

WEST VALLEY LOGISTICS CENTER SPECIFIC PLAN RECIRCULATED DRAFT ENVIRONMENTAL IMPACT REPORT

SCH #2012071058



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Acronyms and Abbreviations

°F	degrees Fahrenheit
AADT	Average Annual Daily Traffic
AB	Assembly Bill
ADT	average daily traffic
af/yr	acre-feet per year
AQMP	Air Quality Management Plan
AR4	Fourth Assessment Report
ARB	Air Resources Board
ASHREA	American Society of Heating, Refrigeration, and Air Conditioning Engineers
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
Basin Plan	Water Quality Control Plan
BMPs	Best Management Practices
BNSF	Burlington Northern Santa Fe
BP	before present
CAA	Clean Air Act
CAAQS	California ambient air quality standards
CAD	Computer-Aided Dispatch
CAFE	Corporate Average Fuel Economy
CAGN	coastal California gnatcatcher
CAL FIRE	California Department of Forestry and Fire Protection
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Division of Occupational Safety and Health
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
Carl Moyer Program	Carl Moyer Memorial Air Quality Standards Attainment Program
CBC	California Building Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDF	California Department of Forestry
CDFG	California Department of Fish and Game
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
CFR	Code of Federal Regulations
cfs	cubic feet per second
CH ₄	methane
CIP	capital improvements program
City	City of Fontana
CJUSD	Colton Joint Unified School District
CMA	Congestion Management Agency
CMP	Congestion Management Program
CMU	concrete masonry units
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNG	compressed natural gas

CNPS	California Native Plant Society
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
COG	Council of Governments
Construction General Permit	General NPDES Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities
County OES	County of San Bernardino Office of Emergency Services
CPTED	Crime Prevention through Environmental Design
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Ranking
CTP	Comprehensive Transportation Plan
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibels
dBA	A-weighted decibel
dBA L _{max}	maximum A-weighted sound level
DEHS	Department of Environmental Health Services
DIF	Development Impact Fee
DOF	Department of Finance
DOT	U.S. Department of Transportation
DPM	diesel particulate matter
DPR	California Department of Pesticides Regulation
DSFLF	Delhi sands flower-loving fly
DTSC	Department of Toxic Substances Control
du/ac	dwelling units per acre
EA	Environmental Assessment
EIC	Eastern Information Center
EIR	Environmental Impact Report
EO	Executive Order
EOC	Emergency Operations Center
EPA	U.S. Environmental Protection Agency
ERNS	Emergency Response Notification
ESA	Environmentally Sensitive Area
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
FESA	federal Endangered Species Act
FFPD	Fontana Fire Protection District
FHWA	Federal Highway Administration
FPD	Fontana Police Department
FS-3	Fire Safety Area 3
FTA	Federal Transit Administration
FUSD	Fontana Unified School District
GHG	Greenhouse Gas
gpd	gallons per day
gpm	gallons per minute
GWP	Global warming potential
GWR	gross vehicle weight rating
H ₂ S	Hydrogen sulfide
HCD	Housing and Community Development
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HDP	hillside development permit
HFCs	hydrofluorocarbons

Hillwood	Hillwood Investment Properties, Inc.
HVAC	heating, ventilation, and air conditioning
Hz	Hertz
I	Interstate
I-10	San Bernardino Freeway
I-15	Ontario Freeway
I-215	Riverside Freeway
IPCC	Intergovernmental Panel on Climate Change
IS/MND	Initial Study/Mitigated Negative Declaration
ISO	Insurance Services Office
kV	kilovolt
kVA	kilovolt-ampere
kWh	kilowatt-hour
lbs/day	pounds per day
LCFS	Low Carbon Fuel Standard
L _{dn}	Day-Night noise level
LED	light-emitting diodes
LEED	Leadership in Energy & Environmental Design
L _{eq}	Equivalent continuous noise level
LI	Light Industrial
LID	Low Impact Development
L _{max}	maximum A-weighted sound level
L _{min}	minimum A-weighted sound level
LOD	limits of disturbance
LOS	Level of Service
LRA	Local Responsibility Area
LSTs	Localized Significance Thresholds
LUST	Leaking Underground Storage Tank
MAA	Management Agency Agreement
MBTA	Migratory Bird Treaty Act
MBTU	thousand British thermal units
MBTU	thousand British thermal units
mg/L	milligrams per liter
mgd	million gallons per day
MICR	maximum individual cancer risk
MLD	most likely descendant
MMcf/day	million cubic feet per day
MMTCO ₂ e	million metric tons of carbon dioxide equivalent
MND	Mitigated Negative Declaration
mpg	miles per gallon
mph	miles per hour
MPO	metropolitan planning organization
MS4	Municipal Separate Storm Sewer System
MS4 Permit	NPDES General Permit for Municipal Separate Storm Sewer Systems
MSA	Metropolitan Statistical Area
MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan
MSL	mean sea level
MT/yr	metric tons per year
MTCO ₂ e	metric tons of carbon dioxide equivalent
N ₂ O	nitrous oxide
NAAQS	national ambient air quality standards
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NCP	National Contingency Plan
ND	Neighborhood Development

NEPA	National Environmental Policy Act
Nexus Study	SANBAG Development Mitigation Nexus Study
NHPA	National Historic Preservation Act
NO ₂	nitrogen dioxide
NOC	Notice of Completion
NOP	Notice of Preparation
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O ₃	ozone
ODCs	Ozone Depleting Compounds
OEHHA	Office of Environmental Health and Hazards Assessment
OES	Office of Emergency Services
OHP	Office of Historic Preservation
OHWM	Ordinary High Water Mark
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Administration
OSHA	Occupational Safety and Health Administration
OS-NA	Open Space – Natural Area
OS-PF	Open Space – Public Facilities
Pb	lead
PCE	Passenger Car Equivalent
PFCs	perfluorocarbons
PHGA	Peak Horizontal Ground Acceleration
PHMSA	Pipeline and Hazardous Materials Safety Administration
PM	particulate matter
PM ₁₀	particulate matter 10 microns in diameter or less
PM _{2.5}	particulate matter 2.5 microns or less in diameter
POCs	pollutants of concern
PPA	Power Purchase Agreement
ppb	parts per billion
P-PF	Public Facilities
ppm	parts per million
ppt	parts per trillion
PPV	peak particle velocity
P-R	Recreational Facilities
PRC	Public Resources Code
proposed project	West Valley Logistics Center Specific Plan
RCP	Regional Comprehensive Plan
RCPG	Regional Comprehensive Plan and Guide
RCRA	Resource Conservation and Recovery Act
RES	Renewable Electricity Standard
RHNA	Regional Housing Needs Assessment
R-M	Medium Density Residential
R-MF	Multi Family Residential
RMS	root-mean square
ROCs	Reactive organic compounds
ROG	reactive organic gases
RPC	Residential Planned Community
R-PC	Residential Planned
RPS	Renewables Portfolio Standard
RSS	Riversidian sage scrub
RTDM	Regional Transportation Development Mitigation Plan
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board

SAA	Streambed Alteration Agreement
SANBAG	San Bernardino Associated Governments
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SBAIC	San Bernardino Archaeological Information Center
SBCFCD	San Bernardino County Flood Control District
SBCL	San Bernardino County Library
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCH	School Property Evaluation Program
SCRRA	Southern California Regional Rail Authority
SCS	Sustainable Communities Strategy
SED	socioeconomic data
SF ₆	sulfur Hexafluoride
SGMP	Soil and Groundwater Management Plan
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SO ₂	sulfur dioxide
SoCalGas	Southern California Gas Company
SOI	Sphere of Influence
SP	service population
SP	Specific Plan
SPCC	Spill Prevention, Control, and Countermeasure
Specific Plan	West Valley Logistics Center Specific Plan
SR	State Route
SR 60	Pomona Freeway
SRA	Source Receptor Area
SRA	State Responsibility Area
SWEEPS	Statewide Environmental Evaluation and Planning System
SWP	State Water Project
SWPPP	Stormwater Pollution Prevention Plan
SWQMP	Stormwater Quality Management Plan
SWRCB	State Water Resources Control Board
TACs	toxic air contaminants
TDS	total dissolved solids
Tg	teragram
TIA	Traffic Impact Analysis
TMA	Transportation Management Association
TMDL	total maximum daily load
tpd	tons per day
TPM	Tentative Parcel Map
TRU	transport refrigeration units
TUMF	Transportation Uniform Mitigation Fee
UNEP	United Nations Environment Programme
Unified Program	Unified Hazardous Waste and Hazardous Materials Management Regulatory Program
USACE	U.S. Army Corps of Engineers
USC	United States Code
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
v/c	Volume to Capacity Ratio
VdB	velocity decibel

VHFHSZs	very high fire hazard severity zones
VMT	vehicle miles traveled
VOC	volatile organic compound
VP	Viewpoint
VTSP	Valley Trails Specific Plan
WDRs	Waste Discharge Requirements
WDS	Waste Disposal Site
WMO	World Meteorological Organization
WQMP	Water Quality Management Plan
WSA	Water Supply Assessment
WVLCSP	West Valley Logistics Center Specific Plan
WVWD	West Valley Water District
WWTP	Wastewater Treatment Plant

Executive Summary

This executive summary provides an overview of the Recirculated Draft Environmental Impact Report (EIR) for the proposed West Valley Logistics Center Specific Plan (WVLCSP or Specific Plan) project in accordance with the California Environmental Quality Act (CEQA). As the lead agency (the public agency responsible for approving the project), the City of Fontana (herein, City) has determined there is substantial evidence that the proposed project may cause a significant effect on the environment and that a Draft EIR is necessary¹.

This Recirculated Draft EIR is part of the environmental review process for the WVLCSP that is being proposed by Hillwood Investment Properties, Inc. (Hillwood). A Draft EIR for the WVLCSP was made available for public review and comment beginning on April 22, 2014 and ending on June 5, 2014. The City received comments on the Draft EIR from state and local agencies, interest groups, and the public. Pursuant to the provisions of State CEQA Guidelines Section 15088.5 (a), the City determined that a thorough response to the comments received by the City during the public review period necessitated the inclusion of new information, and would thereby require recirculation of the entire Draft EIR.

As required by CEQA, this Recirculated Draft EIR does the following: (1) describes the proposed project, including its location, objectives, and features; (2) describes the existing conditions at the project site and nearby surrounding community; (3) analyzes the direct, indirect, and cumulative adverse physical effects that would occur to the existing conditions should the project be implemented; (4) identifies feasible means of avoiding or substantially lessening the significant adverse effects; (5) provides a determination of significance for each impact after mitigation is incorporated; (6) evaluates a range of reasonable alternatives to the proposed project that would meet the basic objectives and reduce a project-related significant impact.

As permitted by State CEQA Guidelines Section 15088.5 (f)(1), because the entirety of the Draft EIR is being recirculated, the City has chosen not to provide written responses to comments received during the earlier circulation period. Pursuant to the provisions of State CEQA Guidelines Section 15088.5 (f)(1), although the comments received during the previous Draft EIR public review period will be part of the administrative record for the WVLCSP project, the City will not be preparing written responses to those comments in the Final EIR. Therefore, new comments must be submitted for this Recirculated Draft EIR, and the City will prepare written responses only to those comments submitted in response to this Recirculated Draft EIR.

This chapter also summarizes the areas of controversy and describes the level of significance before and after implementation of identified mitigation measures intended to reduce or avoid significant impacts. The determinations presented within this Draft EIR are not intended to recommend approval or denial of the project, but to inform the public and decision-makers of the potential environmental effects of adopting the proposed project, the effectiveness of proposed mitigation measures to reduce impacts, growth-inducing effects, and cumulative effects.

¹ Per State CEQA Guidelines §21067 and §15063(b)(1).

ES.1 Project Location and Setting

The project area is in southeastern portion of the City of Fontana in San Bernardino County, California and in the southwest “Valley Region” of San Bernardino County. The City boundary is to the southern and eastern sides of the project. The project site borders the unincorporated community of Bloomington in San Bernardino County to the east and the City of Jurupa Valley in Riverside County to the south. The project site is depicted on the Fontana U.S. Geological Survey (USGS) 7.5-minute quadrangle within Section 33, Township 1 south, Range 5 west. Regional transportation corridors in the area include the San Bernardino Freeway (I-10) to the north, the Pomona Freeway (SR 60) to the south, the Riverside Freeway (I-215) to the east, and the Ontario Freeway (I-15) to the west. Local street access to the project area from the north would be from Alder Avenue, Locust Avenue, and Jurupa Avenue. Local access from the south would be from Armstrong Road, which becomes Valley Way from SR 60. The project site is bisected by Armstrong Avenue, which runs diagonally northeast to southwest on the southern half of the site and turns into Locust Avenue north of 7th Street in the northern half of the site.

Near the project site, undeveloped areas include the Jurupa Hills (in Fontana) along the entire western boundary, an SCE utility corridor along the northern portion of the project area, and vacant/undeveloped areas east of the project site and south of 7th Street. The residential properties near the project site within Fontana and the County of San Bernardino are typically single-family detached homes, some with equestrian uses, and are located east of Locust Avenue (between 7th and 11th Streets in Bloomington) and south of the project site (in the City of Jurupa Valley). Some rural residential development is found north of Jurupa Avenue. A conifer nursery is within the SCE easement south of Kessler Park and north of the existing detention basin on site. The Jurupa Hills, a major landform in southern Fontana, are the natural backdrop to the WVLCSP site. The project site was used for agricultural production and portions of the site have also been used historically as a landfill and quarry. The site is currently vacant.

ES.2 Project Overview

The project consists of a Specific Plan (WVLCSP) that is being proposed by Hillwood. The proposed project would result in the adoption of a specific plan in the southeast portion of the City of Fontana along Armstrong Road, which travels diagonally through the project site. The 291.31-acre project site was previously approved for a mixed-use residential community, known as the Valley Trails Specific Plan (VTSP), which was never developed. The project would replace the approved but unbuilt residential, school, recreation, and open space uses identified in the VTSP with the industrial warehouse and open space uses proposed in the WVLCSP. Specifically, 3,473,690 square feet of industrial warehouse distribution uses are proposed to occupy 212.1 acres; 14.93 acres of the site would include detention basins; 1.54 acres of an existing utility corridor would remain unchanged; 55.23 acres would be retained in natural hillside open space; and 7.5 acres would consist of right-of-way dedications. The project site was never improved and is undeveloped.

The WVLCSP would serve as the guiding document to develop a 291.31-acre site with industrial warehouse distribution and open space land uses. Specifically, the WVLCSP provides direction for the development of the site related to land use, circulation, architecture and landscape design, grading, lighting, drainage, and public services and utilities, consistent with the City’s General Plan and zoning ordinance. The City of Fontana is the Lead Agency for the preparation of this

Recirculated Draft EIR, and is considering the adoption of the proposed Specific Plan to allow for the development of industrial uses, including warehouse, manufacturing, and office, a detention basin, construction of an off-site sewer lift station within an existing roadway right-of-way, the preservation of natural hillside open space, and right-of-way dedications.

The overall goal of the proposed Specific Plan is to provide for the orderly development of a phased land use plan that balances the need for industrial development with the preservation of open space and infrastructure improvements. The objectives of the WVLCSP were developed based on the proposed Specific Plan to implement general plan goals, policies, and objectives in a manner that achieves the following:

- Create local employment and economic development opportunities for the City of Fontana and surrounding communities that help maintain a balanced community;
- Achieve a high quality, cohesive design character for industrial uses within the project site to create a desirable asset to the community and enhance the project's overall value; and
- Facilitate the timely provision of needed infrastructure and community facilities.

The specific land use goals contained in the WVLCSP are as follows:

- Establish a well-balanced and carefully planned logistics center.
- Develop high-quality sites for warehousing with stringent design standards.
- Implement the City's General Plan by creating a balanced community through strengthening economic opportunities within the City.
- Provide an employment-generating, warehouse-focused industrial development that is located close to potential employees, thus reducing commute times and distances.
- Ensure that the development of the site is compatible with, and sensitive to, existing and planned land uses in the area by providing appropriate transitions and environmental buffers between the proposed industrial development and the surrounding area.
- Conserve on-site critical habitats as natural open space.

ES.3 Required Project Approvals

Pursuant to State CEQA Guidelines §15124(d)(1)(B), this Draft EIR contains a list of City actions required to approve the proposed project.

- Specific Plan
- Zoning Amendment
- General Plan Amendment
- Tentative Parcel Map
- Development Agreement
- Site Plan and Design Review
- Heritage Tree Removal Permit
- Roadway Improvements

ES.4 Areas of Known Controversy

State CEQA Guidelines Section 15123(b)(2) requires that areas of controversy known to the lead agency be stated in the EIR summary. The City distributed a Notice of Preparation (NOP) to solicit agency and public comments on the scope and content of the environmental analysis to be included in the Draft EIR. CEQA requires an NOP circulate for a 30-day period; however, the City voluntarily extended the period to 79 days, which began on July 17, 2012 and ended on October 4, 2012. A total of seven agencies and five individuals provided comments within the public review period.

Comments on the NOP were received from the California Department of Fish and Game (now referred to as the California Department of Fish and Wildlife, or CDFW), the Department of Toxic Substances Control (DTSC), the Native American Heritage Commission (NAHC), the South Coast Air Quality Management District (SCAQMD), the Inland Empire Utilities Agency, the Cucamonga Valley Water District, and the County of San Bernardino Department of Public Works. Comments collected at the public Scoping Meeting on October 3, 2012 were concerned with potential impacts on traffic, air quality, and water quality. All issues raised during the public and agency review process are addressed in this Recirculated Draft EIR in Chapter 4, *Environmental Analysis of the Proposed Project*.

A Draft EIR for the WVLCSP was made available for public review and comment from April 22, 2014 to June 5, 2014. Eight comment letters regarding the project were received during the 45-day public review period, including letters from the Laborers International Union of North America, Local Union 783 (May 8, 2014 and June 5, 2014), NAHC, the County of San Bernardino Department of Public Works, Southern California Association of Governments (SCAG), City of Jurupa Valley Planning Department, CDFW, and the California Governor's Office of Planning and Research. All issues raised during the public and agency review process are addressed in this Recirculated Draft EIR in Chapter 4, *Environmental Analysis of the Proposed Project*.

Areas of known controversy include:

- Location of industrial warehouse development adjacent to residential neighborhoods.
- The project's prohibition against project-related trucks using Sierra Avenue, resulting in the preponderance of project-related truck traffic occurring on roadways outside of the City of Fontana.
- Project-related air pollutant and greenhouse gas (GHG) emissions.

ES.5 Issues to Be Resolved

The issues to be resolved by the lead agency include whether and how to mitigate the significant effects of the proposed project; consideration of the various mitigation measures and alternatives recommended in the Recirculated Draft EIR by City staff; whether the benefits of the proposed project outweigh their unavoidable environmental impacts; and whether the discretionary approvals required to implement the proposed project and its development components should be granted.

Issues to be resolved include those impacts that have been identified as significant and unavoidable (i.e., traffic, air quality, noise). The City will be required to prepare a Statement of Overriding Considerations for those project impacts that cannot be mitigated to less than significant levels.

Section 15093 of the State CEQA Guidelines specifies that a lead agency is required to “balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered ‘acceptable.’”

Specific issues to be resolved include finalizing the draft Specific Plan for the project and the terms of the Development Agreement between the City and the applicant, Hillwood.

ES.6 Incorporated by Reference

Pertinent documents related to this Recirculated Draft EIR have been cited in accordance with Section 15148 of the State CEQA Guidelines. Incorporation by reference reduces redundancy and the length of environmental reports to manageable levels. The following documents, which are available for public review at the City’s office, are hereby incorporated by reference into this environmental document:

- Metis Environmental Group. West Valley Logistics Center Specific Plan (September 2014).
- Thienes Engineering. Tentative Tract Map 19156 (January 2014).
- City of Fontana. City of Fontana General Plan (Adopted October 2003).
- City of Fontana. City of Fontana Zoning and Development Code.
- City of Fontana. City of Fontana Zoning District Map. Adopted April 2004, Last Revised January 15, 2013.
- The Planning Center. Valley Trails Specific Plan (2007).
- Jones and Stokes. Valley Trails Specific Plan Environmental Impact Report. Draft (2006).

ES.7 Summary of Project Alternatives

During the preparation of this Recirculated Draft EIR, the City considered several alternatives to the proposed project. The goal for developing a set of possible alternative scenarios was to identify other means to attain the basic aspects of the project objectives while lessening or avoiding potentially significant environmental impacts caused by the proposed project. The alternatives described in this section were initially chosen as being ostensibly feasible and are considered by the City in this Recirculated Draft EIR.

In accordance with the State CEQA Guidelines (Section 15126.6(d)), the discussion of the environmental effects of the alternatives may be less detailed than the discussion of the impacts of the proposed project. Descriptions of each alternative followed by the analysis comparing the impacts of the alternative with the proposed project are provided below.

Alternative 1: No Project/No Build

Section 15126.6(e) of the State CEQA Guidelines requires the analysis of a “no project” alternative. The No Project/No Build Alternative is defined as the continuation of the existing condition (baseline) and trends in the project area. The approximately 291-acre site is primarily undeveloped, containing the Jurupa Hills, two utility corridors, existing roadways, a detention basin and some mature trees scattered throughout the site. Under the No Project/No Build Alternative, the proposed project would not be constructed, and the project area would remain in its current undeveloped condition. No new urban development would occur on the project site under this alternative, and no ground-disturbing activities would occur.

Alternative 2: No Project/Buildout of Valley Trails Specific Plan

Under this alternative, the proposed WVLCSP would not be approved, and buildout of the currently approved VTSP would occur instead. The approved VTSP provides for development of a master planned community with a maximum of 1,154 homes, a 13.8-acre elementary school, 3.7-acre community center, 18-acre private park and trail system, 20.4-acre public park, and 69.2 acres of dedicated open space. The VTSP project was fully analyzed in the VTSP EIR, and the specific plan was approved by the City Council on May 8, 2007, in accordance with the certified Final EIR. It is assumed that all provisions of the VTSP and the mitigation measures set forth in the VTSP Final EIR would be implemented.

Alternative 3: Multi-Tenant Business Park

Under Alternative 3, a multi-tenant business park with a mix of small-scale, light industrial, business services, and employee-serving commercial uses (e.g., cafés, print shops) would be developed. Rather than large warehouse buildings on separate parcels, the site would be developed with single-story, multi-tenant buildings designed as a single planned development with common access points to the surrounding street system. Similar to the proposed project, Alternative 3 would include construction of approximately 3.47 million square feet of building area; however, because Alternative 3 would consist of a business park rather than a logistics center, site development would be substantially less truck-intensive and would result in less truck traffic than the proposed project. The 14.93-acre detention basin and 55.23 acres of natural hillsides would remain under Alternative 3, and the development area would involve the same footprint.

Alternative 4: Reduced Intensity Multi-Tenant Business Park

Under this alternative, a multi-tenant business park with mix of small-scale, light industrial, business service, and employee-serving commercial uses (e.g., cafés, print shops) would be developed in a manner similar to Alternative 3, but with a development intensity about 25% lower than the proposed project, for a total development of 2.6 million square feet of building area. The 14.93-acre detention basin would still be constructed, and the 55.23-acre natural hillside preservation area provided in the proposed project would be expanded because of the 25% smaller development footprint of Alternative 4.

Alternative 5: Reduced Intensity Logistics Center

This alternative provides for development of a warehouse-based logistics center with a 30% reduction in intensity and development footprint as compared with the proposed project (i.e., for a

total of 2.4 million square feet of warehouse buildings). Alternative 5 was designed to reduce impacts on air quality, GHG emissions, and noise.

Alternative 6: Proposed Project with No Prohibition on Trucks Using Sierra Avenue Alternative

Alternative 6 would involve the extension of Alder Avenue south of Jurupa Avenue to meet the west leg of Locust Avenue-Armstrong Street at 7th Street. Under this scenario, project-related automobiles and trucks would be permitted to use Sierra Avenue. All other project components and features would be the same as for the proposed project.

Environmentally Superior Alternative

An EIR must identify the environmentally superior alternative to the proposed project. As discussed in Chapter 5, *Alternatives*, the No Project/No Build Alternative would be environmentally superior to the proposed project on the basis of the minimization or avoidance of physical environmental impacts. However, according to the State CEQA Guidelines, if the environmentally superior alternative is the No Project Alternative, the EIR shall identify an environmentally superior alternative among the other alternatives (Section 15126.6(c)).

In terms of the physical effects on the environment, the environmentally superior alternative (other than the No Project/No Build Alternative) is the Reduced Intensity Logistics Center Alternative (Alternative 5). This alternative would have fewer impacts on the environment than the proposed project in relation to aesthetics, air quality/GHG, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, and noise. Although air quality impacts would be reduced during construction and operation compared with the proposed project, impacts would still be significant and unavoidable. In addition, although overall traffic generation would be reduced compared with the proposed project, traffic impacts would be significant and unavoidable because the timing of improvements funded by development impact fee programs in San Bernardino and Riverside Counties and improvements funded by payment of impact fees to jurisdictions other than the City of Fontana cannot be guaranteed.

Because Alternative 6 would involve a 30% reduction in development potential, it would not meet project objectives related to jobs creation and economic development opportunities to the same extent as would the proposed project. In addition, Alternative 5 would result in substantially reduced impact fee payments to the City, and place the applicant in the position of having purchased a fully entitled development site and allowing for use of only 70% of the site's approved development capacity, while eliminating no project-related significant unavoidable impacts.

ES.8 Summary of Project Impacts and Mitigation

Table ES-1 provides a summary of the environmental effects that would result from implementation of the proposed project, potential mitigation measures, and the level of significance of the environmental impacts after implementation of the proposed mitigation, as identified in Chapter 4.0 of this document. Impacts identified as "potentially significant" are considered to be significant impacts under CEQA. A significant and unavoidable impact is one that would cause a substantial adverse effect on the environment and for which no mitigation is available to reduce the impact to a

less-than-significant level. The significant and unavoidable impacts of the proposed project are as follows:

- Impact AQ-2: Violate any air quality standard or contribute substantially to an existing or projected air quality violation (Construction and Operation)
- Impact AQ-3: 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)
- Impact NOI-1: Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- Impact NOI-3: A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- Impact TRA-1: Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

Table ES-1. Summary of Impacts and Mitigation Measures

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
Aesthetics			
Impact AES-1. Have a substantial adverse effect on a scenic vista. There are no identified scenic vistas that could be affected by construction or operation of the proposed project.	No Impact	<u>Specific Plan Requirements</u> <ul style="list-style-type: none"> • SP-A-1: Implement High-quality Design Guidelines. • SP-A-2: Install Visual Barriers between Project Areas and Residential Areas. <u>Regulatory Requirements</u> <ul style="list-style-type: none"> • RR-A-1: Maintain Construction Sites. • RR-A-2: Maintain Signs. <u>Mitigation Measures</u> <p>Mitigation Measure AES-1: Install Visual Barriers between Construction Work Areas and Residential Areas. The contractor will install fencing (such as chain link with slats or fencing made of windscreen material) or other structures to obstruct undesirable views of ground-level construction activities from residences, recreationists, and businesses that are adjacent to the construction site. The fencing will be a minimum of 6 feet high and will help to maintain the privacy of residents and block views from ground levels during construction.</p>	No impact.
Impact AES-2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. The proposed project would result in only minor visual changes in available views from Cedar Avenue and would not significantly affect any scenic resources that are visible within these views, including the Jurupa Hills and San Gabriel	Less than Significant	<u>Regulatory Requirements</u> <ul style="list-style-type: none"> • RR-B-3: Obtain Permits for Removal of Heritage Trees. <u>Mitigation Measures</u> <p>No mitigation measures are required.</p>	No impact.

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
Mountains.			
Impact AES-3. Substantially degrade the existing visual character or quality of the site and its surroundings. Construction activities would result in changes to the existing aesthetic conditions at the project site if nighttime construction activities occur that would require the use of high-intensity nighttime lighting to illuminate construction activities on the site, which is currently unlit. Under operation, partial views of Buildings 3 and 4 would somewhat obstruct views of the San Gabriel Mountains and Angeles National Forest in the background.	Less than Significant	<u>Specific Plan Requirements</u> <ul style="list-style-type: none"> • SP-A-1: Implement High-quality Design Guidelines. • SP-A-2: Install Visual Barriers between Project Areas and Residential Areas. <u>Regulatory Requirements</u> <ul style="list-style-type: none"> • RR-A-1: Maintain Construction Sites. • RR-A-2: Maintain Signs. • RR-N-1: Comply with the Construction Noise Municipal Code Exemption. <u>Mitigation Measures</u> Mitigation Measures AES-1 and BIO-8.	Less than Significant
Impact AES-4. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. The area surrounding the site is currently moderately lit, and project design features include stringent measures—such as not over-illuminating the site, shielding light sources, avoiding exposed high-intensity lighting, avoiding highly reflective glass doors, and using neutral building colors that reduce reflectivity—to ensure that the	Less than Significant	<u>Specific Plan Requirements</u> <ul style="list-style-type: none"> • SP-A-1: Implement High-quality Design Guidelines, <u>Regulatory Requirements</u> <ul style="list-style-type: none"> • RR-N-1: Comply with the Construction Noise Municipal Code Exemption. <u>Mitigation Measures</u> No mitigation measures are required.	Less than Significant.

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
project does not create a substantial new source of light and glare in the project area.			
Air Quality			
Impact AQ-1. Conflict with or obstruct implementation of the applicable air quality plan. Projects that are consistent with the forecasts identified by SCAG are considered to be consistent with the AQMP. The proposed change in future land use from a residential planned to community to an industrial warehousing use would provide for the County's existing employment needs to be met, and would not induce growth beyond what was anticipated in SCAG's growth forecasts used for the AQMP. In addition, the General Plan Land Use designations by the project would be included in SCAQMD's updated AQMP. Therefore, the proposed project would not conflict with, or obstruct, implementation of the AQMP and this impact would be less than significant.	Less than Significant	<u>Mitigation Measures</u> No mitigation measures are required.	Less than Significant
Impact AQ-2. Violate any air quality standard or contribute substantially to an existing or projected air quality violation. Construction-The unmitigated	Significant	<u>Specific Plan Requirements</u> <ul style="list-style-type: none"> • SP-GG-4: Install Electrical Loading Docks. <u>Regulatory Requirements</u> <ul style="list-style-type: none"> • RR-AQ-2: Comply with SCAQMD Rule 401 – Visible Emissions. 	Significant Unavoidable

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
<p>peak daily construction emissions are all under the SCAQMD thresholds of significance, except for NO_x, which is entirely from diesel engine exhaust and primarily from the large number of cement haul trucks planned for use by the project. With feasible mitigation, NO_x emissions can be reduced, but not below SCAMQD's NO_x threshold of 100 lbs/day. Operation-Even though the large haul trucks only comprise about 12% of the project vehicles, their exhaust comprises about 80 to 85% of the overall mobile source emissions (NO_x, PM₁₀, and PM_{2.5}). The project would reduce but not eliminate significant impacts related to NO_x, ROG, and CO emissions under the SCAQMD thresholds of significance. Minor increases in regional air pollution from project-generated ROG, and NO_x, and CO would have nominal or negligible impacts on human health.</p>		<ul style="list-style-type: none"> • RR-AQ-3: Comply with SCAQMD Rule 402 – Nuisance. • RR-AQ-4: Comply with SCAQMD Rule 403 – Fugitive Dust. • RR-AQ-5: Comply with SCAQMD Rule 1113 – Architectural Coatings. • RR-AQ-6: Comply with SCAQMD Rule 1301 – General. • RR-AQ-7: Comply with Title 24 – Building Energy Conservation. <p><u>Mitigation Measures</u></p> <p>Mitigation Measure AQ-1: Incorporate Dust Suppression Measures. The Construction Contractor will ensure that the following dust suppression measures in the SCAQMD CEQA Air Quality Handbook will be implemented to reduce the project's emissions:</p> <ul style="list-style-type: none"> • Revegetate disturbed areas as quickly as possible. • Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph. • Sweep all streets once per day if visible soil materials are carried to adjacent streets (recommend water sweepers with reclaimed water). • Install “shaker plates” prior to construction activity where vehicles enter and exit unpaved roads onto paved roads, or wash trucks and any equipment prior to leaving the site. • Pave, water, or chemically stabilize all on-site roads as soon as feasible. • Minimize at all times the area disturbed by clearing, grading, earthmoving, or excavation operations. <p>Mitigation Measure AQ-2: Utilize Tier 3 Construction Equipment. The Construction Contractor will use off-road diesel construction equipment that complies with EPA Tier 3 emissions standards during all construction phases and will ensure that all construction equipment be tuned and maintained in accordance with the manufacturer's specifications.</p>	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		<p>Mitigation Measure AQ-3: Use Electricity Rather than Internal Combustion Engines during Construction. The Construction Contractor will require by contract specifications that construction operations rely on the electricity infrastructure surrounding the construction site rather than electrical generators powered by internal combustion engines to the extent commercially available.</p> <p>Mitigation Measure AQ-4: Use Alternative Fueled Technology during Construction. The Construction Contractor will require the use of alternative fueled, engine retrofit technology, after-treatment products (e.g., diesel oxidation catalysts, diesel particulate filters), and/or other options as they become available, including all off-road and portable diesel-powered equipment, to the extent feasible.</p> <p>Mitigation Measure AQ-5: Require Proper Maintenance of Construction Equipment. The Construction Contractor will require that construction equipment be maintained in good operational condition so as to reduce emissions. The construction contractor shall ensure that all construction equipment is being properly serviced and maintained per the manufacturers' specifications. Maintenance records shall be available at the construction site for City verification.</p> <p>Mitigation Measure AQ-6: Submit Construction Plans. Prior to the issuance of any grading permits, the applicant and/or building operators shall submit construction plans and a construction vehicle management plan to the City of Fontana denoting the proposed schedule and projected equipment use. The construction vehicle management plan will include such things as: specifying idling time requirements; requiring hour meters on equipment; and requiring documentation of the serial number, horsepower, age, and fuel of all on-site equipment. The plan will include that California state law requires equipment fleets to limit idling to no more than 5 minutes. Construction Contractors shall provide evidence that low emission mobile construction equipment will be utilized, or that its use was investigated and found to be infeasible for the project.</p>	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		<p>Contractors shall also conform to any construction measures imposed by the SCAQMD as well as City of Fontana Community Development Department Planning Staff.</p> <p>Mitigation Measure AQ-7: Require Construction Equipment to Turn Off When Not in Use. The Construction Contractor will require by contract specifications that construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, will be turned off when not in use for more than 5 minutes.</p> <p>Mitigation Measure AQ-8: Encourage Ridesharing and Transit Incentives. The Building Operator for each building within the WVLCSP will support and encourage ridesharing and transit incentives for the construction crew by providing crews with the needed resources to organize rideshares, through such means as bulletin boards or email announcements. The Construction Contractor will also fully or partially subsidize transit fares or passes for the construction crew members who can feasibly use transit.</p> <p>Mitigation Measure AQ-9: Request Construction Contractors and Building Operators to Use Particulate Matter Traps on All On-road Heavy-Duty Diesel Trucks. Construction Contractors and building operators shall ensure (by contract specifications) that on-road heavy-duty diesel trucks with a gross vehicle weight rating greater than 14,000 pounds will have a 2010 model year engine or newer or will be equipped with a particulate matter trap, as available.</p> <p>Mitigation Measure AQ-10: Require Operational Equipment to Turn Off When Not in Use. Building operators shall ensure (by contract specifications) that equipment, including heavy-duty equipment, motor vehicles, and portable equipment, will be turned off when not in use for more than 5 minutes. Truck idling shall not exceed 5 minutes in time. All facilities will post signs requiring that trucks shall not be left idling for more than 5 minutes pursuant to Title 13 of the California Code of Regulations, Section 2485, which limits idle times to not more than 5</p>	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		<p>minutes. Nighttime truck idling (between the hours of 10:00 p.m. and 7:00 a.m. or as specified by the City) will not be permitted.</p> <p>Mitigation Measure AQ-11: Incorporate EPA Smartway Features. The City will require operators of the project to ensure that haul trucks incorporate EPA Smartway features, as required by ARB. Project operators will maintain a daily log of incoming and outgoing haul trucks that are fitted with the combination of aerodynamic kits and low rolling resistance tires to reduce fuel consumption.</p> <p>Mitigation Measure AQ-12: Incorporate Energy Efficiency in Vendor Trucks. The City will require operators of the proposed facilities to encourage the vendor trucks to incorporate energy efficiency improvement features through the Carl Moyer Program—including truck modernization, retrofits, and/or aerodynamic kits and low rolling resistance tires—to reduce fuel consumption.</p> <p>Mitigation Measure AQ-13: Incorporate Electric Vehicle Charging Stations and Carpool Parking. The project will be designed to incorporate electric vehicle charging stations and five carpool parking spaces at each building for employees and the public to use.</p> <p>Mitigation Measure AQ-14: Provide Electric Interior Vehicles. All buildings will be designed to provide infrastructure to support use of electric powered forklifts and/or other interior vehicles.</p>	
Impact AQ-3. 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 (including releasing emissions which exceed quantitative thresholds for	Significant	<p><u>Specific Plan Requirements</u></p> <ul style="list-style-type: none"> • SP-GG-4: Provide Electrical Loading Docks. <p><u>Regulatory Requirements</u></p> <ul style="list-style-type: none"> • RR-AQ-1: Comply with SCAQMD Rule 401 – Visible Emissions. • RR-AQ-2: Comply with SCAQMD Rule 402 – Nuisance. • RR-AQ-3: Comply with SCAQMD Rule 403 – Fugitive Dust. • RR-AQ-4: Comply with SCAQMD Rule 1113 – Architectural Coatings. 	Significant Unavoidable

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
ozone precursors). Based upon the air dispersion modeling and additional information, the project would add 0.19% to the overall ambient cancer risk level under the worst-case scenario, which is a less-than-significant individual impact and would not make a cumulatively considerable contribution to a regional significant cumulative impact because it does not exceed the threshold. Impacts related to pollutant emissions from project operations would be significant after implementation of project design features and mitigation.		<ul style="list-style-type: none"> • RR-AQ-5: Comply with SCAQMD Rule 1301 – General. • RR-AQ-6: Comply with Title 24 – Building Energy Conservation. <u>Mitigation Measures</u> Mitigation Measures AQ-1 through AQ-14.	
Impact AQ-4. Expose sensitive receptors to substantial pollutant concentrations. The emissions of criteria pollutants on the peak day of grading would not result in concentrations of pollutants at nearby residences or other sensitive receptors that are at or above the SCAQMD thresholds of significance. Operational emission rates of criteria pollutants would not result in any concentrations that exceed the LST thresholds at nearby residences. Emissions of toxic air pollutants do not exceed the threshold. A health	Less than Significant	<u>Specific Plan Requirements</u> <ul style="list-style-type: none"> • SP-GG-4: Provide Electrical Loading Docks. <u>Regulatory Requirements</u> <ul style="list-style-type: none"> • RR-AQ-1: Comply with SCAQMD Rule 401 – Visible Emissions. • RR-AQ-2: Comply with SCAQMD Rule 402 – Nuisance. • RR-AQ-3: Comply with SCAQMD Rule 403 – Fugitive Dust. • RR-AQ-4: Comply with SCAQMD Rule 1113 – Architectural Coatings. • RR-AQ-5: Comply with SCAQMD Rule 1301 – General. • RR-AQ-6: Comply with Title 24 – Building Energy Conservation. <u>Mitigation Measures</u> Mitigation Measures AQ-1 through AQ-14.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
risk assessment concluded that impacts on sensitive receptors would be less than significant and minor increases in regional air pollution from project-generated ROG, NO _x , and CO would have nominal/negligible impacts on human health.			
Impact AQ-5. Create objectionable odors affecting a substantial number of people. The proposed uses are not anticipated to emit any objectionable odors. Also, objectionable odors posing a health risk to potential on site and existing off site uses would not occur as a result of the proposed project.	Less than Significant	<u>Regulatory Requirements</u> <ul style="list-style-type: none"> • RR-AQ-2: Comply with SCAQMD Rule 402 – Nuisance. <u>Mitigation Measures</u> No mitigation measures are required	Less than Significant
Biological Resources			
Impact BIO-1. 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. If California Gnatcatcher (CAGN) are present adjacent to the limits of disturbance, there is a potential for take under FESA; this would be a significant impact if	Significant	<u>Mitigation Measures</u> Mitigation Measure BIO-1: Preconstruction Focused Survey for Coastal California Gnatcatcher. A protocol-level focused survey for CAGN shall be conducted by a qualified ornithologist in the spring prior to project development to determine whether CAGN have colonized the potentially suitable habitat within 300 feet of the limits of disturbance subsequent to the surveys previously conducted within the project site. If CAGN are found to occur within 300 feet of the limits of disturbance, consultation with USFWS will be necessary to determine whether an Individual Take Permit is required. In addition, if the species is confirmed present, either (1) construction shall be prohibited within 300 feet of potential CAGN habitat between March 15 and August 31 or (2) a preconstruction nesting survey for CAGN will be performed to ensure that no CAGN nests are within 300 feet of the limits of disturbance.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
<p>construction activities occur within 300 feet of an active nest, as the potential exists for construction to indirectly cause nest failure (Mitigation Measure BIO-1). There is a potential the proposed project could directly and indirectly affect birds nesting within or adjacent to the limits of disturbance. Implementation of Mitigation Measure BIO-2 would ensure all nesting birds are avoided during the nesting bird season. Mitigation Measure BIO-3 would determine if burrowing owls are present prior to construction activities. Additionally, implementation of the habitat management plan could support movement of CAGN between the Jurupa Hills and Rattlesnake Mountains and could improve the health of RSS so it has a higher potential of providing improved nesting CAGN habitat in the mitigation area.</p> <p>There is a potential for indirect impacts from project construction and operation to occur to species potentially occupying the RSS. Implementation of Mitigation Measures BIO-4 through BIO-6 would ensure potential indirect impacts to potential suitable</p>		<p>If nesting CAGN are found, an avoidance buffer no less than 300 feet shall be established around the nest until all young have fledged and the nest is confirmed by a qualified biologist to be no longer active.</p> <p>Mitigation Measure BIO-2: Preconstruction Nesting Bird Survey. Nesting birds are protected pursuant to the MBTA and California Fish and Game Code. If ground-disturbing activities or removal of any trees, shrubs, or any other potential nesting habitat are scheduled within the avian nesting season (January 1 to August 31), a preconstruction clearance survey for nesting birds shall be completed no more than 3 days prior to ground disturbance. This will ensure that no nesting birds adjacent to the construction area will be disturbed during construction. If nesting birds are found, an avoidance buffer no less than 300 feet shall be established around the nest until all young have fledged and the nest is confirmed by a qualified biologist to be no longer active.</p> <p>Mitigation Measure BIO-3: Preconstruction Survey for Burrowing Owl. The project applicant shall retain a qualified biologist to conduct preconstruction surveys for burrowing owls no less than 14 days prior to any ground-disturbing activities, to be repeated 24 hours prior to grading. The preconstruction surveys shall be approved by the City of Fontana Director of Community Development and conducted in accordance with current survey protocols provided in the CDFW Staff Report on Burrowing Owl Mitigation (March 7, 2012). In the event a burrowing owl is found to be present on site during the preconstruction survey, the project applicant shall ensure that the applicable avoidance measures outlined in the CDFW Staff Report on Burrowing Owl Mitigation (March 7, 2012) are applied to the proposed project (e.g., avoid direct impacts on occupied burrows during nesting season). Any active avoidance measures during the breeding season must be coordinated with CDFW.</p>	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
RSS habitat adjacent to the limits of disturbance would be less than significant on special-status species.		<p>Mitigation Measure BIO-4: Installation of Environmentally Sensitive Area Fencing during Construction. Access to sensitive resources, in particular the RSS community in the preserved lands (refer to Mitigation Measure BIO-6) shall be restricted during construction of the proposed project. At or before the start of construction, including establishment of staging areas and/or grading activities, Environmentally Sensitive Area (ESA) fencing shall be installed along the western limits of disturbance to prevent unauthorized access into preserved lands. Educational signage shall also be posted to inform workers and residents in the area of the sensitivity of biological resources in the area. The fencing shall be inspected by a qualified biological monitor once per week during construction to ensure the fencing is intact and construction activities are not encroaching into preserved lands. Another option would be to install the permanent fencing or barrier called for in Mitigation Measure BIO-5.</p> <p>Mitigation Measure BIO-5: Protection of RSS Post-Construction. A permanent fence or barrier shall be erected along the western edge of the limits of disturbance to protect the 44.8 acres of RSS on the project site. The design and materials used for the fencing shall be consistent with fuel management zone specifications for fencing. The fence shall consist of a three- or four-rail wooden fence, three- or four-strand barbed wire with metal t-posts, or other such materials and configuration that will allow for the passage of wildlife while restricting project personnel and the public from accessing the preserved lands. Coordination with a qualified biologist shall occur for the fence design to ensure the fence will not restrict movement of mammals or entangle wildlife. Signage will also be installed that clearly states that access beyond the fence is prohibited. To remain consistent with aesthetic considerations, signage shall be installed where it is easily visible, but not visually obtrusive. The project applicant shall be responsible for the cost and implementation of fencing and signage. The project</p>	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		<p>applicant shall also be responsible for maintenance of the fencing and signage until a management entity is established that will assume such responsibility in perpetuity. This measure may also be implemented at or before the start of construction activities in place of Mitigation Measure BIO-4.</p> <p>Mitigation Measure BIO-6: Implement Habitat Management Plan for the Protection of RSS in Perpetuity. To ensure consistency with applicable General Plan policies, the project applicant shall implement the habitat management and maintenance plan for the 44.8-acre preservation area.</p> <p>The habitat management plan, which is included in Appendix E, sets forth requirements to:</p> <ul style="list-style-type: none"> • Document the baseline conditions within RSS open space area. • Eradicate weeds and other undesirable plants within the disturbed portions of the RSS open space area. Tasks include conducting weed eradication or thinning, disposal of weed species to occur annually, reseeding and biannual monitoring of the site to document treatment actions. • Control and prevent trespassing, dumping and other human intrusion into the RSS open space area through permanent fencing, signage, and coordination with the City of Fontana. Signs of human disturbance will be removed through annual clean up. • Create vegetated areas along the southern boundary of the site to accommodate potential avian movement between Rattlesnake Mountain and the Jurupa Hills regions. 	
Impact BIO-2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or	Significant	<p><u>Regulatory Requirements</u></p> <ul style="list-style-type: none"> • RR-B-1: Obtain Permits for Jurisdictional Waters of the State and State Streambeds. • RR-B-2: Procure Approved Determination from USACE. 	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
<p>by the California Department of Fish and Wildlife, Regional Water Quality Control Board, or the U.S. Fish and Wildlife Service. Removal of 0.26 acre of waters of the State (under the jurisdiction of the RWQCB and CDFW), of which a total of 0.05 acre constitutes wetlands. Additionally, a 0.21-acre patch of mulefat scrub occurs adjacent to the wetland and is potentially subject to regulation by CDFW. Removal of 0.26 acre of waters of the State and CDFW unvegetated streambed, and 0.21 acre of CDFW riparian habitat would require a RWQCB Waste Discharge Requirement under the Porter-Cologne Water Quality Act, including compensatory mitigation, and an SAA per the CDFW 1602 process. Compensatory mitigation would be required due to the adoption of a no net loss of wetlands policy by RWQCB and CDFW, following standards set by USACE.</p>		<p><u>Mitigation Measures</u></p> <p>Mitigation Measure BIO-7: Replacement of Affected Wetland Areas. Implementation of on-site mitigation at a 1:1 ratio for loss of wetlands and drainage channels regulated by RWQCB and CDFW shall be required to compensate for the loss of State-regulated wetlands. Approximately 0.05 acre of wetland, 0.21 acre of drainage, and 0.21 acre of mulefat scrub would be mitigated at an off-site mitigation bank using an in-lieu fee program at a 1:1 ratio (total of 0.47 acre), with the cost per acre to be determined at the time of project development. Final costs will depend upon negotiation with an approved mitigation bank and will be based upon the current market value for wetland mitigation credit purchase</p>	
<p>Impact BIO-3. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal,</p>	No impact	<p><u>Regulatory Requirements</u></p> <ul style="list-style-type: none"> • RR-B-1: Obtain Permits for Jurisdictional Waters of the State and State Streambeds. • RR-B-2: Procure Approved Determination from the USACE. <p><u>Mitigation Measures</u></p> <p>No mitigation measures are required.</p>	No impact

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
filling, hydrological interruption, or other means. Based on wetland surveys conducted on site, it is anticipated that drainage and wetland features on site would qualify as waters of the state, but would not fall under USACE jurisdiction. An approved determination from USACE will be required confirming that the drainage and wetland features on the project site are non-jurisdictional.			
Impact BIO-4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. The project site is currently the only open space connecting the native RSS habitats in the Jurupa Hills and Rattlesnake Mountain. Under the current project design, the proposed project would permanently remove the remaining open space between the Jurupa Hills and Rattlesnake Mountain, restricting movement for CAGN. Since there are no other linkages that could be used by avian species, including CAGN,	Significant	<u>Mitigation Measures</u> Mitigation Measure BIO-8. Maintain an Open Space Corridor between the Jurupa Hills and Rattlesnake Mountain. To facilitate and support opportunities for CAGN to access the RSS habitat preserved on site and encourage movement between Rattlesnake Mountain and the Jurupa Hills, an area approximately 100 feet wide along the project site's southern boundary shall be maintained as a vegetative linkage. The 100-foot-wide vegetated area will be accommodated by maintaining a 100-foot easement along the project site's southern border and will be clear of buildings in perpetuity. Vegetation will include a few large scrubs/trees and native RSS vegetation species, and may include ornamental vegetation species compatible with the RSS vegetation structure and function. This type of vegetation will provide resting areas for CAGN dispersing between the preserved RSS habitat on site in the Jurupa Hills and Rattlesnake Mountain (see Appendix D, Exhibit 4). The RSS plant community found in the region is an open, sparsely vegetated plant community dominated by brittlebush (<i>Encelia farinosa</i>), sagebrush (<i>Artemisia californica</i>), California buckwheat (<i>Eriogonum fasciculatum</i>), and deerweed (<i>Acmispon glaber</i>), and as such these species	Less than significant.

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
for movement between the Jurupa Hills and Rattlesnake Mountain, the complete removal of the open space area by the project would be a significant impact. Implementation of mitigation would ensure avian species, including CAGN, could safely move between the Jurupa Hills and Rattlesnake Mountain.		will be included in the plantings. Vegetation shall be planted at minimum 75-foot intervals, leaving sufficient gaps between the shrubs such that the CAGN would not establish nests or territories but would effectively meet the dispersal needs of CAGN. The Habitat Mitigation and Monitoring Plan (Appendix E) provides detailed specifications on installation, irrigation, maintenance, and performance standards for the vegetation plantings.	
Impact BIO-5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. There are windrows of olive trees and eucalyptus trees on the project site that qualify as heritage trees under the City of Fontana Tree Preservation Ordinance. Olive trees occur just outside the western border (outside of the limits of disturbance).	Significant	<p><u>Regulatory Requirements</u></p> <ul style="list-style-type: none"> • RR-B-3: Obtain Permits for Removal of Heritage Trees. <p><u>Mitigation Measures</u></p> <p>Implement Mitigation Measures BIO-4 through BIO-6.</p> <p>Mitigation Measure BIO-9: Perform Tree Inventory and Protect, Relocate, or Replace any City-designated Heritage, Significant, or Specimen Trees in Accordance with City Code Requirements. A certified arborist shall perform a tree inventory to identify the heritage, significant, or specimen trees within the limits of disturbance. The arborist will document species, age, size, structure, and trunk diameter. If one or more heritage, significant, or specimen trees that occur within the limits of disturbance would be disturbed or removed by project activities, the project applicant shall be responsible for the protection, relocation, and/or replacement of the tree(s). A permit for the removal of these trees will be required (Section 28-68) along with implementation of the protective measures (Section 28-66) to avoid impacts on heritage, significant, and specimen trees outside of the limits of disturbance. Trees that will be removed must be replaced or relocated per the guidelines in Section 28-67 of the Tree Preservation Ordinance.</p> <p>As indicated by Section 28-65 of the Tree Preservation Ordinance, no permit or replacement shall be required for the removal of: damaged parts of a heritage, significant, or specimen tree that has sustained an injured trunk, broken</p>	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		limbs, or uprooting as a result of storm damage or other acts of God, which create a hazard to life or property; trees that are determined to be diseased and/or dead by a certified arborist and approved by the City staff; trees that are determined to be hindering the safe application or installation of traffic control devices or roadway improvements in the public right-of-way or trees that hinder the line of site as determined by the City engineer; or trees that are determined to be within the ultimate right-of-way as shown within the circulation element of the City's General Plan.	
Impact BIO-6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. The western boundary of the project site supports a narrow band of RSS habitat, which is adjacent to and an extension of the non-contiguous habitat block designated by Riverside County under their MSHCP for the Jurupa Conservation Area.	Significant	<u>Mitigation Measures</u> Mitigation Measures BIO-4 through BIO-6.	No impact
Cultural Resources			
Impact CUL-1. Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5. Two historic-era resources were identified within the project site. The portion of resource P-36-16417 (CPHI-SBR-21) plotted through	Less than Significant	<u>Standard Requirements</u> <ul style="list-style-type: none"> SR-C-1: Comply with City of Fontana Municipal Code Chapter 5, Buildings and Building Regulations, Article XIII, Section 5-351: Preservation of Historic Resources. <u>Mitigation Measures</u> No mitigation measures are required.	Less than Significant.

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
the project site formerly comprised a segment of the historic San Bernardino/Sonora Road that could not be identified during the most recent cultural resource survey of the area. The portion of the resource through the project site no longer retains historical integrity, and does not contribute to the significance of the historic San Bernardino/Sonora Road. No direct impacts to any portion of resource P-36-25455 would occur within the project site.			
Impact CUL-2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5. Two prehistoric resources were identified within the project site. Although CA-SBR-1573 would not be adversely affected by the project, prehistoric cultural resources have been identified within and adjacent to the project site, and the project site is considered to be potentially sensitive in terms of buried prehistoric cultural resources. Grading and trenching, along with other ground-disturbing actions during construction, have the potential to disturb and destroy	Significant	<p><u>Regulatory Requirements</u></p> <ul style="list-style-type: none"> • RR-C-1: Comply with Requirements if Unanticipated Discovery of Human Remains Occurs. <p><u>Standard Requirements</u></p> <ul style="list-style-type: none"> • SR-C-1: Comply with City of Fontana Municipal Code Chapter 5, Buildings and Building Regulations, Article XIII, Section 5-351: Preservation of Historic Resources. <p><u>Mitigation Measures</u></p> <p>Mitigation Measure CUL-1: Monitoring for Archaeological Resources during Construction. Prior to commencement of any grading activity on the project site and consistent with the findings and recommendations of the cultural resources surveys and reports for the proposed project, a qualified archaeological monitor shall be retained by the applicant after consultation with interested tribal and Native American representatives to be present during all excavation activities occurring within 100 meters of each of following sites: P-19-17932, CA-SBR-1573, and CA-SBR-714. The monitor shall work under the direct supervision of a cultural resources professional who meets the Secretary of the Interior's Professional Qualification Standards for</p>	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
a historic or archaeological resource. Disturbance of any significant archaeological resource would result in a significant adverse impact.		<p>archaeology. The monitor shall be empowered to temporarily halt or redirect construction work in the vicinity of any find until a qualified archaeologist can evaluate it. The monitor shall be present at the pre-grade conference in order to explain the cultural mitigation measures associated with the project, and shall be present on site during all ground-disturbing activities.</p> <p>Mitigation Measure CUL-2: Preparation of Archaeological Monitoring Plan. Prior to commencement of any grading activity on the project site and consistent with the findings and recommendations of the cultural resources reports pertaining to the sensitivity of each area on the project site for cultural resources, the qualified archaeologist shall prepare an Archaeological Monitoring Plan. The Monitoring Plan shall be prepared for review and approval by the City of Fontana Director of Community Development and shall, include at a minimum:</p> <ul style="list-style-type: none"> • A list of personnel involved in the monitoring activities; • A description of how the monitoring will occur; • A description of the frequency of monitoring (e.g., full time, part-time, spot checking, etc.); • A description of what resources may be discovered; • A description of circumstances that would result in the halting of work at the project site (e.g., what is considered a "significant" archaeological site); • A description of the procedures for halting work on the site and notification procedures; and • A description of monitoring reporting procedures. <p>Should any cultural resources be discovered during monitoring of project construction activities, the on-site cultural resources monitor shall stop work actions within 100 feet of the discovery until such time as the resource can be evaluated by a qualified archaeologist to determine its significance and make appropriate treatment recommendations. Project personnel shall not collect or move any cultural resource materials. To the extent feasible,</p>	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		<p>project activities shall avoid such resources. Where avoidance is not feasible, the resources shall be evaluated for their eligibility for listing in the California Register of Historical Resources. If a resource is not eligible, avoidance is not necessary. If a resource is determined eligible, adverse effects on the resource shall be avoided or such effects must be mitigated. Mitigation can include, but is not necessarily limited to, excavation of the deposit in accordance with a cultural resource mitigation or data recovery plan that makes provisions for adequately recovering the scientifically consequential information from and about the resource (see CCR Title 4(3) Section 15126.4(b)(3)(C)). The data recovery plan shall be prepared and adopted prior to any excavation and should make provisions for sharing information with tribes that have requested Senate Bill 18 consultation. Results of the data recovery plan shall be deposited with the regional California Historical Resources Information Center repository.</p> <p>Prehistoric resources may include lithics, ceramics, animal bone, or concentrations of burned rock, while historical resources may include glass, ceramics, or building foundations.</p> <p>It shall be the responsibility of the City of Fontana Department of Public Works to verify that the Archaeological Monitoring Plan is implemented by the applicant during project grading and construction.</p> <p>As part of the Archaeological Monitoring Plan, upon completion of all mitigation activities, the consulting archaeologist shall submit a monitoring report to the City of Fontana Director of Community Development and to the San Bernardino Archaeological Information Center summarizing all monitoring and mitigation activities and confirming that all mitigation requirements have been met. The monitoring report shall be prepared consistent with the guidelines of the Office of Historic Preservation's <i>Archaeological Resources Management Reports (ARMR): Recommended Contents and Format</i>. The City of Fontana Director of</p>	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		Community Development or designee shall be responsible for reviewing any reports produced by the archaeologist to determine the appropriateness and adequacy of the findings and recommendations.	
Impact CUL-3. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Excavations in the igneous and metamorphic rocks exposed around the margins of the project site would not encounter any fossils. Excavations in the relatively coarse-grained Quaternary deposits exposed in most of the project site also likely would not encounter significant vertebrate fossil remains. Should fine-grained Quaternary sediments at depths below 5 feet be discovered during construction, site grading at depths below 5 feet could disturb previously unknown paleontological resources, resulting in a significant impact.	Less than Significant	<u>Mitigation Measures</u> Mitigation Measure CUL-3. Monitoring of Paleontological Resources and Reporting. A Paleontological Monitoring Plan will be prepared by the applicant or its designee for City approval. If fine-grained quaternary sediments are discovered below 5 feet in depth within Parcels 5 or 6 either during preparation of the Final Geotechnical Reports or geotechnical testing or during construction, a qualified paleontology monitor shall monitor excavation in these areas based on the Paleontological Monitoring Plan. The paleontology monitor shall retain the option to reduce monitoring if, in his or her professional opinion, sediments being monitored are previously disturbed. Monitoring may also be reduced if the potentially fossiliferous geologic units previously described are not found to be present or, if present, are determined by qualified paleontological personnel to have low potential to contain fossil resources. The monitor shall be equipped to salvage fossils and samples of sediments as they are unearthed to avoid construction delays and shall be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Any recovered specimens shall be prepared to a point of identification and permanent preservation, and shall be curated into a professional, accredited museum repository with permanent retrievable storage. A report of findings, with an appended itemized inventory of specimens, shall be prepared. The report and inventory, when submitted to the City of Fontana, will signify completion of the program to mitigate impacts to paleontological resources.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
Impact CUL-4. Disturb any human remains, including those interred outside of formal cemeteries. No human remains have been identified in the project area. However, if any human remains are encountered during construction of the project, the regulatory requirement for the unanticipated discovery of human remains would be followed to reduce impacts to less than significant levels.	Less than Significant	<u>Regulatory Requirements</u> <ul style="list-style-type: none"> • RR-C-1: Comply with Requirements if Unanticipated Discovery of Human Remains Occurs. <u>Mitigation Measures</u> No mitigation measures are required.	Less than Significant
Geology and Soils			
Impact GEO-1. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: <ol style="list-style-type: none"> Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42. Strong seismic ground shaking. Seismic-related ground 	Significant	<u>Regulatory Requirements</u> <ul style="list-style-type: none"> • RR-G-1: Comply with Fontana Municipal Code, Chapter 5, Article III, 2013 Edition of the California Building Code. <u>Standard Requirements</u> <ul style="list-style-type: none"> • SR-G-1: Develop and Implement an Erosion Control Plan. <u>Mitigation Measures</u> Mitigation Measure GEO-1: Final Geotechnical Studies/Incorporate Foundation Design Elements Appropriate for the Project Geographic Area. Prior to approval of grading permits, a specific final geotechnical study for each planning area of the WVLCSP will be provided by the applicant to the City for review and approval. A qualified registered geologist or engineer will verify to the satisfaction of the City Director of Engineering or the Director's designee that foundations designed for all proposed structures are appropriate and meet code requirements. Recommendations included in Section 3.0 and Appendix D of the 2007 Preliminary Geotechnical Report and on pages 5 through 8 of the 2013 Supplemental Geotechnical Investigation and Infiltration Testing Report (geotechnical	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
<p>failure, including liquefaction.</p> <p>iv. Landslides.</p> <p>The implementation of proper seismic design specifications and techniques would allow structures to withstand intense groundshaking without collapse. Design of any proposed structures associated with the WVLCSP would conform to current codes and specifications that support protection and stability against seismic events. The seismic design would be based on the most current CBC. Prescribed measures would reduce any potential impacts related to seismically induced hazards to less-than-significant levels.</p>		<p>reports are included as Appendix H to this Recirculated Draft EIR) regarding foundations, overexcavation, and recompaction of the footing subgrade soils, slab-on-grade, and seismic design parameters will be incorporated into the final geotechnical reports as appropriate based on updated findings. All foundations will be designed in accordance with CBC and local requirements. The footings for one- to two-story tilt-up precast concrete structures will have a minimum embedment depth of 18 inches, with a minimum width of 24 and 18 inches for isolated and continuous footings, respectively.</p> <p>Additional recommendations from the 2007 Preliminary Geotechnical Report and the 2013 Supplemental Geotechnical Investigation and Infiltration Testing Report addendum pertaining to site clearing and preparation, temporary excavation, engineered fill placement, infiltration basins, trench backfilling, foundation design, retaining walls, slope stability, rippability, pavement design and thickness, cement type, shrinkage, and surface drainage will be implemented per the findings of final geotechnical studies required by this mitigation measure in order to minimize any negative effects associated with erosion and sedimentation.</p> <p>Mitigation Measure GEO-2: Geotechnical Testing During Construction. Geotechnical observations and testing will be conducted as necessary during excavation and all phases of grading operations, consistent with the conclusions and recommendations presented in the final Geotechnical Studies (required per Mitigation Measure GEO-1) for each planning area of the project. In accordance with the final Geotechnical studies, the 2007 Preliminary Geotechnical Report, and the 2013 Supplemental Geotechnical Investigation and Infiltration Testing Report measures related to trench backfill and retaining wall backfill subdrain will be implemented. Geotechnical observation and testing will be provided during the following:</p> <ul style="list-style-type: none"> • After completion of site clearing. 	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		<ul style="list-style-type: none"> • During overexcavation of compressible soil. • During compaction of all fill materials. • After excavation of all footings and prior to placement of concrete. • During retaining wall back drain construction and backfilling. • During utility trench backfilling and compaction. • During pavement subgrade and base preparation. • When any unusual conditions are encountered. 	
Impact GEO-2. Result in substantial soil erosion or the loss of topsoil. Grading and excavation activities and the removal of vegetation cover associated with project construction would increase the potential for temporary or sporadic erosion and sedimentation events to occur. Construction activities also have potential to induce soil compaction and wind erosion conditions that could result in the substantial soil erosion and/or loss of topsoil.	Significant	<u>Regulatory Requirements</u> <ul style="list-style-type: none"> • RR-G-1: Comply with Fontana Municipal Code, Chapter 5, Article III, 2013 Edition of the California Building Code. • RR-HW-1: Prepare and Implement a Stormwater Pollution Prevention Plan. • RR-HW-2: Submit a Final Stormwater Quality Management Plan for City Approval. <u>Standard Requirements</u> <ul style="list-style-type: none"> • SR-G-1: Develop and Implement an Erosion Control Plan. <u>Mitigation Measures</u> Mitigation Measures GEO-1 and HYD-1.	Less than Significant
Impact GEO-3. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. Although the site has a potential for groundshaking from earthquakes generated by	Less than Significant	<u>Regulatory Requirements</u> <ul style="list-style-type: none"> • RR-G-1: Comply with Fontana Municipal Code, Chapter 5, Article III, 2013 Edition of the California Building Code. <u>Mitigation Measures</u> Mitigation Measures GEO-1 and GEO-2.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
faults in the region, the site is not located in an area that has been mapped as potentially liquefiable. The regional depth of groundwater is 150 feet. Groundwater on the site was discovered at a depth of 64 feet in geotechnical studies. These factors effectively negate liquefaction hazards.			
Impact GEO-4. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property. The soils on site exhibit a very low expansion potential. Design of any proposed structures within the WVLCSP site would conform to current regulatory codes and specifications that support protection and stability against seismic events.	Less than Significant	<u>Regulatory Requirements</u> <ul style="list-style-type: none"> • RR-G-1: Comply with Fontana Municipal Code, Chapter 5, Article III, 2013 Edition of the California Building Code. <u>Mitigation Measures</u> Mitigation Measures GEO-1 and GEO-2.	Less than Significant
Impact GEO-5. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water. The project would be connected to the City's wastewater system and would not use septic tanks or alternative wastewater disposal systems.	No impact	<u>Mitigation Measures</u> No mitigation measures are required.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
Greenhouse Gas Emission			
<p>Impact GHG-1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.</p> <p>The unmitigated peak annual emissions during the most intense construction activities from both on- and off-site emissions, which would total 4,831 metric tons per year (MT/yr) and total GHG emissions over the entire construction period are expected to be 8,300 MT from a combination of building, grading, paving, and other associated construction activities. Operation of the project under “business-as-usual” conditions would result in 42,900 MTCO₂e per year. The total project’s annual GHG emissions of 35,000 MTCO₂e per year would exceed a 15% reduction from Business as Usual conditions.</p>	Significant	<p><u>Specific Plan Requirements</u></p> <ul style="list-style-type: none"> • SP-GG-1: Incorporate Water Conservation and Efficient Measures for Landscaping • SP-GG-2: Design Building Components to Meet 2013 Title 24 Standards. • SP-GG-3: Design CALGreen-Compliant Buildings. • SP-GG-4: Provide Electrical Loading Docks. • SP-GG-5: Utilize Energy-Efficient Lighting. • SP-GG-6: Select Efficient Refrigerants and HVAC Systems. • SP-GG-7: Provide Landscaped Parking Lots. <p><u>Standard Requirements</u></p> <ul style="list-style-type: none"> • SR-GG-1: Provide Waste Reduction and Recycling Education. <p><u>Mitigation Measures</u></p> <p>Implement Mitigation Measures AQ-2 through AQ-5 and AQ-7 through AQ-14.</p> <p>Mitigation Measure GHG-1: Incorporate More Energy-Efficient Measures Related to Construction and Building Materials. The project will be required to implement the following measures to improve energy efficiency during construction:</p> <ul style="list-style-type: none"> • Use locally produced and/or manufactured building materials for at least 10% of the construction materials used for the project. • Use “green” building materials, such as those materials that are resource efficient and recycled and manufactured in an environmentally friendly way, for at least 10% of the project. <p>Mitigation Measure GHG-2: Incorporate Energy Efficiency Measures for New Warehouse Buildings. Prior to the issuance of building permits, the WVLCSP will demonstrate the incorporation of the following project design features that will achieve a minimum of 15% reduction in GHG emissions from “business as usual”</p>	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		<p>conditions, pursuant to the San Bernardino County Regional Greenhouse Gas Reduction Plan and AB 32 and the GHG emissions reduction goal selected by the City of Fontana as part of that regional program. Future projects (either constructed by the applicant as core and shell buildings or by building operators) will also be required to implement the Regional Greenhouse Gas Reduction Plan and meet the 15% reduction by incorporating the following design features:</p> <p><i>Energy Efficiency</i></p> <ul style="list-style-type: none"> • Design buildings to be energy efficient and meet 2013 Title 24 requirements and comply with the CALGreen Code. Under Tier I, all new construction projects are required to reduce energy consumption by 15% below the baseline required by CEC, as well as implement more stringent green measures than those required by mandatory code. • Install efficient lighting and lighting control systems. Solar or light-emitting diodes (LEDs) will be installed for outdoor lighting. The site and buildings will be designed to take advantage of daylight, such that use of daylight is an integral part of the lighting systems in buildings. • Use trees, landscaping, and sunscreens on west and south exterior building walls to reduce energy use. • Install light colored “cool” roofs over air conditioned spaces and cool pavements. • Install energy-efficient heating and cooling systems, appliances and equipment, and control systems that are Energy Star rated. • Implement design features to increase the efficiency of the building envelope (i.e., the barrier between conditioned and unconditioned spaces). This includes installation of insulation to minimize heat transfer and thermal bridging and to limit air leakage through the structure or within the heating and cooling distribution system to minimize energy consumption. • Provide vegetative or human-made exterior wall shading 	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		<p>devices or window treatments for east-, south-, and west-facing walls with windows.</p> <ul style="list-style-type: none"> • Incorporate Energy Star rated windows, space heating and cooling equipment, light fixtures, appliances, or other applicable electrical equipment. • Install and use equipment and machinery that only use less than 3,900 GWP HFC refrigerants or natural refrigerants (ammonia, propane, CO₂) for refrigeration and fire suppression equipment. <p><i>Renewable Energy</i></p> <ul style="list-style-type: none"> • Install solar-ready infrastructure so that solar panels could be included over any future parking locations internal to the project. No solar panels will be placed in areas visible from Jurupa Avenue, Locust Street, Armstrong Road or the new private street west of the Armstrong/Locust/7th Street intersection and glare would not produce spill-over that affects nearby sensitive receptors. • Design buildings to have “solar ready” roofs that will structurally accommodate later installation of rooftop solar panels. Building operators providing rooftop solar panels will submit plans for solar panels prior to occupancy. • Use combined heat and power in appropriate applications. <p><i>Water Conservation and Efficiency</i></p> <ul style="list-style-type: none"> • Create water-efficient landscapes with a preference for a xeriscape landscape palette. Provide a landscape and development plan for the project that takes advantage of shade, prevailing winds, and landscaping. • Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls and sensors for landscaping according to the California Department of Water Resources Model Efficient Landscape Ordinance. • Install landscape irrigation infrastructure along the 	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		<p>property frontage to deliver and use reclaimed water, should reclaimed water supplies become available through the City.</p> <ul style="list-style-type: none"> • Design buildings to be water efficient. Install water-efficient fixtures and appliances (e.g., EPA WaterSense labeled products). • Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff. • Restrict the use of water for cleaning outdoor surfaces and vehicles. • Implement low-impact development practices that maintain the existing hydrologic character of the site to manage storm water and protect the environment. The project will retain storm water runoff on site and construct basins to hold and filter water. • Implement a comprehensive water conservation strategy through methods described in the WVLCSP that are appropriate for the project and location. • The applicant will provide education about water conservation and available programs and incentives to distribute to employees. <p><i>Solid Waste Measures</i></p> <ul style="list-style-type: none"> • Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard). • Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas. • The applicant will provide education and publicity about reducing waste and available recycling services to the building operators to distribute to employees. <p><i>Transportation and Motor Vehicles</i></p> <ul style="list-style-type: none"> • Limit idling time for commercial vehicles to no more than five minutes, including delivery and construction vehicles, per ARB requirements. 	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		<ul style="list-style-type: none"> The construction contractor and project operator will promote ride sharing programs (e.g., by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading and waiting areas for ride sharing vehicles, and providing a web site or message board for coordinating rides). Provide electric vehicle charging facilities to encourage the use of low or zero-emission vehicles. Incorporate bicycle lanes and routes into street improvements within the WVLCSP area. Provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. For large employers, provide facilities that encourage bicycle commuting (e.g., locked bicycle storage or covered or indoor bicycle parking). 	
Impact GHG-2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. The combination of statewide GHG reduction measures, project design features, and EIR mitigation measures would result in an 18.2% reduction in GHG emissions from BAU. This is greater than the reduction from business as usual targets set in Executive Order S-3-05, AB 32 and the ARB's Scoping Plan, as well the San Bernardino County Regional Greenhouse Gas Reduction Plan, and the 15% reduction target Fontana selected based on the SANBAG	Significant	<u>Specific Plan Requirements</u> <ul style="list-style-type: none"> SP-GG-1: Incorporate Water Conservation and Efficient Measures for Landscaping. SP-GG-2: Design Building Components to Meet 2013 Title 24 Standards. SP-GG-3: Design CALGreen-Compliant Buildings. SP-GG-4: Provide Electrical Loading Docks. SP-GG-5: Utilize Energy Efficient Lighting. SP-GG-6: Select Efficient Refrigerants and HVAC Systems. SP-GG-7: Provide Landscaped Parking Lots. <u>Standard Requirements</u> <ul style="list-style-type: none"> SR-GG-1: Provide Waste Reduction and Recycling Education. <u>Mitigation Measures</u> Mitigation Measures AQ-2 through AQ-5, AQ-7 through AQ-14, and GHG-1 and GHG-2.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
regional GHG emissions reduction plan.			
Impact GHG-3. Result in impacts on the proposed project from global climate change. The project site is in an elevated location and, therefore, would not be threatened from rising waters. The region in which the project site is located is subject to seasonal wildfires. The project buildings would have all required fire suppression systems, minimizing the risk of fire damage. Climate change impacts are expected to be less than significant.	Less than Significant	<u>Mitigation Measures</u> No mitigation measures are required.	No impact
Hazards and Hazardous Materials			
Impact HAZ-1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Project construction would involve routine transport, use, and disposal of hazardous materials such as solvents, paints, oils, grease, and caulking. Such transport, use, and disposal must be compliant with applicable regulations such as the RCRA, Department of Transportation hazardous materials regulations, and local CUPA regulations. No significant	Less than Significant	<u>Regulatory Requirements</u> <ul style="list-style-type: none"> • RR-HM-2: Prepare a Hazardous Materials Construction Management Plan for Accidental Spills. <u>Mitigation Measures</u> No mitigation measures are required.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
hazard to the public or the environment through the routine transport, use, or disposal of hazardous waste during construction or operation of the proposed project is anticipated.			
Impact HAZ-2. 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. Typical construction-related hazardous materials would be used during construction of the proposed project, including gasoline, oil, other vehicle-related fluids, paints, solvents, and metals. It is possible that any of these substances could be released during construction activities.	Significant	<p><u>Regulatory Requirements</u></p> <ul style="list-style-type: none"> • RR-HM-1: Conduct Asbestos and Lead-Based Paint Removal if Required. • RR-HM-2: Prepare a Hazardous Materials Construction Management Plan for Accidental Spills. • RR-HM-3: Abandon Any Identified Wells in Accordance with County Requirements. <p><u>Standard Requirements</u></p> <ul style="list-style-type: none"> • SR-HM-1: Contact Underground Services Alert. • SR-HM-2: Require Construction Equipment Spark Arresters. <p><u>Mitigation Measures</u></p> <p>Mitigation Measure HAZ-1: Phase II Environmental Site Assessment. Prior to design review submittal for the first building within the WVLCSP site, a Phase II ESA will be prepared for any portions of the project area for which there is evidence of previous contamination, as identified in the Phase I ESA. The Phase II ESA will be submitted to the City Director of Community Development and the County Division of Environmental Health for review and approval. The Phase II ESA will include, but not be limited to, the following:</p> <ul style="list-style-type: none"> • A scope of work for preparation of a Health and Safety Plan that specifies pre-field activity, such as preparation of a Health and Safety Plan marking of boring locations and obtaining utility clearance, and field activities, such as identifying appropriate sampling procedures, health and safety measures, chemical testing methods, and quality assurance/quality control procedures in 	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		<p>accordance with the ASTM Standard.</p> <ul style="list-style-type: none"> • Necessary permits for well installation and/or boring advancement. • A Soil Sampling and Analysis Plan in accordance with the scope of work. • Laboratory analyses conducted by a State-certified laboratory. • Disposal processes, including transport by a State-certified hazardous material hauler to a State-certified disposal or recycling facility licensed to accept and treat hazardous waste. • An asbestos-containing materials survey for analysis of demolition/construction debris located on site. <p>The Phase II ESA must determine the environmental quality of the site and verify whether or not any portion of the site are contaminated. The applicant and project contractors shall be required to follow the recommendations and specific measures included in the Phase II ESA, specifically if contamination exists on site, and follow measures for site remediation in accordance with the DTSC. If any hazardous materials are discovered, a plan for their proper removal shall be prepared in accordance with applicable requirements of the California Division of Occupational Safety and Health (Cal/OSHA) and the County of San Bernardino Environmental Health Services.</p> <p>Prior to site construction, the applicant shall undertake the following actions in accordance the performance standards provided herein to ensure safe conditions of the site.</p> <p>Soils Testing. As part of the Final Geotechnical and Soils Study for the proposed specific plan (refer to Mitigation Measure GEO-1) soils testing shall be undertaken to confirm the findings of previous studies for the Valley Trails Specific Plan EIR indicating an absence of contamination from previous pesticide use on site, as well as to confirm the absence of asbestos and lead-based paint in the remnant construction debris on-site. The soils testing shall include applicable testing procedures pursuant to the directives of,</p>	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		<p>and subject to review by, the County Division of Environmental Health.</p> <p>Site Remediation. Should any hazardous materials be determined present on the project site, site remediation shall be undertaken to address such hazards, subject to the regulatory authority of the DTSC, RWQCB, and County Division of Environmental Health, to achieve risk-based cleanup standards of an acceptable excess cancer risk (ECR) of 1×10^{-5} or as otherwise established by the USEPA, DTSC, or County Division of Environmental Health for proposed industrial uses on site. Remedial actions may include, but not be limited to, the following. Final remediation technologies will be determined in a final Remediation Action Plan/ Feasibility Study and could be adaptively managed such that the remedial action objectives for the specific land uses being approved within the project site are achieved.</p> <ul style="list-style-type: none"> • Soil Excavation. Targeted excavation of contaminated soil with on-site reuse or off-site disposal will be provided. Excavation strategies that may be employed on-site include: <ul style="list-style-type: none"> ○ Targeted Excavation with Off-site Disposal. With this technology, heavily contaminated soil is excavated and transported by truck or rail to a permitted off-site treatment and disposal facility. Pretreatment may be required at the disposal facility prior to disposal. ○ Targeted Excavation with On-site Treatment. With this technology, heavily contaminated soil is excavated and stockpiled on site for treatment and subsequent reuse on site. Potential treatment technologies include: <ul style="list-style-type: none"> • Plasma arc centrifugal treatment technology, which uses heat generated by a plasma arc to melt the inorganic portion of waste material while destroying the organic portion, creating an inert slag that can be reused on site; • Smoldering treatment technology, a new 	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		<p>technology to remediate oil in the subsurface, either in situ or above-ground in treatment chambers following excavation that uses smoldering combustion (the type of combustion that turns charcoal into ash in a barbeque grill) to quickly and efficiently destroy contaminants; and bioremediation that uses naturally occurring microorganisms to degrade organic contaminants in soil.</p> <ul style="list-style-type: none"> Targeted Excavation with On-site Extraction. With this technology, moderately contaminated soil is excavated and placed in areas that will be covered by soil, concrete slabs, or other structures that prevent contact with the soil. <p>Installation of Sub-slab Vapor Barriers. To minimize potential vapor intrusion into proposed new buildings within 1,000 feet of the waste footprint, sub-slab vapor barriers shall be required if methane testing conducted prior to issuance of building permits indicates the presence of methane or other volatile gases.</p> <p>Additional Air Pollutant and Greenhouse Gas (GHG) Emissions Analysis. The air quality and GHG analyses undertaken for the proposed WVLCSP are based on the proposed project site grading plan, which is intended to achieve an on-site balance of cut and fill. Should site remediation and/or soil excavation be required as part of implementation of this measure, additional analysis of the air quality and GHG emissions associated with such site remediation and/or soil excavation will be required. While this measure sets performance standards for safety in relation to hazardous materials, such air quality and GHG analyses cannot be undertaken at this time because the actual need for remediation and specific methods to accomplish site remediation, as well as the amount of any additional grading activity to be undertaken as part of site remediation, would be determined as part of a Phase II ESA undertaken prior to approval of design review.</p>	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		<p>Mitigation Measure HAZ-2: Engineering Controls and Best Management Practices during Construction. During construction, the contractor will employ use of engineering controls and best management practices to minimize human exposure to potential contaminants. Engineering controls and construction best management practices specified on project construction plans for review and approval by the City Department of Community Development will include, but not be limited to, the following.</p> <ul style="list-style-type: none"> Contractor employees working on site will be certified in the Occupational Safety and Health Administration's 40-hour Hazardous Waste Operations and Emergency Response training. The contractor will monitor areas around the construction site for fugitive vapor emissions with appropriate field screening instrumentation. The contractor will water/mist soil as it is being excavated and loaded onto transportation trucks. The contractor will place any stockpiled soil in areas shielded from prevailing winds. The contractor will cover the bottom of excavated areas with sheeting when work is not being performed 	
<p>Impact HAZ-3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. The use of non-acutely hazardous chemicals in relatively small quantities and concentrations is anticipated, and it is expected that all hazardous materials would be handled in accordance with all applicable rules and regulations.</p>	No Impact	<p><u>Mitigation Measures</u> No mitigation measures are required.</p>	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
Construction of the proposed project would not affect land uses 0.3 mile away, including Walter Zimmerman Elementary School and Ruth O. Harris Middle School.			
Impact HAZ-4. 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 create a significant hazard to the public or the environment. Portions of the existing project site were found in several environmental databases during completion of the Phase I ESA. The project property was listed in four environmental databases, including the DTSC's EnviroStor database along with the LUST, SWEEPS UST, and SCH databases. Research indicated that the site was under evaluation by the DTSC in regards to its past agricultural use, and was granted "inactive" status in 2008. The project site was granted closure under the LUST and SWEEPS UST databases in 1994.	Significant	<u>Regulatory Requirements</u> <ul style="list-style-type: none"> • RR-HM-1: Conduct Asbestos and Lead-Based Paint Removal if Required. • RR-HM-2: Prepare a Hazardous Materials Construction Management Plan for Accidental Spills. • RR-HM-3: Abandon Any Identified Wells in Accordance with County Requirements. <u>Standard Requirements</u> <ul style="list-style-type: none"> • SR-HM-1: Contact Underground Services Alert. • SR-HM-2: Require Construction Equipment Spark Arresters. <u>Mitigation Measures</u> Mitigation Measures HAZ-1 and HAZ-2.	Less than Significant
Impact HAZ-5. For a project located within an airport land use plan or, where such a plan has not been adopted, within	No impact	<u>Mitigation Measures</u> No mitigation measures are required.	No impact

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
two miles of a public airport or public use airport, the project would result in a safety hazard for people residing or working in the project area. The project site is not within an airport land use plan or within 2 miles of a public airport or public use airport. The closest airport is the Flabob Airport in Riverside County, which is approximately 3 miles south of the project site. Also, the proposed project site is not located within any Airport Influence Areas, airport safety areas, or Accident Potential Zone.			
Impact HAZ-6. For a project within the vicinity of a private airstrip, the project would result in a safety hazard for people residing or working in the project area. The project site is not within the vicinity of a private airstrip. The closest airports described in Impact HAZ-5 are in excess of 3 miles from the project site. Therefore, the proposed project would not result in an airstrip-related safety hazard for people residing or working in the project area.	No impact	<u>Mitigation Measures</u> No mitigation measures are required.	No impact
Impact HAZ-7. Impair implementation of or physically interfere with an	Significant	<u>Mitigation Measures</u> Mitigation Measure TRA-1a.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
<p>adopted emergency response plan or emergency evacuation plan. No impacts on emergency evacuation or response plans during project operations would be expected. During construction, the project has potential to impair and/or interfere with emergency response access in the vicinity of the project site due to possible lane closures, detours, and construction-related traffic along adjacent streets. During construction, a Construction Management Plan (Mitigation Measure TRA-1a) would be implemented to minimize obstruction, which would help to ensure continued emergency access to the project site and nearby properties.</p>			
<p>Impact HAZ-8. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. Because the project would introduce new development into an area adjacent to <i>high</i> and <i>very high</i> fire hazard severity zones, the potential for exposure of people and structures to wildland fires is</p>	Significant	<p><u>Standard Requirements</u></p> <ul style="list-style-type: none"> • SR-HM-2: Require Construction Equipment Spark Arresters. • SR-HM-3: Prepare a Fuel Modification Zone Management Plan. <p><u>Mitigation Measures</u></p> <p>Mitigation Measure HAZ-2: Clear Materials that Could Serve as Fire Fuel from Areas Slated for Construction Activities Prior to Initiation of Construction. Prior to ground clearing, grading and other ground-disturbing construction activities contractors will clear areas of dry vegetation or other potential fire fuels on or near staging areas, welding areas, or any other areas on which equipment will be operated. The City will require contractors to maintain areas subject to construction activities clear of</p>	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
considered a potentially significant impact.		combustible natural materials to the extent feasible to maintain firebreaks and minimize the availability of fire fuels. Proposed staging areas to be cleared will be identified with the assistance of a qualified biologist to avoid conflicts with policies to preserve protected habitat areas. Staging and clearing will not be permitted in protected habitat areas. This requirement will be included on project construction plan specifications and reviewed for approval by the City Fire Department prior to issuance of grading permits.	
Hydrology and Water Quality			
Impact HYD-1: Violate any water quality standards or waste discharge requirements. Construction activities associated with the future development of the WVLCSP could create short-term surface water quality impacts resulting from the potential discharge/release of sediment loads that exceed water quality objectives or chemical spills into water bodies if proper minimization measures are not implemented. Implementation and build out of the proposed WVLCSP could also result in water quality impacts during project operation and maintenance activities. Runoff from on-site parking, loading, and truck maneuvering could affect water quality by transporting trash, oil, grease, and gasoline, and diesel fuel to storm drains. Compliance with development	Significant	<p><u>Regulatory Requirements</u></p> <ul style="list-style-type: none"> • RR-HW-1: Prepare and Implement a Stormwater Pollution Prevention Plan. • RR-HW-2: Submit a Final Stormwater Quality Management Plan for City Approval. • RR-HW-3: Comply with City of Fontana Municipal Code Chapter 23, Article IX, General Construction Permit and the City's Stormwater Management Plan. • RR-HW-4: Include Best Management Practices for Water Quality Management. <p><u>Standard Requirements</u></p> <ul style="list-style-type: none"> • SR-G-1: Develop and Implement an Erosion Control Plan. <p><u>Mitigation Measures</u></p> <p>Mitigation Measure HYD-1: Maintain Stormwater Detention Basins and Biotreatment Areas during Project Operation. Final selection of BMPs will be subject to approval by the Santa Ana RWQCB. The City will review the list and description of the long-term BMPs and ascertain whether the physical effects of those features are addressed within the project Final EIR, or whether additional environmental analysis would be required. The City and/or its contractors will inspect the project following construction to ensure that all identified BMPs have been properly installed. The applicant or applicant's designee will prepare and implement a regular maintenance and monitoring schedule to ensure that these BMPs function</p>	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
standards as part of the San Bernardino Area Stormwater Program and the City of Fontana stormwater program, as well as implementation of post-construction stormwater measures would reduce water quality impacts during project operation to less-than-significant levels.		<p>properly throughout project operations. The maintenance and monitoring schedule will be submitted to the City for review and approval prior to implementation by the applicant. The City may require additional BMPs to be designed and implemented if those originally constructed do not achieve performance standards in accordance with the City's Municipal Stormwater Management Plan. The City would notify contractors immediately if there is a noncompliance issue, and appropriate actions would be taken by the City and the contractors to ensure immediate compliance.</p> <p>Project operations and maintenance activities would primarily entail maintenance of stormwater basins and biotreatment areas, landscaping, and periodic parking and external building maintenance. Stormwater basin and biotreatment area maintenance would be performed routinely to prevent sediment buildup and clogging in order to ensure optimal pollutant removal efficiency. Maintenance activities would include the following, which would be done periodically.</p> <ul style="list-style-type: none"> • Remove obstructions, debris, and trash and dispose of properly. • Inspect to ensure proper drainage between storms and within 5 days following rainfall. • Inspect inlets for channels, soil exposure, or other evidence of erosion. • Remove obstructions and sediment. • Maintain vegetation via pruning and weeding, and treat with preventative and low-toxicity methods. • Check that mulch is maintained at an appropriate depth and replenish as necessary. 	
Impact HYD-2: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net	Less than Significant	<p><u>Mitigation Measures</u></p> <p>No mitigation measures are required.</p>	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
<p>deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).</p> <p>The project would comply with groundwater dewatering requirements of the Santa Ana RWQCB. With implementation of dewatering requirements and the short-term nature of the potential dewatering activities, impacts to groundwater supplies and recharge from construction would be less than significant. Implementation of the proposed project would not substantially deplete groundwater supplies or interfere with groundwater recharge because it would not increase groundwater demand or decrease groundwater recharge areas.</p>			
<p>Impact HYD-3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site. The</p>	Less than Significant	<p><u>Regulatory Requirements</u></p> <ul style="list-style-type: none"> • RR-HW-1: Prepare and Implement a Stormwater Pollution Prevention Plan. • RR-HW-2: Submit a Final Stormwater Quality Management Plan for City Approval. • RR-HW-3: Comply with City of Fontana Municipal Code Chapter 23, Article IX, General Construction Permit and the City's Stormwater Management Plan. 	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
project would not dramatically alter existing drainage patterns in such a manner which would result in substantial erosion or siltation on or off site. Existing drainage generally flows northeasterly to Locust Avenue, and either flows into an existing detention basin at 11 th Street in Lot A or ponds at 9 th , 10 th , and 11 th streets. The project includes an existing stormwater detention basin to treat and limit runoff from the proposed development, along with new stormwater basins that would be designed as both retention and water quality basins and would capture sediment and other contaminants that are collected in surface runoff.		<u>Standard Requirements</u> <ul style="list-style-type: none"> • SR-G-1: Develop and Implement an Erosion Control Plan. <u>Mitigation Measures</u> Mitigation Measure HYD-1.	
Impact HYD-4: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. The project site is not within a 100-year flood hazard zone. However, it is within a minimal to moderate flood hazard area (100- to 500-year or above) and the project	Significant	<u>Regulatory Requirements</u> <ul style="list-style-type: none"> • RR-HW-1: Prepare and Implement a Stormwater Pollution Prevention Plan. • RR-HW-2: Submit a Final Stormwater Quality Management Plan for City Approval. • RR-HW-3: Comply with City of Fontana Municipal Code Chapter 23, Article IX, General Construction Permit and the City's Stormwater Management Plan. <u>Standard Requirements</u> <ul style="list-style-type: none"> • SR-G-1: Develop and Implement an Erosion Control Plan. <u>Mitigation Measures</u> Mitigation Measure HYD-1.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
would involve 10,000 square feet or more of impervious surface and 5,000 square feet or more of parking lots exposed to stormwater.			
Impact HYD-5: Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. As described in Impact HYD-1, all project stormwater and runoff drainage would be retained and held in on-site stormwater basins, and therefore would not be released into the storm drain system. Stormwater drainage is discussed in more detail in Section 4.2-15, <i>Utilities and Service Systems</i> . Potential additional sources of polluted runoff during construction and operation would be addressed as part of Impact HYD-1.	Significant	<u>Regulatory Requirements</u> <ul style="list-style-type: none"> • RR-HW-1: Prepare and Implement a Stormwater Pollution Prevention Program. • RR-HW-2: Submit a Final Stormwater Quality Management Plan for City Approval. • RR-HW-3: Comply with City of Fontana Municipal Code Chapter 23, Article IX, General Construction Permit and the City's Stormwater Management Plan. <u>Standard Requirements</u> <ul style="list-style-type: none"> • SR-G-1: Develop and Implement an Erosion Control Plan. <u>Mitigation Measures</u> Mitigation Measure HYD-1.	Less than Significant
Impact HYD-6: Otherwise substantially degrade water quality. Potential water quality impacts are discussed previously in Impact HYD-1. No other anticipated potential water quality impacts would occur as part of this project. Therefore, impacts that would otherwise substantially degrade	Significant	<u>Regulatory Requirements</u> <ul style="list-style-type: none"> • RR-HW-1: Prepare and Implement a Stormwater Pollution Prevention Plan. • RR-HW-2: Submit a Final Stormwater Quality Management Plan for City Approval. • RR-HW-3: Comply with City of Fontana Municipal Code Chapter 23, Article IX, General Construction Permit and the City's Stormwater Management Plan. 	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
water quality would be less than significant with implementation of standard requirements and Mitigation Measure HYD-1.		<u>Standard Requirements</u> <ul style="list-style-type: none"> • SR-G-1: Develop and Implement an Erosion Control Plan. <u>Mitigation Measures</u> Mitigation Measure HYD-1.	
Impact HYD-7: Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map. The project involves construction of industrial buildings, and no residential buildings are proposed as part of the project. Potential impacts on flooding are described in Impact HYD-4.	No impact	<u>Mitigation Measures</u> No mitigation measures are required.	No impact
Impact HYD-8: Place within a 100-year flood hazard area structures which would impede or redirect flood flows. The project site is not within a 100-year or 500-year floodplain and would not therefore impede or redirect flood flows.	No impact	<u>Mitigation Measures</u> No mitigation measures are required.	No impact
Impact HYD-9: Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam. There are no major dams upstream from the City of Fontana, therefore; the City is currently not susceptible to dam	No impact	<u>Mitigation Measures</u> No mitigation measures are required.	No impact

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
inundation. Lake Gregory Dam is approximately 15 miles northeast of the project site near Crestline, and Seven Oaks Dam is approximately 17 miles east of the project site in San Bernardino County; both are within Reach 4 of the Santa Ana River. However, due to the long distance and the mountainous topography between the dams and the project site, it is unlikely that the project site is within their inundation area should a dam failure occur.			
Impact HYD-10: Inundation by seiche, tsunami, or mudflow. The proposed project site is over 43 miles away from the Pacific Ocean and is generally considered too distant to be subject to a tsunami.	No impact	<u>Mitigation Measures</u> No mitigation measures are required.	No impact
Land Use and Planning			
Impact LU-1. Physically divide an established community. Development of the proposed WVLCSP would not disturb or divide the existing layout of the community. It would include mobility improvements to facilitate connectivity with the surrounding communities of Jurupa Valley and Bloomington.	No impact	<u>Mitigation Measures</u> No mitigation measures are required.	Less than Significant
Impact LU-2. Conflict with any applicable land use plan, policy, or regulation of an	No impact	<u>Mitigation Measures</u> No mitigation measures are required.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. With the adoption of the proposed general plan amendment, the proposed WVLCSP would be consistent with the Fontana General Plan and other plans adopted for the purpose of avoiding or mitigating an environmental effect.			
Impact LU-3. Conflict with any applicable habitat conservation plan or natural community conservation plan. The project site is not subject to any state, local, or regional habitat conservation plan or natural community preservation plan; however, the project is located adjacent to and directly north of the Western Riverside MSHCP's northern boundary. Because the project would involve modifications to existing undeveloped land uses located adjacent to the plan boundaries, the project has the potential to result in indirect impacts on species and sensitive habitats	Significant	<u>Mitigation Measures</u> Mitigation Measures BIO-4 through BIO-6.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
protected by the MSHCP within the Jurupa Area Plan.			
Noise			
<p>Impact NOI-1. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.</p> <p>The residences 150 feet to the east of the proposed project site would be subject to short-term noise reaching 81 dBA L_{max} generated by construction activities near the southern boundary of the project site. Potential long-term noise impacts would be associated with stationary sources on the project site and on- and off-site traffic activities.</p>	Significant	<p><u>Specific Plan Requirements</u></p> <ul style="list-style-type: none"> • SP-GG-4: Provide Electrical Loading Docks. <p><u>Regulatory Requirements</u></p> <ul style="list-style-type: none"> • RR-N-1: Comply with the Construction Noise Municipal Code Exemption. <p><u>Standard Requirements</u></p> <ul style="list-style-type: none"> • SR-N-1: Ensure Proper Operation and Maintenance of Construction Equipment. • SR-N-2: Ensure Proper Placement of Stationary Construction Equipment During Construction. • SR-N-3: Stage Construction Equipment Away from Noise-Sensitive Receptors. <p><u>Mitigation Measures</u></p> <p>Implement Mitigation Measures AQ-7 and AQ-10.</p> <p>Mitigation Measure NOI-1: Installation of Sound Barriers On Site. The applicant shall construct a screen wall/noise barrier near Buildings 1, 2, 3, 4 and 7, as shown in Figure 4.2.10-2, to shield noise from adjacent sensitive receptors, including along Locust Avenue and near sensitive receptors within the City of Jurupa Valley to the south and the County of San Bernardino to the east. A screen wall would be constructed from cement or concrete masonry units (CMU) along the eastern project boundary adjacent to Building 1, with two rolling gates that can be opened and closed during truck operations at night to shield the openings for truck entrances. A screen wall would also be constructed along the western project boundary adjacent to Building 2, with a wrap-around portion on the north side to cover the parking area on the west side of the building. If constructed, this screen wall would further reduce truck operational noise from the west side of Building 2 for residences to the northwest of the project side. Additionally, a screen wall would be constructed along the south/east</p>	Significant Unavoidable

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		<p>side of Building 4. Noise barriers will be installed with noise attenuating qualities and will have a minimum height of 12 feet above the grade.</p> <p>Mitigation Measure NOI-2: Truck Idling. To reduce potential noise impacts related to truck idling during project operations, the project operator shall ensure through contract provisions and parking lot signage that the maximum number of trucks idling on the east side of Building 1 shall be limited to 20 trucks during nighttime hours between 10:00 p.m. and 7:00 a.m. Contract provisions shall be submitted to the City of Fontana Community Development Department and signs in the parking lot adjacent to Building 1 noting the restriction shall be installed in accordance with City requirements prior to issuance of a certificate of occupancy.</p> <p>Mitigation Measure NOI-3: Installation of Sound Barriers Off Site. Prior to operation of the project and issuance of a certificate of occupancy for any adjacent building, a noise barrier with a minimum height of 6 feet will be installed along the residential property line for the following off-site areas with residential property owner approval and coordination for installation:</p> <ul style="list-style-type: none"> • Along Locust Avenue between 11th Street and 7th Street, and • Along Jurupa Avenue between Locust Avenue and Cedar Avenue 	
<p>Impact NOI-2. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels. Construction of the project would result in temporary vibration from use of heavy equipment and machinery. Operational impacts related to vibration would occur from loaded trucks accessing</p>	Less than Significant	<p><u>Mitigation Measures</u></p> <p>No mitigation measures are required.</p>	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
the site on local roadways. Because the predicted vibration levels from project operations would be at or below the threshold of perception, exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels would not occur and impacts would be less than significant.			
Impact NOI-3. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. As discussed in Impact NOI-1, potential long-term noise impacts would be associated with stationary sources on the project site and traffic activities.	Significant	<u>Specific Plan Requirements</u> <ul style="list-style-type: none"> • SP-GG-4: Provide Electrical Loading Docks. <u>Mitigation Measures</u> Implement Mitigation Measures AQ-10, NOI-1, NOI-2, and NOI-3.	While the noise level associated with truck idling could still be an increase over ambient noise levels, it would not represent a substantial increase. Therefore, with inclusion of Mitigation Measures NOI-1 and NOI-2 , impacts would be less than significant with the exception of one location, residences on the east side of Locust Street in the County of San Bernardino, where impacts would be significant and unavoidable. At some locations along the impacted roadway segments, noise barriers would not be feasible due to access constraints to property (such as driveway access).

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
			Therefore, even with the implementation of Mitigation Measure NOI-3 , impacts associated with project-related traffic would be significant and unavoidable.
<p>Impact NOI-4. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. Construction-related, short-term noise levels would be higher than existing ambient noise levels in the project area but would cease once construction was complete. Receptors to the east, south, and north of the proposed project site would experience noise levels of 81 dBA L_{max}, 77 dBA L_{max}, and 65 dBA L_{max}. With the noise attenuation from the distance divergence, noise in the parking lot would be attenuated to below 60 dBA L_{max}. Noise levels of this magnitude are likely similar to the existing maximum noise levels in the vicinity of the project. Thus, neither the residence to the east nor the residences to the south would experience a substantial noise increase related to on-site</p>	Less than Significant	<p><u>Specific Plan Requirements</u></p> <ul style="list-style-type: none"> • SP-GG-4: Provide Electrical Loading Docks. <p><u>Regulatory Requirements</u></p> <ul style="list-style-type: none"> • RR-N-1: Comply with the Construction Noise Municipal Code Exemption. <p><u>Standard Requirements</u></p> <ul style="list-style-type: none"> • SR-N-1: Ensure Proper Operation and Maintenance of Construction Equipment. • SR-N-2: Ensure Proper Placement of Stationary Construction Equipment During Construction. • SR-N-3: Stage Construction Equipment Away from Noise-Sensitive Receptors. <p><u>Mitigation Measures</u></p> <p>Implement Mitigation Measure AQ-7.</p>	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
parking lot activity.			
Impact NOI-5. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, exposure of people residing or working in the project area to excessive noise levels. The project site is not within the 2 miles of a public airport. The nearest aviation facilities are the Flabob Airport in Riverside County, approximately 3 miles to the south, the Rialto Municipal Airport, approximately 5.5 miles to the north, and the Riverside Municipal Airport, approximately 6 miles to the south. The San Bernardino International Airport is approximately 9.5 miles to the northeast of the project site. Ontario International Airport is approximately 13 miles west of the project site. Fontana is within the flight path of Ontario International Airport and is one of the identified affected agencies of the LA/Ontario International Airport Land Use Compatibility Plan. This plan shows that the nearest runway is 3 miles to the west of the Fontana city limits.	Less than Significant	<u>Mitigation Measures</u> No mitigation measures are required.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
Impact NOI-6. For a project within the vicinity of a private airstrip, exposure of people residing or working in the project area to excessive noise levels. The City of Fontana is within the flight path of Ontario International Airport; however, it is outside the 65-dB CNEL noise contours of all local airports. No private airstrips are located within the vicinity of the project.	Less than Significant	<u>Mitigation Measures</u> No mitigation measures are required.	Less than Significant
Population and Housing			
Impact POP-1: Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure) that could cause substantial adverse physical changes in the environment. Because the existing labor pool could meet the temporary construction needs of the WVLCSF, the project would not induce substantial population growth or development through increased construction employment. The vacancy rate for residential units within the City of Fontana is 5.3% and the vacancy rate within the County	Less than Significant	<u>Mitigation Measures</u> No mitigation measures are required.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
of San Bernardino is 12.5%. Therefore, operation of the project would not induce substantial population growth. With the loss of the Valley Trails Specific Plan's 1,154 dwelling units from the City's inventory of land available for the development of housing for all economic segments of the community, Fontana would still be able to meet its RHNA goals for the production of housing.			
Impact POP-2: Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. The project site is currently vacant and does not contain any houses or other structures. Construction activities associated with the proposed project would be largely confined to the project site and designated, undeveloped staging areas with minor amounts of off-site infrastructure improvements (e.g., within and adjacent to nearby roadways, such as Jurupa Avenue, and a proposed new sewer lift station and force main at 11 th Street near Linden Avenue).	No impact	<u>Mitigation Measures</u> No mitigation measures are required.	No impact
Impact POP-3: Displace substantial numbers of	No impact	<u>Mitigation Measures</u> No mitigation measures are required.	No impact

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
<p>people, necessitating the construction of replacement housing elsewhere. The project site is currently vacant and does not contain any houses, businesses, or other structures. Construction activities associated with the proposed project would be largely confined to the project site and designated, undeveloped staging areas, with only minor amounts of off-site infrastructure improvements required.</p>			
Public Services			
<p>Impact PUB-1. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:</p> <ul style="list-style-type: none"> • Fire protection • Police protection • Schools • Parks (analyzed 	Significant	<p><u>Regulatory Requirements</u></p> <ul style="list-style-type: none"> • RR PS-1: Pay Colton Joint Unified School District Fees. • RR-PS-2: Pay City of Fontana Impact Development Fees for Police and Fire Services. • RR PS-3: Pay City of Fontana Impact Fees for Library Facilities. <p><u>Standard Requirements</u></p> <ul style="list-style-type: none"> • SR-HM-2: Require Construction Equipment Spark Arresters. • SR-HM-3: Prepare a Fuel Modification Zone Management Plan. <p><u>Mitigation Measures</u></p> <p>Mitigation Measure PS-1: Compliance with CPTED Measures. The WVLCSP shall comply with the City's CPTED guidelines and shall incorporate the following measures identified to minimize crime occurrences and the need for additional police protection services.</p> <ul style="list-style-type: none"> • A comprehensive security plan that includes uniformed security and video monitoring. • A graffiti removal plan. 	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
<p>separately in the Recreation section, Section 4.2.12)</p> <ul style="list-style-type: none"> • Other public facilities <p>The proposed project may have direct impacts on public services for on-site needs, and may also have some indirect impacts due to population migration and employment growth. Fire protection response times to the project site meet current 6-minute standard. However, the City is considering moving Station 77 to the west, which would place the project site and adjacent developments outside of the 6-minute response area, with projected response times up to 8 minutes. Because the project would introduce new development into an area adjacent to <i>high</i> and <i>very high</i> fire hazard severity zones, the potential for exposure of people and structures to wildland fires would be a significant impact. The Fontana Police Department has recently expanded its central station, additional or expanded facilities would not be necessary as the result of the proposed project. Because project site workers have the ability to register their children for school based on</p>		<ul style="list-style-type: none"> • The establishment of a Business Coalition/Neighborhood Watch program. • A comprehensive traffic control plan. • Design guidelines relative to security in semi-public and private spaces, which may include, but not be limited to, access control of buildings, secured parking facilities, walls/fences with key systems, well-illuminated public and semi-public space designed with a minimum of dead space to eliminate areas of concealment, location of toilet facilities or building entrances in high foot traffic areas, and provision of security guard patrol throughout the project site, if needed. <p>Mitigation Measure PS-2: Fire Protection through Implementation of Safety Design Measures. In order to mitigate the potential inadequacy of fire protection due to travel distance from the fire station to the project site, the following measures and design considerations are incorporated into the WVLCSP to provide for adequate fire protection and meet the requirements of the FFPD:</p> <ul style="list-style-type: none"> • Adequate off-site public and on-site private fire hydrants may be required; their number and location will be determined after FFPD reviews and approves the site plan. • Private streets and entry gates will be built to City standards to the satisfaction of the City Engineer and FFPD. • Sprinkler systems will be required throughout each structure and will be built in accordance with the Fontana Municipal Code. • Construction of public or private roadways in the proposed development will not exceed 15% in grade. • Standard cut-corners will be used on all turns. • Fire lanes and dead-ending streets will terminate in a cul-de-sac or other approved turning area. • Secondary access will be required for Parcels 1 through 7. 	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
their place of employment, the proposed project will generate students for the CJUSD.		<ul style="list-style-type: none"> • Fire lane width will comply with FFPD requirements. • Where access for a given building requires accommodation of FFPD apparatus, minimum outside radius of the paved surface will be provided and approved by the FFPD. • No building or portion of a building will be constructed more than 150 feet from the edge of a roadway of an improved street, access road, or designated fire lane. • Where access for a given building requires accommodation of FFPD apparatus, overhead clearance will be maintained in compliance with FFPD requirements. • Access for FFPD apparatus and personnel to and into all structures will be required. • FFPD may require additional vehicular access where buildings exceed 28 feet in height. 	
Recreation			
Impact REC-1. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. The proposed project would adhere to these goals and policies by ensuring that the design of the proposed project continues to provide access to the trails that border the site. Design of the proposed project would not deteriorate the design or maintenance of the existing trails, and access would continue for both the Jurupa Hills Trail and SCE	Significant	<u>Specific Plan Requirements</u> <ul style="list-style-type: none"> • SP-R-1: Verify Trail Access and Location. <u>Mitigation Measures</u> <p>Mitigation Measure REC-1: Jurupa Hills Trail Realignment Plan. Any realignment of the Jurupa Hills Trail as a result of the WVLCSP project shall be submitted by the applicant to the County of San Bernardino prior to or concurrent with review of the proposed WVLCSP Tentative Parcel Map(s). As a portion of the Jurupa Hills Trail is located within the project site, on private land and not entirely within a utility corridor or public lands, the trail shall be realigned so as to be within the utility corridor easement in the southeastern portion of the WVLCSP project site, between proposed Parcels 5 and 6. The applicant shall also submit plans for review and approval and coordinate with utility companies regarding any change to the existing easement, specifically if any sort of development is proposed within the easement, including roadways, buildings, accessory structures, etc. For compliance, the applicant shall</p>	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
Easement Trail, unless the location of the trail were determined to be within the project's development footprint.		provide proof to the City of Fontana Community Development Department of the County's approval for the alignment shift prior to Tentative Parcel Map recordation.	
Impact REC-2. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. No park or recreational facilities would be constructed or expanded under the proposed project. No encumbrance to the existing SCE Easement Trail or the Jurupa Hills Trail would occur, and access would remain. Potential impacts related to demand for additional or expanded recreational facilities would be considered less than significant.	Less than Significant	<u>Mitigation Measures</u> No mitigation measures are required.	Less than Significant
Transportation and Traffic			
Impact TRA-1. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections,	Significant	<u>Specific Plan Requirements</u> <ul style="list-style-type: none"> SP-TR-1: Prepare a Transportation Management Association. <u>Mitigation Measures</u> Mitigation Measure TRA-1a: Develop and Implement a Construction Management Plan. Prior to the issuance of construction permits, the project applicant shall develop and implement a Construction Management Plan to the satisfaction of the City of Fontana Traffic Engineer that shall: <ul style="list-style-type: none"> Designate traffic control for any street closure, detour, or other disruption to traffic circulation. Identify the routes that construction vehicles will use for 	Construction: Less than Significant Operation: Significant Unavoidable Compliance with congestion management programs and the provision of fees along with construction of improvements directly adjacent to the proposed project would reduce

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
<p>streets, highways and freeways, pedestrian and bicycle paths, and mass transit. The total daily amount of worker and vendor trips is estimated to be up to 200 trips during project site construction. In addition, because the project site is segmented by Armstrong Road and would require the construction of several driveways along Jurupa Avenue, Locust Street, and Armstrong Road, it is assumed that construction equipment would cross these streets and may be located within the right-of-way, resulting in lane closures or other impairments to roadway circulation.</p> <p>The project would result in a direct impact to three intersections (intersections 11, 17 and 30) and contribute to a significant increase in unacceptable levels of service to three intersections (intersections 6, 11, and 30) and 8 freeway segments and ramp junctions (facilities 5, 6, 8, 9, 27, 30, 32, and 33) under existing conditions. The project plus cumulative traffic scenario would result in unacceptable levels of service to 21 intersections and 42 freeway mainline and ramp junctions in</p>		<p>the delivery of construction materials (e.g., lumber, tiles, piping, windows) to access the site, including any needed traffic controls and detours.</p> <ul style="list-style-type: none"> Specify the hours during which site deliveries and off-site hauling can occur and methods to mitigate construction-related impact on adjacent streets. Require the contractor to keep all haul routes clean and free of debris, including, but not limited to, gravel and dirt as a result of construction activities. The applicant shall clean adjacent streets, as directed by the City Traffic Engineer (or a representative of the City Traffic Engineer) of any materials that may have been spilled, tracked, or blown onto adjacent streets or areas. Allow hauling or transport of oversize loads between 9:00 AM and 3:00 PM only, Monday through Friday, unless approved otherwise by the City Traffic Engineer. No hauling or transport will be allowed during nighttime hours, weekends, or federal holidays. Prohibit use of local streets not specifically approved by the City Traffic Engineer. Require haul trucks entering or exiting public streets to yield to public traffic. Provide a flag person at the intersection of Armstrong Road and Locust Avenue and any other intersections deemed necessary by the City Traffic Engineer to ensure that vehicle conflicts between haul trucks and all other vehicles are minimized. Require that if hauling operations cause any damage to existing pavement, street, curb, and/or gutter along the haul route, the applicant will be fully responsible for repairs. The repairs will be completed by the project's contractor to the satisfaction of the City Traffic Engineer. Require all construction-related parking and staging of vehicles to be kept out of the adjacent public roadways and instead be kept on site. Meet the standards established in the current California 	<p>impacts. While facilities are identified in congestion management programs, because the timing of full funding and construction of such improvements cannot be known at this time, there is not enough evidence to support a conclusion that impacts would be reduced to less-than-significant levels with implementation of mitigation, and impacts would be significant and unavoidable until all improvements can be made.</p>

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
the long term (2035).		<p>Manual on Uniform Traffic Control Devices, as well as City of Fontana requirements.</p> <ul style="list-style-type: none"> Identify adequate access points for emergency vehicles and ensure emergency personnel would be able to identify these access points by providing a flagman, signage, or other indicator to effectively communicate emergency access during construction. <p>Mitigation Measure TRA-1b: Construction of Transportation Improvements. Prior to the issuance of occupancy permits for the project, construction of the traffic improvements required to mitigate all direct impacts of the project within the City will be constructed. In addition to improvements called for in the proposed WVLCSF, this includes mitigation for all intersections that currently operate at an acceptable LOS, but that would operate at an unacceptable LOS with the addition of project-related traffic. Each improvement that will be provided by the applicant is listed in Table 4.2.14-11 along with the required timing for the improvement.</p> <p>Mitigation Measure TRA-1c: Payment of Development Impact Fees for Transportation Improvements. Prior to the issuance of occupancy permits for a building within the WVLCSF, the applicant shall make fee payments to fund the improvements needed to mitigate the project's contribution to impacts on intersections, freeway mainline segments, and/or ramp junctions. Such fee payments will include:</p> <ul style="list-style-type: none"> City of Fontana Development Impact Fee (DIF), which represents the project's required fee to mitigate impacts on both regional (Nexus Study) and additional local facilities; Fair share payment to the City of Jurupa Valley as mitigation for the project's contribution of traffic to the Valley Way/SR-60 interchange and the need for 	

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Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		<p>interchange reconstruction, which is not included in Riverside County's TUMF program²; and</p> <ul style="list-style-type: none"> Fair share payment to San Bernardino County as mitigation for the project's fair share³ to install a traffic signal at the Alder Avenue/Slover Avenue intersection. <p>Mitigation Measure TRA-1d: Payment of Development Impact Fees for Transportation Improvements. Prior to the issuance of occupancy permits for a building within the WVLCSF, the applicant shall make fee payments to the City to fund the improvements needed to mitigate the project's contribution to cumulative impacts on intersections, freeway mainline segments, and/or ramp junctions that would operate at an unacceptable LOS (or a further unacceptable LOS) in 2035. Such fee payments will include:</p> <ul style="list-style-type: none"> City of Fontana Development Impact Fee (DIF)⁴, which represents the required fee for mitigation of impacts on both regional (Nexus Study) and additional local facilities; Fair share payment⁵ to Riverside County as mitigation for the project's contribution of traffic to the Rubidoux Boulevard/20th Street-Market Street intersection and the need for: <ul style="list-style-type: none"> Converting signal timing to provide a northbound right turn overlap phasing; Adding a southbound left turn lane, eastbound right turn lane, and westbound left turn lane; and Restriping the eastbound through-right turn lane to 	

² It is currently estimated that the fair share improvement for this interchange is \$149,400 (2.49% of a \$6.0 million improvement cost).

³ It is currently estimated that the fair share improvement for this improvement is \$26,040 (6.51% of the \$400,000 cost for installation of a traffic signal).

⁴ It is currently estimated that the project applicant will be required to pay the City of Fontana development impact fees for the entire WVLCSF development in the amount of \$6,539,442. The timing of payment of the full fee will be phased as building permits are issued for construction within the WVLCSF area; however, all payments will be required to be provided by the fifth anniversary of issuance of the first building permit within the project site, regardless of whether building permits have been issued for all buildings.

⁵ It is currently estimated that the project's fair share is \$19,160 (6.51% of a \$400,000 improvement cost).

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		<p>an eastbound through lane.</p> <ul style="list-style-type: none"> Fair share payment⁶ to Caltrans as mitigation for the project's contribution of traffic to the Market Street/SR-60 eastbound ramps and the need for restriping the southbound approach to provide two left turn lanes and one through lane, which is not included in Riverside County's TUMF Program. 	
Impact TRA-2. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways. SANBAG considers the City exempt from CMP traffic impact analysis, and no CMP analysis is required for this project.	No impact.	<u>Mitigation Measures</u> No mitigation measures are required.	No impact
Impact TRA-3. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. There are no airports within the City of Fontana and the nearest airport is more than 3 miles south of the project site in Riverside County (Flabob Airport). Similarly, project operations would not impact air	No impact	<u>Mitigation Measures</u> No mitigation measures are required.	No impact

⁶ It is currently estimated that the project's fair share is \$524 (5.24% of a \$10,000 improvement cost).

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
traffic patterns.			
Impact TRA-4. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). General operation and maneuvering of heavy and large construction equipment along roadways such as Armstrong Road, Locust Avenue, and Jurupa Avenue during project construction could potentially create a safety hazard, and impacts would be significant. With inclusion of mitigation and project design features, operation of the project would result in a less-than-significant.	Significant	<u>Specific Plan Requirements</u> <ul style="list-style-type: none"> • SP-TR-1: Prepare a Transportation Management Association. • SP-TR-2: Ensure Installation of Safety Features. <u>Mitigation Measures</u> Implement Mitigation Measure TRA-1a.	Less than Significant
Impact TRA-5. Result in inadequate emergency access. Emergency access could be affected as a result of proposed project construction activities, which may involve temporary road closures, detours, and general construction-related delays that could obstruct or temporarily impair the movement of emergency vehicles. During operations, emergency access would continue to be provided by Armstrong Road, Locust Avenue, Jurupa Road, and	Significant	<u>Mitigation Measures</u> Implement Mitigation Measure TRA-1a.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
several project driveways.			
Impact TRA-6. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. It can be reasonably concluded that the majority of construction workers and vendors would travel to the site by automobile. At most, only a small number of workers and vendors may utilize the existing public transit system. In any event, no elements of project construction would result in a conflict with the adopted policies, plans, or programs supporting alternative transportation, and existing public transportation options would not be decreased as a result of project construction. Also, the proposed project is consistent with adopted policies, plans, and programs regarding public transit, bicycle, and pedestrian facilities.	Less than Significant	<u>Specific Plan Requirements</u> <ul style="list-style-type: none"> • SP-TR-3: Install Bicycle Racks. <u>Mitigation Measures</u> No mitigation measures are required.	Less than Significant
Utilities			
Impact UTIL-1. Exceed wastewater treatment requirements of the applicable regional water quality control board. The proposed project would be fully	Less than Significant	<u>Mitigation Measures</u> No mitigation measures are required.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
compliant with existing wastewater treatment requirements of the Santa Ana RWQCB. As discussed in Impact UTIL-2, sewer lines developed as part of the project would meet the design requirements set forth by the City of Fontana Sewer Master Plan.			
Impact UTIL-2. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. The proposed project is in an area of Fontana for which wastewater treatment service is provided by the City of Rialto in accordance with the Extraterritorial Sewer Services Agreement between the Cities of Fontana and Rialto. The project would pay any connection fees and obtain any required permits in order to connect to existing wastewater infrastructure. Further, existing public wastewater treatment facilities have the capacity to accommodate sewage generated by the project.	Less than Significant	<u>Specific Plan Requirements</u> <ul style="list-style-type: none"> • SP-UT-4: Comply with Fontana Sewer Master Plan. <u>Regulatory Requirements</u> <ul style="list-style-type: none"> • RR-UT-5: Install Sewer/Wastewater Facilities. • RR-UT-6: Comply with WVWD Water Master Plan. <u>Standard Requirements</u> <ul style="list-style-type: none"> • SR-G-1: Develop and Implement an Erosion Control Plan. <u>Mitigation Measures</u> No mitigation measures are required.	Less than Significant
Impact UTIL-3. Require or result in the construction of new storm water drainage facilities or expansion of	Less than Significant	<u>Regulatory Requirements</u> <ul style="list-style-type: none"> • RR-HW-1: Prepare and Implement a Stormwater Pollution Prevention Plan. • RR-HW-4: Include Best Management Practices for Water 	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
existing facilities, the construction of which could cause significant environmental effects. The proposed project's stormwater improvements would not require connections to existing public stormwater drainage infrastructure because all stormwater would be retained on site.		Quality Management. <u>Mitigation Measures</u> No mitigation measures are required.	
Impact UTIL-4. Have insufficient water supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements. Implementation of the WVLCSP is projected to require 292 gpm of water supplies, or 0.84 mgd, based on a generation factor of 1.39 gpm/acre doubled for light industrial development, as specified in the Water Supply Assessment for approximately 210 acres of potential industrial development. The existing entitlements and resources of WVWD would be sufficient to serve the proposed project.	Less than Significant	<u>Standard Requirements</u> • SR-UT-2: Provide Reliable Water Supply. <u>Mitigation Measures</u> No mitigation measures are required.	Less than Significant
Impact UTIL-5. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected	Less than Significant	<u>Mitigation Measures</u> No mitigation measures are required.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
demand in addition to the provider's existing commitments. Wastewater generated within the project site would be conveyed through existing sanitary sewer lines operated by the City of Fontana to the City of Rialto WWTP for treatment. The Rialto WWTP is operated in compliance with the waste discharge requirements set forth by the RWQCB for that treatment facility.			
Impact UTIL-6. Not comply with federal, state, and local statutes and regulations related to solid waste. The proposed project would comply with all mandated federal, state, and local statutes related to solid waste, including AB 939.	No impact	<u>Mitigation Measures</u> No mitigation measures are required.	Less than Significant
Impact UTIL-7. Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs. Solid waste generated by the proposed project would be hauled by Burrtec Waste Industries, which operates under a franchise agreement with the City of Fontana. Burrtec Waste Industries would haul project waste to the Mid-Valley Sanitary Landfill. The Mid-Valley facility has ample capacity to accommodate the	Less than Significant	<u>Specific Plan Requirements</u> <ul style="list-style-type: none"> • SP-UT-3: Incorporate Recycling Program. <u>Standard Requirements</u> <ul style="list-style-type: none"> • SR-GG-1: Provide Waste and Recycling Education. <u>Mitigation Measures</u> No mitigation measures are required.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
9.8-tpd average of new solid waste generated by the project.			
Impact UTIL-8. Result in the use of large amounts of energy or use energy in a wasteful manner during project operations that would in turn require or result in the construction of new energy utility service or system infrastructure or the expansion of existing infrastructure, the construction of which could cause significant environmental effects. The proposed project would result in incremental increases in demand for electricity and natural gas. Natural gas and electricity infrastructure are available to the proposed project, and both SoCalGas and SCE have stated that they each have sufficient capacity to serve the proposed project. The proposed warehouse development at buildout would consume approximately 22,315 megawatt hours per year of electricity, and 21,820 thousand British thermal units (MBTU) per year (21,392,157 cubic feet) of natural gas. With implementation of energy reduction measures in the WVLCSP and adherence to	Less than Significant	<u>Specific Plan Requirements</u> <ul style="list-style-type: none"> • SP-UT-2: Incorporate Water-Efficient Building Designs. • SP-GG-1: Incorporate Water Conservation and Efficient Measures for Landscaping. • SP-GG-2: Design Building Components to Meet 2013 Title 24 Standards. • SP-GG-3: Design CALGreen-Compliant Buildings. • SP-GG-4: Provide Electrical Loading Docks. • SP-GG-5: Utilize Energy-Efficient Lighting. • SP-GG-6: Select Efficient Refrigerants and HVAC Systems. • SP-GG-7: Provide Landscaped Parking Lots. <u>Mitigation Measures</u> Implement Mitigation Measures AQ-10, AQ-11, AQ-12, and GHG-2.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
standard requirements, the project would not generate significant physical impacts for new energy utility services and infrastructure.			
Impact UTIL-9. Result in the use of large amounts of energy or use energy in a wasteful manner during project construction. Construction of the proposed warehouse uses would involve the use of electricity for a variety of construction activities. Because typical construction techniques are proposed, project site construction would not be expected to result in a demand for electricity and fuels on a per-unit-of-development basis in excess of energy use by other development projects in the region.	Less than Significant	<u>Mitigation Measures</u> Implement Mitigation Measures AQ-2, AQ-4 through AQ-9, and GHG-1. Mitigation Measure UT-1: Efficient Use of Energy During Construction. Project construction plan specifications shall include the following measures to be implemented by the Construction Contractor to prevent the wasteful or inefficient use of energy and fuel during construction: <ul style="list-style-type: none"> • Implement work schedules and procedures that minimize equipment idle time and double-handling of material; • Switch off office equipment and lights when not in use; • Use solar power resources for road signs and other applicable equipment required at the construction site; and • Design all temporary roads to minimize travel distances. 	Less than Significant
Impact UTIL-10. Use vehicular fuel in a wasteful manner from vehicle trips associated with proposed project operations. Operation of the proposed WVLCSP warehouse uses would result in a substantial increase in fuel use associated with vehicle trips to, from, and within the project site compared with the existing undeveloped project site. The total average daily traffic of the	Less than Significant	<u>Specific Plan Requirements</u> <ul style="list-style-type: none"> • SP-GG-4: Provide Electrical Loading Docks. • SP-TR-1: Prepare a Transportation Management Association. <u>Mitigation Measures</u> Implement Mitigation Measures AQ-8, AQ-11, AQ-12, and AQ-13.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
proposed project would be 6,384 trips and the total daily vehicle miles traveled (VMT) would be 168,730. Daily fuel consumption is estimated for project traffic at 2,683 gallons of diesel fuel and 6,878 gallons of gasoline.			



1.1 Overview

This Recirculated Draft Environmental Impact Report (EIR) is part of the environmental review process for the West Valley Logistics Center Specific Plan (WVLCSP, Specific Plan, or proposed project) that is being proposed by Hillwood. A Draft EIR for the WVLCSP was made available for public comment beginning on April 22, 2014 and ending on June 5, 2014. The City of Fontana (City) received comments on the Draft EIR from state and local agencies, interest groups, and the public. Pursuant to the provisions of California Environmental Quality Act (CEQA) Guidelines Section 15088.5(a), the City determined that a thorough response to the comments received during the public review period necessitated the inclusion of new information, and would thereby require recirculation of the entire Draft EIR.

This chapter presents a summary of the proposed project, the purpose of this Recirculated Draft EIR, an overview of the public involvement process, a summary of the intended uses of this Recirculated Draft EIR, a list of agencies expected to review and consider the document to inform their future actions during the approval process, and an outline of the EIR's organization.

1.2 Project Overview

The 291.31-acre WVLCSP project site is in the southeastern portion of the City and was previously approved for a mixed-use residential community, known as the "Valley Trails Specific Plan." The proposed project would redesignate the approved but unbuilt land uses identified by the Valley Trails Specific Plan (residential, school, recreation, and open space uses) with the industrial warehousing distribution center and open space uses proposed in the WVLCSP. Specifically, 3,473,690 square feet of industrial warehouse distribution uses are proposed to occupy 212.11 acres; 14.93 acres of the site are proposed to continue to serve as detention basins; 1.54 acres of an existing utility corridor would remain unchanged; 55.23 acres would be retained in natural hillside open space; and 7.5 acres would consist of right-of-way dedications.

The proposed Specific Plan, including site development, open space preservation, and construction of an off-site sewer lift station—along with general plan amendments, a zone change, a development agreement, a tentative parcel map, and a stormwater quality management plan—is considered to be the "whole of the action" and therefore constitutes the scope of the "project" pursuant to State CEQA Guidelines Section 15378.

1.3 Recirculation of the Draft Environmental Impact Report

The City is the "lead agency" as authorized by Section 15050 of the State CEQA Guidelines and has determined that a Recirculated Draft EIR should be prepared. CEQA requires a lead agency to

recirculate an EIR when significant new information is added to the EIR after the public review period begins but prior to certification (State CEQA Guidelines Section 15088.5). In the case of this EIR, the term “information” includes additional data and analysis prepared in response to comments received on the Draft EIR.

As permitted by State CEQA Guidelines Section 15088.5(f)(1), because the entirety of the Draft EIR is being recirculated, the City has chosen not to provide written responses to comments received during the earlier circulation period. Pursuant to the provisions of State CEQA Guidelines Section 15088.5 (f)(1), although the comments during the previous Draft EIR public review period will be part of the administrative record for the WVLCSP project, the City will not be preparing written responses to those comments in the Final EIR. Therefore, new comments must be submitted for this Recirculated Draft EIR, and the City will prepare written responses only to those comments submitted in response to this recirculated Draft EIR.

Public notice and circulation of a Recirculated Draft EIR is subject to the same notice and consultation requirements that applied to the original Draft EIR, per State CEQA Guidelines Sections 15086 and 15087.

1.4 Purpose of this EIR

This Recirculated Draft EIR describes the components of the proposed project and includes an environmental analysis to determine and report any adverse direct, indirect, or cumulative environmental effects associated with implementation of the proposed project.

Enacted in 1970, CEQA (Public Resources Code [PRC] Section 21000 et seq.) and its implementing guidelines (State CEQA Guidelines; 14 California Code of Regulations [CCR] Section 15000 et seq.) require that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority prior to taking action on those projects. An EIR is a public informational document designed to provide decision makers and the public with an analysis of the environmental impacts of a proposed project, to indicate possible ways to reduce or avoid significant impacts, and to describe reasonable alternatives to a project that may reduce or avoid significant impacts. An EIR must also disclose significant environmental impacts that cannot be avoided, growth-inducing impacts, impacts not found to be significant, and the project’s contribution to any significant cumulative impacts in the context of all past, present, and reasonably foreseeable future projects.

Projects in California are required to undergo environmental review in accordance with CEQA to determine if implementation of the proposed project would result in any environmental impacts. Accordingly, a project is defined as requiring environmental review pursuant to CEQA if, upon implementation, the project has the potential to result in either a direct physical change to the environment or a reasonably foreseeable indirect physical change to the environment. More specifically, a project requires environmental review if it incorporates an action undertaken by a public agency; is an activity that is supported in whole or in part through public agency contracts, grants, subsidies, etc.; or is an activity requiring a public agency to issue a lease, permit, license, certificate, or other entitlement. The public agency is required to conduct an environmental review of the project and consider its environmental effects before making a decision on the project. In accordance with CEQA, the City of Fontana is the lead agency for the preparation and certification of

the WVLCSP EIR. A detailed description of the proposed project is provided in Chapter 3, *Project Description*.

Approval of the WVLCSP and certification of the EIR would not necessarily result in the construction of the entire development described in the Specific Plan. If the project was approved as described in the Specific Plan, the applicant may decide to construct and operate only a portion of the proposed project (at eventual buildout or as phased development depending upon economic conditions). However, the environmental analysis within this Recirculated Draft EIR, specifically in Chapter 4, assumes the complete development potential of the proposed land use changes specified in the WVLCSP. All future actions related to the WVLCSP will need to be evaluated in light of this Recirculated Draft EIR and CEQA provisions for reliance on the previously prepared environmental document.

1.5 Public Involvement Process

CEQA requires lead agencies to solicit and consider input from other interested agencies, citizen groups, and individual members of the public and also requires that the implementation of mitigation measures required for the project be monitored after it has been permitted to ensure that any and all mitigation measures identified in the Recirculated Draft EIR are successfully carried out as intended. Under CEQA, the lead agency is also required to provide the public with a full disclosure of the expected environmental consequences of the project and an opportunity to provide comments. There are several opportunities for the public to participate in the decision-making process, as described below:

Notice of Preparation (NOP). The lead agency prepared and circulated an NOP to responsible, trustee, and local agencies and the public for review and comment. In conjunction with this public notice, the lead agency held two scoping meetings to provide a forum for agency and public comments on the scope of the EIR, as described in more detail below.

Draft EIR Preparation/Notice of Completion (NOC). The Draft EIR was circulated from April 22 through June 5, 2014 for review and comment to appropriate agencies and additional individuals and interest groups that have requested to be notified of EIR projects. In accordance with Section 15105 of the State CEQA Guidelines, the lead agency provided a 45-day public review period for the Draft EIR. Public testimony and agency comments were provided on the project within the Draft EIR's 45-day public review period during a Planning Commission hearing.

Recirculated Draft EIR Preparation/Notice of Completion (NOC). Like the Draft EIR, this Recirculated Draft EIR will be circulated for a 45-day public review period (pursuant to State CEQA Guidelines Sections 15086 and 15087) to provide time for agencies, individuals, and interest groups to review and provide comments to the lead agency.

Preparation of Final EIR. The lead agency will respond to each comment on the Recirculated Draft EIR received in writing through a responses-to-comments chapter in the Final EIR. The comments and responses will be provided to each agency or person that provided written comments on the EIR at least two weeks before the scheduled hearing before the City Council. Any revisions to the Recirculated Draft EIR will be included within the Final EIR.

Certification of Final EIR. The Planning Commission will consider the Final EIR, all public comments, and the project itself before recommending final action on the project to the City Council. The City

Council will hold at least one public hearing to consider the Final EIR, take public testimony, and approve, conditionally approve, or deny the project.

1.5.1 Notice of Preparation

Pursuant to Section 15082 of the State CEQA Guidelines, as amended, the City prepared and circulated the NOP to responsible and affected agencies and other interested parties for an extended public review period of 79 days that began on July 17, 2012, and ended on October 3, 2012. The extended public review period allowed the City to schedule two scoping meetings for the project and provided the public additional time to provide comments. The NOP was also posted in the San Bernardino County Clerk's office for 30 days and sent to the State Clearinghouse at the Governor's Office of Planning and Research to solicit statewide agency participation in determining the scope of the EIR. The purpose of the NOP was to convey formally that the City, as the lead agency under CEQA, solicited input regarding the scope and proposed content of the EIR. The NOP is provided in Appendix A and the comment letters are provided in Appendix B1 of this EIR.

1.5.2 Scoping Meetings

Pursuant to Section 15206 of the State CEQA Guidelines, the lead agency is required to conduct at least one scoping meeting for all projects of statewide, regional, or area-wide significance. The scoping meeting is for jurisdictional agencies and interested persons or groups to provide comments regarding the range of actions, alternatives, mitigation measures, environmental effects to be analyzed, and other topics. The City of Fontana hosted two scoping meetings: one for agencies and the other for the public. Two staff members from the City of Jurupa Valley attended the agency-only scoping meeting. The public scoping meeting was held near the project site, and approximately 15 community members attended the meeting. These meeting dates and locations are provided below:

Agency Scoping Meeting:

August 8, 2012 at 3:00 p.m.
Fontana City Hall, DSO Building
8353 Sierra Avenue, Fontana, California

Public Scoping Meeting:

October 3, 2012 at 6:00 p.m.
Citrus High School Multipurpose Room
10760 Cypress Avenue, Fontana, California

Agency and public comments received during the two scoping meetings held during the NOP public review period, along with the summary of proceedings from the meetings, are provided in Appendix B1. Most of the comments heard during the scoping meetings involved potential impacts related to traffic, truck trips, and land use conflicts.

1.5.3 Written Comments Provided During the NOP Period

Eight comment letters regarding the project were received during the NOP's 79-day public review period. Specific environmental concerns raised in these comment letters are discussed in Table 1-1 below. As noted, the NOP and all comments received during the NOP public review period are included in Appendices A and B1, respectively.

Table 1-1. NOP Written Comment Summary by Agency

Comment Summary by Respondent	Response in EIR
Native American Heritage Commission (NAHC) (7-19-12)	
The project area is very culturally sensitive. The lead agency should request a Sacred Lands File Search be performed by the NAHC.	Section 4.2.4
Consult with the following Native American tribes: Pechanga Band of Mission Indians, Ramona Band of Cahuilla Mission Indians, San Manuel Band of Mission Indians, Soboba Band of Mission Indians, Gabrieleno/Tongva San Gabriel Band of Mission Indians, Gabrielino Tongva Nation, Morongo Band of Mission Indians, the San Manuel Band of Mission Indians, Morongo Band of Mission Indians, Serrano Nation of Indians, Ernest H. Siva (Tribal Leader), and the Soboba Band of Luiseno Indians.	Section 4.2.4
If National Environmental Policy Act (NEPA) compliance is required, Section 106 and 4f of federal NHPA is required. Confidentiality may apply under NHPA Section 304.	No NEPA required. Comment noted.
Provisions for the inadvertent discovery of human remains must be followed.	Section 4.2.4
Consultation between Native American tribes and the lead agency must be ongoing.	Section 4.2.4
Avoidance is recommended if Native American burial sites are discovered on site.	Section 4.2.4
South Coast Air Quality Management District (SCAQMD) (7-31-12)	
SCAQMD requests a copy of the Draft EIR and air quality/greenhouse gases technical data, including air quality modeling and health risk assessment files.	Comment noted and copy of Draft EIR provided.
The Air Quality Handbook (1993) should be used to prepare the air quality analysis.	Section 4.2.2
Impacts from construction and operation should be calculated.	Section 4.2.2
Guidance for PM _{2.5} emissions is available online.	Section 4.2.2
Localized air quality impacts should be calculated, and a mobile source health risk assessment is recommended (guidance is available online).	Section 4.2.2
Consider several sources in developing mitigation measures for air quality, including: (1) Chapter 11 of the SCAQMD CEQA Air Quality Handbook; (2) SCAQMD CEQA web page; (3) SCAQMD's Rule 403 – Fugitive Dust and Implementation Handbook; (4) SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning; (5) California Air Resource Board's (CARB's) Air Quality and Land Use Handbook: A Community Perspective; and (6) CARB's Land Use Handbook.	Section 4.2.2
Contact information for SCAQMD's Public Information Center is provided.	Comment noted.
Inland Empire Utilities Agency (7-26-2012)	
The project is located outside the Inland Empire Utilities Agency's water and wastewater service area and does not need this agency to provide those services.	Comment noted.
Cucamonga Valley Water District	
No comments.	Comment noted.
San Bernardino County Department of Public Works Land Development and Construction (8-1-12)	
Please provide the San Bernardino County Department of Public Works with the Draft EIR and technical studies for comment.	Comment noted.
San Bernardino County Department of Public Works Flood Control (7-31-12)	
The project is within the Federal Emergency Management Agency's Zone X, unshaded; drainage facility (Line C) traverses the site.	Section 4.2.8
Contact the Flood Control District's Flood Control Planning Division for future drainage and flood control facilities planning regarding Line C.	Comment noted.
Address drainage on and off site as a result of the project.	Section 4.2.8

Comment Summary by Respondent	Response in EIR
Department of Toxic Substances Control (DTSC) (8-7-12)	
Suggest consulting the National Priorities List, EnviroStor, Resource Conservation and Recovery Information System, Comprehensive Environmental Response Compensation and Liability Information System, Solid Waste Information System, Geotracker, local counties and cities, and the U.S. Army Corps of Engineers for formerly used defense sites.	Section 4.2.7
Identify remediation efforts in the EIR.	Section 4.2.7
Fully disclose findings of Phase I or II Environmental Site Assessments, disclose sampling results, and include all closure, certification, or remediation approvals in the EIR.	Section 4.2.7
Conduct investigations if any buildings, structures, or surfaces are demolished.	Section 4.2.7
Properly dispose of contaminated soils and conduct sampling on imported soils.	Section 4.2.7
Conduct health risk assessment if necessary.	Section 4.2.2
Investigate agricultural or livestock areas, as applicable.	Section 4.2.7
The project must comply with hazardous waste control law if hazardous wastes are involved in the project.	Section 4.2.7
Contact DTSC for cleanup.	Comment noted.
Provide email address in the EIR.	Comment noted.
California Department of Fish and Game (CDFG) (Now California Department of Fish and Wildlife) (8-15-12)	
CDFG is a trustee agency for fish and wildlife and a responsible agency for discretionary actions.	Section 4.2.3
Discuss jurisdictional waters resources, habitat and species information, and mitigation measures. Do not defer impacts to future regulatory, discretionary actions (e.g., federal Endangered Species Act permit)	Section 4.2.3
Conduct site-specific surveys and consult the California Natural Diversity Database (CNDDB).	Section 4.2.3
In the EIR include a project description and any biological assessments, focused surveys, and hydrology reports.	Chapter 3 & Section 4.2.3
In the EIR include a figure of the site's relation to open spaces and the Jurupa Hills and how the project relates with respect to wildlife connectivity.	Section 4.2.3
In the EIR include a figure showing the area as natural open space and the allowable uses.	Section 4.2.3
In the EIR include a jurisdictional delineation of waters of the state and a sensitive plant survey following the November 2009 guidance from CDFG.	Section 4.2.3
Include a cumulative biological impact analysis.	Chapter 6
A list of habitat and species within the Jurupa Area Plan of the Western Riverside Multiple Species Habitat Conservation Plan is provided.	Section 4.2.3
Biological studies should include info on: rare plants; rare natural communities; sensitive fish and wildlife species; and rare, threatened, and endangered species. Contact the CDFG's CNDDB in Sacramento.	Section 4.2.3
Discuss direct, indirect, and cumulative impacts and mitigate as necessary.	Section 4.2.3 & Chapter 6
Analyze off-site habitats, including public lands, open space, natural habitats, riparian ecosystems, and wildlife corridor/movement areas.	Section 4.2.3
Discuss wildlife-human interactions.	Section 4.2.3
Include a cumulative analysis for biological resources in the EIR.	Chapter 6

Comment Summary by Respondent	Response in EIR
The alternatives analysis should include a range of alternatives, should address off-site compensation for unavoidable impacts, should avoid impacts on Rare Natural Communities, and should not relocate, salvage, or transplant rare, threatened, or endangered species as mitigation.	Section 4.2.3 & Chapter 5
A California Endangered Species Act Permit is required for impacts to state-listed species, which requires that biological mitigation, monitoring, and reporting information is provided, including a mitigation monitoring and reporting plan for rare-listed plants under the Native Plant Protection Act.	Section 4.2.3
The project cannot eliminate a watercourse, including channelization or conversion to subsurface drains. CDFG must be notified of any changes to the natural flow or the bed, channel, or bank of a waterway.	Sections 4.2.3 & 4.2.8
Contact information is provided for questions.	Comment noted.

1.5.4 Summary of Comments Received During Public Review of the Draft EIR

Eight comment letters regarding the project were received during the Draft EIR's 45-day public review period. The comment letters received during the initial Draft EIR public review period are included in Appendix B2 of this Recirculated Draft EIR.

Public testimony and agency comments were also provided on May 6, 2014 during a Planning Commission public hearing on the project held during the EIR's 45-day public review period. A summary of the public comments is included in Appendix B2. Generally, the issues of greatest concern raised by the public relate to traffic, congestion, air quality emissions, and health impacts. The meeting information is provided below:

May 6, 2014 at 6:00 p.m.
 Grover W. Taylor City Council Chambers
 Fontana City Hall
 8353 Sierra Avenue, Fontana, California

1.6 Intended Uses of this Recirculated Draft EIR

As discussed above under Section 1.4, *Purpose of this EIR*, this Recirculated Draft EIR will publically disclose the significant effects of the project on the environment, identify alternatives to the project that would avoid or substantially lessen significant effects, and indicate the manner in which those significant effects can be mitigated or avoided. An EIR does not recommend approval or denial of a project. This Recirculated Draft EIR is being provided to the public for review and comment, and to facilitate public participation in the planning process. After public review and comment on the Recirculated Draft EIR, a Final EIR would be distributed to decision makers to inform them of the project-related environmental effects.

1.6.1 Lead Agency

This Recirculated Draft EIR will be used by the City to inform the Planning Commission and City Council of the probable environmental impacts associated with the adoption and implementation of the proposed WVLCSP. Projects or actions undertaken by the lead agency—in this case, the City of

Fontana—may require subsequent oversight, approvals, or permits from other departments of the City or public agencies to be implemented, including but not limited to those specified in Table 1-2. Other such agencies are referred to as *responsible agencies* and *trustee agencies*, as further described below.

Table 1-2. WVLCSF Approvals Required

Approval	Agency/Department Name
City of Fontana (Lead Agency)	
Specific Plan	City Council
Zoning Amendment	City Council
General Plan Amendment	City Council
Tentative Tract Map 19156	City Council
Development Agreement	City Council
Site Plans and Design Review	Community Development Department Planning Division
Adopt and certify EIR	City Council
Heritage Tree Removal Permit	Community Development Department Building and Safety Division
Roadway Improvements	Public Works Department
Local Agencies	
Permits (to construct and operation stationary equipment)	South Coast Air Quality Management District
County of San Bernardino	
Storm Drain and Flood Control Facilities	San Bernardino County Department of Public Works
Well Permit	San Bernardino County Department of Public Health
Roadway Improvements	San Bernardino County Department of Public Works
State	
Workplan/Hazardous Materials Environmental Oversight	Department of Toxic Substances Control
Water Quality Certification Permit or Report of Waste Discharge	Regional Water Quality Control Board, Santa Ana Region
National Pollutant Discharge Elimination System	Regional Water Quality Control Board, Santa Ana Region

Notes:

- As the project proposes implementation of a specific plan to facilitate the future development of an industrial warehousing center, many of these approvals would only be required once the applicant is ready to construct the project. The timing of these approvals may not coincide with the approval of the EIR.
- As currently proposed, the project would require no take permits or compliance with Section 106 (State of California Historic Preservation Office) or Section 7 (U.S. Fish and Wildlife Service), as it is assumed that the coastal California Gnatcatcher (CAGN) would not occur within the limits of disturbance (LOD). RBF Consulting, Inc. will conduct a focused survey during the spring prior to project construction for CAGN and, if it is found within the LOD, the project may require a take permit. Currently, the conceptual design for the project shows full avoidance of suitable habitat west of the LOD, and any changes to the LOD would require re-evaluation to determine potential impacts to biological resources and the need for additional approvals and permits.

1.6.2 Responsible Agencies

Pursuant to Sections 15381 and 15386 of the State CEQA Guidelines, a *responsible agency* is a public agency that proposes to carry out or approve a project for which a lead agency is preparing or has prepared an EIR or negative declaration. For the purposes of CEQA, responsible agencies include all public agencies other than the lead agency that have discretionary approval power over the project (Section 15381). The following agencies have been identified as responsible agencies for comment on the proposed project.

- San Bernardino County Department of Public Works
- San Bernardino County Division of Environmental Health
- California Department of Toxic Substances Control
- Regional Water Quality Control Board, Santa Ana Region
- South Coast Air Quality Management District

1.6.3 Trustee Agencies

Pursuant to Sections 15381 and 15386 of the State CEQA Guidelines, a *trustee agency* is a state agency that has jurisdiction by law over natural resources affected by a project that are held in trust for the people of California (Section 15386). These agencies include the California Department of Fish and Wildlife (CDFW), the State Lands Commission, the State Department of Parks and Recreation, the Native American Heritage Commission, and the University of California. The Regional Water Quality Control Board (Santa Ana Region) is identified as a trustee agency for the proposed project.

1.6.4 Other Agency Uses

There are other various public agencies and jurisdictions that have a particular interest in the proposed project but have no discretionary authority or jurisdiction over it. The following agencies would serve only to review and comment on the technical information pertinent to each agency's specific field of interest and expertise.

Federal Agencies

- U.S. Fish and Wildlife Service
- U.S. Environmental Protection Agency

State Agencies

- Governor's Office of Planning and Research
- California Department of Fish and Wildlife
- California Air Resources Board
- California Native American Heritage Commission
- California Department of Transportation, District 8

- California Department of Parks and Recreation
- California Public Utilities Commission
- California Environmental Protection Agency
- State of California Historic Preservation Office
- Southern California Association of Governments

Local Agencies

- City of Jurupa Valley
- City of Rialto
- City of Colton
- City of San Bernardino
- City of Riverside
- County of Riverside
- County of San Bernardino

1.7 Terminology

The terms listed below are defined to assist reviewers in understanding this EIR.

- *Project* means the whole of an action that has the potential for resulting in a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.
- *Environment* means the physical conditions that exist in the area and would be affected by a proposed project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. The area involved is where significant direct or indirect impacts would occur as a result of the project. The environment includes both natural and artificial conditions.
- *Impacts* analyzed under CEQA must be related to a physical change. Impact types are described below.
 - Direct or primary impacts are impacts that would be caused by the project and would occur at the same time and place as the project's construction or operation.
 - Indirect or secondary impacts are impacts that would be caused by the project and would be later in time or farther removed in distance but would still be reasonably foreseeable. Indirect or secondary impacts may include growth-inducing impacts and other impacts related to induced changes in the pattern of land use or population density, the growth rate, or related effects on air and water and other natural systems, including ecosystems.
 - Residual impacts are the remaining impacts after identified mitigation is implemented.
- *Significant impact on the environment* means a substantial (or potentially substantial) adverse change in any of the physical conditions in the area affected by the project, including land, air,

water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. An economic or social change by itself is not considered a significant impact on the environment, but a social or economic change related to a physical change may be considered in determining whether the physical change is significant.

- *Mitigation* consists of measures that avoid or substantially reduce the project's significant environmental impacts by:
 - Avoiding the impact altogether by not taking a certain action or parts of an action.
 - Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
 - Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
 - Reducing or eliminating the impact over time through preservation and maintenance operations during the life of the action.
 - Compensating for the impact by replacing or providing substitute resources or environments.
- *Cumulative impacts* are two or more individual impacts that, when considered together, are considerable or that compound or increase other environmental impacts. The following statements also apply when considering cumulative impacts.
 - The individual impacts may be changes resulting from a single project or separate projects.
 - The cumulative impact from several projects is the change in the environment that results from the incremental impact of the proposed project when added to other closely related past, present, or reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over time.

This EIR uses a variety of terms to describe the level of significance of adverse impacts. These terms are defined as follows.

- *Less than significant.* An impact that is adverse but does not exceed the defined thresholds of significance. Less-than-significant impacts do not require mitigation.
- *Significant.* An impact that exceeds the defined thresholds of significance and would or could cause a substantial adverse change in the environment. Mitigation measures are recommended to eliminate the impact or reduce it to a less-than-significant level.
- *Significant and unavoidable.* An impact that exceeds the defined thresholds of significance and cannot be eliminated or reduced to a less-than-significant level through the implementation of mitigation measures.

1.8 Organization and Contents of the Recirculated Draft EIR

This Recirculated Draft EIR, which addresses the potential environmental impacts of the project, was prepared with input from the public and responsible and affected agencies during the EIR scoping process, as discussed previously.

The contents of this Recirculated Draft EIR are based on the NOP, the Draft EIR, and public and agency input provided during the previous public review periods for the project. The City of Fontana, as the Lead Agency, determined that a Recirculated EIR would be appropriate to address potentially significant environmental impacts related to the following resource areas:

- Aesthetics
- Air quality
- Biological resources
- Cultural resources
- Geology and soils
- Greenhouse gas emissions
- Hazards and hazardous materials
- Hydrology and water quality
- Land use and planning
- Noise
- Population and housing
- Public services
- Recreation
- Transportation and traffic
- Utilities and service systems

With respect to the following resource areas, as discussed in the NOP, it was determined that no impacts would occur and only a limited discussion of the following topics is warranted in this document:

- Agricultural and forest resources
- Mineral resources

The content and organization of this Recirculated Draft EIR are designed to meet the requirements of CEQA and the State CEQA Guidelines and present issues, analysis, mitigation, and other information in a logical and understandable way. This Recirculated Draft EIR is organized into the sections listed below.

- Chapter ES, *Executive Summary*, provides a project description and a summary of the environmental impacts and mitigation measures.
- Chapter 1, *Introduction*, provides CEQA compliance information, an overview of the decision-making process, information regarding the organization of the EIR, and a responsible and trustee agency list.
- Chapter 2, *Environmental Setting*, contains a summary of the project location and existing conditions and setting.
- Chapter 3, *Project Description*, provides a description of the project's location, characteristics, and objectives, as well as a summary of the major components of the Specific Plan, the Specific Plan's relationship to the previous specific plan approved on the site, and any required approvals.

- Chapter 4, *Environmental Analysis of the Project*, contains a detailed environmental analysis of the existing conditions, project impacts, mitigation measures, and unavoidable adverse impacts. The analysis of each environmental category in Chapter 4 is organized as listed below.
 - *Introduction* provides a brief overview on the purpose of the section being analyzed with regard to the project.
 - *Existing Conditions* describes the physical conditions that exist at this time and may influence or affect the topic being analyzed.
 - *Regulatory Setting* provides federal, state, and local laws that apply to the topic being analyzed.
 - *Impact Analysis* discusses the impacts of the project in each category, presents the determination of the level of significance, and provides a discussion of feasible mitigation measures to reduce any significant impacts.
- Chapter 5, *Alternatives*, describes a reasonable range of alternatives to the project that could reduce significant environmental effects that cannot be avoided.
- Chapter 6, *Cumulative Impacts*, presents an analysis of the project's contribution to cumulative impacts and growth-inducing impacts as well as other CEQA requirements, including significant and unavoidable impacts and irreversible commitments of resources.
- Chapter 7, *Growth Inducement*, includes an analysis of ways in which the proposed project could foster economic or population growth, or the construction of additional housing either directly or indirectly in the surrounding area.
- Chapter 8, *List of Preparers*, identifies persons involved in the preparation of the EIR.
- Chapter 9, *References*, identifies referenced sources for the EIR.
- Appendices provide information and technical studies that support the environmental analysis contained within the EIR.



2.1 Background and Project History

The West Valley Logistics Center Specific Plan (WVLCSP or Specific Plan) project site is on the site of the approved but undeveloped Valley Trails Specific Plan within the City of Fontana in the County of San Bernardino, California. The Valley Trails Specific Plan currently allows for a master planned community containing a maximum of 1,154 homes, an elementary school, and private and joint-use recreational facilities on approximately 289 acres. The Valley Trails Specific Plan and corresponding California Environmental Quality Act (CEQA) documentation (Environmental Impact Report [EIR]: State Clearinghouse Number 2005091001) were approved on May 8, 2007; however, the development was not built. Subsequently, the landowner sold the parcels to Hillwood A 1.54-acre utility corridor, not included within the Valley Trails Specific Plan, was added to the project site after the property was transferred to Hillwood. The current project site is 291.31 acres.

The assessor's parcel numbers included in the property owned by Hillwood on the WVLCSP site are:

- 0194-401-04-0000
- 0194-401-05-0000
- 0194-401-09-0000
- 0256-131-11-0000
- 0256-131-12-0000
- 0256-131-13-0000
- 0256-131-14-0000
- 0256-131-15-0000
- 0256-131-05-0000
- 0256-141-36-0000
- 0256-141-38-0000
- 0256-141-39-0000
- 0256-141-41-0000

The project site was vacant with few, isolated residential structures prior the 1950s, and, after that, was used for agricultural production for approximately 50 years (Appendix C: Golden State Land and Tree Assessment 2013). Portions of the site have also been used historically as a landfill and two quarries. The site is currently vacant.

2.2 Project Location

The WVLCSP area is in southeastern Fontana, as shown in Figure 2-1, Regional Location Map. The City boundary is to the southern and eastern sides of the project. The site borders the unincorporated community of Bloomington in San Bernardino County to the east and the City of Jurupa Valley in Riverside County to the south. The project site is depicted on the Fontana U.S. Geological Survey (USGS) 7.5-minute quadrangle within Section 33, Township 1 south, Range 5 west (Appendix D: RBF 2014). The project site and surrounding areas are shown in Figure 2-2, Project Vicinity Map, and Figure 2-3, Aerial Map, shows an aerial of the undeveloped project area and the surrounding terrain.

The areas within the project site are referenced throughout this Recirculated Draft EIR by parcel and by planning area, as provided in Figure 2-4, Tentative Parcel Map 19156, and Figure 2-5, Proposed Planning Areas. Proposed parcels 1 through 6, as depicted in Figure 2-4, are located west of Locust Avenue, east of Alder Avenue, north and south of Armstrong Road, south of Jurupa Avenue, and north of the Jurupa Valley (Riverside County) boundary. Proposed Parcel 7 is on the southeast corner of the intersection of Jurupa Avenue and Locust Avenue, north of the Southern California Edison (SCE) corridor. Proposed Parcel 8 includes the 55.23-acre open space portion of the project area, which is adjacent to proposed Parcels 2, 3, and 4. An existing 1.54-acre utility corridor (Parcel 9), which is east of proposed Parcel 7, encompasses the project's easternmost boundary. Lot A, located east of Locust Avenue and north of 11th Street, consists of disturbed land with a large detention basin constructed near Locust Avenue in the eastern portion of the project site. The project site can also be characterized by three planning areas, each of which are further described below and depicted on Figure 2-5:

- Planning Area 1: The largest development area (247.71 acres) is bounded on the north by an SCE utility corridor, on the west by the Jurupa Hills, on the south by residential properties within the City of Jurupa Valley in the County of Riverside, and on the east by residential uses in the San Bernardino County area of Bloomington. This area includes proposed Parcels 1 through 6 and Parcel 8 (the 55.23-acre open space area).
- Planning Area 2: The northernmost development area (21.78 acres) is at the southeastern corner of Locust Avenue and Jurupa Avenue, just north of the SCE utility corridor. The northern and eastern project boundaries in this area coincide with the Fontana City limits. This area includes proposed Parcels 7 and 9 (the existing 1.54-acre utility easement).
- Planning Area 3: The detention basin area (14.93 acre Lot A) is east of Locust Avenue as a standalone parcel. The southern and eastern boundaries of the detention basin coincide with the Fontana City limits and the area is bordered by the 1.54-acre SCE utility corridor (Parcel 9) to the north.

In addition to areas within the three planning areas, project development would involve 7.5 acres of roadway dedication area for Armstrong Road, Locust Avenue, Jurupa Street, and a private street (old Alder Avenue). A sewer lift station would also be constructed on 11th Street, south of Planning Area 3, and approximately 200 feet west of Linden Avenue within the existing right-of-way.



Figure 2-1
Regional Location Map
West Valley Logistics Center Specific Plan EIR

K:\Irvine\GIS\Projects\City of Fontana\00920_11\mapdoc\Fig2_3 Project Aerial.mxd Date: 3/26/2014 24991

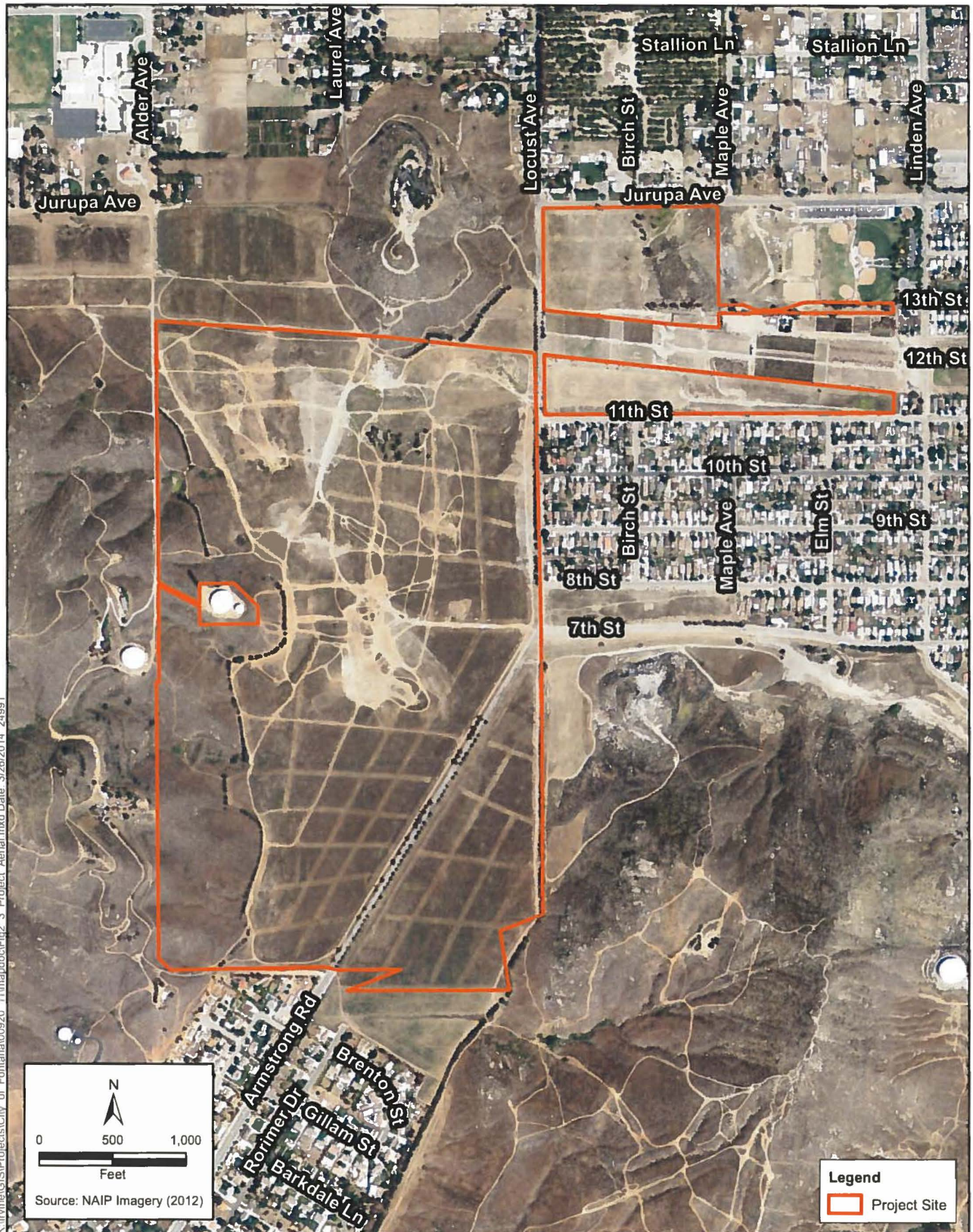


Figure 2-3
Aerial Map
West Valley Logistics Center Specific Plan EIR

AR0004723

K:\Irvine\GIS\Projects\City of Fontana\00920_11\mapdoc\Fig2_4 Tentative Parcel Map.mxd Date: 3/26/2014 24991

Source: T.E., Inc.

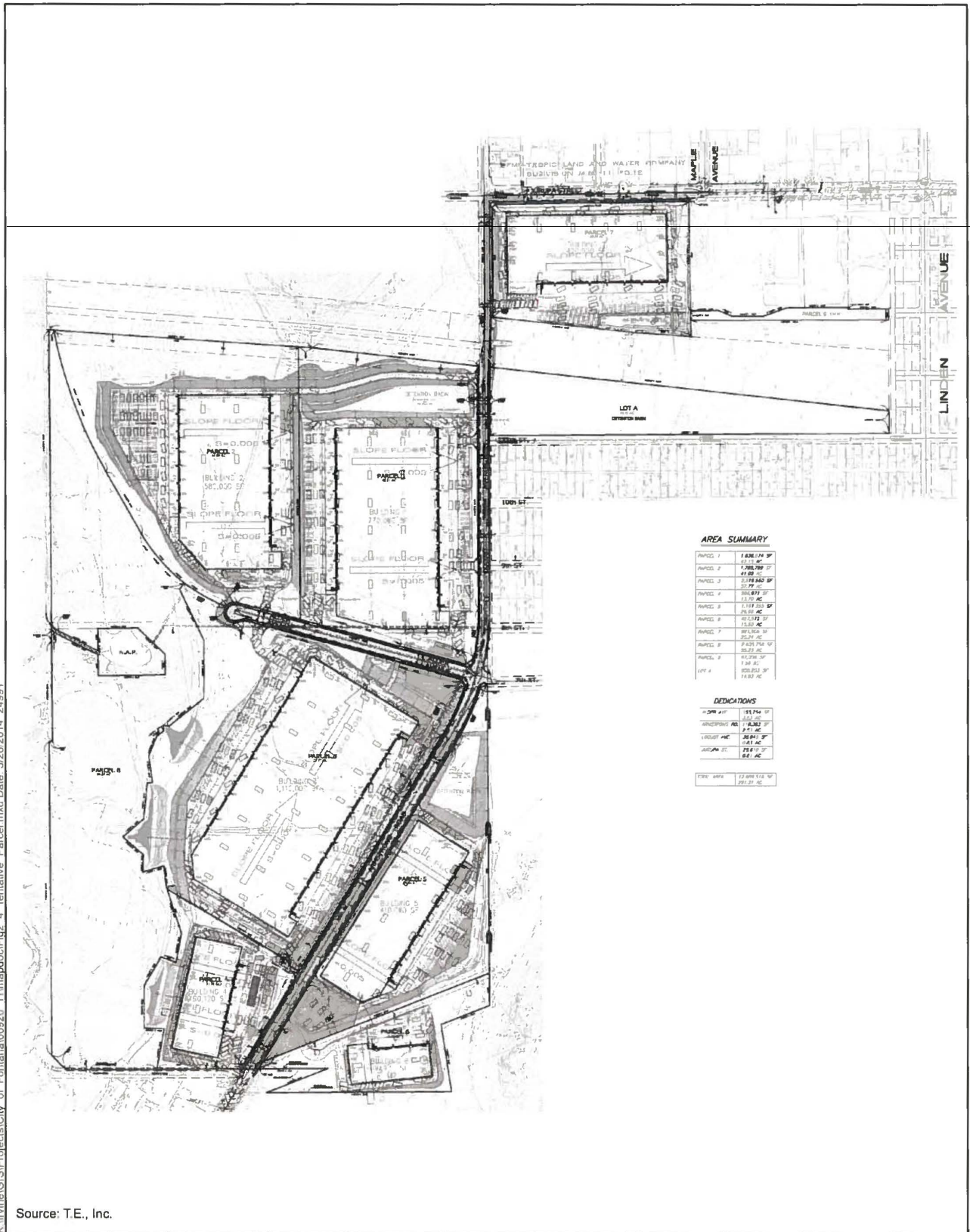


Figure 2-4
Tentative Parcel Map
West Valley Logistics Center Specific Plan EIR

AR0004724

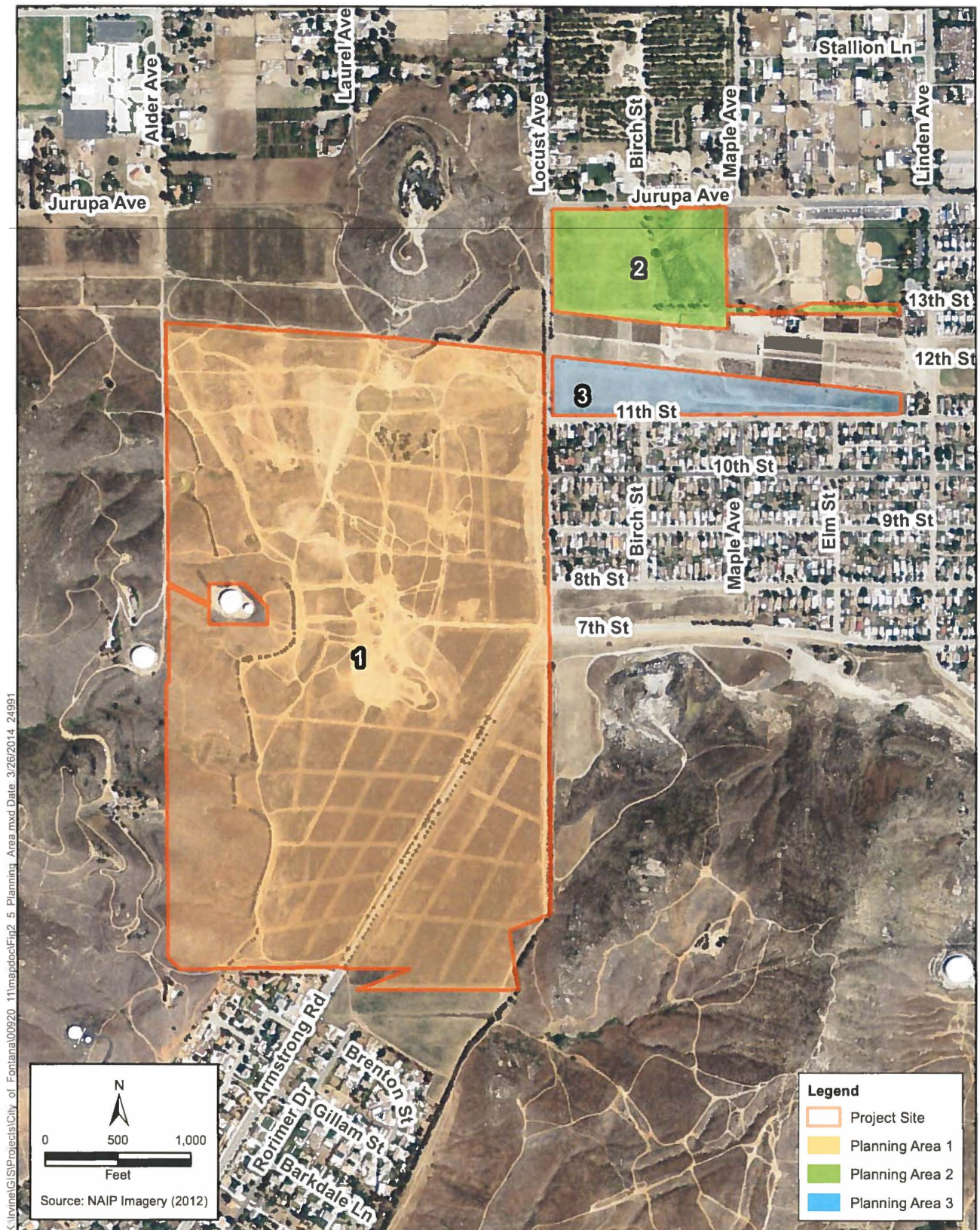


Figure 2-5
Proposed Planning Areas
West Valley Logistics Center Specific Plan EIR

2.3 Setting and Existing Conditions

Near the project site, undeveloped areas include the Jurupa Hills (in Fontana) along the entire western boundary, an SCE utility corridor along the northern boundaries of Planning Areas 1 and 3 (refer to Figure 2-5), and vacant/undeveloped areas east of the project site and south of 7th Street. The residential properties near the project site within Fontana and the County of San Bernardino are typically single-family detached homes, some with equestrian uses, and are located east of Locust Avenue (between 7th and 11th Streets in Bloomington) and south of the project site (in the City of Jurupa Valley). Some rural residential development is found north of Jurupa Avenue. A conifer nursery is within the SCE easement south of Kessler Park and north of the existing detention basin on site (Planning Area 3, Lot A). The Jurupa Hills, a major landform in southern Fontana, are the natural backdrop to the WVLCSP site. Also the dominant topographic feature of the WVLCSP property, the Jurupa Hills are on the western portion of the property, gently slope in an easterly direction, and range in height from approximately 1,100 feet to 1,450 feet above mean sea level (MSL). Rattlesnake Mountain, which spans both San Bernardino and Riverside Counties, is southeast of the project site at a maximum elevation of 1,604 feet above MSL. Other features near the WVLCSP area include two water reservoir tanks and an access road in the Jurupa Hills surrounded by the project on its western edge. These features are shown in Figure 2-2 as "N.A.P." or "not a part" and are designated as public facilities.

A portion of the project site within Planning Area 2, south of Jurupa Avenue, east of Locust Avenue, and within nearby Kessler Park in the County of San Bernardino, became the Crestmore Landfill, or the Crestmore Waste Disposal Site (WDS). The Crestmore WDS is a closed municipal solid waste disposal site owned by the County of San Bernardino Solid Waste Management Division, and was actively operated by the County between the years of 1955 and 1966 (California Integrated Waste Management Board 2003). Two sites were previously used for mining: one at the base of Jurupa Hills central to Planning Area 1, and the other within the former Crestmore WDS site, a limestone quarry known as Little Hill Quarry.

The project site primarily consists of vacant, undeveloped but heavily disturbed land with some mature trees scattered throughout the project area and two utility corridors that pass through the northern and southeastern portions of the site. There are remnants of a former house, specifically a stone wall and fountain basin located where a possible residence once stood on the northern portion of the project site within Planning Area 1. The use of the central portion of the site as a borrow site where materials have been removed from the site, combined with more recent off-road vehicle use, has created small depressions that retain water after storm events. The portion of the site at the southeastern corner of Jurupa Avenue and Locust Avenue may recently have been used to store fencing materials and planting pots, and it is occupied by tires, irrigation supplies, and other construction and agricultural materials. The foothills of the Jurupa Hills on the western and southeastern boundaries of the project site remain relatively undisturbed. The project site has been subject to various types of human disturbance including an extensive history as an agricultural site, which likely ended in the early 2000s. More recently, the property has been fallow but has been subject to unauthorized uses such as horseback riding, extensive off-road vehicle use, and illegal dumping of trash and debris. These unauthorized uses have continued the heavy level of disturbance and prevented the return of the native habitats that once occupied the project site.

2.3.1 Physical Setting

The project site is located along the northeastern edge of the Jurupa Hills along the southern boundary of San Bernardino County. The topography of the project site ranges from gently sloping to steeper hills with elevations ranging from 1,000 to 1,220 feet above MSL (Appendix C). Existing agricultural land uses, routine disking activities, and off-road vehicle use have mechanically disturbed surface soils, resulting in the removal of some native soils from the project site and general area. These disturbances have removed most of the top soils from the project site.

2.4 Existing Land Use Designations

Approval of the proposed project would include land use designation changes pursuant to the proposed Specific Plan Amendment, General Plan Amendment, and Zone Change. The primary land use policy documents in place that relate to the project site include: the City of Fontana General Plan, Zoning Code, Municipal Code, and the Valley Trails Specific Plan. The following is a description of the existing land use designations for the site.

2.4.1 General Plan

The General Plan establishes the long-range direction, or blueprint, for the City. The Fontana General Plan (2003) designates the project area (Parcels 1 through 8 and Lot A) as the Valley Trails Specific Plan #24 and specifically as Residential Planned R-PC (3.0 to 6.4 dwelling units per acre), Medium Density Residential (R-M), Multi Family Residential (R-MF), Public Facilities (P-PF), and Recreational Facilities (P-R) land uses. Proposed Parcel 9, which is not within the Valley Trails Specific Plan, is designated as R-PC but is not included within the existing Specific Plan overlay. The intent of the R-PC designation is to provide for the managed growth of master planned communities offering a mix of residential housing types and amenities available for various economic segments of the population. The designation also allows single-family residential development areas within approved Specific Plans.

Alder Avenue currently runs in a north-south direction from northwest of the project site, and is designated by the City's General Plan Circulation Element as a Modified Secondary Highway between Slover Avenue and Jurupa Avenue. The City's Circulation Plan shows Alder Avenue as a Secondary Highway (92-foot right-of-way) from Jurupa Avenue to Locust Avenue through the project site.

The General Plan also shows recreational facilities within the project site. These facilities, associated with the Valley Trails Specific Plan, are included in the General Plan as two future park sites on Figure 10-1 (Existing and Planned Future Parks) and as part of the alignment of the Jurupa Hills Trail on Figure 10-3 (Recreational Trails).

2.4.2 Zoning

Zoning is a primary mechanism for implementing the general plan, providing development standards, allowable uses, and other regulations that directly implement the general plan's goals and policies. The site's current zoning classification is SP (Valley Trails Specific Plan, #24), which includes residential, school, recreation, and open space uses for the entirety of the project site except for proposed Parcel 9, which is zoned R-PC. Portions of proposed Parcels 1, 3, 4, and 8 are

included within a Hillside Overlay, the purpose of which (as described by the City's Zoning and Development Code Section 30-301.5) is to preserve steep slopes and hillsides and to provide development that conforms to the natural terrain while minimizing geologic hazards and biological impacts.

2.4.3 Specific Plan

Specific plans provide focused land use guidance and regulation for particular areas. They generally include a land use plan, circulation plan, infrastructure plan, development standards, design guidelines, phasing plan, financing plan, and implementation plan. The project site is the location of the Valley Trails Specific Plan (#24), which allows for a master planned community containing a maximum of 1,154 homes, an elementary school, and private and joint-use recreational facilities. The Valley Trails Specific Plan and corresponding CEQA documentation were approved on May 8, 2007; however, the project was never developed.



3.1 Introduction

The West Valley Logistics Center Specific Plan (herein WVLCSP, Specific Plan, or proposed project) will serve as the guiding document to develop a 291.31-acre site with warehouse distribution, public facility, and open space land uses within the southeastern portion of the City of Fontana (City), San Bernardino County, California. Specifically, the WVLCSP provides direction for the development of the site related to land use, circulation, architecture and landscape design, grading, lighting, drainage, and public services and utilities, consistent with the City's General Plan. The City is the Lead Agency for the preparation of this Recirculated Draft Environmental Impact Report (EIR), and is considering the adoption of the proposed Specific Plan to allow for the development of a logistics center, including warehouse, light manufacturing (such as assembly) and support office uses, a detention basin, the preservation of natural hillside open space, and right-of-way dedications.

The project would establish and implement the WVLCSP to replace the Valley Trails Specific Plan currently approved for the site with the planning concept, design framework, development regulations, design guidelines, and administrative procedures necessary to achieve a high quality industrial warehousing distribution environment in southeast Fontana. The WVLCSP includes seven parcels set aside for warehouse distribution development. The remaining area would include one parcel consisting of 55.23 acres to be preserved in natural open space (Parcel 8), a parcel consisting of a 1.54-acre utility easement (Parcel 9), and a 14.93-acre lettered lot (Lot A) that consists of an existing detention basin that would be improved as part of the proposed project. In addition, the proposed project includes construction of an off-site sewer lift station within an existing roadway right-of-way.

The purpose of this chapter is to describe the details of the WVLCSP to the public and to provide reviewing agencies and decision-makers with a complete description of the proposed action. Approval of the Specific Plan would adopt a land use plan and associated development standards that would guide development within the Specific Plan boundaries. This chapter also includes a comparison of the proposed project and the Valley Trails Specific Plan to better understand the differences in build-out potential of the two different specific plan concepts.

3.2 Project Area and Site Access

The precise location and boundaries of the proposed project, including a regional map of the project's location, must be included per California Environmental Quality Act (CEQA) Guidelines (Section 15124(a)). The Specific Plan area is in the southeastern portion of the City of Fontana, in the southwest "Valley Region" of San Bernardino County, as shown previously on Figure 2-1. Regional transportation corridors in the area include the San Bernardino Freeway (I-10) to the north, the Pomona Freeway (SR 60) to the south, the Riverside Freeway (I-215) to the east, and the Ontario Freeway (I-15) to the west.

Local street access to the WVLCSP area from the north would be from Alder Avenue, Locust Avenue, and Jurupa Avenue. Local access from the south would be from Armstrong Road, which becomes Valley Way from SR 60. The approximately 291-acre WVLCSP site is bisected by Armstrong Avenue, which runs diagonally northeast to southwest on the southern half of the site and turns into Locust Avenue north of 7th Street in the northern half of the site. The project site can be characterized by three planning areas consistent with the WVLCSP, each of which are further described below and depicted previously on Figure 2-5 (*Proposed Planning Areas*):

- Planning Area 1: The largest development area includes Parcels 1 through 6 and 8, totals 247.10 acres, and is bounded on the north by an existing Southern California Edison (SCE) utility corridor, on the west by the Jurupa Hills, on the south by residential properties within the City of Jurupa Valley in the County of Riverside, and on the east by residential uses in the San Bernardino County area of Bloomington. While most of this area would be designated for warehouse development, a total of 55.23 acres (Parcel 8) of natural hillside open space is included along the western project boundary.
- Planning Area 2: The northernmost development area includes Parcels 7 and 9 and totals 21.78 acres. Parcel 7 would be dedicated to warehouse development and is north and east of the primary development area at the southeast corner of Locust Avenue and Jurupa Avenue, just north of the SCE utility corridor. A 1.54-acre linear utility easement (Parcel 9) is also included within this planning area. The northern and eastern project boundaries in this area coincide with the Fontana city limits.
- Planning Area 3: The existing detention basin area (Lot A, which is 14.93 acres) would be dedicated as a public facility, and is east of the primary development area, separated by Locust Avenue. The southern and eastern boundaries of the detention basin coincide with the Fontana city limits and the area is bordered by the SCE utility corridor to the north. This area would continue to be used as a detention basin but would be improved by the applicant to increase capacity.

In addition to areas within the three planning areas, project development would involve 7.5 acres of roadway dedication area for Armstrong Road, Locust Avenue, Jurupa Street, and a private street (old Alder Avenue). The proposed project also includes construction and operation of a sewer lift station on 11th Street approximately 200 feet west of Linden Avenue within the existing right-of-way, which would serve the Specific Plan area.

3.2.1 Off-site Areas Affected by the Project

As part of the Specific Plan implementation, improvements would be required outside of the proposed project site. Off-site improvements on Linden Avenue (between Santa Ana and 11th Street) and on 11th Street (between Linden Avenue and Locust Avenue) would be constructed as part of the project, along with a new lift station on 11th Street near Linden Avenue. The off-site utility improvements would be required for implementation of the project and would be within public rights-of-way and existing utility easements. Final designs of each improvement would be coordinated with the appropriate utility agencies.

3.3 Project Objectives

A statement of project objectives is required by the State CEQA Guidelines (Section 15124 (b)). In general, an objective can be defined as the purpose for which something is proposed. Under CEQA, a clear statement of project objectives is necessary because alternatives evaluated in an EIR must achieve, in whole or in part, the underlying objectives.

The overall goal of the proposed Specific Plan is to provide for the orderly development of a phased land use plan that balances the need for industrial development with the preservation of open space and infrastructure improvements. The following objectives were developed based on the proposed Specific Plan in order to implement this goal:

- Create local employment and economic development opportunities for the City of Fontana and surrounding communities that help maintain a balanced community;
- Achieve a high-quality, cohesive design character for industrial uses within the project site to create a desirable asset to the community and enhance the project's overall value; and
- Facilitate the timely provision of needed infrastructure and community facilities.

3.4 Specific Plan Overview

A specific plan is a tool for the systematic implementation of a city's general plan. It is intended to establish a link between implementing the provisions of the general plan and site-specific development within the specific plan area (e.g., West Valley Logistics Center). In general, a specific plan provides for the orderly and efficient development of an area, covering both land use and design requirements for private development, public services and facilities, and circulation and streetscape improvements to public areas.

The WVLCSP is proposed to replace the undeveloped Valley Trails Specific Plan. The residential, school, and park land use designations set forth in the Valley Trails Specific Plan would be replaced with the industrial and open space land use designations proposed by the WVLCSP.

The proposed WVLCSP provides detail for the following:

- The distribution, location, and extent of the uses of land within the 291.31 acres covered by the plan, including industrial warehousing distribution, office, detention basin, utility easement, and open space uses.
- The proposed distribution, location, extent, and intensity of major components of public and private transportation, sewage, water, drainage, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan.
- Standards and criteria by which development would proceed, and standards for the conservation, development, and utilization of natural resources, where applicable.
- A program of implementation measures that includes regulations and programs necessary to carry out the implementation of this Specific Plan.
- A statement of consistency describing the compatibility linkages between the Specific Plan and the City of Fontana General Plan.

3.4.1 Specific Plan Land Use Goals

The specific land use goals contained in the WVLCSP are as follows:

- Establish a well-balanced and carefully planned logistics center.
- Develop high-quality sites for warehousing with stringent design standards.
- Implement the City's General Plan by creating a balanced community through strengthening economic opportunities within the City.
- Provide an employment-generating, warehouse-focused industrial development that is located close to potential employees, thus reducing commute times and distances.
- Ensure that the development of the site is compatible with, and sensitive to, existing and planned land uses in the area by providing appropriate transitions and environmental buffers between the proposed industrial development and the surrounding area.
- Conserve on-site critical habitats as natural open space.

3.4.2 Specific Plan Purpose and Intent

The WVLCSP would establish the planning concept, design framework, development regulations, design guidelines, and administrative procedures necessary to achieve a high-quality industrial warehousing environment in southeastern Fontana, consistent with the City of Fontana's General Plan, and would build upon the City's existing zoning ordinance. The proposed project is intended by the applicant to increase economic and employment opportunities within this portion of the City through implementation of the Specific Plan and the facilitation of warehouse development on the site.

3.4.3 Land Use Plan

The proposed WVLCSP would allow development of 212.11 acres of industrial warehouse and preservation of 55.23 acres of open space land uses within the 291.31-acre Specific Plan area (other areas include utilities easements, detention basins, and roadways). Three zoning districts—Light Industrial (LI), Open Space – Public Facilities (OS-PF), and Open Space – Natural Area (OS-NA)—are proposed for inclusion into the WVLCSP area. A breakdown of these land use designations and zoning district distributions is provided in Table 3-1 and depicted in Figure 3-1, *Proposed Land Use Map*. Descriptions of each zoning district, allowable uses, and general development standards for each are provided in the Specific Plan.

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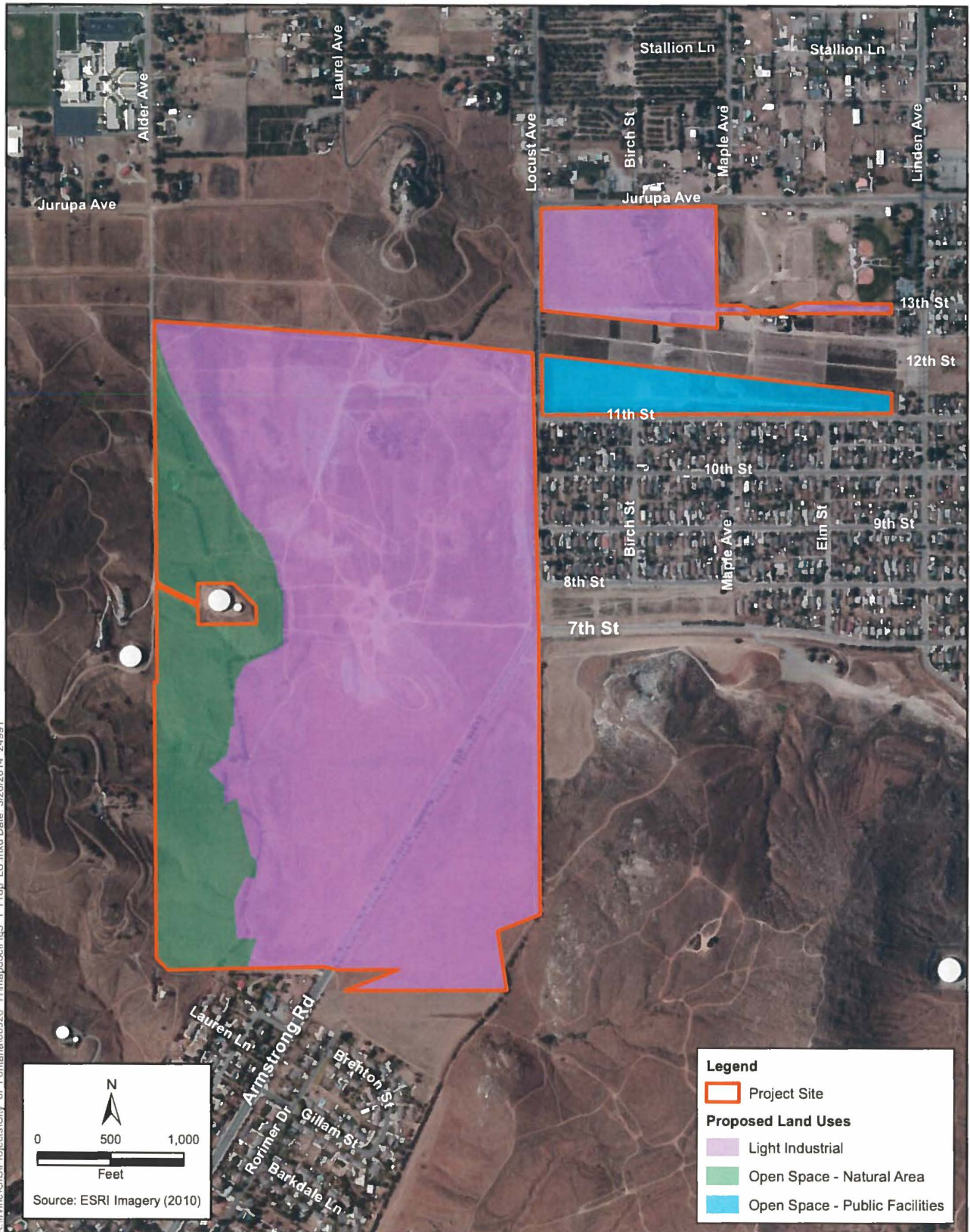


Figure 3-1
Proposed Land Use Map
West Valley Logistics Center Specific Plan EIR

AR0004734

Table 3-1. Proposed Land Uses and Zoning Districts

Land Use	Zoning District	Acres	Development Potential (square feet of building area)
Planning Area 1 (Parcels 1-6, 8)			
Light Industrial (I-L)	Light Industrial (LI)	191.87	3,053,690
Open Space (OS)	Open Space – Natural Area (OS-NA)	55.23	-
Planning Area 2 (Parcels 7 and 9)			
Light Industrial (I-L)	Light Industrial (LI)	20.24	420,000
Light Industrial (I-L)	Light Industrial (LI)	1.54	-
Planning Area 3 (Detention Basin Area)			
Open Space (OS)	Open Space – Public Facilities (OS-PF)	14.93	-
Right-of-Way (Entire Site)			
Roadway and access		7.5	
TOTAL		291.31	3,473,690

Source: West Valley Logistics Center Specific Plan, Metis Environmental Group (September 2014) and Tentative Parcel Map (TPM) 19156, Thienes Engineering (January 2014).

Building development within the project site is proposed to be kept within the lower-elevated portions of the project site, allowing the higher portions of the site associated with the Jurupa Hills to be set aside for preservation. The Specific Plan would facilitate development of up to seven proposed buildings within two of the three planning areas. As listed in Table 3-2, buildout of the project would include 212.11 acres of land that would be designated for industrial warehousing distribution development, which would include up to 3,403,000 square feet of warehouse space and 70,000 square feet of office space. In addition, 7.5 acres of right-of-way dedications are provided to allow for parking and circulation within Parcels 1 through 7, as depicted on Figures 2-4, 2-5, and 3-2, *Conceptual Site Plan*. The Specific Plan planning areas, which includes this development, are described below.

- Planning Area 1: Proposed Buildings 1 through 4 within Parcels 1 through 4 would be located west of Armstrong Avenue and Locust Avenue within this area. Proposed Buildings 5 and 6 (on Parcels 5 and 6) would be located east of Armstrong Avenue and south of 7th Street¹. No development would be allowed within Parcel 8, which is a 55.23-acre area that would be retained in natural hillside open space.
- Planning Area 2: This area includes proposed Building 7 (on Parcel 7) and an existing 1.54-acre linear utility easement (Parcel 9). No development is proposed within Parcel 9.
- Planning Area 3: The 14.93-acre existing detention basin area (Lot A) east of Locust Avenue would be improved to collect and control stormwater runoff from the Specific Plan area.

The locations of each building and roadway within the project site are shown on Figure 3-3, *Conceptual Building Configuration*. The 7.5 acres of roadway dedication areas include a private street (Old Alder Avenue) (3.53 acres), Armstrong Road (2.53 acres), Locust Avenue (0.83 acre), and Jurupa Avenue (0.61 acre).

¹ Building locations are shown for planning purposes only and may be subject to change upon City review and approval of Tentative Parcel Map 19156 and Design Review of the Site Plan.

Table 3-2. Proposed Buildings and Development Type

Building	Site Area (net acres)	Building Area (square feet)		
		Total	Warehouse	Support Office (within warehouse buildings)
1	42.15	743,780	733,780	10,000
2	41.09	580,000	570,000	10,000
3	57.77	1,045,640	1,025,640	20,000
4	13.70	190,120	185,120	5,000
5	26.66	393,680	383,680	10,000
6	10.50	100,470	95,470	5,000
7	20.24	420,000	410,000	10,000
Total	212.11	3,473,690	3,403,690	70,000

Source: West Valley Logistics Center Specific Plan, TPM 19156, Thienes Engineering (January 2014).

Note: All required front and side setback areas would be clear of all structures.

TPM 19156 and Site Plan for the project are subject to review and approval by the City and may be subject to change pending City recommendations for revisions. These plans are conceptual at this time.

3.4.4 Circulation Improvements

The proposed Specific Plan includes circulation improvements to enhance the functional efficiency of the southern Fontana circulation system as well as the aesthetics of the street network through landscape improvements along the project's frontage. An internal roadway network would be constructed to provide access to and from parcels within the WVLCSP area and would consist of public roadways, with only Locust Avenue and Armstrong Road to be maintained by the City of Fontana. Additionally, sidewalk construction along Locust Avenue, Jurupa Avenue, Armstrong Road, and a private road (old Alder Avenue) would be included as part of the project to facilitate pedestrian access throughout the project area and would be constructed and maintained by the applicant.

The following roadways would be improved with implementation of the proposed project. Other transportation improvements, including new pavement and roadway or intersection improvements adjacent to the project site, would be constructed by the applicant to improve capacity on adjacent roadways.

Roadways

Private Street (Old Alder Avenue)

Alder Avenue runs in a north-south direction off site from northwest of the project site. Pavement and other existing improvements for Alder Avenue terminate north of Jurupa Avenue and an unimproved road runs southward along the eastern project boundary until it accesses the water tanks off site. Alder Avenue is designated by the City's General Plan Circulation Element as a Modified Secondary Highway for most of its length and shows Alder Avenue as a Secondary Highway (92-foot right-of-way) adjacent to the project site. Instead of its extension from Jurupa Avenue through the project site in accordance with the General Plan, a new private street would be realigned and would bisect the project site in a northwest to southeast direction from the



Source: Hillwood, 2011



Figure 3-3
Conceptual Building Configuration
West Valley Logistics Center Specific Plan EIR

intersection of Armstrong Road and 7th Street and would be contained within the project boundaries. This private street would then terminate south of Parcel 2, and no connection to Alder Avenue off site to the north at Jurupa Avenue would occur with implementation of the project. A private street would be constructed as a cul-de-sac; however, it would be designed for future extension off site. The design would involve a new 80-foot right-of-way with 5-foot sidewalks and 7-foot buffers or planter strips on both sides of the street. There would be 16-foot-wide traveling lanes and a 12-foot passing lane on each side of the centerline. The applicant would be responsible for installing all driveways into and out of the project site.

Locust Avenue

Locust Avenue runs in a north-south direction through the project site and forms the top half of the eastern boundary. Locust Avenue is designated by the City's General Plan Circulation Element as a Modified Secondary Highway north of the project and as a Modified Primary Highway. Through the project site, Locust Avenue would be developed with a right-of-way of 102 feet. Upon implementation of the WVLCSP, the project applicant would be responsible for improvements including a 72-foot curb-to-curb roadway section, a 3- to 6-foot buffer or planter strip, and a painted median. The applicant would be responsible for constructing all driveways into and out of the project site.

Armstrong Road

Armstrong Road runs north-to-south and extends through the southern half of the WVLCSP area. It is designated by the City's General Plan Circulation Element as a Modified Primary Highway. Armstrong Avenue through the WVLCSP area would be provided with a right-of-way width of 92 feet, including sidewalks. Upon implementation of the WVLCSP, the project applicant would be responsible for improvements including a 68-foot curb-to-curb roadway section, a 3- to 6-foot buffer or planter strip, and a painted median. The applicant would be responsible for constructing all driveways into and out of the project site.

Jurupa Avenue

Jurupa Avenue runs in an east-west direction north of the project site. Jurupa Avenue is designated by the City's General Plan Circulation Element as a Primary Highway with a base right-of-way width of 104 feet, including sidewalks, except for the section of Jurupa Avenue between Locust and Alder Avenues, where it is designated with a base right-of-way width of 102 feet. Off-site street improvements would occur on Jurupa Avenue within the County of San Bernardino. From Locust Avenue to Maple Avenue within the County of San Bernardino, the applicant proposes improvement along the project frontage only. The applicant would be responsible for constructing all driveways into and out of the project site.

Transportation Management Association

The proposed project would incorporate driveway channelization, truck route designation, and other methods including a Transportation Management Association (TMA) to guide project traffic to the regional transportation network and away from residential streets. The TMA would create a tenant-based system and set of regulations for monitoring and providing feedback for vehicles, specifically including truck traffic, entering and exiting the development. Entry drives would also be clearly marked by special features, including enhanced paving, landscaping features, decorative

walls, and signage, to promote safety and to increase the visibility of driveway intersections. The purpose of the TMA is to gather sufficient information to assess truck routing, verify that roadway impacts are minimized, and ensure that trucks use authorized routes to the greatest extent feasible. The specific plan requirement for a TMA is provided in Section 3.6 below.

3.4.5 Public Facilities and Service Improvements

Water Facilities

In order to provide an adequate water supply to the proposed project, water pipeline infrastructure would be constructed within the future extensions of Alder Avenue, Armstrong Avenue, and Locust Avenue and an existing 12-inch water main that crosses the site would be relocated. An existing 24-inch water line, located along the western boundary of the site and extending from Alder Avenue to the water tanks just off site, would transmit domestic water to the WVLCSP area. A 12-inch line extends westward from the water tanks to Locust Avenue and then travels north. A 12-inch water main is proposed along Armstrong Avenue and Locust Avenue and would require other connections. The proposed project would also include the installation of reclaimed pipe for future use; however, reclaimed water is not currently available in the area, and the reclaimed water system would be dry until non-potable water becomes available. Final water supply line size would be determined, subject to approval by the West Valley Water Department (WVWD), in the final design stage of the project.

Sewer Facilities

Development under the proposed Specific Plan would include on- and off-site sewer facility upgrades to adequately provide for wastewater service to the project site. Wastewater would flow from the WVLCSP area through a new gravity main and lift station that would be located in the rights-of-way of Alder Avenue, Locust Avenue, and Armstrong Road. More specifically, as part of the project, 8-inch sewers would be constructed to allow the wastewater from the project area to gravity flow to the intersection of Locust Avenue and 11th Street, and a 15-inch sewer would be constructed to continue the gravity flow eastward to a new lift station near the northwest corner of 11th Street and Linden Avenue. The lift station would convey wastewater northerly along Linden Avenue to discharge into the existing 27-inch gravity main at the intersection of Linden Avenue and Santa Ana Avenue. All of the wastewater facilities would be installed in accordance with the requirements and specifications of the State Department of Health Services and the San Bernardino County Health Department.

Stormwater Drainage and Flood Control Improvements

All stormwater on the site would drain to and be held in stormwater basins, and would not be released into the storm drain system. The new stormwater basins would be designed as both retention and water quality basins. The majority of the drainage would be retained in an existing basin, to which the project would provide upgrades, located north of 11th Street. The remaining drainage would be retained in smaller basins adjacent to proposed buildings. A maintenance district would be established at the start of the project prior to building occupancy and would be responsible for providing maintenance of the detention basins, drainage easements, and drainage facilities within the public road rights-of-way that are developed on site.

Utilities and Public Services

The proposed project would involve the development of utility and public service improvements to provide telephone, cable, internet, and natural gas within the proposed project site.

3.4.6 Sustainability Features

Several areas of sustainability are applicable to the WVLCSP, including green infrastructure, appropriate landscaping, building-level sustainability, resource conservation, and compliance with building design regulations aimed at reducing greenhouse gas (GHG) emissions below “business as usual” conditions. A sustainability chapter of the WVLCSP is included as Chapter 7, *Sustainability*, located in the WVLCSP. Table 3-3 below describes the proposed sustainability components of the WVLCSP.

Table 3-3. Sustainability Features Included within the WVLCSP

Sustainability Areas	Project Component	Environmental Topic Area
Resource Conservation	The project would retain 55.23 acres of open space and habitat areas	Biology, land use
Green Infrastructure and Building-level Sustainability	State-required compliance with 2013 Title 24 energy standards. The 2013 Title 24 standards are 30% more stringent than the 2008 Title 24 standards for nonresidential buildings. Per the California Green Building Standards Code (CALGreen), the mandatory provisions of the code are anticipated to reduce 3 million metric tons of GHG emissions by 2020, reduce water use by 20% or more, and divert 50% of construction waste from landfills. This includes design considerations related to the building envelope, heating, ventilating, and air conditioning (HVAC), lighting, power systems, and building materials.	Air quality, GHG emissions, energy, utilities, service systems, and water supply. The CALGreen standards are a key component of reducing GHG emissions statewide below “business as usual” conditions and an important part of achieving GHG reduction targets for the WVLCSP.
Appropriate Landscaping and Building-Level Sustainability	Plants and landscaping within the WVLCSP would be designed to be able to meet Leadership in Energy & Environmental Design (LEED) Neighborhood Development (ND) standards for water conservation, in addition to providing water-efficient landscape irrigation that meets the City’s water conservation requirements.	Utilities, service systems, and water supply
Appropriate Landscaping	A non-irrigated, drought-tolerant hydroseed mix appropriate to the climate zone would be used to conserve water.	Utilities, service systems, and water supply

Sustainability Areas	Project Component	Environmental Topic Area
Appropriate Landscaping and Building-Level Sustainability	Surface parking lots would be well landscaped to reduce the heat island effect. Parking lot landscaping would be planted with 15-gallon trees, one per every four parking stalls. The trees may be clustered, but a minimum of one cluster would be provided for each 100 feet of parking row. Trees would be selected and placed to provide canopy and shade for the parking lots.	Climate change, aesthetics
Building-Level Sustainability	Buildings would be designed to be energy efficient, meeting 2013 Title 24 energy standards designed to be able to meet LEED ND standards as described above.	Utilities and service systems
Green Infrastructure and Building-level Sustainability	Electrical outlets would be provided in loading dock areas to power trucks when refrigeration is needed. This allows trucks with refrigerated cargo to keep their cargo cool without using their engines, minimizing idling time to reduce air emissions and use of fuel on site.	Air quality, GHG emissions, noise
Green Infrastructure and Building-level Sustainability	Buildings would be designed to consider the interactions of building envelope, HVAC, lighting, and power systems as they affect energy performance.	Air quality, GHG emissions, utilities and service systems
Green Infrastructure and Building-level Sustainability	Refrigerants and HVAC equipment would be selected to minimize or eliminate the emission of compounds that contribute to ozone depletion and global warming.	GHG emissions
Green Infrastructure and Building-level Sustainability	Ventilation and HVAC systems would be designed to meet or exceed the minimum outdoor air ventilation rates described in the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHREA) standards and/or per California Title 24 requirements.	Air quality, GHG emissions, noise, and utilities and service systems
Source: West Valley Logistics Center Specific Plan, Metis Environmental Group (September 2014).		

As provided above, the overall project design would employ green technologies and design principles to achieve an innovative, resource-conserving, maintenance-friendly warehousing distribution center that can also minimize long-term rising maintenance costs related to a variety of environmental topic areas, including energy and water use. The project's landscape design would employ a green strategy that incorporates environmentally friendly, sustainable design principles, to include water-wise planting and irrigation, water quality and storm water best management practices through placement of detention basins, use of recycled materials, and other green techniques including bio-swale water cleansing and permeable paving. The applicant would also design all buildings in the development to incorporate LEED standards for future certification by building operators under the core and shell rating system.

3.4.7 Grading Plan and Soil Removal

Grading activities proposed as part of the WVLCSP would be tailored to the existing topography of the project site and are expected to entail the excavation of approximately 2,000,000 cubic yards of material to develop proposed building pads, parking areas, and on-site roadways. Earthwork would involve only minimal amounts of import and export of material to or from off-site locations, as all unspoiled excavated soil would be reused throughout the project site. Potentially hazardous materials (such as intentionally released oil, dumped construction, automotive, and household waste debris, labeled and unlabeled containers, and imported soil) and any contaminated soils found on site would be required to be remediated and removed by a licensed hazardous materials contractor prior to site development, resulting in some export of contaminated soil off site (Appendix C). Graded pads for the project would require two-to-one slopes in many locations surrounding the graded pads with steeper slopes along the base of the hill (adjacent to and partially within Parcel 8) and surrounding proposed detention basins. As grading on slopes greater than three-to-one may occur, the applicant would be required to prepare an erosion control management plan for review by the City.

A project-wide storm water quality management plan (SWQMP) would be submitted to the City for approval prior to any grading activity commencing on site.

3.4.8 Phasing Plan

Implementation of the WVLCSP is likely to be accomplished in phases; however, there is no specific required order in which development phases would commence (a preliminary phasing plan is provided in the Specific Plan as Figure 10-1, *Phasing Plan*). While each planning area may be implemented through construction of smaller sub-phases or individual buildings, the infrastructure improvements listed below would be completed concurrent with building construction, as warranted and to the satisfaction of the City Engineer:

- Private Street (Old Alder Avenue) Improvements
- Alder Avenue Water Line: Transmission Relocation
- Locust Avenue Improvements
- Armstrong Avenue Improvements
- Detention Basin Improvements at 11th Street and Locust Avenue
- Jurupa Avenue Improvements (Locust Avenue to Cedar Avenue)
- Jurupa Avenue Improvements (Tamarind Avenue to Alder Avenue)
- Sewer Lift Station (11th Avenue) & Force Main (Linden Avenue)
- Open Space Preservation Area
- Detention Basin Maintenance District
- Traffic Signal at Alder Avenue and Locust Avenue (when warranted)
- Traffic Signal at Jurupa Avenue and Cedar Avenue (when warranted)

3.4.9 Required Approvals

Pursuant to State CEQA Guidelines Section 15124(d)(1)(B), a list of permits or other approvals required to implement the proposed project is included in the description of the proposed project. The City is the lead agency for the proposed project and would rely upon this Recirculated Draft EIR to document potential impacts of full buildout of the WVLCSP and to determine whether the impacts may be avoided or mitigated to less-than-significant levels. This Recirculated Draft EIR may also be used by regulatory and responsible agencies such as county, state, and federal agencies. Such agencies are responsible for issuing permits and approvals that may be needed to proceed with the proposed project. Potential permits and approvals required by the City include general plan amendments, a zone change, specific plan, development agreement, tentative parcel map, and an SWQMP, each of which are further discussed below. A list of discretionary approvals anticipated to be required for the project was previously provided in Table 1-2.

General Plan Amendments

Adoption of the proposed project would include amendments to the City's existing General Plan, including an amendment to the City's Land Use Element to replace the existing residential and public land use designations on the site with industrial use and open space designations, as well as an amendment to the City's Circulation Element to relocate the extension of Alder Avenue, now proposed as a private street. The existing residential and public land use designations on the site include: Residential Planned Community (RPC), Medium Density Residential (R-M), Multi Family Residential (R-MF), Public Facilities (P-PF), and Recreational Facilities (P-R). Approval of the proposed project would change the land use designations to Light Industrial (I-L) and Open Space (OS).

Alder Avenue is designated by the City's General Plan Circulation Element as a Secondary Highway (92-foot right-of-way) through the project site. According to the current General Plan, Alder Avenue is planned to be realigned to the south then east, bisecting the project site to connect at the intersection of Armstrong Road and 7th Street. The project would instead create a new private street, which would begin at the intersection of Armstrong Road/Locust Avenue and 7th Street, head northwest, and then terminate south of Parcel 2. As a result, no connection to Alder Avenue off site to the north would occur with the General Plan amendment.

Specific Plan and Zone Change

The proposed project includes a request for a zone change to allow for industrial warehouse development within the Specific Plan zone classification. While the project site is currently zoned Specific Plan, the previously adopted Valley Trails Specific Plan applies both residential and public zones within the proposed project area. Should the WVLCSP be approved, the existing Valley Trails Specific Plan would be rescinded, and the property rezoned to industrial (LI) and open space (OS-PF and OS-NA). Refer to Section 3.4.2, *Land Use Plan and Zoning Districts*, for a discussion of proposed land use designations.

Development Agreement

The proposed project includes a development agreement between the City of Fontana and the project applicant. The agreement provides a legal instrument that establishes a commitment whereby the City, as the land management agency for the site, agrees to permit the applicant or its

successors to develop the property under the agreed-upon terms and commits the applicant to the provision of certain public improvements, facilities, and services. The agreement constitutes a legal contract between the City and the applicant. It commits both parties to the agreed-upon development program for the site. The agreement is binding, and would exempt the approved project from future changes to codes, plans, resolutions, and voter-approved initiatives that might cause a different development scenario in the future. The development agreement would:

- Commit the developer to construction of the public facilities specified in the Specific Plan.
- Ensure the establishment of a functioning property owners' association.
- Ensure environmental commitments and mitigation measures by the City, following the establishment of a functioning property owners' association.
- Ensure the maintenance of environmental conservation areas.
- Provide specified public benefits, including:
 - Payment of development impact fees at the current and/or negotiated level, including payment of \$6 million impact fees.
 - Conveyance to the City of Parcel 7, along with specified rights for the developer to repurchase the property. As described in the Specific Plan, Parcel 7 is proposed for development of a 410,000-square-foot warehouse with 10,000 square feet of support office uses. Following conveyance of the parcel to the City, Fontana would have the option of developing the property or selling the property with its entitlement.

It would be the responsibility of the City to ensure that all conditions of approval for the WVLCSP are met at the time of building permit issuance or occupancy, in accordance with the approved Specific Plan as determined by the City.

Tentative Parcel Map

Development within the proposed WVLCSP would require the approval of Tentative Parcel Map No. 19156 in order to legally subdivide the approximately 291.31-acre site into nine parcels and one lettered lot, shown previously in Figure 2-4. Seven of the proposed parcels (Parcels 1 through 7) are intended for industrial development, one parcel consists of approximately 55.23 acres to be preserved in natural open space (Parcel 8), and the ninth parcel consists of a 1.54-acre utility easement (Parcel 9). The 14.93-acre lettered lot (Lot A) is an existing detention basin that would be improved as part of the proposed project.

Storm Water Quality Management Plan

A project-wide SWQMP would be submitted to the City and approved prior to the onset of grading. Site Design Best Management Practices (BMPs) for Water Quality Management, which include Low Impact Development standards (LIDs), permitted by the water quality management plan for WVLCSP may include, but are not limited to, the following:

- Maximize permeable areas (pervious open space) of the site by reducing the amount of pavement, decreasing the project's footprint, or by utilizing alternative paving materials in select areas.
- Drain rooftops into pervious, swaled landscaped areas prior to discharge of overflow into storm drain.

- Construct streets, sidewalks, and parking lot aisles to the minimum width necessary.
- Construct walkways, parking stalls, overflow parking lots, and other low-traffic areas with open-jointed paving materials.
- Use pervious drainage channels (rock or grass lines systems) for conveying parking lot runoff into storm drain overflows.
- Use perforated pipe, gravel infiltration pits and drywells for low-flow infiltration following treatment by an acceptable method.
- Construct on-site vegetated ponding areas and swaled landscaping (not mounded) that drain within 72 hours to prevent the development of vector-breeding areas.
- Provide curb cutouts, curb cores, or concrete mow strips and wheel stops to allow stormwater runoff to flow into swaled landscaped areas.
- Where soil conditions are suitable, construct vegetated infiltration trenches in paved parking lot areas to infiltrate and filter stormwater runoff.
- Other site design options that are comparable and equally effective.

3.5 Specific Plan Standards and Guidelines

The WVLCSP includes standards and general guidelines for development and open space preservation that would apply to the overall project area and encourage sustainable practices. These guidelines are based on the guiding principles for the Specific Plan, which are to promote economic development; achieve a high-quality, cohesive design character; and provide infrastructure improvements and other public enhancements.

3.5.1 Specific Plan Implementation

The WVLCSP would be in conformance with the General Plan, as amended as set forth above, and as required in the City of Fontana Municipal Code Division 9, Specific Plans. The WVLCSP would be adopted by the Fontana City Council by ordinance. Once the WVLCSP is approved, all buildings and roadways would be constructed in accordance with the approved site plan, design regulations, and development standards set forth in the WVLCSP. Any proposed changes to the WVLCSP that would substantially alter the site plan would require an amendment to the WVLCSP. The Planning Commission and City Council would find, in approving or conditionally approving an amendment, that there is not a conflict with the purpose and intent of the Specific Plan or the City of Fontana General Plan. However, minor modifications and/or deviations to the WVLCSP may be approved by the Community Development Director. Refer to Chapter 10, *Implementation*, of the Specific Plan for further details regarding procedures for specific plan implementation, amendment, and/or enforcement.

3.6 Project Design Features

The proposed Specific Plan has incorporated a number of project design features as requirements (herein referred to as Specific Plan Requirements) in order to prevent or lessen potentially significant environmental impacts. In addition, the project design features described in this

Recirculated Draft EIR include regulatory requirements and standard requirements that the project is subject to. Any future development proposals within the proposed project area would be evaluated to determine consistency with these project design features. The types of project design features are described below:

- **Specific Plan Requirements.** The WVLCSPP includes project design considerations or features that would govern all development actions within the Specific Plan boundaries. These considerations would ensure that the area would be developed in accordance with the quality and character desired by the WVLCSPP and would provide guidance to developers, builders, engineers, architects, and landscape architects to promote design quality. Project design features are proposed as part of the project for site design and building orientation, landscape and streetscape, lighting, walls, architecture, parking and access, and building systems. These include provisions of the proposed WVLCSPP that act to avoid or reduce the potential or severity of project-related impacts. Each of these considerations would be evaluated against any future development proposals within the proposed WVLCSPP area and are specified in detail in Chapter 3 of the Specific Plan, *Design Guidelines*.
- **Regulatory Requirements.** These include provisions of federal, state, and local laws, ordinances, and regulations that act to avoid or reduce the severity of project-related impacts. These also include regulatory permitting requirements of agencies other than the City of Fontana to which the proposed WVLCSPP will be subject.
- **Standard Requirements.** These include planning requirements that the City of Fontana will place on the proposed WVLCSPP independent of the need to mitigate physical environmental impacts. These include City review processes and permit approvals, as well as standard conditions of approval placed on development projects throughout the City.

3.6.1 Specific Plan Requirements

The following Specific Plan Requirements, listed by environmental topic area, have been included in the proposed WVLCSPP to prevent or lessen potentially significant project-related environmental impacts.

Aesthetics

SP-A-1: Implement High-quality Design Guidelines. Chapter 3 of the Specific Plan, *Design Guidelines*, sets forth design guidelines to achieve a high-quality design character that would provide consistent aesthetic character related to site design and building orientation, landscape and streetscape, lighting, walls, architecture, parking and access, and building systems. Design guidelines also set forth requirements for minimizing light spillage onto adjacent properties, requiring cut-offs to protect dark night sky, and requiring that windows use non-reflective glass.

SP-A-2: Install Visual Barriers between Project Areas and Residential Areas. The perimeter walls that are visible from adjacent areas are required by the Specific Plan to be of high quality and compatible in terms of design and material with the project buildings. The Specific Plan requires that perimeter walls be accented with decorative stone or colored concrete to enhance the visual appearance and to provide variation and articulation of the screening walls. In addition, the Specific Plan requires that walls facing a public right-of-way be no higher than 12 feet, which would screen views of the project area while retaining views of the hills and mountains in higher altitude background views. (Walls may berm up to allow 14 feet of exposure on the inward-facing side.) Wall

height may extend up to 14 feet if the wall is being required for sound attenuation at specified locations.

Greenhouse Gases

SP-GG-1: Incorporate Water Conservation and Efficient Measures for Landscaping. The project will devise a comprehensive water conservation strategy in compliance with the California Green Building Standards Code (CALGreen) Water Efficiency Measures and Leadership in Energy and Environmental Design (LEED) Neighborhood Development standards to reduce water use during project operation. The strategy will include the following, plus other innovative measures that may be appropriate.

- Install drought-tolerant plants for landscaping.
- Use reclaimed water for landscape irrigation within the project where reasonably available. Install the infrastructure to deliver and use reclaimed water, on the property frontage only.
- Install water-efficient irrigation systems, such as weather-based and soil-moisture-based irrigation controllers and sensors, for landscaping according to the California Department of Water Resources Model Efficient Landscape Ordinance.
- Ensure that all landscape and irrigation measures are in compliance with the City's Municipal Code Article IV, Landscaping and Water Conservation.

SP-GG-2: Design Building Components to Meet 2013 Title 24 Standards. The project will design building shells and building components, such as windows, roof systems and electrical systems, to meet 2013 Title 24 standards, which are 30% more stringent than the 2008 Title 24 standards for nonresidential buildings.

SP-GG-3: Design CALGreen-Compliant Buildings. Buildings will be designed to provide CALGreen standards with LEED features for potential certification and will employ energy and water conservation measures in accordance with such standards. This includes design considerations related to the building envelope, heating, ventilating, and air conditioning (HVAC), lighting, and power systems.

SP-GG-4: Provide Electrical Loading Docks. Electrical outlets will be provided in loading dock areas to provide power for trucks when refrigeration is needed. This allows trucks with refrigerated cargo to keep their cargo cool without using their engines, minimizing idling time to reduce air emissions and use of fuel on site.

SP-GG-5: Utilize Energy-Efficient Lighting. The project will utilize energy-efficient interior and exterior lighting, including light-emitting diodes (LED), T5 and T8 fluorescent lamps, or other lighting that is at least as efficient. Lighting will incorporate motion sensors that turn them off when not in use.

SP-GG-6: Select Efficient Refrigerants and HVAC Systems. Refrigerants and HVAC equipment will be selected to minimize or eliminate the emission of compounds that contribute to ozone depletion and global warming. Ventilation and HVAC systems will be designed to meet or exceed the minimum outdoor air ventilation rates described in the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHREA) standards and/or per California Title 24 requirements.

SP-GG-7: Provide Landscaped Parking Lots. Surface parking lots will be well landscaped to reduce the heat island effect. Parking lot landscaping will be planted with 15-gallon trees, one per

every four parking stalls. The trees may be clustered, but a minimum of one cluster will be provided for each 100 feet of parking row. Trees will be selected and placed to provide canopy and shade for the parking lots.

Recreation

SP-R-1: Verify Trail Access and Location. The following measures and design considerations are required prior to the implementation and construction of the WVLCSP:

- Final project design and grading plans shall include the confirmed alignment of the Jurupa Hills Trail within the project site boundaries.
- The WVLCSP site plans and tentative parcel map(s) would retain access to existing parks and trails in accordance with applicable guidelines and requirements in the City Municipal Code and General Plan policies. Design of the proposed project would not deteriorate the existing Jurupa Hills Trail and Southern California Edison (SCE) Easement Trail, and access shall be retained.

Transportation and Traffic

SP-TR-1: Prepare a Transportation Management Association (TMA). A TMA, a member-controlled organization that provides transportation services in a particular area, will be formed by the applicant or its designee to guide project traffic to the regional transportation network and away from residential streets. The applicant or its designee will submit the TMA prior to issuance of the certificate of occupancy for the first building. The TMA will be required to:

- Create a tenant-based system and set of regulations for monitoring and providing feedback for vehicles, specifically including truck traffic, entering and exiting the development.
- Include site plans for individual buildings with driveway channelization and truck route designation.

SP-TR-2: Ensure Installation of Safety Features. Entry drives will be clearly marked by special features, including enhanced paving, landscaping features, decorative walls, and signage, to promote safety and to increase the visibility of driveway intersections.

SP-TR-3: Install Bicycle Racks. Bicycle racks will be provided at central locations on Parcels 1 through 7 (e.g., between buildings or in central parking areas) for employees who wish to bicycle.

Utilities

SP-UT-1: Ensure Access to Utility Easements. Access to utility easements on site will remain unimpeded and no disturbance will occur within the existing easements, with the exception of improvements to facilitate access. A 50-foot area surrounding suspension towers will be kept clear. Coordination with the appropriate utility agencies will be required for any improvements to utility easements or structures on or off site as a result of project implementation.

SP-UT-2: Incorporate Water-Efficient Building Designs. The project will incorporate water-efficient building designs, fixtures, and appliances that meet Leadership in Energy and Environmental Design (LEED) Silver certification standards for water efficiency.

SP-UT-3: Incorporate Recycling Program. The project will be designed to incorporate an operational recycling program that includes paper, cardboard, glass, plastic, and metals.

SP-UT-4: Comply with Fontana Sewer Master Plan. Sewer/wastewater facilities will be designed in accordance with the City of Fontana Sewer Master Plan.

SP-UT-5: Install Sewer/Wastewater Facilities. Sewer/wastewater facilities will be installed in accordance with specifications of the California Department of Health Services and San Bernardino County Health Department.

SP-UT-6: Comply with West Valley Water District (WVWD) Water Master Plan. Domestic water pipe alignments and sizes will be designed in accordance with design criteria outlined in WVWD's 2012 Water Master Plan.

3.6.2 Regulatory Requirements

The following Regulatory Requirements, listed by environmental topic area, provide federal, state, and local laws, ordinances, and regulations that act to prevent or lessen potentially significant project-related environmental impacts. These also include regulatory permitting requirements of agencies other than the City of Fontana to which the proposed WVLCSF will be subject.

Aesthetics

RR-A-1: Maintain Construction Sites. The Fontana Municipal Code (Article I, Chapter 5, Section 5-12) requires that all property is maintained in a reasonably clean and well-kept manner and that all lumber and building materials are neatly piled or stacked in a safe manner.

RR-A-2: Maintain Signs. The Fontana Municipal Code (Article IV, Division 4, Section 3-171) requires that signs and sign structures be "periodically inspected and maintained at reasonable intervals, including the replacement of defective parts, painting, repainting, cleaning and other acts required to maintain the sign."

Air Quality

RR-AQ-1: Comply with South Coast Air Quality Management District (SCAQMD) Rule 401 – Visible Emissions. A person will not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than 3 minutes in any 1 hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the U.S. Bureau of Mines.

RR-AQ-2: Comply with SCAQMD Rule 402 – Nuisance. A person will not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

RR-AQ-3: Comply with SCAQMD Rule 403 – Fugitive Dust. This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust. Applicable dust suppression requirements from Rule 403 are summarized below.

- Nontoxic chemical soil stabilizers shall be applied according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Active sites shall be watered at least twice daily. (Locations where grading is to occur will be thoroughly watered prior to earthmoving.)
- All trucks hauling dirt, sand, soil, or other loose materials shall be covered, or at least 0.6 meter (2 feet) of freeboard (vertical space between the top of the load and top of the trailer) maintained in accordance with the requirements of California Vehicle Code Section 23114.
- Construction access roads shall be paved at least 30 meters (100 feet) onto the site from the main road.
- Traffic speeds on all unpaved roads shall be reduced to 15 miles per hour or less.

RR-AQ-4: Comply with SCAQMD Rule 1113 – Architectural Coatings. No person shall apply or solicit the application of any architectural coating within the SCAQMD with volatile organic compound (VOC) content in excess of the values specified in a table incorporated in the Rule. A list of low/no-VOC paints is provided at the following SCAQMD website:

<http://www.aqmd.gov/prdas/brochures/paintguide.html>. All paints will be applied using either high volume low-pressure spray equipment or by hand application.

RR-AQ-5: Comply with SCAQMD Rule 1301 – General. This rule is intended to provide that preconstruction review requirements to ensure that new or relocated facilities do not interfere with progress in attainment of the National Ambient Air Quality Standards, while future economic growth within SCAQMD is not unnecessarily restricted. The specific air quality goal is to achieve no net increases from new or modified permitted sources of nonattainment air contaminants or their precursors. Rule 1301 also limits emission increases of ammonia and Ozone Depleting Compounds from new, modified or relocated facilities by requiring the use of Best Available Control Technology.

RR-AQ-6: Comply with Title 24 – Building Energy Conservation. The proposed project is required to comply with Title 24 of the California Code of Regulations established by the California Energy Commission regarding energy conservation standards.

Biological Resources

RR-B-1: Obtain Permits for Jurisdictional Waters of the State and State Streambeds. Prior to issuance of a grading permit, the project applicant will obtain the following regulatory approvals for construction activities proposed within the identified jurisdictional and non-jurisdictional areas: U.S. Army Corps of Engineers (USACE) Clean Water Act Jurisdictional Determination documenting isolated conditions and lack of jurisdictional authority; Regional Water Quality Control Board Porter-Cologne Water Quality Certification; and California Fish and Game Code Section 1602 Streambed Alteration Agreement.

RR-B-2: Procure Approved Determination from USACE. An approved determination from USACE will be required prior to a grading permit confirming that the four ephemeral drainages and wetland feature on the project site are non-jurisdictional.

RR-B-3: Obtain Permits for Removal of Heritage Trees. The project applicant will obtain required permits pursuant to the Fontana Tree Preservation Ordinance for removal of any on-site trees prior to a grading permit subject to the provisions of the ordinance.

Cultural Resources

RR-C-1: Comply with Requirements if Unanticipated Discovery of Human Remains Occurs. If human remains are discovered or recognized during construction-related activities, State Health and Safety Code Section 7050.5 requires there to be no further excavation or disturbance of the immediate location of the remains until the County coroner has been informed and has determined that no investigation of the cause of death is required. If the remains are determined by the coroner to be of Native American origin, the coroner will notify the Native American Heritage Commission (NAHC), which will then identify a most likely descendant (MLD) (§7050.5; Public Resources Code [PRC] §5097.98). The MLD will make a recommendation to the landowner as to the means of treating or disposing of the human remains and any associated grave goods with appropriate dignity, as stipulated in California PRC §5097.98. Upon discovery of human remains, the landowner will ensure that the immediate vicinity is not damaged or disturbed until specific conditions are met through discussions with the descendants regarding their preferences for treatment. If the NAHC is unable to identify a descendant, or the descendant fails to respond within 48 hours after being notified by the NAHC, the landowner is required to reinter the human remains on the property and to protect the site where the remains were reinterred from further and future disturbance. According to the State Health and Safety Code, six or more human burials at one location constitute a cemetery (§8100), and disturbance of Native American cemeteries is a felony (§7052).

Geology and Soils

RR-G-1: Comply with Fontana Municipal Code, Chapter 5, Article III, 2013 Edition of the California Building Code (CBC). The project would be required to comply with the 2013 Edition of the CBC, known as the California Code of Regulations, Title 24, Part 2, Volumes 1 and 2, based on the 2012 Edition of the International Building Code, published by the International Code Council, including Appendices C, I, and J, adopted as the Building Code of the City of Fontana. The CBC as adopted by the City contains performance standards for grading and construction to provide an acceptable level of safety in relation to seismic and geologic hazards, as well as provisions to ensure acceptable design for buildings in relation to soils conditions. The proposed project grading and construction plans will be submitted by the applicant for review by the City for compliance with the Fontana Municipal Code and CBC.

Hazards and Hazardous Materials

RR-HM-1: Conduct Asbestos and Lead-Based Paint Removal if Required. Assessment of remnant construction debris to confirm the absence of asbestos and lead-based paint in remnant construction debris shall be conducted by a lead-based paint and asbestos licensed contractor in accordance with Title 17, Division 1, Chapter 8 of the California Code of Regulations (CCR). Should this assessment determine that lead-based paint and/or asbestos are present, the following actions shall be implemented for identified structures.

- A health and safety plan shall be developed by a certified industrial hygienist for potential lead-based paint and asbestos risks present during demolition of remnant construction debris determined to have either asbestos or lead-based paint present. The health and safety plan shall then be implemented by a licensed contractor. Both the federal Occupational Safety and Health Administration (OSHA) and the California Division of Occupational Safety and Health (Cal/OSHA) regulate worker exposure during construction activities that affect lead-based paint. The Interim Final Rule found in 29 Code of Federal Regulations (CFR), Part 1926.62 covers

construction work in which employees may be exposed to lead during such activities as demolition, removal, surface preparation for repainting, renovation, cleanup, and routine maintenance. The OSHA-specified method of compliance includes respiratory protection, protective clothing, housekeeping, hygiene facilities, medical surveillance, and training. No minimum level of lead is specified to activate the provisions of this regulation.

- Should lead-based paint be determined to be present in remnant construction debris, a lead-based paint abatement plan containing, but not limited to, the following elements shall be implemented:
 - Develop an abatement specification approved by an Interim-Certified or Certified Project Designer;
 - Acquire necessary approvals from the San Bernardino County Environmental Health Department for specifications or commencement of abatement activities;
 - Contain all work areas to prohibit off-site migration of paint chip debris;
 - Remove all peeling and stratified lead-based paint on debris surfaces to the degree necessary to safely and properly complete demolition activities according to recommendations of the survey. The demolition contractor shall be responsible for the proper containment and disposal of intact lead-based paint on all material to be cut and/or removed during the demolition;
 - Provide on-site air monitoring during all abatement activities and background monitoring to ensure no contamination of work areas or adjacent properties;
 - Clean up and/or HEPA vacuum paint chips;
 - Collect, segregate, and profile waste for disposal determination; and
 - Provide appropriate disposal of all waste.
- Should asbestos be determined to be present in remnant construction debris, asbestos abatement shall be conducted prior to removal of remnant construction debris.
 - Prior to demolition of construction debris containing asbestos, contractors licensed to conduct asbestos abatement work must be retained, and the South Coast Air Quality Management District (SCAQMD) must be notified 10 days prior to initiating construction and demolition activities.
 - Asbestos shall be disposed of at a licensed disposal facility. Section 19827.5 of the California Health and Safety Code, adopted January 1, 1991, requires that local agencies not issue demolition or alteration permits until an applicant has demonstrated compliance with notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos.
 - SCAQMD is vested by the California legislature with authority to regulate airborne pollutants, including asbestos, through both inspection and law enforcement, and is to be notified 10 days in advance of any proposed abatement work or removal of debris determined to contain asbestos. Notification shall include:
 - The names and addresses of operations and persons responsible;
 - A description and location of the debris to be removed including any available information on age and prior use, and the approximate amount of friable asbestos;

scheduled start and completion dates of abatement; nature of planned work and methods to be employed;

- Procedures to be employed to meet SCAQMD requirements; and
- The name and location of the waste disposal site to be used.
- Furthermore, the local office of Cal/OSHA must be notified of asbestos abatement activities.
- Asbestos abatement contractors must follow state regulations contained in 8 CCR 1529 and 8 CCR 341.6 through 341.14 where there is asbestos-related work involving 100 square feet or more of asbestos-containing material.
- Asbestos removal contractors must be certified as such by the Contractors Licensing Board of the State of California. The owner of the property where abatement is to occur must have a Hazardous Waste Generator Number assigned by and registered with the Office of the California Department of Health Services in Sacramento.
- The contractor and hauler of the material are required to file a Hazardous Waste Manifest that details the hauling of the material from the site and the disposal of it. Pursuant to California law, the City of Fontana shall not issue the required permit until the applicant has complied with the notice requirements described above.

RR-HM-2: Prepare a Hazardous Materials Construction Management Plan for Accidental Spills. Prior to the City's approval of any final grading plans, the applicant and project contractors will submit a Hazardous Materials Construction Management Plan to ensure that appropriate remedial actions are taken in case of accidental spill. The plan will specify the following actions to address accidental spill situations, as needed:

- If contaminated soil and/or groundwater are encountered during project construction, work will be halted in the area, and the type and extent of the contamination will be identified. A qualified professional, in consultation with the appropriate federal, state, and/or local regulatory agencies, will then develop an appropriate method to remediate the contamination. If necessary, a remediation plan in conjunction with continued project construction will be implemented.
- Hazardous or contaminated materials may only be removed from the project site in accordance with the following provisions:
 - All work is to be completed in accordance with the following regulations and requirements:
 - Chapter 6.5, Division 20, California Health and Safety Code
 - California Administration Code, Title 22, relating to Handling, Storage and Treatment of Hazardous Materials
 - The Uniform Building Code, 1997 edition
 - 2001 California Building Code
 - All hazardous materials will be disposed of at an approved disposal site and will only be hauled by a current California-registered hazardous waste hauler using correct manifesting procedures and vehicles displaying a current Certificate of Compliance. The contractor will identify, by name and address, the site where toxic substances are to be taken for disposal.

- In case of accidental spill, County of San Bernardino Fire Department will provide oversight in site cleanup and site remediation and will verify that all appropriate remedial actions were undertaken within the project site.
- Prior to issuance of a building or grading permit for any parcel within the project site, a Soil and Groundwater Management Plan (SGMP) shall be prepared by a qualified environmental engineer, reviewed and approved by the Department of Toxic Substances Control and the Regional Water Quality Control Board and implemented by the project applicant. The SGMP shall include a requirement for development and implementation of site-specific safety plans to be prepared prior to commencement of construction consistent with OSHA Safety and Health Standards 29 CFR 1910.120 as well as management of groundwater produced through temporary dewatering activities.

Such site-specific safety plans shall include necessary training, operating and emergency response procedures, and reporting requirements to regulate all activities that bring workers in contact with potentially contaminated soil or groundwater, landfill gas, or leachate to ensure worker safety and avoid impacts on the environment. Furthermore, the SGMP shall include protocols for any areas of the site that require excavation and relocation of refuse material (e.g., building foundations and utility infrastructure) in accordance with the Title 27 of the CCR.

RR-HM-3: Abandon Any Identified Wells in Accordance with County Requirements. If wells are encountered during earth-disturbing activities, and if the applicant decides to abandon any wells found on site, such abandonment will be conducted in accordance with current County of San Bernardino regulatory requirements. This condition will be included on project construction plan specifications.

Hydrology and Water Quality

RR-HW-1: Prepare and Implement a Stormwater Pollution Prevention Plan (SWPPP). A SWPPP will be developed by a qualified engineer or erosion control specialist in accordance with Santa Ana Regional Water Quality Control Board (RWQCB) requirements for National Pollutant Discharge Elimination System (NPDES) compliance and implemented prior to the issuance of any grading permit before construction. The SWPPP will be kept on site during construction activity and will be made available upon request to representatives of the Santa Ana RWQCB.

The SWPPP will detail how the sediment and erosion control practices, referred to as Best Management Practices (BMPs), will be implemented. Possible BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater and other nonpoint-source runoff. Measures range from source control, such as reduced surface disturbance, to treatment of polluted runoff, such as detention or retention basins. BMPs to be implemented as part of the stormwater management program and general permit may include, but are not limited to, the following measures.

- Temporary erosion control measures (such as silt fences, stacked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, watering of bare soils, and temporary revegetation or other ground cover) will be employed to control erosion from disturbed areas.
- Drainage facilities in downstream off-site areas will be protected from sediment using BMPs acceptable to the Santa Ana RWQCB.

- All construction activities will cease during high wind (winds exceeding 25 miles per hour) and rain storm events.
- Grass or other vegetative cover will be established on the construction site as soon as possible after disturbance. No disturbed surfaces will be left without erosion control measures in place during the wet season.
- Maintenance of all erosion control measures, including the clearing of excess debris, throughout all construction phases will be performed to the satisfaction of the City engineer.

RR-HW-2: Submit a Final Stormwater Quality Management Plan (SWQMP) for City Approval.

An SWQMP based on final design for each phase of the WVLCSP will be submitted to the Fontana Director of Engineering for approval prior to issuance of grading permits. The SWQMP will provide project-specific site design, source control, and treatment control BMPs including Low Impact Development to be incorporated into final design. The BMPs will be required to be properly designed and maintained to target pollutants of concern in accordance with the City's Municipal Storm Water Management Plan and the County Municipal Separate Storm Sewer System (MS4) Permit.

RR-HW-3: Comply with City of Fontana Municipal Code Chapter 23, Article IX, General Construction Permit and the City's Stormwater Management Plan. This chapter of the Municipal Code addresses preventing discharge of pollutants into storm drains. The purpose of the code is to: (a) protect and enhance the water quality of watercourses, water bodies, groundwater, and wetlands in a manner consistent with federal, state, and local laws and regulations, and (b) to implement the requirements of the County-wide MS4 Permit and the City's Municipal Storm Water Management Plan site construction and maintenance requirements for new development. The proposed project drainage and water quality management plans would be reviewed by the City for compliance with the City's Construction General Permit.

RR-HW-4: Include Best Management Practices for Water Quality Management. Site design BMPs will be included in the project-wide SWQMP submitted to the City and approved prior to the issuance of a grading permit (see **Regulatory Requirement RR-HW-2**). The BMPs, which include Low Impact Development standards, will include, but not be limited to, the following:

- Maximize permeable areas (pervious open space) of the site by reducing the amount of pavement, decreasing the project's footprint, or by utilizing alternative paving materials in select areas.
- Drain rooftops into pervious, landscaped swales prior to discharge of overflow into storm drain.
- Construct streets, sidewalks, and parking lot aisles to the minimum width necessary.
- Construct walkways, parking stalls, overflow parking lots, and other low-traffic areas with open-jointed paving materials.
- Use pervious drainage channels (rock or grass lines systems) for conveying parking lot runoff into storm drain overflows.
- Use perforated pipe, gravel infiltration pits, and drywells for low-flow infiltration following treatment by an acceptable method.
- Construct on-site vegetated ponding areas and landscaped swales (not mounded) that drain within 72 hours to prevent the development of vector-breeding areas.

- Provide curb cutouts, curb cores, or concrete mow strips and wheel stops to allow stormwater runoff to flow into landscaped swales.
- Where soil conditions are suitable, construct vegetated infiltration trenches in paved parking lot areas to infiltrate and filter stormwater runoff.

Noise

RR-N-1: Comply with the Construction Noise Municipal Code Exemption. The City's Municipal Code limits the hours of construction to between 7:00 a.m. and 6:00 p.m. on weekdays and between 8:00 a.m. and 5:00 p.m. on Saturdays; no construction is to be conducted on Sundays or federal holidays.

Public Services

RR PS-1: Pay Colton Joint Unified School District (CJUSD) Fees. Proposed commercial, industrial, and senior housing development projects, including the WVLCSP, are required to pay CJUSD school facilities impact fees of \$0.51 per square foot at the time of building permit issuance.

RR-PS-2: Pay City of Fontana Development Impact Fees for Police and Fire Services. Proposed development projects are required to pay development impact fees to support police and fire/emergency facilities and services. The fee for industrial land use development for police services is \$131.63 per 1,000 gross building square feet (City of Fontana 2012). New development must also comply with the Fontana Police Department's Standard Building Security Specifications and the City's Crime Prevention through Environmental Design Guidelines.

The development impact fee for industrial land-use construction to support fire protection facilities and services is \$0.10 per building square foot.

RR-PS-3: Pay City of Fontana Impact Fees for Library Facilities. The proposed project will pay the City's development impact fee for industrial land-use construction of \$42.83 per 1,000 gross square feet of building area to support expansion of library facilities.

3.6.3 Standard Requirements

The following Standard Requirements, listed by environmental topic area, include the planning requirements that the City of Fontana will place on the proposed WVLCSP. This includes City review processes and permit approvals, as well as typical standard conditions of approval placed on development projects throughout the City.

Cultural Resources

SR-C-1: Comply with City of Fontana Municipal Code Chapter 5, Buildings and Building Regulations, Article XIII, Section 5-351: Preservation of Historic Resources. The Code states that this article is "adopted to implement the goals and policies of the general plan, which recognize the presence of archaeological sites and buildings that have historic importance for the city. The city council finds and declares that historic, archaeological and cultural resources symbolize the city and its people, reveal how the city's character was shaped, and instill pride in the community. The creation and functions of the planning commission and the identification, preservation and protection of historic, archaeological and cultural resources within the city shall be governed by the provisions of this article." The applicant or developer will evaluate cultural resources to determine

presence on the site, and protect and preserve resources or mitigate any potential project-related impacts, as necessary, to ensure compliance with this Code.

Geology and Soils

SR-G-1: Develop and Implement an Erosion Control Plan. The applicant or developer will prepare and submit to the City Department of Engineering for approval 30 days prior to construction an Erosion Control Plan. (Note: The Erosion Control Plan may be part of the same document as the Stormwater Pollution Prevention Plan.) The Erosion Control Plan will identify the locations of all soil-disturbing activities (including but not limited to sites involving new development or roadways), the locations of all drainage structures that will be directly affected by soil-disturbing activities, and the locations and types of all Best Management Practices (BMPs) that will be installed. The plan will also include a proposed schedule for the implementation and maintenance of erosion control measures and a description of the erosion control practices, including appropriate design details. As part of the plan, the construction contractor will maintain a logbook of the erosion-prevention effectiveness of the BMPs, as well as a description of any post-storm modifications to those BMPs.

Greenhouse Gas

SR-GG-1: Provide Waste Reduction and Recycling Education. The property operator will distribute readily available information provided by the City for employee education about reducing waste and available recycling services.

Hazards and Hazardous Materials

SR-HM-1: Contact Underground Services Alert. Prior to earth-disturbing activities, the contractor will contact Underground Services Alert to identify the locations and depths of all buried utility facilities not previously identified in construction plans. For all areas identified with buried facilities, the contractor will either:

- Avoid excavating in such areas beyond a depth of less than 2 feet from the existing buried facility; or
- Coordinate a plan of facility realignment with a city engineer and appropriate utility company representatives.

This condition will be included on project construction plan specifications.

SR-HM-2: Require Construction Equipment Spark Arresters. Project contractors will be required to equip any construction equipment that normally includes a spark arrester with an arrester in good working order pursuant to manufacturers' recommendations. Spark arrestors will be maintained in working order during the period of construction. Subject equipment includes, but is not limited to, heavy equipment (e.g., earthmovers, graders), mowers, and chainsaws. This requirement will be included on project construction plan specifications.

SR-HM-3: Prepare a Fuel Modification Zone Management Plan. In accordance with Section 30-189(12), Article V, Division 7, of the City Zoning and Development Code (Subdivision and site plan design), and in accordance with Action 20, Goal 4, of the City General Plan Safety Element, a fuel modification zone will be required in areas threatened by fire hazard. Prior to approval of any Tentative Parcel Map(s), the applicant or construction contractor will prepare a fuel modification

zone management plan for the Jurupa Hills area of the proposed project site to be reviewed and approved by the City of Fontana. The fuel modification zone management plan will include:

- Planting and maintenance of fire-retardant vegetation species implemented in accordance with Policy 3 and Action 21, Goal 4, of the City General Plan Safety Element;
- Firebreaks (areas void of vegetation and flammable structures) implemented in accordance with Public Resources Code Section 4290 minimum statewide fire safety standards; and
- Implementation of fencing in accordance with Section 80.020210(f) of the San Bernardino County Code, to prevent litter (accumulation of ignitable fuels) or vandalism of the fuel modification zone.

Noise

SR-N-1: Ensure Proper Operation and Maintenance of Construction Equipment. During all site excavation and grading, the construction contractors will equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.

SR-N-2: Ensure Proper Placement of Stationary Construction Equipment during Construction. The construction contractor will place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site.

SR-N-3: Stage Construction Equipment Away from Noise-Sensitive Receptors. The construction contractor will locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction activities.

Utilities

SR-UT-1: Comply with City of Fontana Municipal Code, Chapter 27, Article III. This code requires undergrounding of utilities as part of new development, including the WVLCSP, involving new/additional utility connections to the project site.

SR-UT-2: Provide Reliable Water Supply. Conditions for Reliable Water Supply, included in the Water Supply Assessment (WSA) prepared for the proposed WVLCSP (see Appendix J), include the following:

- The project will install water-efficient devices and landscaping according to the requirements of West Valley Water District's (WVWD's) water use efficiency ordinance(s), if any, at the time of construction of the project to reduce the impact of this project on WVWD's water supplies.
- Prior to project construction, the project developer is required to meet with WVWD staff to develop a plan of service. The plan of service will include, but not be limited to, water and recycled water requirements to serve the project. If there is a change in the circumstances detailed in the water supply assessment, WVWD has the option to suspend the approval of the WSA.
- This project is not near any existing recycled water facilities; however, in the future it may be possible to serve this project with recycled water. WVWD policy recognizes recycled water as a preferred source of water supply for all non-potable water demands, including, without limitation, irrigation of recreation areas, greenbelts, open space, common areas, commercial landscaping and supply for aesthetic impoundment, or other water features. The majority of

landscaped areas in this project will be designed to use recycled water to the greatest extent possible. According to WVWD requirements, the project may be conditioned to construct a recycled water system physically separated from the potable water system². This system will need to be constructed to WVWD's recycled water standards. The project may also be conditioned to construct off-site recycled water facilities. WVWD will make a determination on requirements for recycled water use and facilities during the design phase of the project.

- The WSA will be reviewed every 3 years until the project begins construction. The property owner shall notify WVWD when construction has begun. The review will ensure that the information included in the project WSA remains accurate and that no significant changes to the project or WVWD's water supply have occurred. If the property owner has not contacted WVWD within 3 years of approval of the WSA, it will be assumed that the proposed project no longer requires the estimated water demand calculated, the demand for this project will not be considered in assessments for future projects, and the assessment provided by the WSA will become invalid.
 - Based on present information, WVWD has determined that it will be able to provide adequate water supplies to meet the potable water demand for the WVLCSP project in addition to existing and future uses. Water service will be guaranteed by the satisfaction of all rules and regulations of WVWD. WVWD reserves the right to revisit the water supply assessment in the event of a potential increase in water demand to the project.
 - The WSA is not a commitment to serve the project, but a review of WVWD's supplies based on present information available.

3.7 Difference between the Proposed Project and the Previously Approved Valley Trails Specific Plan

In addition to inclusion of a utility corridor into the WVLCSP, the project area is the site of the Valley Trails Specific Plan that allows development of a master planned community containing a maximum of 1,154 homes, an elementary school, and private and joint-use recreational facilities, including a 20-acre park and a comprehensive trail system. The Valley Trails Specific Plan and corresponding EIR were approved by the City of Fontana on May 8, 2007. Subsequent to the approval of the Valley Trail Specific Plan, the project area was sold to Hillwood, which proposes to replace the Valley Trails Specific Plan with the WVLCSP and to develop the site with industrial warehousing uses in order to maximize the site's economic potential to the City and surrounding community while creating job growth. Due to this change in proposed land uses for the site, the City determined that a new specific plan should be prepared to define land uses, regulations, and development standards to fit the needs of the proposed industrial specific plan development. A comparison of the two specific plans is provided below in Tables 3-4 and 3-5.

² Because such a system would be constructed in the same streets as the other water and wastewater lines being constructed for the proposed project, construction of recycled water lines would not result in any additional environmental impacts.

Table 3-4. Comparison of Valley Trails Specific Plan and the Proposed Project (WVLCSP)

	Valley Trails Specific Plan	Proposed Project
Land Use Comparison (acres)		
Residential	135.9	--
Industrial	--	212.11
Parks	46.3	--
Open Space	69.2	71.70*
School	13.8	--
Roadways	23.4	7.50
Total Area	288.6	291.31*
Buildout Potential		
Dwelling Units	1,154	0
Industrial Development (square feet)	0	3,473,690
Source: West Valley Logistics Center Specific Plan, Metis Environmental Group (September 2014); TPM 19156, Thienes Engineering (January 2014); Valley Trails Specific Plan (2007).		
* The WVLCSP includes a utility access corridor that was not a part of the Valley Trails Specific Plan.		

Table 3-5. Comparison of Valley Trails Specific Plan and the Proposed Project (WVLCSP) by Planning Area

Land Use	Valley Trails Specific Plan (acres)	Proposed Project (acres)
Planning Area 1		
Residential	135.9	--
Industrial	--	191.87
Parks	25.9	--
Open Space	54.4	55.23
School	13.8	--
Roadways	23.4	See below
Planning Area 2		
Industrial	--	20.24
Parks/Open Space	20.4	1.54
Planning Area 3 (Detention Basin Area)		
Open Space	14.8	14.83
Roadways		7.5
TOTAL	288.6	291.31*
Source: West Valley Logistics Center Specific Plan, Metis Environmental Group (September 2014); TPM 19156, Thienes Engineering (January 2014); Valley Trails Specific Plan (2007)		
Note: Acreage totals include roadway dedication areas, as specified in Tentative Parcel Map No. 19156 (Thienes Engineering January 2014)		
* The WVLCSP includes a utility access corridor that was not a part of the Valley Trails Specific Plan.		



Chapter 4

Environmental Analysis of the Proposed Project

This chapter presents the environmental analysis for the proposed project. The Recirculated Draft Environmental Impact Report (EIR) includes evaluations of project-specific impacts for each resource area considered as part of this analysis. The sections below present the local and regional context applied in this environmental analysis and the criteria and terminology used in determining the significance for resource-specific impacts.

Determining Significance under the California Environmental Quality Act (CEQA)

Based on public comments, public agency input, and preliminary studies performed for the project, the City of Fontana (City) determined that an EIR would be required for the project. In addition, the City considered agency and public input received during the Notice of Preparation (NOP) comment period (July 17, 2012 to October 3, 2012), scoping meetings held on August 8, 2012 and October 3, 2012 to determine the scope of the evaluation for the EIR, and comments received during public review period for the original Draft EIR from April 22, 2014 to June 5, 2014.

The NOP, agency and/or public comments, and preliminary technical analyses identified 15 issue areas as having potentially significant environmental impacts associated with the proposed project. These environmental issues and their corresponding section numbers are as follows:

- 4.2.1, Aesthetics
- 4.2.2, Air Quality
- 4.2.3, Biological Resources
- 4.2.4, Cultural Resources
- 4.2.5, Geology and Soils
- 4.2.6, Greenhouse Gas Emissions
- 4.2.7, Hazards and Hazardous Materials
- 4.2.8, Hydrology and Water Quality
- 4.2.9, Land Use and Planning
- 4.2.10, Noise
- 4.2.11, Population and Housing
- 4.2.12, Public Services
- 4.2.13, Recreation
- 4.2.14, Transportation and Traffic
- 4.2.15, Utilities and Service Systems

Sections 4.2.1 through 4.2.15 provide detailed discussions of the environmental setting, thresholds of significance, impacts associated with the proposed project, mitigation measures designed to reduce significant impacts, and cumulative impacts. Other environmental issues identified in

Appendix G of the State CEQA Guidelines that were identified as having less-than-significant or no impacts are detailed in Section 4.1 below.

For each impact identified in the Recirculated Draft EIR, a statement of the level of significance of the impact is provided. Impacts are categorized in the following categories:

- A designation of **no impact** is given when no adverse changes in the environment are expected.
- A **less-than-significant impact** would cause no substantial adverse change in the environment.
- A **significant (but mitigable) impact** would have a substantial adverse impact on the environment but could be reduced to a less-than-significant level with incorporation of mitigation measure(s).
- A **significant unavoidable impact** would cause a substantial adverse effect on the environment, and no feasible mitigation measures would be available to reduce the impact to a less-than-significant level.
- **Residual impacts** are the remaining impacts after identified mitigation is implemented.

4.1 Effects Found Not to Be Significant

In the course of this evaluation, certain impacts of the project were found to be less than significant due to the inability of the project to create such impacts or the absence of environmental resources or project characteristics to produce impacts. In accordance with State CEQA Guidelines Section 15128, this section provides a brief description of potential impacts found to be less than significant and not discussed further in this Recirculated Draft EIR.

4.1.1 Agriculture and Forestry Resources

4.1.1.1 CEQA Thresholds

In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts on forest resources, including timberland, are significant environmental effects, lead agencies may refer to (1) information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project, and (2) forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. The proposed project would have a significant environmental impact on agricultural or forestry resources under CEQA if it would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.
- Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract.
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220[g]), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g]).

- Result in the loss of forest land or conversion of forest land to non-forest use.
- Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

4.1.1.2 Discussion

The proposed project would be implemented within the corporate limits of Fontana, south of Jurupa Avenue, generally west of Locust Avenue, and a portion of the site is bisected by Armstrong Road. The majority of the project site has historically been used for agricultural purposes, with vineyards previously extending over most of the site except the steep hillsides. The project site was first used for agricultural production in the 1950s for about 50 years (Appendix C). The site is no longer an active agricultural operation, nor is it zoned for agricultural uses, and the land is not encumbered by a Williamson Act contract.

The project site is classified as grazing land by the California Farmland Mapping and Monitoring Program for San Bernardino County, and implementation of the project would not result in the direct conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use (California Department of Conservation 2011). The conversion of grazing land, or land on which the existing vegetation is suited to the grazing of livestock as designated by the California Farmland Mapping and Monitoring Program, is considered a less-than-significant impact.

The south-central portion of the unincorporated southern San Bernardino County Bloomington area is within an agricultural overlay district (County of San Bernardino 2013). This plan allows single residential land use districts with minimum lot sizes ranging from 20,000 square feet to 1 acre and agricultural and animal raising activities associated with the additional agricultural overlay. However, the proposed project in Fontana would not result in any change to this off-site land use in the Bloomington area, and impacts would be less than significant.

As stated previously, the project would not involve changes to the environment that would result in the conversion of farmland to non-agricultural use. The project site is not zoned for agricultural uses, nor is it subject to Williamson Act contracts. The project area also does not contain forest resources. Therefore, impacts to agricultural and forest resources were not found to be significant, and no further discussion in the EIR is required.

4.1.2 Mineral Resources

4.1.2.1 CEQA Thresholds

The proposed project would have a significant environmental impact on mineral resources under CEQA if it would:

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

4.1.2.2 Discussion

There are no deposits of precious gemstones, ores, or unique or rare minerals, and there are no active sand and gravel mining operations in Fontana. Further, the project site is not identified as an aggregate resource area in the City's General Plan, and there are no known deposits of precious gemstones, ores, or unique or rare minerals in the project area (City of Fontana 2003). The project site is in an MRZ-3 zone (mineral resource zone where the significance of mineral deposits cannot be determined from the available data), and the Jurupa Hills have been quarried extensively for many decades for rip-rap and other uses but have not been used for aggregate. Specifically, two sites were previously used for mining on site: one within the former Crestmore Waste Disposal Site—a limestone quarry known as Little Hill Quarry—and the other at the base of Jurupa Hills in the middle of Planning Area 1. The remnants of these two former quarries are in the northeastern corner and near the central area of the site. Because resource extraction activities are not currently occurring within the project site and the project would not physically disturb or impede access into these areas, the potential for impacts involving the loss of availability of a known mineral resource is not significant.

Implementation of the proposed project would not interfere with any existing mining activity or prevent access to any areas where mining activities would be allowed. As a result, the proposed project would not result in the loss of availability of either (1) a known mineral resource that would be of value to the region and the residents of the state or (2) a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Mineral resource impacts were not found to be significant, and no further discussion in the EIR is required.

4.2 Environmental Analysis

4.2.1 Aesthetics

Introduction

This section describes the existing aesthetic and visual conditions that could be adversely affected by implementation of the proposed West Valley Logistics Center Specific Plan (WVLCSP) project, including scenic vistas, scenic resources, and the overall visual quality of the project site and surrounding areas as seen from sensitive viewing locations or representative viewpoints. The discussion of aesthetics and potential impacts related to visual changes in the physical elements within and surrounding the project site is subjective by nature. As such, the analysis of visual resources impacts within this section is based on a qualitative evaluation of changes that would occur as part of the proposed project.

Terminology

- **Aesthetics.** The identification of visual resources and the quality of what can be seen, or the overall visual perception of the environment.
- **Representative Viewpoint (VP).** A specific location where views of the proposed project site are available from a public vantage point (e.g., a public roadway, park, or trail).
- **View Types.** View types are characterized in terms of foreground, middleground, and background views.
 - *Foreground* views are those immediately presented to the viewer and include objects at close range that tend to dominate views (generally views within 0.5 mile of the project).
 - *Middleground* views include those in the center of the viewshed and tend to include objects that are the center of attention if they are large or visually different from adjacent visual features (generally 0.5 to 3.0 miles from the viewer).
 - *Background* views include distant objects and other objects that make up the horizon. Objects in the background fade to obscurity with increasing distance, and background views usually include features 3 miles and farther from the viewer.
- **Viewer Groups.** Classifications of types of people that are expected to have sensitivity to visual changes as a result of the project, such as residential and recreational viewers.
- **Viewer Sensitivity.** Sensitivity is based on the value or connection of a view to the viewer and considers visibility of a scenic resource, frequency and duration, the number of viewers, and the expectations individuals and viewer groups have from a given viewpoint. Viewer sensitivity is categorized as follows.
 - *High Sensitivity* suggests that most of the public is likely to react strongly to a threat to visual quality. Viewers using recreational trails and areas, scenic highways, and scenic overlooks are usually assessed as having high visual sensitivity. A highly concerned public is assumed to be more aware of any given level of adverse change and less tolerant than a public that has little concern. A small modification of the existing landscape may be visually distracting to a highly sensitive public and represent a substantial reduction in visual quality.

- *Moderate Sensitivity* suggests that the public would probably voice concern over substantial visual impacts. Often, the affected views are secondary in importance or are similar to others commonly available to the public.
- *Low Sensitivity* prevails where the public is expected generally to have little concern about adverse changes in the landscape, or only a small minority may be expected to voice such concern, even where the adverse change is substantial in intensity and duration. A commuter or non-recreational traveler that has fleeting views and is focused on commuter traffic, and not on surrounding scenery, would typically be considered to have low visual sensitivity.
- *No Sensitivity* occurs when the views are not public, or there are no indications of public concern over, or interest in, scenic/visual resource impacts on the affected area.
- **Visual Character.** The natural and artificial elements within a representative viewpoint that compose the character of an area or specific view. Character is influenced by geologic, topographic, hydrologic, botanical, wildlife, recreation, and urban features. Urban features include those conditions associated with landscape settlements and development, including roads, utilities, structures, earthworks, recreation, and urban features. The basic components used to describe visual character of most visual assessments are the elements of form, line, color, and texture of the landscape patterns. The appearance of the landscape is described in terms of the dominance of each of these components.
- **Visual Quality.** The sum of the concepts of vividness, intactness, and unity from the Federal Highway Administration culminate to create the overall visual quality from a specific representative viewpoint.
 - *Vividness.* The visual power or memorability of landscape components as they combine in striking and distinctive visual patterns.
 - *Intactness.* The visual integrity of the natural and human-built landscape and its freedom from encroaching elements.
 - *Unity.* The visual coherence and compositional harmony of the landscape considered as a whole.

Existing Conditions

Regional Visual Character

The project site is at the southeastern edge of suburban Fontana with the City of Jurupa Valley to the south and unincorporated San Bernardino County to the east (see Figure 2-1). Visual conditions in the region are generally characteristic of suburban Inland Empire and Southern California and include a mix of residential, commercial, industrial, and institutional land uses. Existing development in the area began after World War II and mostly consists of low-rise and horizontal development with few tall buildings or manmade structures that are visible from further distances. Background and distant views of the San Gabriel Mountains and the Angeles National Forest are available to the northwest and north, and background views of Mount San Jacinto are visible to the southeast. Major transportation corridors occur through the Inland Empire and Fontana and have attracted retail stores, restaurants, auto dealerships, and light industrial development. These facilities are not visible from the project site or the immediately surrounding area; however, these

uses contribute nighttime lighting in the area, which is visible from the project site and surrounding areas.

There are no state scenic highways within the vicinity of the proposed project under the California Scenic Highway Program; the nearest designated state scenic highways include State Route (SR) 243 in Riverside County between SR-74 and the Banning city limit, about 30 miles southeast of the project site, and SR-2 in Los Angeles County between the City of La Canada Flintridge and the San Bernardino County Line. A portion of Interstate 10 more than 10 miles east of the project site is eligible but not officially designated. These roadways do not have views of the proposed project due to distance and intervening topography, development, infrastructure, and vegetation. Therefore, these state scenic highways would not be impacted by the proposed project and are not discussed further.

Local Visual Character

The visual character of views in the project vicinity is characterized by sloped natural areas with native vegetation (such as coastal sage scrub), single-family residential neighborhoods, a tree nursery, paved roadways, mature street trees, overhead utility improvements, and undeveloped, partially graded and disturbed areas. Views from the area, including the nearby communities of Jurupa Valley and Bloomington, are dominated by the Jurupa Hills and Rattlesnake Mountain in the foreground and middleground. The highest visible peak from the project site is 1,913 feet in elevation at the top of the Jurupa Hills, which extend west of the project site. Steep topography around Rattlesnake Mountain is also visible in the foreground and middleground as slopes continue to the west and southeast. These topographic features have precluded development along steeper hillside areas; however, the foothill and valley areas at the base of these hills consist of single-family residential development and vacant areas, and include the project site. Three white concrete water reservoirs are visible just west of the project site and are surrounded by low-lying vegetation in the slopes of the Jurupa Hills. The surrounding hillsides are generally devoid of dense vegetation; however, there are occasional trees scattered along the slopes.

Residential development in the area has been ongoing since the 1960s and is evidenced by the variety of architectural styles of the surrounding neighborhoods. Established single-family residential neighborhoods exist within two primary clusters—one south of the project site in the City of Jurupa Valley and another just east of Armstrong Road, between the existing detention basin and 7th Street, in the City of Fontana. Both neighborhoods are generally single-story and are improved with typical residential landscaping features, including ornamental trees, shrubs, lawns, fencing, and retaining walls. Views onto the project site from surrounding residential neighborhoods are mostly blocked by existing street trees, residential landscaping, and other residential development; however, views onto portions of the project site, such as the detention basin area, are available from several residences on the edges of the development that are closest to the project site, such as along 11th Street. Similarly, views onto the main project site are available from homes along 8th Street. Residential areas farther north of the project site are somewhat visually separated by topography and include a mix of developed and undeveloped larger residential lots. There are no views onto the project site from most of the residential areas farther north of the project due to intervening street trees, distance, and topography changes; however, homes along the north side of Jurupa Avenue would have unobstructed views onto the northeastern portion of the project. A conifer tree nursery is visible within the Southern California Edison (SCE) Utility Easement between the detention basin area and the northeastern portions of the project site. Views onto the project site from the residential area to the south are precluded by landscaping, street trees along

Armstrong Road, walls and fencing in backyards, and intervening residential development, although some residential areas abutting the project site would have some views of the site.

Overhead electrical transmission and distribution lines supported by wooden utility poles are visible throughout the area, generally extending in a north-south direction parallel to Armstrong Road and Locus Avenue and in an east-west direction through the SCE utility corridor along the project's northern boundary.

Visual elements within the project site include mostly undeveloped areas and an existing detention basin (Lot A). The project site is disturbed and sparsely populated with low-lying vegetation. Evidence of disturbance from horseback riding, off-road vehicle uses, and illegal dumping of trash and other debris is visible, especially west of Armstrong Road and Locust Avenue. A chain-link fence occurs alongside and west of Armstrong Road and completely surrounds the detention basin area; however, portions of fencing have been breached, which has allowed illegal access and recreational use of the site and surrounding areas. A network of trails (including the Jurupa Hills Trail and the SCE Easement Trail) within the surrounding hillside areas is visible and includes smaller trails along the western and southern project boundaries, as well as an SCE Utility Easement along the project's northern boundary. Due to the higher elevations of some of the trails, aerial views onto the project site and the surrounding areas are available.

Representative Viewpoints

This section discusses viewpoints from public areas that would be visually accessible to the project site. A total of five viewpoints from public areas were chosen to evaluate the significance of views of the project that are likely to change as a result of project implementation, and they consist of views from near to mid-range distances from the site.

- VP-1 is from Armstrong Road to the south.
- VP-2 is along the Jurupa Hills Trail in Fontana to the west.
- VP-3 is within the SCE Easement Trail to the north.
- VP-4 is along Locust Avenue to the north.
- VP-5 is within the Jurupa Hills Trail in the City of Jurupa Valley within Riverside County to the south.

Figure 4.2.1-1 shows the viewpoint locations. A description of the specific view characteristics, including view types, viewer groups, viewer sensitivity, and visual quality from each viewpoint under existing conditions, is discussed below.

Armstrong Road at Fontana/Jurupa Valley Line (VP-1)

Figure 4.2.1-2a shows the existing view from VP-1, which is located along the Armstrong Road right-of-way at the Fontana/Jurupa Valley line, just south of the proposed project in the City of Jurupa Valley in Riverside County. VP-1 was selected due to the availability of foreground views into the southern portions of the site on either side of Armstrong Avenue. Foreground views of the flat and undeveloped project site are shown on either side of Armstrong Road; however, utility poles and power lines decrease the vividness, intactness, and unity of these views. Similarly, views of undeveloped hillsides and open spaces extending into the middleground are partially obstructed by these intervening elements. The surrounding area is generally flat, and a residential development exists just south of VP-1. Elevations slightly increase toward the north, and the power lines and



Figure 4.2.1-1
Viewpoint Locations Map
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VP-1. From Armstrong Road along the southern project boundary facing north.



VP-2. From the Jurupa Hills Trail near the southwestern project boundary facing east.

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Figure 4.2.1-2a
Photos
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poles along Armstrong Road hinder views of both the project site and background elements, including the San Gabriel Mountains and Angeles National Forest. The entire project site is not visible from VP-1, and visibility of the northernmost portions of the project (portions east of Locust Avenue) are not available due to distance, elevation change, and street trees near the intersection of Armstrong Road and 7th Street.

Views of open space areas on the project site are available on either side of Armstrong Road; however, due to intervening elements, unity, vividness, and intactness are considered to be moderately low. Because most of the viewers at VP-1 would be commuters and non-recreational travelers, views onto the project site would be brief and fleeting and are considered to have low visual sensitivity. Therefore, VP-1 exhibits moderately low visual quality and moderately low visual sensitivity.

Jurupa Hills Trail in the City of Fontana (VP-2)

Figure 4.2.1-2a shows the existing view from VP-2, which is located west of the project site from an existing trail on the eastern slopes of the Jurupa Hills above the project site. The main portion of the project site is visible in the foreground, and views are dominated by the low-lying brush along the Jurupa Hills. The visual character in the foreground includes very little in terms of texture, and the general pattern consists of a brown and yellow hillside. A small line of trees toward the center of the foreground provides the first visual break in the visual character from VP-2. In the middleground, Armstrong Road is distinctly visible and lined with utility poles that transects the flatter valley. Beyond the road are the rocky hillsides of Rattlesnake Mountain. Background views of suburban Fontana are in the distance, and the Angeles National Forest is faintly visible on the horizon.

There are few visual elements within VP-2 to distract from the views of vacant project site. Unified views are available for most of the project site and maintain congruence when considered in the context of the surrounding visual elements. Visual quality is high in terms of vividness, intactness, and unity due to the expansiveness of the view from VP-2. A distinct visual separation of the undeveloped project site in relation to the developed, suburban character in the background, also contributes to a high visual quality.

The areas surrounding the trail near VP-2 appear to have been minimally improved and lack trail markers or other signage to delineate or otherwise formally organize the trails. There are some access restrictions (e.g., fencing or gates) along portions of the trail, and there is evidence of trash and debris dumping. The extent and frequency of use of these trails for recreation is unknown; however, the lack of recreational amenities such as trash cans, benches, or drinking fountains and the existence of debris suggest a low level of use. As such, few residents, if any, would likely consider views from VP-2 to be sensitive, and viewer sensitivity from VP-2 is expected to be moderately low.

SCE Easement Trail near Alder Avenue (VP-3)

Figure 4.2.1-2b shows the existing view from VP-3, which is located along the SCE Easement Trail near Alder Avenue. This south-facing view of the project site includes mostly natural elements, with the exception of two white water tanks on the sides of the Jurupa Hills. The visual character is rural and vacant. Foreground views include scattered debris, bare ground with minimal low-lying vegetation, and off-road vehicle tracks that continue into the middleground. Slight variations in topography dominate middleground views, and there are some concentrations of vegetation toward the center of the viewshed. A small line of trees separating the project site from the residential development is barely visible in the distance; however, background views are mostly of Rattlesnake

Mountain. There is a stand of trees lining the bottom of the slopes associated with Rattlesnake Mountain to the east; however, the presence of the Jurupa Hills and Rattlesnake Mountain, combined with the vacant project site, results in a moderately low level of vividness. Few elements create distinction in visual patterns within VP-3. The off-road vehicle tracks and water tanks disrupt the visual harmony in the landscape and result in moderate levels of unity. The water tanks and concentrated areas of vegetation also provide some encroachment into the views of the vacant project site; however, the natural elements, such as slopes and vegetation on the project site, are mostly undisturbed and are moderately intact.

Because vividness is considered moderately low and intactness and unity are both considered moderate, the resulting visual quality from VP-3 is best characterized as moderate. As evidenced by the debris in the foreground and the lack of trail designations or trail markers along the SCE Easement Trail, few residents, if any, would consider views from VP-3 to be sensitive, and viewer sensitivity from VP-3 is expected to be moderately low.

Locust Avenue (VP-4)

Figure 4.2.1-2b shows the existing view from VP-4, which is located along Locust Avenue to the north of the project site. VP-4 shows easterly views of Parcel 7 that are included at the northern end of the project site. The visual character from VP-4 comprises a transition from a rural to a more developed appearance, which is evidenced by the mix of natural and manmade elements within the viewpoint. While natural elements dominate the foreground views, a nursery, large overhead power lines, and suburban residential development in the middleground and background create a diverse visual character. Visual elements are low in terms of vividness in the foreground and consist of the dark paved asphalt along Locust Avenue, chain-link fencing, part of the undeveloped project site opposite of Locust Avenue, and some street trees. The conifer tree nursery in the middleground adds color and texture to the view and creates a vivid visual element. VP-4 exhibits low visual quality and low visual sensitivity. Power lines occur above the nursery and extend into the background, which somewhat detracts from the visual integrity and intactness of the view created by the nursery, vacant project site, and Locust Avenue.

While there is a distinction of the visual elements within VP-4, views of suburban development, roadways, and utility improvements do not typically constitute a moderate or high quality view. As such, the visual quality from VP-4 is considered to be low. Views of open space areas on the project site are available and views of the green conifer tree nursery in contrast to the vacant project site and the blue horizon result in a moderate level of intactness; however, elements within VP-4 have a low level of unity and vividness. Because a majority of the viewers at VP-4 would be commuters and non-recreational travelers, views onto the project site would be brief and passing and are considered to have low visual sensitivity.

Jurupa Hills Trail in the City of Jurupa Valley (VP-5)

Figure 4.2.1-2c shows the existing view from VP-5, which is located to the west and includes most of the project site and the Jurupa Hills and the San Gabriel Mountains, which span the background view from left to right. These elements create a very vivid, unified, and intact composition that are encroached by some manmade elements, including power lines and several water tanks; however, the overall visual quality is largely intact, especially in the upper areas of the view towards the peaks of the Jurupa Hills and San Gabriel Mountains, which are free from obstruction. Foreground elements consist of part of the Jurupa Hills Trail in Jurupa Valley, and include off-road vehicle tracks and evidence of equestrian activities. Ruderal vegetation is also seen dispersed in short patches



VP-3. From the SCE Easement Trail at the northwestern corner of the project site facing south.



VP-4. From Locust Avenue near the northern project boundary facing east.

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Figure 4.2.1-2b
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VP-5. From the southeastern portion of the project site facing northwest.

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Figure 4.2.1-2c
Photos
West Valley Logistics Center Specific Plan EIR

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towards the project site. Middleground elements contain utility poles along Armstrong Avenue, the edges of residential development at the Riverside and San Bernardino County line, and several water tanks along the northern slopes of the Jurupa Hills. Due to the lack of visual patterns in the foreground and middleground and the size and prominence of the terrain in the middleground, the Jurupa Hills maintain the most prominent element within this viewpoint. Views of open space areas on the project site are available on either side of Armstrong Road and, due to the unobstructed view of the Jurupa Hills, unity, vividness, and intactness are considered to be moderately high.

The lack of trail improvements and the evidence of use by off-road vehicles suggest that viewer sensitivity is moderately low and that trail users would be focused on the terrain in front of them as opposed to middleground and background views.

Regulatory Setting

State

State regulations as they relate to aesthetics include the California State Scenic Highway Program. As discussed above under *Existing Conditions*, there are no state scenic highways within the vicinity of the proposed project.

Local

City of Fontana General Plan

Within Fontana, the City's General Plan Community Design Element (general plan; City of Fontana 2003) identifies important visual elements within the City that are valuable and worth preserving. Within the project vicinity, protecting views of the San Gabriel and San Bernardino Mountains and the Jurupa Hills is identified in the general plan as an important community value. Views of the San Gabriel and San Bernardino Mountains and the Jurupa Hills are subject to general plan policies that address utilizing views of the mountains and hills in Fontana when designing major community centers, parks, bikeways, and trails, and that open spaces should contribute to visual contrast with the built environment.

In addition, the general plan designates scenic corridor routes that shall receive special design treatments to maintain and enhance their scenic qualities. Designated scenic corridors that are closest to the proposed project include Sierra Avenue (1 mile west of the project), which is noted for its views of the Jurupa Hills, and Valley Boulevard (1.5 mile north of the project), which is noted for its views of the region's car racing history. Neither Sierra Avenue nor Valley Boulevard have visual access to the project site due to intervening topography, development, infrastructure, and vegetation. Therefore, these scenic corridors within the City of Fontana would not be impacted by the proposed project and are not discussed further.

City of Fontana Zoning and Development Code

The City of Fontana Zoning and Development Code (City of Fontana 2013) includes standards for lighting and glare in Sections 30-184 and 30-189(10) of Article V, Division 6, Performance Standards. Lighting design requirements specify that "all lights shall be directed and/or shielded to prevent the light from adversely affected adjacent properties" and that "no structure or feature shall be permitted which creates adverse glare effects."

Bloomington Community Plan (County of San Bernardino General Plan)

The Bloomington Community Plan (community plan; County of San Bernardino 2007a), part of the San Bernardino County General Plan (County of San Bernardino 2007b), identifies “scenic routes” within the community that have scenic and aesthetic qualities that add beauty to the County. The community plan designates Cedar Avenue, from Bloomington Avenue to the Riverside County line, as a County Scenic Route. Cedar Avenue occurs about 0.75 mile east and parallel to the project site and affords views of the Jurupa Hills in the middleground; however, views onto the project site are limited from Cedar Avenue due to intervening topography and commercial and residential development. Regarding recreational amenities, there are no formal trails designated within the Bloomington Community Plan area; however, residents have expressed their desire to connect with the Jurupa Hills Trail in Fontana to accommodate equestrian trails.

Jurupa Valley Area Plan (County of Riverside General Plan)

The visual setting in the Jurupa Area Plan, a component of the County of Riverside General Plan,¹ acknowledges that the hills and mountains in the area serve to frame development in developable areas of the landscape and identifies the Jurupa Hills as the dominant visual resource in the project vicinity. The Jurupa Valley Area Plan does not include any designated scenic corridors within the area. There is a scenic corridor designated in the Land Use Element of the County’s General Plan; however, this corridor occurs more than 13 miles southwest of the project at the junction of I-15 and SR-91 near the City of Corona and does not offer views of the project site. Therefore, Riverside County scenic corridors would not be impacted by the proposed project and are not discussed further. A community trail is located south of the site and views of the proposed project site are available.

Impact Analysis**Methodology**

Aesthetic experiences can be highly subjective in that they vary from person to person; therefore, it is preferable to evaluate aesthetic resources using a process that objectively identifies the visual features of the area, their importance, and the sensitivity of the associated viewers. The existing visual environment is documented and compared to the anticipated future visual environment based on the description of the physical changes described in Chapter 3, *Project Description*, the Specific Plan Design Guidelines (included as Chapter 3 of the Specific Plan), and the site layout, shown in Figure 3-2. The proposed project-related changes to the aesthetic character of the site and surrounding area are identified and qualitatively evaluated based on the extent of the modification to the existing physical conditions and based largely on viewer sensitivity to the modification. Proposed project-related changes are evaluated using the threshold criteria discussed below under *Thresholds of Significance* to determine significance.

Viewer sensitivity is based on the visibility of a scenic resource, the proximity of viewers to the resource, the relative elevation of viewers to the resource, the frequency and duration of views, the number of viewers, and the types and expectations of the individuals and viewer groups. Generally, visual sensitivity increases as the total number of viewers, frequency, and duration of viewing activities increases. The process to determine where sensitive views would be available is based on

¹ Land uses in the city of Jurupa Valley are regulated by the Riverside County General Plan including the Jurupa Valley Area Plan.

site visits, a photographic inventory from surrounding areas, and identification of scenic resources in the surrounding communities where views of the project site would be available and potentially impacted. Due to the topographic features in the area, distant views of the site are limited and public viewing areas are mostly available from the public trails immediately surrounding the project site. No other viewing areas, such as parks, designated scenic highways, or scenic routes/vistas, would include views of the project site. It should also be noted that no public comments were received at either scoping meeting (August 8, 2012 and October 3, 2012) regarding viewer sensitivity from surrounding areas.

Thresholds of Significance

Criteria for determining the significance of impacts related to aesthetics are based on criteria contained in Appendix G of the California Environmental Quality Act Guidelines. The proposed project could have a significant impact on the environment if it would result in any of the following.

- AES-1** Have a substantial adverse effect on a scenic vista.
- AES-2** Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- AES-3** Substantially degrade the existing visual character or quality of the site and its surroundings.
- AES-4** Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Project Design Features

The following aesthetics-related project design features, which include specific plan requirements and regulatory requirements, would prevent or reduce potentially significant impacts.

Specific Plan Requirements SP-A-1: Implement High-quality Design Guidelines. Chapter 3 of the Specific Plan, *Design Guidelines*, sets forth design guidelines to achieve a high-quality design character that would provide consistent aesthetic character related to site design and building orientation, landscape and streetscape, lighting, walls, architecture, parking and access, and building systems. Design guidelines also set forth requirements for minimizing light spillage onto adjacent properties, requiring cut-offs to protect dark night sky, and requiring that windows use non-reflective glass.

SP-A-2: Install Visual Barriers between Project Areas and Residential Areas. The perimeter walls that are visible from adjacent areas are required by the Specific Plan to be of high quality and compatible in terms of design and material with the project buildings. The Specific Plan requires that perimeter walls be accented with decorative stone or colored concrete to enhance the visual appearance and to provide variation and articulation of the screening walls. In addition, the Specific Plan requires that walls facing a public right-of-way be no higher than 12 feet, which would screen views of the project area while retaining views of the hills and mountains in higher altitude background views. (Walls may berm up to allow 14 feet of exposure on the inward-facing side.) Wall height may extend up to 14 feet if the wall is being required for sound attenuation at specified locations.

Regulatory Requirements

RR-A-1: Maintain Construction Sites. The Fontana Municipal Code (Article I, Chapter 5, Section 5-12) requires that all property is maintained in a reasonably clean and well-kept manner and that all lumber and building materials are neatly piled or stacked in a safe manner.

RR-A-2: Maintain Signs. The Fontana Municipal Code (Article IV, Division 4, Section 3-171) requires that signs and sign structures be “periodically inspected and maintained at reasonable intervals, including the replacement of defective parts, painting, repainting, cleaning and other acts required to maintain the sign.”

RR-B-3: Obtain Permits for Removal of Heritage Trees. The project applicant will obtain required permits pursuant to the Fontana Tree Preservation Ordinance for removal of any on-site trees prior to a grading permit subject to the provisions of the ordinance.

RR-N-1: Comply with the Construction Noise Municipal Code Exemption. The City’s Municipal Code limits the hours of construction to between 7:00 a.m. and 6:00 p.m. on weekdays and between 8:00 a.m. and 5:00 p.m. on Saturdays; no construction is to be conducted on Sundays or federal holidays.

Impacts and Mitigation**Impact AES-1. Have a substantial adverse effect on a scenic vista**

Scenic vistas generally include areas that are designated by a local jurisdiction to have scenic or community value but may also include areas that have a high level of viewer sensitivity, such as a lookout point. Based on a review of the City of Fontana General Plan, the Bloomington Community Plan, and the Jurupa Valley Area Plan, no designated scenic vistas were identified.

Furthermore, based on site visits and a reconnaissance of the project site, no locations with the likelihood for high viewer sensitivity were identified. Because there are no identified scenic vistas that could be affected by construction or operation of the proposed project, impacts would not occur and no mitigation measures would be required. Nevertheless, **Mitigation Measure AES-1, Specific Plan Requirements SP-A-1 and SP-A-2, and Regulatory Requirements RR-A-1 and RR-A-2** would be implemented.

Specific Plan Requirements and Regulatory Requirements

The applicant shall implement the following specific plan requirements and regulatory requirements, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **SP-A-1:** Implement High-quality Design Guidelines.
- **SP-A-2:** Install Visual Barriers between Project Areas and Residential Areas.
- **RR-A-1:** Maintain Construction Sites.
- **RR-A-2:** Maintain Signs.

Mitigation Measures

Mitigation Measures AES-1: Install Visual Barriers between Construction Work Areas and Residential Areas. The contractor will install fencing (such as chain link with slats or fencing made

of windscreen material) or other structures to obstruct undesirable views of ground-level construction activities from residences, recreationists, and businesses that are adjacent to the construction site. The fencing will be a minimum of 6 feet high and will help to maintain the privacy of residents and block views from ground levels during construction.

Residual Impacts

With implementation of **Mitigation Measure AES-1** and specific plan requirements and regulatory requirements stated previously, impacts would be less than significant.

Impact AES-2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway

As discussed above under *Regulatory Setting*, there are no scenic highways per the California Scenic Highway Program within the vicinity of the proposed project and there are no designated scenic routes within the City of Fontana, San Bernardino County, or Riverside County that would be impacted by the proposed project. Cedar Avenue, a San Bernardino County designated scenic route, is about 0.75 mile east of the proposed project and is the only scenic route with the potential to have views of the proposed project. The Jurupa Hills and San Gabriel Mountains are important visual features contributing to the scenic quality of Cedar Avenue.

Limited views of the proposed project would be available from a narrow view corridor along a portion of Cedar Avenue near the intersection with 12th Street. This view corridor includes views into the SCE Utility Easement surrounded by single-family residences. The proposed project is located at the base of Jurupa Hills and San Gabriel Mountains and views of construction activities and project buildings would be almost entirely obscured by residential landscape trees that are in the foreground views from this portion of Cedar Avenue. Views of the Jurupa Hills and San Gabriel Mountains in the background would be partially obstructed by several large transmission towers and associated power lines. Because the project site would be mostly obscured by the intervening features previously described, construction activities and the built project would not be focal points within available views from Cedar Avenue. Also, to the limited degree that views of the project are available, these views would be fleeting as passengers drive past this narrow view corridor at roughly 45 miles per hour with their attention largely focused on the roadway and surrounding traffic. The proposed project would result in only minor visual changes in available views from Cedar Avenue and would not significantly affect any scenic resources that are visible within these views, including the Jurupa Hills and San Gabriel Mountains. Therefore, impacts would be less than significant. However, the project would require **Regulatory Requirement RR-B-3**, which would reduce effects related to aesthetics.

Regulatory Requirement

The applicant shall implement the following regulatory requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **RR-B-3: Obtain Permits for Removal of Heritage Trees.**

Mitigation Measures

Mitigation measures are not required.

Residual Impacts

No residual impacts would occur.

Impact AES-3. Substantially degrade the existing visual character or quality of the site and its surroundings***Construction***

Construction activities would be visible from the immediately surrounding residential areas and along local roadways to passing motorists. Specifically, mass grading and earthmoving operations on the site would be visible, in addition to finish grading activities for final building pad and roadway elevations. These activities would result in the exposure of soils, construction personnel and equipment, and landform modifications to prepare the site for the potential development of seven buildings for an industrial business park development, detention basin development, internal roadways and driveways, and sidewalk construction along Locust Avenue, and Armstrong Road, and a private street (old Alder Avenue). Construction activities would occur over three phases that would not overlap, which would somewhat reduce the extent of aesthetic changes on the site during construction at any given time; however, as construction commences during each phase, each portion of the project site under construction would appear noticeably different in relation to the surrounding project site and hillside areas. Building permits for new commercial and industrial development are valid for a period of 18 to 24 months, which would ensure that construction activities for each phase would be temporary and would not continue beyond a 24-month period.

While visual changes would occur on the project site throughout the construction period, views of the surrounding Jurupa Hills and Rattlesnake Mountain would remain intact and the surrounding views into the open space area included as part of the project would remain unaffected. While views would be temporarily modified, as seen from the surrounding residential areas, construction activities would also be subject to the City's Municipal Code, which requires that all property is maintained in a reasonably clean and well-kept manner and that all lumber and building materials are neatly piled or stacked in a safe manner. While construction activities are common to the project vicinity, construction adjacent to sensitive residential receptors could negatively affect these receptors. To reduce potential impacts, the WVLCSP includes the installation of visual barriers between construction work areas and residential areas (see **Mitigation Measure AES-1**, above). Installation of these visual barriers would reduce visual impacts during construction to a less-than-significant level.

In addition, construction activities would not adversely affect nighttime views of the area. Because construction activities would be limited to weekdays between 7:00 a.m. and 6:00 p.m. and Saturdays between 8:00 a.m. and 5:00 p.m., with no construction on Sundays and federal holidays, the use of high-intensity lighting for construction would not be required (see **Regulatory Requirement RR-N-1**). As such, the proposed project would result in a less-than-significant impact related to aesthetics during construction with implementation of **Mitigation Measure AES-1**, **Regulatory Requirement RR-N-1** for compliance with construction noise restrictions, and **Regulatory Requirement RR-A-1** for the maintenance of construction sites.

Operation

Once the project is constructed, the project site would be transformed from an existing vacant area to a developed industrial warehousing site with internal roadways, improved landscaping areas, parking areas, signage, and lighting. As detailed in Section 3.6 of Chapter 3, *Project Description*, the

project includes design guidelines to achieve a high-quality design character that would provide consistent aesthetic character related to site design and building orientation, landscape and streetscape, lighting, walls, architecture, parking and access, and building systems (**Specific Plan Requirement SP-A-1**). As described above, views of the site from adjacent areas are limited. The WVLCSP includes guidelines related to visual screening along Armstrong Road, Locust Avenue, and internally along the extension of a private road (old Alder Avenue) to provide visual barriers between the project site and surrounding areas, including residential areas east of Jurupa Avenue and south of the project site (**Specific Plan Requirement SP-A-2**). **Regulatory Requirement RR-A-2** also includes a requirement for maintaining signage throughout the project site.

In addition, the Specific Plan includes project design features that prescribe that the site design and building orientation within the WVLCSP site provide an attractive appearance from public streets. The Specific Plan includes guidelines that new development must implement to ensure that buildings would be designed and sited to create an attractive impression from surrounding areas and provide generous landscaping to soften the visual appearance of buildings from the street. The WVLCSP also includes project design features that specify that landscaped areas incorporate a three-tiered planting system that includes ground cover and flowering plants, shrubs and vines, and trees as focal points. Additionally, streetscapes would be landscaped with 24-inch box trees every 30 feet and 5-gallon shrubs spaced at a maximum of 4 feet apart, along with groundcover, which would blend with and appear as part of the existing public right-of-way landscaping.

The perimeter walls that would be visible from adjacent areas are required by the WVLCSP to be of high quality and compatible in terms of design and material with adjacent project buildings. The WVLCSP project design features include measures specifying that perimeter walls be accented with decorative stone or colored concrete to enhance the visual appearance and to provide variation and articulation of the screening walls. In addition, walls facing a public right-of-way would be no higher than 12 feet, which would screen views of the project area, while retaining views of the hills and mountains in higher altitude background views.

Other visual screening measures required by the WVLCSP design guidelines include:

- A building parapet or other screening wall component, of a style consistent with the architectural expression of the overall building in regard to massing, scale, and materials, would be used to screen rooftop equipment so that it is not visible.
- All wall- or ground-mounted equipment (transformers, utility pads, and telephone boxes) would be screened with walls, fences, or vegetation and would be located to the rear of the buildings to eliminate views from public streets, driveways, or walkways.
- Loading docks and doors would be oriented away from street views or screened from incompatible adjacent uses.
- Utilitarian uses such as trash enclosures, compactors, truck loading areas, and outdoor storage would be located away from public view or screened from view to the extent practical. Trash enclosures would be incorporated as part of the building design.
- All trash receptacles and disposal areas would be screened on at least three sides with a solid masonry wall or combination of berm and wall. All trash receptacles and disposal areas fronting a public street would be screened by a combination of walls, dense landscaping including trees and shrubs, berming, and/or portions of the building.

- Parking areas adjacent to a public right-of-way would be screened from view by a landscape buffer. Berming may be provided, mounded to an average height of 3 feet above the curb height along public streets. Trees and shrubs would be planted in these areas to provide further screening.

Landscaping improvements would be located near building entrances, around parking lots and loading areas, and along edges of developed areas. Specific planting types would be selected that meet Leadership in Energy and Environmental Design standards for drought-tolerant plants and would have efficient landscaping irrigation to ensure the health and longevity of the landscaping improvements. The open space area along the western project boundary would be left as natural open space, and no improvements within this area are included as part of the proposed project. The analysis below describes the anticipated visual changes that would occur on the project site from each of the five viewpoints surrounding the project.

Armstrong Road at Fontana/Jurupa Valley Line (VP-1)

As shown on Figure 4.2.1-2a, VP-1 provides views onto the southern portion of the project site on either side of Armstrong Road. The conceptual site plan included as Figure 3-2 in Chapter 3, *Project Description*, shows that portions of Buildings 4 and 6 and screening walls, which are fronted by project landscaping along Armstrong Road, would be visible in the immediate foreground after project buildout. This would be visually followed by portions of Buildings 3 and 5 and their associated screening walls and landscaping in the middleground. Foreground and middleground views would also include driveways along Armstrong Road and parking (for cars; truck parking and loading areas would not be visible), landscape, and hardscape areas (e.g., screening walls, sidewalks) around each of the buildings. Landscaping improvements consisting of street trees, groundcover, and shrubs along Armstrong Road and within the building setback areas and parking lots that are visible from VP-1 would provide for visual screening between the project site and along Armstrong Road. Partial views of Buildings 3 and 4 and its associated screening walls and landscaping would somewhat obstruct lower altitude views of the San Gabriel Mountains and Angeles National Forest in the background, which are already partially obstructed by existing power lines and poles along Armstrong Road.

As described above, views onto the project site from the residential area to the south are largely precluded by existing landscaping, street trees along Armstrong Road, walls and fencing in backyards, and intervening residential development. Once the project is constructed, views of the hills and mountains in higher altitude background views would be retained. Views into the project site from residences in the area would continue to be limited and would primarily include views of native landscaping within the biological linkage area south of Building 4 that is required per **Mitigation Measure BIO-8** (described in Section 4.2.3, *Biological Resources*) and landscaping throughout the parking lots fronting Buildings 4 and 6. Buildings 4 and 6 would be partially visible along with open space areas adjacent to the slopes of the Jurupa Hills along the western project boundary. Due to the existence of fencing, walls, and residential landscaping in backyards adjacent to the project site, and the addition of project landscaping features and required WVLCSP design elements, views from these areas are not anticipated to be substantially degraded. Views from other residences south of the project site would be largely hindered by other residential structures, and are also not anticipated to be substantially degraded.

Partial views of the site would be experienced by passing motorists who have existing views of disturbed open space areas with sparse low-lying vegetation and overhead electrical transmission and distribution lines that are supported by wooden utility poles. Motorists have low visual

sensitivity and would be focused on the road ahead. View quality and visual sensitivity would continue to be low and moderately low, respectively, and changes to aesthetics as a result of the proposed project with implementation of the WVLCSP design guidelines would not result in a substantial degradation of the existing visual character or quality of the site and its surroundings. As a result, impacts on community character as viewed from VP-1 would be less than significant.

Jurupa Hills Trail in the City of Fontana (VP-2)

Views from VP-2 (as shown in Figure 4.2.1-2a) include nearly the entire project site due to the elevated location along the western slopes of the Jurupa Hills. Foreground views would include undeveloped hillsides on site within the designated open spaces areas (Parcel 8) and adjacent to and west of the project site, and would remain unchanged with the project. Similarly, views of Rattlesnake Mountain and the Angeles National Forest would be unaffected and would not be obstructed by the project from this location due to its altitude. However, the project would result in changes to middleground views. Views of the vacant project site would be replaced with views of portions of Buildings 3, 4, 5, and 6 and associated hardscape and landscaped areas, including parking and loading areas, internal roadways, groundcover, and street and parking lot trees. It should be noted that open space areas in the middleground would preserve views of the existing stand of trees that line the western project boundary and (along with project landscaping) would provide for some visual screening and softening of the changed views within the project site.

Implementation of the proposed project would result in changes to an overall view that is considered to be high quality in terms of vividness, intactness, and unity. As noted under *Existing Conditions*, views from VP-2 are considered to have moderately low sensitivity due to the roadway with power lines and poles, illegal dumping in the area, and apparent low-level use of the trails in this area for recreation purposes. Views of Jurupa Hills, Rattlesnake Mountain, Fontana, and the Angeles National Forest, which largely contribute to the existing visual character, would not be affected. Therefore, while middleground views of the project site would change within VP-2, the surrounding landscape would not be altered and the resulting visual quality would be lowered from high to moderately high. The WVLCSP design guidelines include requirements concerned with the preservation of open space and architectural guidelines (as described further in discussion of views from VP-1) to achieve a high quality cohesive character to create a desirable asset to the community. With implementation of the Specific Plan design guidelines, the project would not result in a substantial degradation of the existing visual character or quality of the site and its surroundings. As a result, impacts on community character as viewed from VP-2 would be less than significant.

SCE Easement Trail near Alder Avenue (VP-3)

South-facing views of the undeveloped project site from VP-3 include scattered debris, bare ground with minimal low-lying ruderal vegetation, off-road vehicle tracks, and two white water tanks. As shown in Figure 4.2.1-2b, implementation of the project would replace existing foreground views with a landscaped easement followed by middleground views of Buildings 1 and 2 and associated landscape and hardscape elements along Locust Avenue. Due to the elevation along the SCE easement trail above the project site, background views of Rattlesnake Mountain and the Jurupa Hills would remain intact and would not be blocked as a result of project development, and views of the open space portion of the WVLCSP area would be available from VP-3. Similar to VP-2, middleground views from VP-3 would change from an undeveloped and vacant site to a developed warehousing distribution center. Viewer sensitivity would remain low and the visual quality of VP-3 would be lowered from moderate to moderately low. The Specific Plan design guidelines require preservation of open space areas that are visible from VP-3 and the WVLCSP includes numerous

architectural features (as described further in discussion of views from VP-1) to achieve a high quality cohesive character and result in the creation of a desirable asset to the community. With implementation of the Specific Plan design guidelines, the project would not result in a substantial degradation of the existing visual character or quality of the site and its surroundings. As a result, impacts on community character as viewed from VP-3 would be less than significant.

Locust Avenue (VP-4)

With implementation of the proposed project, foreground and middleground views of the vacant project site from VP-4 (Figure 4.2.1-2b) that currently include chain link fencing, a conifer tree nursery, and the power lines above the nursery would be replaced with one industrial warehouse building (Building 7). As VP-4 is facing east, no views onto any other areas of the project site would be provided from this location. Landscaping improvements would include street trees along the eastern side of Locust Avenue that provide 24-inch box trees every 30 feet and 5-gallon shrubs spaced at a maximum of 4 feet apart, along with groundcover, which would blend with and seem a part of the existing public right-of-way landscaping. In addition, landscaping that includes groundcover, bushes, and trees would provide visual screening of Building 7. Parking and loading areas would be located along the southern side of the building, and foreground views onto these areas would not be available from VP-4. Middleground and background views of suburban Fontana and Bloomington, power lines, and the existing conifer nursery would be hindered by the development of Building 7 and street landscaping along Locust Avenue; however, these views would not be completely blocked. As such, the low visual quality of views from VP-4 would remain low quality once the proposed project is built. The Specific Plan design guidelines (as described previously) include requirements that the project site architecture and landscaping achieve a high quality cohesive character to create a desirable asset to the community. With implementation of the Specific Plan design guidelines, the project would not result in a substantial degradation of the existing visual character or quality of the site and its surroundings as viewed from VP-4. As a result, impacts would be less than significant.

Jurupa Hills Trail in Riverside County (VP-5)

VP-5 (shown in Figure 4.2.1-2c) is located at the southeastern corner of the proposed project site along the Jurupa Hills Trail in Jurupa Valley, and viewers would experience foreground views of Building 6 and middleground views of portions of Building 4. Existing views of the project site from the residential areas near VP-5 are generally obstructed by residential walls, fencing, or landscaping features that hinder direct and expansive views onto the project site. Views onto Building 6 in the foreground would include views onto the back side of a 100,470-square-foot building and surrounding on-site landscaping. No off-site landscape improvements are proposed between VP-5 and the project site. Due to the size and height (up to 44 feet) of Building 6 in the foreground, middleground views of the central portion of the project site would not be available. Middleground views of the Jurupa Hills to the west would be somewhat affected by lower portions of the hillside being blocked by Building 6 and possibly Building 4. Views onto the peaks of the Jurupa Hills are anticipated to remain intact; however, the moderately high levels of visual quality of the Jurupa Hills would be affected upon implementation of the proposed project. Moderately high quality views from a designated public trail would be reduced to moderate quality views; however, viewer sensitivity is anticipated to remain moderately low from VP-5. The Specific Plan design guidelines (as described previously) require project architecture and landscaping to achieve a high quality cohesive character to create a desirable asset to the community. With implementation of the Specific Plan design guidelines, the project would not result in a substantial degradation of the existing visual

character or quality of the site and its surroundings as viewed from VP-5. As a result, impacts would be less than significant.

Line of Sight Analysis

In addition to the preceding analysis, a line of sight analysis was conducted from seven locations as shown in Figure 4.2.1-3 to precisely illustrate which project elements would be visible from surrounding areas and which elements would not be visible. The analysis accounts for topography and other intervening elements like landscaping or other development between the viewer and the project site to illustrate what would be visible if the project is implemented.

Line of Sight Sections 1A and 1B identify views of the project site from residential areas to the south. Line of Sight Section 1A identifies views of proposed Building 4 from the nearest residence, which is approximately 305 feet to the south of the building. As shown in Figure 4.2.1-3, landscaping within the project's setback area would frame foreground views of the proposed building, which, because of the more than 100-foot setback from its southerly property line, would appear to be no taller than trees planted at the property line. Line of Sight Section 1B identifies views of proposed Building 5 from the nearest residence to the south, which is approximately 1,155 feet to the south. As shown in Figure 4.2.1-3, landscaping within the project's setback area would frame foreground views of the proposed building, which, because of the more than 470-foot setback from its southerly property line, would appear to be no taller than trees planted at the property line. Therefore, the proposed buildings would not impede views and impacts would be less than significant.

Line of Sight Section 2 identifies views of the proposed Building 4 from a trail within the open space area to the west of the project site. As shown in Figure 4.2.1-3, the trail is approximately 386 feet from the building. Because the trail is at a higher elevation than the building, trail users would be able to see roofs of buildings within the project site. However, the lower elevation of proposed Building 4 would not impede views of Rattlesnake Mountain to the east of the project site from the trail, and impacts would be less than significant.

Line of Sight Section 3 illustrates views of proposed Building 2 from the existing trail within the SCE easement to the northwest of the site toward Rattlesnake Mountain. Because of (1) the intervening topography between the trail and proposed Building 2, (2) placement of the building's finished floor elevation lower than the existing elevation at the property, and (3) the location of the building approximately 646 feet from the property line, neither the building nor the truck yard north of the building would be visible from the trail, and views would not be hindered.

Line of Sight Section 4 illustrates views of proposed Building 7 from Kessler Park to the east. As shown in Figure 4.2.1-3, the finished floor elevation of proposed Building 7 would be 24 feet below natural elevation at the property line. When viewed from Kessler Park, which is approximately 857 feet east of the building's property line, views of the top few feet of the building might be visible behind landscaping proposed to be planted on the slope within the project site.

Line of Sight Section 5 illustrates views of proposed Building 6 from the Jurupa Hills to the south at a distance approximately 101 feet south of the WVLCS property line. Along Line of Sight Section 5, proposed Building 5 would have a finished floor elevation approximately 22 feet below the viewpoint to the south. As shown in Figure 4.2.1-3, the top half of the building would be visible above proposed project site landscaping. Viewing locations at higher elevations in the hills to the south and southeast of the project site would have views of the tops of buildings within the project site; however, views between open space areas to the west and east of the site would be maintained

from higher elevations (approximately 1,130 feet above mean sea level). Therefore, impacts would be less than significant.

Specific Plan Requirements and Regulatory Requirements

The applicant shall implement the following specific plan requirements and regulatory requirements, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **SP-A-1:** Implement High-quality Design Guidelines.
- **SP-A-2:** Install Visual Barriers between Project Areas and Residential Areas.
- **RR-A-1:** Maintain Construction Sites.
- **RR-A-2:** Maintain Signs.
- **RR-N-1:** Comply with the Construction Noise Municipal Code Exemption.

Mitigation Measures

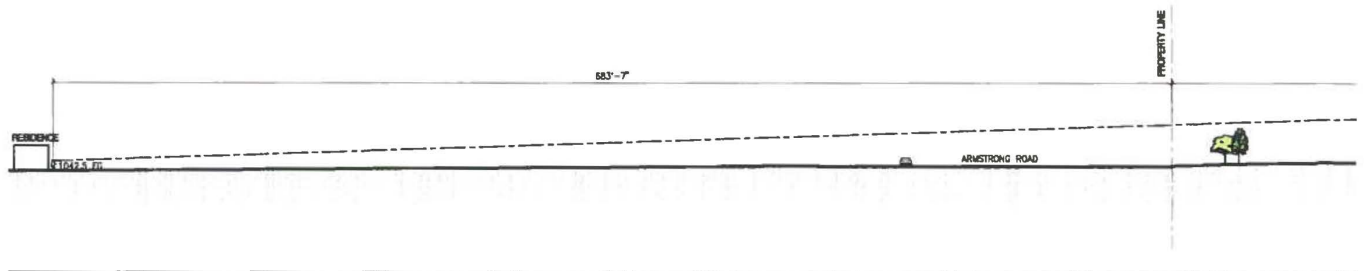
Implement **Mitigation Measure AES-1** and **Mitigation Measure BIO-8** provided in Section 4.3.2, *Biological Resources*.

Residual Impacts

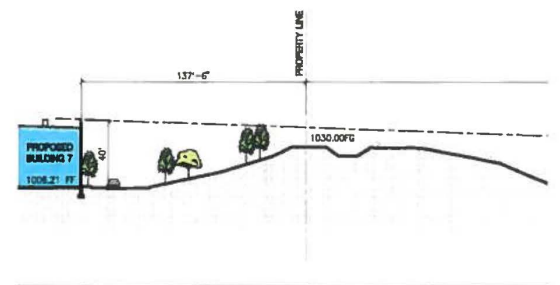
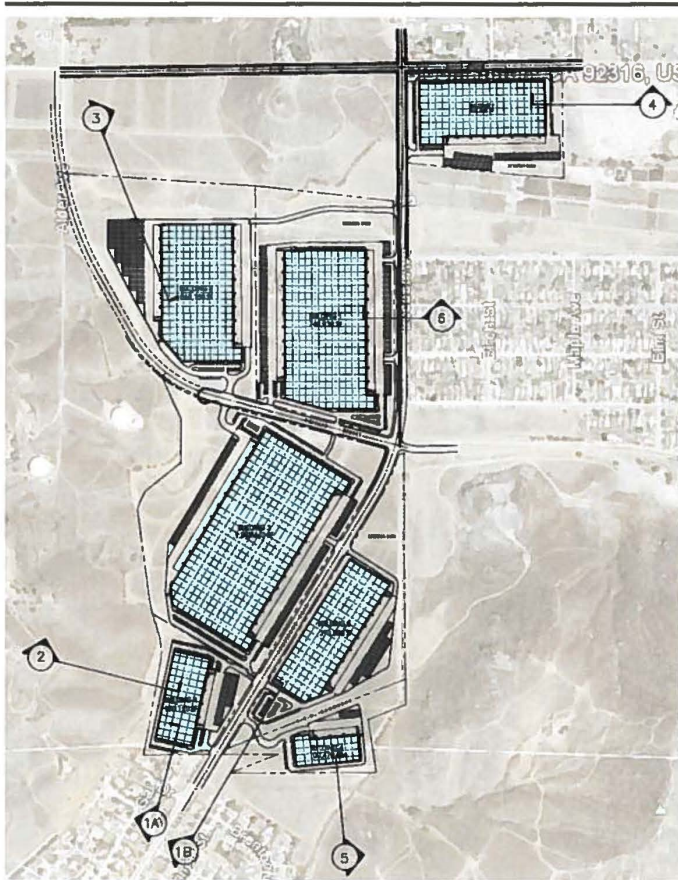
Aesthetic impacts would be less than significant with the incorporation of **Mitigation Measure AES-1**, **Specific Plan Requirements SP-A-1** and **SP-A-2**, **Regulatory Requirements RR-A-1**, **RR-R-2** and **RR-N-1**, and preservation of open space along the western project boundary as specified in **Mitigation Measure BIO-8**. No residual impacts would occur.

Impact AES-4. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area

The proposed project would improve a vacant and undeveloped site with seven industrial warehouse buildings, lighting, and parking areas, all of which would create a new source of lighting and glare where no lighting or artificial sources to create glare currently exists. Street improvements would include street lighting along interior streets, and buildings would have interior lighting that would contribute to nighttime lighting. The proposed seven buildings would contain reflective surfaces that would contribute some level of glare; however, Specific Plan architectural guidelines specifically call for use of non-reflective glass. As a result of the project, trucks and cars related to light industrial operations would also introduce elements of light and glare to the area that are not currently present. As detailed in Specific Plan design guidelines (provided in **Specific Plan Requirement SP-A-1**), site development would be designed to confine direct light rays to areas within the project site (e.g., parking and roadway areas) and light would not spill over into adjacent recreational or residential areas or roadways. Street lighting and parking lot lighting would be low-level lighting, and any landscape accent lighting would be placed at the base of trees and directed upward to avoid impacts associated with glare and light pollution. The area surrounding the site is currently moderately lit, and project design considerations include stringent measures—such as not over-illuminating the site, shielding light sources, avoiding exposed high-intensity lighting, avoiding highly reflective glass doors, and using neutral building colors that reduce reflectivity—to ensure that the project does not create a substantial new source of light and glare in the project area. As such, project-related impacts associated with creating day or nighttime views with new sources of



KEY MAP



Source: HPA Architecture (2014)



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substantial light or glare are anticipated to be less than significant. In addition, compliance with the City's municipal code requirements related to construction noise (**Regulatory Requirement RR-N-1**) would limit the hours of construction and prevent impacts related to nighttime construction lighting.

Specific Plan Requirements

The applicant shall implement the following specific plan and regulatory requirements, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **SP-A-1:** Implement High-quality Design Guidelines.
- **RR-N-1:** Comply with the Construction Noise Municipal Code Exemption.

Mitigation Measures

Mitigation measures are not required.

Residual Impacts

No residual impacts would occur.



4.2.2 Air Quality

Introduction

This section describes air quality-related impacts of the proposed project. It includes a discussion of existing regulatory requirements, the existing air quality setting within the project area, and impacts on air quality that would result from implementation of the West Valley Logistics Center Specific Plan (WVLCSP). The Existing Conditions and Impact Analysis sections below are based on two technical reports in Appendix F: *Air Quality Analysis, West Valley Logistics Center, City of Fontana, California* and in Appendix G: *Health Risk Assessment, West Valley Logistics Center, City of Fontana, California*.

Terminology

The following terms are used in this section.

- **Air Basin.** A region that is defined by geographic features that create a distinctive regional climate. California has 15 distinct air basins. Air basin boundaries are also influenced by jurisdictional boundaries (California Air Resources Board 2012a). The WVLCSP is within the South Coast Air Basin (SCAB).
- **Air District.** A political body responsible for managing air quality on a regional or county basis. California is currently divided into 35 air districts. The WVLCSP is within the boundaries of the South Coast Air Quality Management District.
- **Attainment.** Data collected at permanent monitoring stations are used by the U.S. Environmental Protection Agency (EPA) to classify regions as attainment if the regions meet the requirements stated in the primary standards established by EPA within the national ambient air quality standards (NAAQS) for six major pollutants termed criteria pollutants.
- **Area Sources.** Sources of pollution where the emissions are spread over a wide area, such as consumer products, fireplaces, road dust, and farming operations (California Air Resources Board n.d.).
- **Criteria Pollutants.** Air pollutants for which acceptable levels of exposure can be determined and for which an ambient air quality standard has been set (California Air Resources Board n.d.). Such standards have been set for six criteria pollutants: ozone (O₃), carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and particulate matter (PM), which consists of PM that is 10 microns in diameter or less (PM₁₀) and PM that is 2.5 microns in diameter or less (PM_{2.5}).
- **Nonattainment.** Data collected at permanent monitoring stations are used by EPA to classify regions as nonattainment if the regions did not meet the requirements stated in the primary standards established by EPA within the NAAQS for criteria pollutants.
- **Sensitive Receptor.** Sensitive receptors include land uses, such as residences, schools, hospitals, and similar uses that are particularly sensitive to adverse air quality. A sensitive receptor also includes sensitive populations such as asthmatics, children, and the elderly who are particularly sensitive to air pollution.

- **Mobile Sources.** Sources of air pollution such as automobiles, motorcycles, trucks, off-road vehicles, boats, and airplanes that emit air pollutants while moving and when stopped (California Air Resources Board n.d.).
- **Stationary Sources.** Non-mobile sources such as power plants, refineries, and manufacturing facilities that emit air pollutants from a fixed location (California Air Resources Board n.d.).

Environmental Setting

This section provides a discussion of the existing conditions related to air quality in the study area. Information below is drawn from the relevant oversight agencies, which are the South Coast Air Quality Management District (SCAQMD), the California Air Resources Board (ARB), and EPA.

Climate/Meteorology

Air quality in the planning area is not only affected by various emission sources (mobile, industry, etc.), but also by atmospheric conditions such as wind speed, wind direction, temperature, rainfall, etc. The combination of topography, low mixing height, abundant sunshine, and emissions from the second largest urban area in the United States gives the SCAB the worst air pollution problem in the nation.

The region has a year-round Mediterranean climate or semi-arid climate, with warm, sunny, dry summers and cool, rainy, mild winters. Climate in the SCAB is determined by its terrain and geographical location. The SCAB is a coastal plain with connecting broad valleys and low hills. The Pacific Ocean forms the southwestern border, and high mountains surround the rest of the SCAB. The SCAB lies in the semi-permanent high-pressure zone of the eastern Pacific; the resulting climate is mild and tempered by cool ocean breezes. This climatological pattern is rarely interrupted. However, periods of extremely hot weather, winter storms, and Santa Ana wind conditions do occur.

The annual average temperature varies little throughout the SCAB, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station closest to the site with sufficient data to describe local climate is the Fontana Kaiser Station. The monthly average maximum temperature recorded at this station in the past ranged from 66.8°F in January to 95.0°F in July, with an annual average maximum of 79.4°F. The monthly average minimum temperature recorded at this station ranged from 44.0°F in January to 62.9°F in August, with an annual average minimum of 52.3°F. January is typically the coldest month, and July and August are typically the warmest months in this area of the SCAB. (Western Regional Climate Center 2013.)

The majority of annual rainfall in the SCAB occurs between November and April. Summer rainfall is minimal and is generally limited to scattered thundershowers in coastal regions and slightly heavier showers in the eastern portion of the SCAB and along the coastal side of the mountains. The Fontana Kaiser Station also monitors precipitation. Average annual precipitation ranges from 10 to 12 inches per year in the coastal plain to 18 inches per year in the inland alluvial valleys, reaching 40 inches or more in the San Bernardino Mountains (Appendix C). Most of the precipitation occurs between November and March in the form of rain with variable amounts of snow in the higher elevations. Average monthly rainfall measured varied from 3.65 inches in January to 0.34 inch or less between May and October. The climatological cycle of the region results in higher surface water flows in the spring and early summer and lower flows during the dry season. Winter and spring floods generated

by storms are not uncommon in wet years. Similarly, during the dry season, infrequent summer storms can cause torrential floods in local streams. Patterns in monthly and yearly rainfall totals are unpredictable due to fluctuations in the weather (Appendix F).

The SCAB experiences a persistent temperature inversion (increasing temperature with increasing altitude) as a result of the Pacific high, which is an inversion that limits the vertical dispersion of air contaminants, holding them relatively near the ground. As the sun warms the ground and the lower air layer, the temperature of the lower air layer approaches the temperature of the base of the inversion (upper) layer until the inversion layer finally breaks, allowing vertical mixing with the lower layer. This phenomenon is observed in midafternoon to late afternoon on hot summer days, when the smog appears to clear up suddenly. Winter inversions frequently break by midmorning.

Wind speeds in the project area average about 4 miles per hour (mph). Summer wind speeds average slightly higher than winter wind speeds. Low average wind speeds, together with a persistent temperature inversion, limit the vertical dispersion of air pollutants throughout the SCAB. Strong, dry, north or northeasterly winds, known as Santa Ana winds, occur during the fall and winter months, dispersing air contaminants. The Santa Ana conditions tend to last for several days at a time.

The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are the lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly on shore into Riverside and San Bernardino Counties. In the winter, the greatest pollution problems are CO and nitrogen oxides (NO_x) because of extremely low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and the brighter sunshine combine to cause a reaction between hydrocarbons and NO_x to form photochemical smog.

Criteria and Other Air Pollutants of Concern

The federal and state governments have established NAAQS and California ambient air quality standards (CAAQS), respectively, for six criteria pollutants: O₃, CO, Pb, NO₂, SO₂, PM₁₀, and PM_{2.5}.

Ozone and NO₂ are considered regional pollutants because they (or their precursors) affect air quality on a regional scale; NO₂ reacts photochemically with reactive organic gases (ROGs) to form ozone, and this reaction occurs at some distance downwind of the source of pollutants. Pollutants such as CO, SO₂, and Pb are considered to be local pollutants that tend to accumulate in the air near the source. Particulate matter is considered to be a local as well as a regional pollutant.

The primary pollutants of concern in the study area are ozone (including nitrogen oxides, NO_x), CO, and PM. Principle characteristics surrounding these pollutants are discussed below. Toxic air contaminants (TACs) are also discussed, although no air quality standards exist for these pollutants.

Ozone (O₃)

Ozone (smog) is formed by photochemical reactions between oxides of nitrogen and ROGs rather than being directly emitted. Ozone is a pungent, colorless gas typical of Southern California smog. Elevated Ozone concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors such as the sick, the elderly, and young children. Ozone levels peak during summer and early fall. The entire SCAB is designated as a nonattainment area for the state 1-hour and 8-hour ozone standards. EPA has officially

designated the status for most of the SCAB regarding the 8-hour O₃ standard as “Extreme,” which means the SCAB has until 2024 to attain the federal 8-hour ozone standard.

ROG, NO_x and CO are considered ozone precursors. If ozone precursors are present under the right conditions, they react to form ozone. Because the reaction takes place in the atmosphere, winds can carry ozone far from where the precursors were originally emitted. Scientists have studied the effects of ozone on health for decades. Hundreds of research studies have confirmed that exposure to ozone and the pollutants that produce it is linked to premature death, asthma, bronchitis, heart attack, and other cardiopulmonary problems. Ground-level ozone can harm lung function and irritate the respiratory system.

Anyone who spends time outdoors where ozone pollution levels are high may be at risk; however, five groups of people are especially vulnerable to the effects of breathing ozone:

- children and teens;
- anyone 65 and older;
- people who work or exercise outdoors;
- people with existing lung diseases, such as asthma and chronic obstructive pulmonary disease (also known as COPD, which includes emphysema and chronic bronchitis); and
- people with cardiovascular disease.

In addition, newer evidence suggests that other groups—including women and people who suffer from obesity—may also face a higher risk from ozone inhalation (American Lung Association 2013).

Carbon Monoxide (CO).

CO is formed by the incomplete combustion of fossil fuels, almost entirely from automobiles. It is a colorless, odorless gas that can cause dizziness, fatigue, and impairments to central nervous system functions. The entire SCAB is in attainment for the state standards for CO. The SCAB is designated as an “Attainment/Maintenance” area under the federal CO standards.

Nitrogen Oxides (NO_x)

NO₂, a reddish brown gas, and NO, a colorless, odorless gas, are formed from fuel combustion under high temperature or pressure. These compounds are referred to as nitrogen oxides, or NO_x. NO_x is a primary component of the photochemical smog reaction. It also contributes to other pollution problems, including a high concentration of fine particulate matter, poor visibility, and acid deposition (i.e., acid rain). NO₂ decreases lung function and may reduce resistance to infection. The entire SCAB is designated as nonattainment for the state NO₂ standard and as an “Attainment/Maintenance” area under the federal NO₂ standard.

Sulfur Dioxide (SO₂)

SO₂ is a colorless irritating gas formed primarily from incomplete combustion of fuels containing sulfur. Industrial facilities also contribute to gaseous SO₂ levels. SO₂ irritates the respiratory tract, can injure lung tissue when combined with fine particulate matter, and reduces visibility and the level of sunlight. The entire SCAB is in attainment with both federal and state SO₂ standards.

Lead (Pb)

Lead is found in old paints and coatings, plumbing, and a variety of other materials. Once in the blood stream, lead can cause damage to the brain, nervous system, and other body systems. Children are highly susceptible to the effects of lead. The SCAB is designated as being in attainment for the state and federal standards for lead (California Air Resources Board 2013a).

Particulate Matter (PM)

Particulate matter is the term used for a mixture of solid particles and liquid droplets found in the air. Coarse particles (PM_{10}) derive from a variety of sources, including windblown dust and grinding operations. Fuel combustion and resultant exhaust from power plants and diesel buses and trucks are primarily responsible for fine particulate matter ($PM_{2.5}$) levels. Fine particles can also be formed in the atmosphere through chemical reactions. PM_{10} can accumulate in the respiratory system and aggravate health problems such as asthma. EPA's scientific review concluded that $PM_{2.5}$, which penetrates deeply into the lungs, is more likely than coarse particles to contribute to the health effects listed in a number of recently published community epidemiological studies at concentrations that extend well below those allowed by the current PM_{10} standards. These health effects include premature death and increased hospital admissions and emergency room visits (primarily the elderly and individuals with cardiopulmonary disease); increased respiratory symptoms and disease (children and individuals with cardiopulmonary disease such as asthma); decreased lung functions (particularly in children and individuals with asthma); and alterations in lung tissue and structure and in respiratory tract defense mechanisms. Most of the SCAB is designated nonattainment for the federal and state PM_{10} and $PM_{2.5}$ standards.

Reactive Organic Compounds (ROC)

Reactive organic compounds (ROCs), also known as ROGs and volatile organic compounds (VOCs), are formed from the combustion of fuels and the evaporation of organic solvents. ROCs are not defined as criteria pollutants but are a prime component of the photochemical smog reaction. Consequently, ROC accumulates in the atmosphere more quickly during the winter when sunlight is limited and photochemical reactions are slower. Health effects include eye, nose, and throat irritation; headaches, loss of coordination, and nausea; and damage to the liver, kidney, and central nervous system. Some organics can cause cancer in animals; some are suspected or known to cause cancer in humans. Key signs or symptoms associated with exposure to VOCs include conjunctival irritation, nose and throat discomfort, headache, allergic skin reaction, dyspnea, declines in serum cholinesterase levels, nausea, vomiting, nose bleeding, fatigue, and dizziness.

Sulfates

Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to SO_2 during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO_2 to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features. The entire SCAB is in attainment for the state standard for sulfates. Effects of sulfate exposure at levels above air quality standards include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardiopulmonary disease. Sulfates are particularly effective in degrading visibility, and, due to fact that they are usually acidic, can harm

ecosystems and damage materials and property. Sulfates increase the acidity of the atmosphere and form acid rain.

Hydrogen Sulfide (H₂S)

Hydrogen sulfide (H₂S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas and can be emitted as the result of geothermal energy exploitation. In 1984, an ARB committee concluded that the ambient standard for hydrogen sulfide is adequate to protect public health and to significantly reduce odor annoyance. The entire SCAB is unclassified for the state standard for hydrogen sulfide.

Visibility-Reducing Particles

Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles consisting of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size, and chemical composition and can be made up of many different materials such as metals, soot, soil, dust, and salt. The statewide standard is intended to limit the frequency and severity of visibility impairment due to regional haze. The entire SCAB is unclassified for the state standard for visibility-reducing particles.

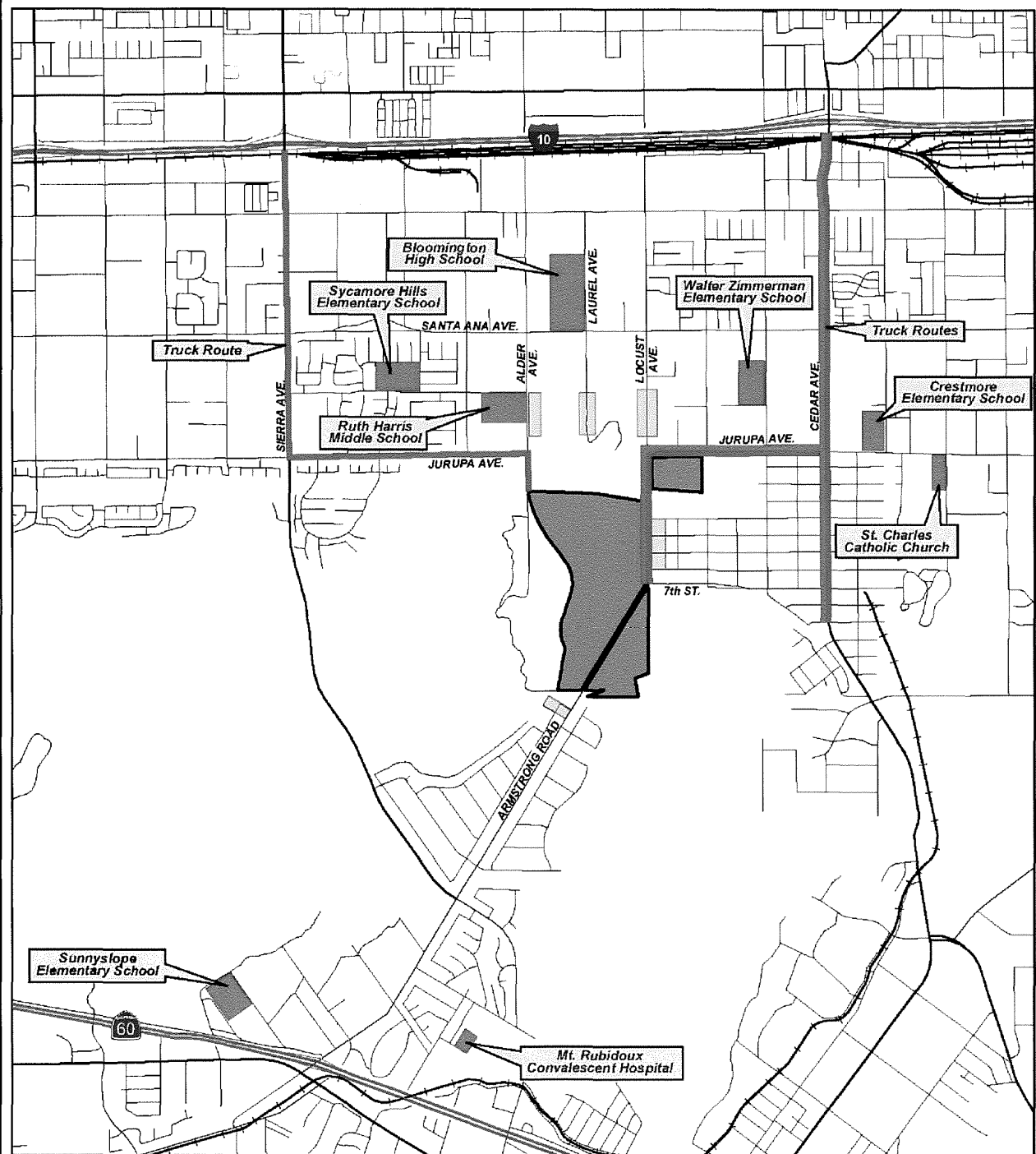
Sensitive Receptors

Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality. Currently, the site of the WVLCSP project is vacant and undeveloped and does not include any sensitive receptors. Other land uses farther from the project site include residential and a mix of industrial and commercial uses. The closest existing residential uses are approximately 150 feet from the project's eastern boundary across Locust Avenue and 250 feet from the project's southern boundary. There are residential uses to the north approximately 1,000 feet from the project's northern boundary. Table 4.2.2-1 lists identified sensitive receptors in order of the distance from the project site boundary. Figure 4.2.2-1 shows these sensitive receptors relative to the proposed project site.

Table 4.2.2-1. Sensitive Land Uses in the Project Vicinity

Description	Location	Approximate Distance from Project Site
Residences	Across Locust Ave.	150 ft. from project's eastern boundary
Residences	Along Armstrong Rd.	250 ft. from project's southern boundary
Residences	Along Alder, Laurel and Locust Ave.	1,000 ft. from project's northern boundary
Walter Zimmerman Elementary School	11050 Linden Ave.	1,700 ft. from project's northern boundary
Ruth O. Harris Middle School	11150 Alder Ave.	1,900 ft. from project's northern boundary
Crestmore Elementary School	18870 Jurupa Ave.	2,400 ft. from project's eastern boundary
Sycamore Hills Elementary School	11036 Mahogany Dr.	3,600 ft. from project's northern boundary
Bloomington High School	10750 Laurel St.	3,700 ft. from project's northern boundary
St. Charles Catholic Church	11342 Spruce Ave.	4,100 ft. from project's eastern boundary
Mt Rubidoux Convalescent	6401 33rd St.	7,800 ft. from project's southern boundary

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Source: LSA (2013)



Figure 4.2.2-1
Sensitive Receptors in the Project Vicinity
West Valley Logistics Center Specific Plan EIR

AR0004798



Description	Location	Approximate Distance from Project Site
Hospital		
Sunnyslope Elementary School	7050 38th St.	9,100 ft. from project's southern boundary
Note: These calculations were taken from the edge of the project site boundary to the edge of the sensitive land uses.		

Regulatory Setting

At the federal level, EPA is responsible for implementation of the Clean Air Act (CAA). Some portions of the CAA (e.g., certain mobile-source and other requirements) are implemented directly by EPA. Other portions of the CAA (e.g., stationary-source requirements) are implemented by state and local agencies.

Responsibility for attaining and maintaining air quality in California is divided among ARB and the regional air quality districts. Areas of control for the regional districts are set by ARB, which divides the state into air basins.

Plans, policies, and regulations relevant to the proposed project are discussed below.

Federal

Clean Air Act and National Ambient Air Quality Standards

Pursuant to the federal CAA of 1970, EPA established NAAQS. The NAAQS were established for six major pollutants, termed *criteria pollutants*. Criteria pollutants are defined as those pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations in order to protect public health. Table 4.2.2-2 summarizes the NAAQS. Data collected at permanent monitoring stations are used by EPA to classify regions as "attainment" or "nonattainment," depending on whether the regions meet the requirements stated in the primary NAAQS. Nonattainment areas are imposed with additional restrictions as required by EPA.

EPA has designated the Southern California Association of Governments (SCAG) as the Metropolitan Planning Organization responsible for ensuring compliance with the requirements of the CAA for the SCAB.

Table 4.2.2-2. National and State Ambient Air Quality Standards

Criteria Pollutant	Average Time	California Standards	National Standards ^a	
			Primary	Secondary
Ozone	1-hour	0.09 ppm	None	None
	8-hour	0.070 ppm	0.075 ppm	0.075 ppm
Particulate Matter (PM ₁₀)	24-hour	50 µg/m ³	150 µg/m ³	150 µg/m ³
	Annual mean	20 µg/m ³	None	None
Fine Particulate Matter (PM _{2.5})	24-hour	None	35 µg/m ³	35 µg/m ³
	Annual mean	12 µg/m ³	12.0 µg/m ³	15.0 µg/m ³
Carbon Monoxide	8-hour	9.0 ppm	9 ppm	None
	1-hour	20 ppm	35 ppm	None

Criteria Pollutant	Average Time	California Standards	National Standards ^a	
			Primary	Secondary
Nitrogen Dioxide	Annual mean	0.030 ppm	0.053 ppm	0.053 ppm
	1-hour	0.18 ppm	0.100 ppm	None
Sulfur Dioxide ^b	Annual mean	None	0.030 ppm	None
	24-hour	0.04 ppm	0.014 ppm	None
	3-hour	None	None	0.5 ppm
	1-hour	0.25 ppm	0.075 ppm	None
Lead	30-day average	1.5 µg/m ³	None	None
	Calendar quarter	None	1.5 µg/m ³	1.5 µg/m ³
	3-month average	None	0.15 µg/m ³	0.15 µg/m ³
Sulfates	24-hour	25 µg/m ³	None	None
Hydrogen Sulfide	1-hour	0.03 ppm	None	None
Vinyl Chloride	24-hour	0.01 ppm	None	None

Source: California Air Resources Board 2013c.

Notes:

µg/m³ = micrograms per cubic meter

ppm = parts per million

^a National standards are divided into primary and secondary standards. Primary standards are intended to protect public health, whereas secondary standards are intended to protect public welfare and the environment.

^b The final 1-hour SO₂ rule was signed June 2, 2010. The annual and 24-hour SO₂ standards were revoked in that same rulemaking. However, these standards remain in effect until one year after an area is designated for the 2010 standard, except in areas designated nonattainment for the 1971 standards, where the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standard are approved.

State

California Air Resources Board

In 1967, the California Legislature passed the Mulford-Carrell Act, which combined two Department of Health bureaus, the Bureau of Air Sanitation and the Motor Vehicle Pollution Control Board, to establish ARB. Since its formation, ARB has worked with the public, the business sector, and local governments to find solutions to California's air pollution problems. ARB gathers air quality data for California, ensures the quality of this data, designs and implements air models, and sets ambient air quality standards for the state. ARB compiles the state's emissions inventory and performs air quality and emissions inventory special studies to evaluate air quality and reduce emissions in each of the 35 local air districts within the state (California Air Resources Board 2013b).

Toxic Air Containment Regulation

ARB identified particulate emissions from diesel-fueled engines (diesel particulate matter [DPM]) as TACs in August 1998. Following the identification process, ARB was required by law to determine whether there is a need for further control. In September 2000, ARB adopted the Diesel Risk Reduction Plan, which recommends many control measures to reduce the risks associated with DPM

and to achieve goals of 75% DPM reduction by 2010 and 85% by 2020 (California Air Resources Board 1998).

California Clean Air Act

The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state to achieve and maintain the CAAQS by the earliest practical date. The CAAQS incorporate additional standards for most of the criteria pollutants and set standards for other pollutants recognized by the state. In general, the CAAQS are more health protective than the corresponding NAAQS. California has also set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. The SCAB is in compliance with these California standards for sulfates, hydrogen sulfide, visibility-reducing particles, and vinyl chloride. Table 4.2.2-2 summarizes the CAAQS, and Table 4.2.2-3 provides the SCAB attainment status with respect to NAAQS and CAAQS.

Table 4.2.2-3. Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
O ₃ 1-hour	Nonattainment	N/A
O ₃ 8-hour	Nonattainment	Extreme Nonattainment
PM ₁₀	Nonattainment	Serious Nonattainment
PM _{2.5}	Nonattainment	Nonattainment
CO	Attainment	Attainment/Maintenance
NO ₂	Nonattainment	Attainment/Maintenance
SO ₂	Attainment	Attainment
Lead	Attainment*	Attainment*
All others	Attainment/Unclassified	Attainment/Unclassified

Source: California Air Resources Board 2012b.

* All of the South Coast Air Basin is in attainment except for Los Angeles County.

N/A = not applicable

Statewide Truck and Bus Regulation

Originally adopted in 2005, the on-road truck and bus regulation requires heavy trucks to be retrofitted with PM filters. The regulation applies to privately and federally owned diesel fueled trucks with a gross vehicle weight rating (GWR) greater than 14,000 pounds. Compliance with the regulation can be reached through one of two paths: (1) vehicle retrofits according to engine year or (2) phase-in schedule. Both compliance paths ensure that by January 2023 nearly all trucks and buses will have 2010 model year engines or newer.

State Tailpipe Emission Standards

To reduce emissions from off-road diesel equipment, on-road diesel trucks, and harbor craft, ARB established a series of increasingly strict emission standards for new engines. New construction equipment used for the project, including heavy-duty trucks and off-road construction equipment, would be required to comply with the standards.

State Nitrogen Oxide Reduction Program

The Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program) is a voluntary program that offers grants to owners of heavy-duty vehicles and equipment. The program is a partnership between ARB and the local air districts throughout the state to reduce air pollution emissions from heavy-duty engines. Locally, the air districts administer the Carl Moyer Program.

Local

Regional Air Quality Planning Framework

The 1976 Lewis Air Quality Management Act established SCAQMD and other air districts throughout the state. The federal CAA Amendments of 1977 required that each state adopt an implementation plan outlining pollution control measures to attain the federal standards in nonattainment areas of the state.

ARB is responsible for incorporating air quality management plans for local air basins into a State Implementation Plan (SIP) for EPA approval. Significant authority for air quality control within them has been given to local air districts that regulate stationary source emissions and develop local nonattainment plans.

Regional Air Quality Management Plan

SCAQMD and SCAG are responsible for formulating and implementing the Air Quality Management Plan (AQMP) for the SCAB. Every 3 years, SCAQMD prepares a new AQMP, updating the previous plan and having a 20-year horizon. The AQMP proposes policies and measures to achieve federal and state standards for healthful air quality in the SCAB and those portions of the Salton Sea Air Basin (formerly named the Southeast Desert Air Basin) that are under SCAQMD jurisdiction (namely, Coachella Valley). The AQMP also addresses several state and federal planning requirements and incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes and new air quality modeling tools.

The Final 2012 AQMP is available from SCAQMD, and it describes the control strategies necessary to achieve federal clean air standards by specified deadlines. The final plan was adopted by SCAQMD's Governing Board in December 2012. The early development process for the 2015 AQMP is currently underway.

SCAQMD Rules and Regulations

All projects are subject to SCAQMD rules and regulations in effect at the time of construction. Specific rules applicable to the construction anticipated for the proposed project include the following:

Rule 401 – Visible Emissions. A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than 3 minutes in any 1 hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines.

Rule 402 – Nuisance. A person shall not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or

safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

Rule 403 – Fugitive Dust. This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust.

Rule 1113 – Architectural Coatings. No person shall apply or solicit the application of any architectural coating within the SCAQMD with VOC content in excess of the values specified in a table incorporated in the Rule.

Rule 1301 – General. This rule is intended to provide that pre-construction review requirements to ensure that new or relocated facilities do not interfere with progress in attainment of the NAAQS, while future economic growth within SCAQMD is not unnecessarily restricted. The specific air quality goal is to achieve no net increases from new or modified permitted sources of nonattainment air contaminants or their precursors. Rule 1301 also limits emission increases of ammonia and Ozone Depleting Compounds (ODCs) from new, modified, or relocated facilities by requiring the use of Best Available Control Technology (BACT).

Impact Analysis

Methodology

A number of modeling tools are available to assess air quality impacts of projects. In addition, certain air districts, such as SCAQMD, have created guidelines and requirements to conduct air quality analysis. SCAQMD's current guidelines, *CEQA Air Quality Handbook* (April 1993), were adhered to in the assessment of air quality impacts for the proposed project. The air quality models identified in the document (including an older version of the URBEMIS model) are outdated; therefore, the current model—California Emissions Estimator Model (CalEEMod), Version 2013.2.1—was used to estimate project-related mobile and stationary sources emissions in this analysis.

This analysis includes estimated emissions associated with short-term construction and long-term operation of the proposed project. Criteria pollutants with regional impacts would be emitted by project-related vehicular trips, as well as by emissions associated with stationary sources used on site. A local CO hot-spot analysis was conducted. Project-specific information was used in the modeling. Default values representative of the proposed project were used when project-specific data were not available.

Construction

Construction activities produce combustion emissions from various sources such as site grading, utility engines, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, asphalt paving, and motor vehicles transporting the construction crew. Exhaust emissions from construction activities would vary daily as construction activity levels change. The use of construction equipment on site would result in localized exhaust emissions.

The project could be built in phases or in one phase, depending on market conditions. This analysis assumes the more conservative scenario of the entire site built in one phase. Site preparation (mass

grading and/or fine grading) would be completed before other construction activities would occur. Table 4.2.2-4 lists the construction schedule created in the CalEEMod model (Version 2013.2.1) based on project plans. It is also conservatively assumed that the Building Construction and Architectural Coatings phases overlap.

Table 4.2.2-4. Construction Schedule

Phase Number	Phase Name	Number of Days/Week	Number of Days
1	Site Preparation	5	10
2	Grading	5	44
3	Building Construction	5	358
4	Architectural Coating	5	327
5	Paving	5	44

Source: Appendix F, Project Plans and CalEEMod.

Table 4.2.2-5 lists a representative set of equipment to be used on any one day for each phase. While there may be other sets of equipment in use on other days in each phase, this set is representative of the peak day for each phase.

Table 4.2.2-5. Diesel Construction Equipment Utilized by Construction Phase

Construction Phase	Off-Road Equipment Type	Off-Road Equipment Unit Amount	Hours Used per Day	Horsepower	Load Factor
Site Preparation	Rubber-tired dozers	3	8	358	0.40
	Tractors/loaders/backhoes	4	8	75	0.37
Grading	Excavators	2	8	157	0.38
	Graders	1	8	162	0.41
	Rubber-tired dozers	1	8	358	0.40
	Scrapers	2	8	356	0.48
	Tractors/loaders/backhoes	2	8	75	0.37
	Cranes	1	7	208	0.29
Building Construction	Forklifts	3	8	149	0.20
	Generator sets	1	8	84	0.74
	Tractors/loaders/backhoes	3	7	75	0.37
	Welders	1	8	46	0.45
Paving	Pavers	2	8	89	0.42
	Paving equipment	2	8	82	0.36
	Rollers	2	8	84	0.38
Architectural Coating	Air Compressors	1	6	78	0.48

Source: CalEEMod Defaults.

Health Risk Assessment

Hazardous air pollution emissions associated with the project would occur from the exhaust of project-related vehicles. The project has been designed for warehouse uses and would not include heavy manufacturing or processing of raw materials that could generate hazardous air pollution emissions. The only manufacturing uses permitted within the project site are assembly uses. As provided in the Specific Plan Table 9-1, allowable uses do not include uses that would generate substantial quantities of toxic substances on site. Therefore, emissions from sources other than vehicle exhaust would be below a level of significance. Additionally, the amount of use of any area source materials that would cause a release of hazardous air pollution emissions would be low; therefore, these are not analyzed within this document (Appendix G). For the purposes of a health risk assessment, exposure to short-term (construction) emissions are of concern for analyzing acute health impacts, and exposure to long-term (operational) emissions are of concern for analyzing chronic and carcinogenic health impacts.

A screening-level single pathway assessment has been conducted, analyzing the inhalation pathway. This technique was chosen as recommended in the Office of Environmental Health and Hazards Assessment (OEHHA) Air Toxic Hot Spots Program Risk Assessment Guidelines, Appendix D, "Risk Assessment Procedures to Evaluate Particulate Emissions from Diesel-Fueled Vehicles." For risk assessment procedures, OEHHA specifies that the surrogate for whole diesel exhaust is diesel particulate matter (Office of Environmental Health and Hazards Assessment 2003).

OEHHA has determined that long-term exposure to diesel particulate matter poses the highest cancer risk of any hazardous air pollution emissions it has evaluated. Short-term exposure to diesel exhaust can also have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, diesel particulate matter made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Short-term exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks.

Fortunately, improvements to diesel fuel and diesel engines have reduced emissions of these hazardous air pollution emissions. These improvements have already resulted in a 75% reduction in particle emissions from diesel-powered trucks and other equipment (as compared to 2000 levels), and by 2020, when fully implemented, they will result in an 85% reduction (Office of Environmental Health and Hazards Assessment and American Lung Association of California 2002). These improvements are anticipated to continue into the foreseeable future. However, to be conservative, other than what is built into ARB's emissions factor model, EMFAC2011, none of these anticipated improvements are included in the health risk assessment prepared for the project, provided in Appendix G.

The first step of the health risk assessment is to characterize the project-related vehicle emissions. The WVLCSP Traffic Impact Analysis in Appendix L shows a daily trip rate of 221 two-axle trucks, 296 three-axle trucks, and 787 four-plus-axle trucks. Even though these trucks will probably be of various sizes, for the health risk assessment it was assumed that these trucks were all the type of truck that resulted in the greatest exhaust emissions and highest health risk levels (Appendix F).

Consistent with the Traffic Impact Analysis, operational trucks are assumed to operate 7 days per week, 52 weeks per year. These trucks operate in two modes: stationary idling and moving on and off the site. The emissions from the trucks while idling result in much higher concentrations of

hazardous air pollution emissions at nearby sensitive receptors than the emissions from the trucks while moving. This is because, while moving, the distance the truck is from the receptors is changing and the motion of the truck tends to disperse the exhaust. For this screening level assessment, on-road mobile emissions were modeled as a series of volume sources along the truck route specified within the Traffic Impact Analysis, in which all trucks would go up Locust Avenue and turn right on Jurupa Avenue. From there, about half of the trucks would go north on Cedar Avenue to the I-10 freeway, and the other half would go south on Cedar Avenue toward the San Bernardino County line.

The idling emissions were modeled as individual point sources at idling locations throughout the project site along the planned loading docks. While the idling times of the trucks are required by state and federal regulations to be no more than 5 minutes, it is possible that the trucks will stop at the loading dock and one or two other areas on site during a single delivery. Therefore, for the health risk assessment, the idling time per delivery was conservatively assumed to be triple the state and federal limit of 5 minutes, or 15 minutes per delivery. Since building wake effects (building downwash as buildings cause air turbulence) influences can significantly increase concentrations for receptors located downwind of the building close to the emissions source, the proposed new buildings were included with standard hi-cube warehouse heights.

The EMFAC2011 model was used for emission factors for diesel trucks both idling and operating to determine the total emissions of PM₁₀ from the project-related trucks. While PM₁₀ emissions from trucks include more than just diesel particulate matter, the health risk assessment conservatively assumes that all PM₁₀ is diesel particulate matter. The EMFAC2011 model includes assumptions of technological and regulatory changes that will reduce emission rates over time. However, the health risk assessment only allows for a single emission rate for the entire 70-year health risk evaluation period. Therefore, a median set of emission factors from the year 2020 was used to represent the long-term 70-year evaluation period. As shown in Table 4.2.2-6, the emissions factors for 2020 are conservatively higher than the average through 2040 and, based on the assumption that after 2040 the emissions from trucks would continue to be reduced, they are much higher than likely to actually occur (EMFAC2011 only provides emissions factors up through 2040).

Table 4.2.2-6. Emission Factors for Selected Operating Years

Fleet	Light Heavy-Duty (LHD1)		Medium Heavy Duty (MHD)		Heavy Heavy-Duty (HHD)	
	Idling (g/hr)	8 mph (g/mi)	Idling (g/hr)	8 mph (g/mi)	Idling (g/hr)	8 mph (g/mi)
2013 mix ¹	0.782	0.088	0.992	0.593	2.163	2.251
2020 mix ¹	0.781	0.062	0.840	0.345	0.516	0.322
2030 mix ¹	0.791	0.050	0.807	0.275	0.168	0.100
2040 mix ¹	0.799	0.046	0.800	0.266	0.116	0.084
2040 only ²	0.803	0.014	0.803	0.066	0.110	0.041
Average	0.791	0.052	0.848	0.309	0.615	0.560

Source: Appendix G, Health Risk Assessment.

¹ EMFAC2011 emission factors for the standard fleet mix of vehicles ranging from new to 45 years old.

² EMFAC2011 emission factors for only model year 2040 vehicles.

Conducting a health risk assessment that combines one conservative assumption with another can result in an assessment that overstates the health risk levels. 2020 was selected as a reasonable balance between using an overly conservative 2013 dataset (i.e., all anticipated truck emissions improvements over the next 70 years are ignored) and an overly optimistic 2040 dataset (representing a median date in the 70-year exposure period) but ignoring the higher emissions in the first two decades versus the later decades. Using 2020 values achieves a good balance of conservativeness without overstating the risk. Table 4.2.2-7 shows the development of the exhaust emission rates for the trucks while idling at the project buildings.

Receptors were placed at a grid approximately 4.7 by 4.1 kilometers to characterize the regional risk levels and at locations of all identified sensitive receptors. Three years of meteorological data for the Fontana area from SCAQMD were used to represent the atmospheric conditions at the project site (Appendix F). All of these emissions sources, building parameters, and receptor data were modeled using the AERMOD air dispersion model to produce concentrations at receptors of interest. These concentrations were then incorporated into the Hotspots Analysis Reporting Program model with the emissions rates shown in Table 4.2.2-7 to determine individual health risk levels. Appendix G includes the health risk assessment worksheets.

Table 4.2.2-7. Truck Activity and Diesel Particulate Emissions

Total Project ADT ¹	Vehicle Type	Fleet Percentage Breakdown	Total Trips per Day	% of Trucks That Are Diesel ²	Diesel Trucks per Day	Diesel Idle Exhaust gm/hr (on site) ³	Idle Time (min/trip) ⁴	Idle Exhaust Diesel PM ₁₀ (gm/day)
6,386	Passenger Car	79.6%	5,081	0.0%	0	0	0	0
	2 Axle ⁶	3.5%	220	20%	44	0.799	15	8.8
	3 Axle ⁶	4.6%	295	70%	207	0.133	15	6.9
	4+ Axle ⁷	12.3%	787	100%	787	0.117	15	23
Total Project Site Emissions								39

¹ Source: Appendix G. The ADT cited here represents the actual number of trips, and is not adjusted for passenger car equivalents.

² Source: URBEMIS2007 fleet diesel percentages.

³ Idling diesel exhaust emission factors from EMFAC2011 for fleet year 2020. This was used because a single emission rate is needed to represent changing emissions rates over the 70-year period of the health risk assessment.

⁴ It is assumed that each truck idles for 15 minutes per trip to account for stopping on entry, parking, and miscellaneous tasks.

⁵ 2-axle trucks are assumed to be light-heavy-duty (LHD2) trucks and 3-axle trucks are assumed to be medium-heavy-duty (MHDT or T6 public) trucks.

⁶ 4+-axle trucks are assumed to be heavy-heavy-duty (HHDT or T7 tractor) trucks.

ADT = average daily traffic

min/trip = minutes per trip

gm/day = grams per day

PM₁₀ = particulate matter less than 10 microns in size

gm/hr = grams per hour

Long-Term Microscale (CO Hot-Spot) Analysis

Vehicular trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the project vicinity. Localized air quality impacts would occur when

emissions from vehicular traffic increase in local areas as a result of the proposed project. The primary mobile source pollutant of local concern is CO, which is a direct function of vehicle idling time and, thus, traffic flow conditions. CO transport is extremely limited; it disperses rapidly with distance from the source under normal meteorological conditions. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels affecting local sensitive receptors (residents, schoolchildren, the elderly, hospital patients, etc.).

Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

Existing CO concentrations in the immediate project vicinity are not available. Ambient CO levels monitored at the Fontana Arrow Highway Station, the closest station with sufficient monitored CO data, showed a highest recorded 1-hour concentration of 2.7 parts per million (ppm) (CAAQS is 20 ppm) and a highest 8-hour concentration of 1.45 ppm (CAAQS is 9 ppm) during the past 3 years (see Table E of Appendix F).

The highest CO concentrations would normally occur during peak traffic hours; therefore, CO impacts calculated under peak traffic conditions represent a worst-case analysis. The project-related traffic impact analysis is provided in Appendix L. The impact on local CO levels was assessed with the ARB-approved CALINE4 air quality model, which allows microscale CO concentrations to be estimated along roadway corridors or near intersections (see Appendix F for the model output). This model is designed to identify localized concentrations of CO, often termed "hot spots." A brief discussion of input to the CALINE4 model follows. The analysis was performed for the worst-case wind angle and wind speed condition and is based upon the following assumptions:

- Selected modeling locations represent the intersections closest to the project site, with the highest project-related vehicle turning movements and the worst level of service deterioration.
- Twenty receptor locations with the possibility of extended outdoor exposure from 7 to 12 meters (approximately 23 to 39 feet) of the roadway centerline near intersections were modeled to determine CO concentrations, following the California Department of Transportation (Caltrans) CO modeling protocol.
- The calculations assume a meteorological condition of almost no wind (0.5 meters/second), a suburban topographical condition between the source and receptor, and a mixing height of 1,000 meters, representing a worst-case scenario for CO concentrations.
- CO concentrations are calculated for the 1-hour averaging period and then compared to the 1-hour standards. CO 8-hour averages are extrapolated using techniques outlined in the SCAQMD CEQA Air Quality Handbook (updated April 1993) and compared to the 8-hour standards; a persistence factor of 0.7 was used to predict the 8-hour concentration.
- Concentrations are given in parts per million at each of the receptor locations.
- The "at-grade" link option with speed adjusted based on average cruise speed and number of vehicles per lane per hour was used rather than the "intersection" link selection in the CALINE4 model. (Caltrans has suggested that the "intersection" link should not be used due to an inappropriate algorithm based on outdated vehicle distribution.) Emission factors from the EMFAC2011 model were used for the vehicle fleet.

- The highest levels of the second highest 1-hour and 8-hour CO concentrations monitored at the Fontana Arrow Highway Station in the past 3 years were used as background concentrations (2.2 ppm for the 1-hour CO and 1.4 ppm for the 8-hour CO), as specified in Appendix B of the Caltrans CO Protocol. The “background” concentrations were then added to the model results for future with and without the proposed project conditions.

Thresholds of Significance

Criteria for determining the significance of impacts related to air quality are based on criteria contained in Appendix G of the State CEQA Guidelines. The proposed project could have a significant impact on the environment if it would result in any of the following.

- AQ-1** Conflict with or obstruct implementation of the applicable air quality plan.
- AQ-2** Violate any air quality standard or contribute substantially to an existing or projected air quality violation.
- AQ-3** 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors).
- AQ-4** Expose sensitive receptors to substantial pollutant concentrations.
- AQ-5** Create objectionable odors affecting a substantial number of people.

Regional Criteria Pollutant Thresholds for Construction and Operational Emissions

In addition to the NAAQS and CAAQS, there are daily emissions thresholds for construction and operation of a proposed project in the SCAB. The SCAB is administered by SCAQMD, and guidelines and emissions thresholds established by the SCAQMD in its *CEQA Air Quality Handbook* (April 1993) are used in this analysis. It should be noted that the emission thresholds were established based on the attainment status of SCAB in regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety, these emission thresholds are regarded as conservative and would overstate an individual project's contribution to health risks.

Table 4.2.2-8 shows the CEQA significance thresholds that have been established for the SCAB.

Table 4.2.2-8. SCAQMD Significance Thresholds

Air Pollutant	Construction Phase	Operational Phase
ROCs	75 lbs/day	55 lbs/day
CO	550 lbs/day	550 lbs/day
NO _x	100 lbs/day	55 lbs/day
SO _x	150 lbs/day	150 lbs/day
PM ₁₀	150 lbs/day	150 lbs/day
PM _{2.5}	55 lbs/day	55 lbs/day

Source: South Coast Air Quality Management District 2011a.

Projects in the SCAB with construction- or operation-related emissions that exceed any of the emission thresholds are considered to be significant under CEQA.

Local Microscale Concentration Standards for Carbon Monoxide

The significance of localized project impacts under CEQA depends on whether ambient CO levels near the project site are above or below state and federal CO standards. If ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a state or federal standard, project emissions are considered significant if they increase 1-hour CO concentrations by 1.0 ppm or more or 8-hour CO concentrations by 0.45 ppm or more. The following are applicable local emission concentration standards for CO:

- 1-hour CO standard of 20.0 ppm (state) and 35 ppm (federal)
- 8-hour CO standard of 9.0 ppm (state) and 9 ppm (federal)

Thresholds for Localized Significance

SCAQMD published its *Final Localized Significance Threshold Methodology* in June 2003 (revised 2008), recommending that all air quality analyses include an assessment of both construction and operational impacts on the air quality of nearby sensitive receptors (South Coast Air Quality Management District 2008a). Localized Significance Thresholds (LSTs) represent the maximum emissions generated within a project site that are not expected to result in an exceedance of the NAAQS or CAAQS, as previously shown in Table 4.2.2-2. LSTs are based on the ambient concentrations of that pollutant within the project Source Receptor Area (SRA) and the distance to the nearest sensitive receptor. For this project, the appropriate SRA for the LST is the Central San Bernardino Valley area (Area 34).

In the case of CO and NO₂, if ambient levels are below the standards, a project is considered to have a significant impact if project emissions generated on site result in an exceedance of one or more of these standards. If ambient levels already exceed a state or federal standard, then project emissions are considered significant if they increase ambient concentrations by a measurable amount. This would apply to PM₁₀ and PM_{2.5}, both of which are nonattainment pollutants. For these two, the significance criteria are the pollutant concentration thresholds presented in SCAQMD Rules 403 and 1301. The Rule 403 threshold of 10.4 µg/m³ applies to construction emissions (and may apply to operational emissions at aggregate handling facilities). The Rule 1301 threshold of 2.5 µg/m³ applies to nonaggregate handling operational activities.

To avoid the need for every air quality analysis to perform air dispersion modeling, SCAQMD performed air dispersion modeling for a range of construction sites less than or equal to 5 acres in size and created look-up tables that correlate pollutant emissions rates with project size to screen out projects that are unlikely to generate enough emissions to result in a locally significant concentration of any criteria pollutant. These look-up tables can also be used as screening criteria for larger projects to determine whether or not dispersion modeling may be required.

The construction phase with the greatest daily on-site emissions is the grading phase, during which a variety of equipment could be used simultaneously. Based on the construction mix provided in Table 4.2.2-9, the proposed project would result in a maximum of 4 acres disturbed on any one day during the grading phase. Therefore, LSTs thresholds for a 4-acre site are applicable for the project.

Table 4.2.2-9. Equipment-Specific Grading Rates

Equipment Type	Acres per 8-hour day	Grading	
		Pieces of Equipment	Acres Disturbed
Crawler Tractor	0.5	2	1.0
Graders	0.5	1	0.5
Rubber-Tired Dozers	0.5	1	0.5
Scrapers	1.0	2	2.0
Tractors/Loaders/Backhoes	0.0	4	0.0
Total Acres Disturbed		4.0	
Source: CalEEMod User Guide Appendix A and project plans.			

The LST from a 4-acre construction site for receptors at 150 feet (the closest residence) include:

- 263 pounds per day (lbs/day) of NO_x
- 1,989 lbs/day of CO
- 33 lbs/day of PM₁₀
- 8.3 lbs/day of PM_{2.5}

For operational emissions, the localized significance for a project larger than 5 acres can be determined by performing the screening-level analysis before using the dispersion modeling because the screening-level analysis is more conservative. In addition, if no exceedance of the screening-level thresholds is identified, then the chance of the operational LST exceeding concentration standards is small. Therefore, for a conservative approach, the LST screening thresholds for 5 acres are used in this analysis for operational emissions. Since the project is not an aggregate handling facility, operational LSTs are assessed with SCAQMD screening thresholds.

The closest existing residential uses are approximately 150 feet from the project's eastern boundary across Locust Avenue and 250 feet from the project's southern boundary. There are residential uses to the north approximately 1,000 feet from the project's northern boundary. Using the LST for receptors at 150 feet from a 5-acre site for this project would result in a conservative analysis because project operational emissions would be emitted over an area much larger than a 5-acre site. Therefore, the following emissions thresholds apply during project operations:

- 297 lbs/day of NO_x
- 2,292 lbs/day of CO
- 9.9 lbs/day of PM₁₀
- 2.8 lbs/day of PM_{2.5}

Health Risk Assessment Thresholds of Significance

Both the state and federal governments have established health-based ambient air quality standards for seven air pollutants. For other air pollutants without defined significance standards, the definition of substantial pollutant concentrations varies. For hazardous air pollution, "substantial" is taken to mean that the individual cancer risk exceeds a threshold considered to be a prudent risk

management level. If BACT for Toxics has been applied, the individual cancer risk to the maximum exposed individual must not exceed 10 in 1 million in order for an impact to be determined not to be significant.

Airborne impacts are also derived from materials considered to be a nuisance for which there may not be associated standards. Odors or the deposition of large diameter dust particles outside the PM₁₀ size range would be included in this category.

The following limits for maximum individual cancer risk (MICR) and noncancer acute and chronic hazard index from project emissions of hazardous air pollution are considered appropriate for use in determining the health risk for projects in the SCAB:

- **MICR:** MICR is the estimated probability of a maximum exposed individual contracting cancer as a result of exposure to hazardous air pollution over a period of 70 years for residential locations. The MICR calculations include multipathway consideration, when applicable.

The cumulative increase in MICR that is the sum of the calculated MICR values for all hazardous air pollution emissions emitted from the project would be considered significant if it would result in an increased MICR greater than 10 in 1 million (1.0×10^{-5}) at any sensitive receptor location.

- **Chronic hazard index:** Chronic hazard index is the ratio of the estimated long-term level of exposure to hazardous air pollution for a potential maximum exposed individual to its chronic reference exposure level. The chronic hazard index calculations include multipathway consideration, when applicable.

The project would be considered significant if the cumulative increase in total chronic hazard index for any target organ system due to total emissions from the project would exceed 1.0 at any receptor location.

- **Acute hazard index:** Acute hazard index is the ratio of the estimated maximum 1-hour concentration of hazardous air pollution for a potential maximum exposed individual to its acute reference exposure level.

The project would be considered significant if the cumulative increase in total acute hazard index for any target organ system due to total emissions from the project would exceed 1.0 at any receptor location.

Project Design Features

The following air quality-related project design features, which include specific plan requirements and regulatory requirements, would prevent or reduce potentially significant impacts.

Specific Plan Requirement

SP-GG-4: Provide Electrical Loading Docks. Electrical outlets will be provided in loading dock areas to provide power for trucks when refrigeration is needed. This allows trucks with refrigerated cargo to keep their cargo cool without using their engines, minimizing idling time to reduce air emissions and use of fuel on site.

Regulatory Requirements

RR-AQ-1: Comply with South Coast Air Quality Management District (SCAQMD) Rule 401 – Visible Emissions. A person will not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than 3 minutes in any 1 hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the U.S. Bureau of Mines.

RR-AQ-2: Comply with SCAQMD Rule 402 – Nuisance. A person will not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

RR-AQ-3: Comply with SCAQMD Rule 403 – Fugitive Dust. This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust. Applicable dust suppression requirements from Rule 403 are summarized below.

- Nontoxic chemical soil stabilizers shall be applied according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Active sites shall be watered at least twice daily. (Locations where grading is to occur will be thoroughly watered prior to earthmoving.)
- All trucks hauling dirt, sand, soil, or other loose materials shall be covered, or at least 0.6 meter (2 feet) of freeboard (vertical space between the top of the load and top of the trailer) maintained in accordance with the requirements of California Vehicle Code Section 23114.
- Construction access roads shall be paved at least 30 meters (100 feet) onto the site from the main road.
- Traffic speeds on all unpaved roads shall be reduced to 15 miles per hour or less.

RR-AQ-4: Comply with SCAQMD Rule 1113 – Architectural Coatings. No person shall apply or solicit the application of any architectural coating within the SCAQMD with volatile organic compound (VOC) content in excess of the values specified in a table incorporated in the Rule. A list of low/no-VOC paints is provided at the following SCAQMD website: <http://www.aqmd.gov/prdas/brochures/paintguide.html>. All paints will be applied using either high volume low-pressure spray equipment or by hand application.

RR-AQ-5: Comply with SCAQMD Rule 1301 – General. This rule is intended to provide that preconstruction review requirements to ensure that new or relocated facilities do not interfere with progress in attainment of the National Ambient Air Quality Standards, while future economic growth within SCAQMD is not unnecessarily restricted. The specific air quality goal is to achieve no net increases from new or modified permitted sources of nonattainment air contaminants or their precursors. Rule 1301 also limits emission increases of ammonia and Ozone Depleting Compounds from new, modified or relocated facilities by requiring the use of Best Available Control Technology.

RR-AQ-6: Comply with Title 24 – Building Energy Conservation. The proposed project is required to comply with Title 24 of the California Code of Regulations established by the California Energy Commission regarding energy conservation standards.

Impacts and Mitigation

Impact AQ-1. Conflict with or obstruct implementation of the applicable air quality plan

An AQMP describes air pollution control strategies to be taken by a city, county, or region classified as a nonattainment area. The main purpose of an AQMP is to bring the area into compliance with federal and state air quality standards. CEQA requires that certain proposed projects be analyzed for consistency with the AQMP. Projects that are consistent with the regional population, housing, and employment forecasts identified by SCAG are considered to be consistent with the AQMP growth projections, because the forecast assumptions by SCAG forms the basis of the land use and transportation control portions of the AQMP. Additionally, because SCAG's regional growth forecasts are based upon, among other things, land uses designated in general plans, a project that is consistent with the land use designated in a general plan would also be consistent with the SCAG's regional forecast projections, and thus also with the AQMP growth projections.

The project site is currently designated as the Valley Trails Specific Plan, which was planned for residential and public uses, and includes the following land use designations: Residential Planned Community (R-PC; 3.0–6.4 dwelling units/acre), Multi-Family Residential (R-MF), Medium-Density Residential (R-M; 5.1–7.6 dwelling units/acre), Public Facilities (P-PF), and Recreational Facilities (P-R). The land uses proposed in the Valley Trails Specific Plan were previously determined to be consistent with SCAG's regional forecast projections that were used for the AQMP.

For a project to be consistent with the AQMP adopted by SCAQMD, the pollutants emitted from the project should not exceed the SCAQMD daily threshold or cause a significant impact on air quality, or the project's development intensity must already have been included in the AQMP projection. However, if feasible mitigation measures are implemented and shown to reduce the impact level from significant to less than significant, a project may be deemed consistent with the AQMP. The AQMP uses the assumptions and projections of local planning agencies to determine control strategies for regional compliance status.

Approval of the proposed project would involve General Plan and zoning amendments to change the planned land uses to light industrial (I-L) and open space (OS-PF and OS-NA). As described in Section 4.2.9, *Land Use and Planning*, the proposed project would be consistent with the applicable City and SCAG land use plans, policies, and regulations. Implementation of the WVLCSPP would facilitate the construction of up to seven warehouse distribution buildings (up to 3,473,690 square feet of building area) to accommodate the business growth in the project vicinity. Development of the WVLCSPP would replace development of the Valley Trails Specific Plan.

Although the proposed WVLCSPP would require General Plan and zoning amendments, the project would not result in a development density that is inconsistent with SCAG's growth forecasts. As shown in Table 4.2.11-1 in Section 4.2.11, *Population and Housing*, by the year 2035, SCAG estimates the population of the City of Fontana to be 259,100, an increase of 58,126 residents from the 2013 California Department of Finance estimated population of 200,974 residents. Similarly, SCAG estimates population in the County to be 2,750,000 in 2035, an increase of 673,726 residents from the 2013 estimate of 2,076,274.

SCAG anticipates a similar trend in employment projections, with employment in the City of Fontana to increase from 47,600 jobs to 69,000 jobs between 2008 and 2035, which is an increase of 21,400 jobs. Of these employment opportunities, 15,300 are anticipated to occur between 2020 and 2035 (shown in Table 4.2.11-1). The County's projected increase in employment is anticipated to be similar, as 358,000 job opportunities are anticipated to be generated in the County between 2008 and 2035. Of this, 249,000 employment opportunities are anticipated to be generated between 2020 and 2035.

As described in Section 4.2.11, *Population and Housing*, 2,907 jobs are anticipated to be generated from the proposed project at buildout, and the City and County both have moderately high unemployment rates (10.4% and 10%, respectively). Even with an improved economy and lower unemployment rate, the labor force within the region would provide a pool of employees that could adequately meet the project's employment needs.

The 2,907 jobs generated by the proposed project would constitute approximately 13.6% of the anticipated job growth in the City and 0.8% of the projected job growth in the County between 2008 and 2035, which does not exceed SCAG's growth projections. The job opportunities provided by the project would serve to meet an existing demand in the City and County, which is already accounted for by SCAG for the region. As such, the General Plan amendment associated with the project would only serve to allow for the County's existing demand to be met at the project location within the City (i.e., the project site), and would not induce growth beyond what was anticipated in SCAG's growth forecasts. Projects that are consistent with the forecasts identified by SCAG are considered to be consistent with the AQMP. In addition, the General Plan land use designations that would be implemented by the project would be included in SCAQMD's updated AQMP, which is anticipated to occur in 2015 (per the 3-year AQMP update cycle). Therefore, the proposed project would not conflict with or obstruct implementation of the AQMP, and this impact would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact AQ-2. Violate any air quality standard or contribute substantially to an existing or projected air quality violation

Construction

Buildout of the proposed project would involve development of seven warehouse distribution buildings and the associated infrastructure, including roadways, water and sewer connections, an off-site sewer lift station, and on-site landscaping. Pollutant emissions associated with project construction would be generated from the following construction activities: site preparation, grading, building construction, architectural coatings, paving, construction workers traveling to and from project site, and delivery and hauling of construction supplies to, and debris from, the project site. These construction activities would temporarily create emissions of dust, fumes, equipment exhaust, and other air contaminants. The amount of emissions generated on a daily basis would vary, depending on the intensity and types of construction activities occurring simultaneously at the time.

Construction emissions are considered short term and temporary but have the potential to represent a significant impact with respect to air quality. Particulate matter (i.e., PM₁₀ and PM_{2.5}) is among the pollutants of greatest localized concern with respect to construction activities. Particulate emissions from construction activities can lead to adverse health effects and nuisance concerns, such as reduced visibility and soiling of exposed surfaces. Particulate emissions can result from a variety of construction activities, including excavation, grading, vehicle travel on paved and unpaved surfaces, and vehicle and equipment exhaust. Construction emissions of PM can vary greatly depending on the level of activity, the specific operations taking place, the number and types of equipment operated, local soil conditions, weather conditions, and the amount of earth disturbance.

Emissions of ozone precursors ROG and NO_x are primarily generated from mobile sources and vary as a function of vehicle trips per day associated with delivery of construction materials, vendor trips, and worker commute trips, and the types and number of heavy-duty, off-road equipment used and the intensity and frequency of their operation. A large portion of construction-related ROG emissions also result from the application of asphalt and architectural coatings and vary depending on the amount of paving and coatings applied each day.

Table 4.2.2-10 lists the emissions during project construction, without mitigation and conservatively assuming that the building construction and architectural coatings phases overlap. All pollutant emissions shown in Table 4.2.2-10 are from the CalEEMod output tables listed as “Unmitigated Construction” (see Appendix F), except for the fugitive PM₁₀ and PM_{2.5} emissions rates, which are from the CalEEMod output tables listed as “Mitigated Construction.” This is because the only fugitive PM₁₀ and PM_{2.5} “mitigation measures” that have been applied to the CalEEMod analysis are the construction emissions control measures required by SCAQMD Rule 403. Table 4.2.2-10 shows the combination of the on- and off-site emissions.

Table 4.2.2-10. Short-Term Project Construction Emissions—without Mitigation

Construction Phase	Total Regional Pollutant Emissions, lbs/day							
	ROG	NO _x	CO	SO ₂	Fugitive PM ₁₀	Exhaust PM ₁₀	Fugitive PM _{2.5}	Exhaust PM _{2.5}
Site Preparation	6.8	60	46	0.042	7.2	3.3	3.9	3
Grading	8.1	85	55	0.065	3.6	4.1	1.5	3.8
Building Construction	22	150	310	0.48	27	5.3	7.4	4.9
Architectural Coating	34	6.1	38	0.06	4.5	0.32	1.2	0.31
Paving	4.8	26	16	0.024	0.17	1.5	0.045	1.3
Peak Daily	55	160	350	0.54		37		14
SCAQMD Thresholds	75	100	550	150		150		55
Significant Emissions?	No	Yes	No	No		No		No

Source: Appendix F.

Note: Peak daily emissions are based on a worst-case assumption that the Building Construction and Architectural Coating phases would overlap. CalEEMod v2013.2.1 does not calculate the off-site worker ROG emissions correctly; the off-site worker ROG emissions reported above are from the CalEEMod v2011.1.1 analysis.

Table 4.2.2-11 lists the construction emissions that would occur under the conservative scenario of the entire site built in one phase. However, the project would more likely be built in multiple phases

with timing of phases depending on market conditions. Under this conservative construction scenario and with implementation of all feasible mitigation measures, specifically the use of only EPA Tier 3¹ construction equipment, emission reductions would be minimal. As shown in Table 4.2.2-11, with implementation of feasible mitigation, project design features, and regulatory requirements, the NO_x emissions during the building construction phase would exceed the SCAQMD daily threshold due to the large number of haul trucks. As a result, construction-related NO_x impacts would be significant.

Table 4.2.2-11. Short-Term Project Construction Emissions—with Mitigation

Construction Phase	Total Regional Pollutant Emissions, lbs/day							
	ROG	NO _x	CO	SO ₂	Fugitive PM ₁₀	Exhaust PM ₁₀	Fugitive PM _{2.5}	Exhaust PM _{2.5}
Site Preparation	4.1	20	25	0.042	7.2	0.96	3.9	0.96
Grading	5.3	30	40	0.065	3.6	1.3	1.5	1.3
Building Construction	20	130	310	0.48	27	3.8	7.4	3.6
Architectural Coating	33	6.1	38	0.06	4.5	0.32	1.2	0.31
Paving	3.0	11	18	0.024	0.17	0.6	0.045	0.6
Peak Daily	54	140	350	0.54		36		13
SCAQMD Thresholds	75	100	550	150		150		55
Significant Emissions?	No	Yes	No	No		No		No

Source: Appendix F.

Note: Peak daily emissions are based on a worst-case assumption that the Building Construction and Architectural Coating phases would overlap. CalEEMod v2013.2.1 does not calculate the off-site worker ROG emissions correctly; the off-site worker ROG emissions reported above are from the CalEEMod v2011.1.1 analysis.

Fugitive Dust

Fugitive dust emissions are generally associated with (1) land clearing and exposure of soils to the air and wind, and (2) cut-and-fill grading operations. Dust generated during construction varies substantially on a project-by-project basis, depending on daily levels of activity, the specific operations, and weather conditions at the time of construction. It was assumed for the air quality construction analysis (Appendix F) that soil would be balanced on site to minimize the need for import or export of soil during project construction².

Construction emissions can vary greatly depending on the level of activity, the specific operations taking place, the equipment being operated, local soils, weather conditions, and other factors. The proposed project would be required to comply with SCAQMD Rules 402 and 403 (listed under *Regulatory Requirements* above) to control fugitive dust. Specifically, Rule 403 requires that fugitive

¹ Tier 3 engine means a truck engine subject to the Tier 3 emission standards listed in 40 CFR §89.112(a) as specified by EPA.

² Should site remediation and/or soil excavation be required as part of implementation of Mitigation Measure HAZ-1, additional analysis of the air quality and greenhouse gas emissions associated with such site remediation and/or soil excavation will be required. While Mitigation Measure HAZ-1 sets performance standards for safety in relation to hazardous materials, such air quality and greenhouse gas emissions analysis cannot be undertaken at this time because the actual need for remediation and specific methods to accomplish site remediation would be determined as part of a Phase II Environmental Site Assessment undertaken prior to approval of design review.

dust be controlled with BACT so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. Applicable dust suppression requirements from Rule 403 are summarized below.

- Nontoxic chemical soil stabilizers shall be applied according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Active sites shall be watered at least twice daily. (Locations where grading is to occur will be thoroughly watered prior to earthmoving.)
- All trucks hauling dirt, sand, soil, or other loose materials shall be covered, or at least 0.6 meter (2 feet) of freeboard (vertical space between the top of the load and top of the trailer) maintained in accordance with the requirements of CVC Section 23114.
- Construction access roads shall be paved at least 30 meters (100 feet) onto the site from the main road.
- Traffic speeds on all unpaved roads shall be reduced to 15 mph or less.

Implementation of these dust suppression techniques reduces fugitive dust generation (and thus PM₁₀). Compliance with AQMD rules would reduce impacts on nearby sensitive receptors. Tables 4.2.2-10 and 4.2.2-11 list total construction emissions (i.e., fugitive-dust emissions and construction-equipment exhausts) that have incorporated all required control measures to reduce PM₁₀ emissions from construction. Both Tables 4.2.2-10 and 4.2.2-11 show that daily total construction PM₁₀ and PM_{2.5} emissions with standard control measures would be below the daily thresholds established by SCAQMD. As a result, impacts related to fugitive dust would be less than significant.

Architectural Coatings

Architectural coatings contain VOCs that are similar to ROCs and are part of the O₃ precursors. The project would use tilt-up prefabricated concrete panels to construct the buildings, which require very little architectural coating. Compliance with SCAQMD Rule 1113 (listed under *Regulatory Requirements* above) on the use of architectural coatings would minimize emissions. As a result, significant emissions of VOCs and ROC would not occur, and impacts would be less than significant.

Naturally Occurring Asbestos

The proposed project is in San Bernardino County, which is not among the counties that are found to have serpentine and ultramafic rock—or rock rich in dark, ferromagnesian minerals and iron—in their soils. Therefore, the potential risk for naturally occurring asbestos during project construction is small and less than significant.

Construction Impacts Significance

As shown in Table 4.2.2-10, the unmitigated peak daily construction emissions are all under the SCAQMD thresholds of significance, except for NO_x, which is generated from diesel engine exhaust and primarily from the large number of haul trucks planned for use by the project. With feasible mitigation, NO_x emissions can be reduced, but not below SCAQMD's NO_x threshold of 100 lbs/day. Therefore, this impact would be significant; implementation of **Regulatory Requirements RR-AQ-1** through **RR-AQ-5** and **Mitigation Measures AQ-1** through **AQ-9** would reduce but not eliminate significant and unavoidable impacts related to NO_x emissions.

Operation

Long-term air pollutant emission impacts are those associated with stationary sources and mobile sources involving any project-related changes, and are shown in Table 4.2.2-12. Area sources include architectural coatings, consumer products, and landscaping maintenance. Energy sources include electricity for lighting. Mobile sources include workers commuting and trucks idling and hauling material to and from the warehouse buildings. Forklift and transport refrigeration units (TRU) sources include emissions from compressed natural gas (CNG)-fueled forklifts and refrigeration sources. Based on trip generation factors, as described in the Traffic Impact Analysis in Appendix L, long-term operational emissions associated with the proposed project were calculated with the CalEEMod model³, which includes car and truck idling emissions; these are shown in Table 4.2.2-12. Because the project is an industrial warehousing distribution center, it is expected that the haul trucks operating from it will travel much farther than the default distance of 9.3 miles. Based on the location of the proposed project and anticipated truck haul destinations, an average truck haul distance of 40 miles was used. Table 4.2.2-12 shows that ROG, NO_x, and CO (criteria pollutants) emissions, as a result of the project, would exceed SCAQMD daily emission thresholds, which would result in a significant impact.

Table 4.2.2-12. Long-Term Regional Project Operational Emissions

Source	Pollutant Emissions, lbs/day					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area Sources	120	0.0059	0.61	0.00004	0.0022	0.0022
Energy Sources	0.64	5.9	4.9	0.035	0.45	0.45
Mobile Sources	64	430	940	2.0	130	40
Forklift & TRU Sources	5.9	39	26	0.039	3.4	3.4
Total Project Emissions	191	475	972	2.1	134	44
SCAQMD Thresholds	55	55	550	150	150	55
Significant?	Yes	Yes	Yes	No	No	No

Source: Appendix F.

CO = carbon monoxide

lbs/day = pounds per day

NO_x = nitrogen oxides

PM₁₀ = particulate matter 10 microns or less in diameter

PM_{2.5} = particulate matter 2.5 microns or less in diameter

ROG = reactive organic gases

SO_x = sulfur oxides

TRU = transport refrigeration unit

As shown in Table 4.2.2-12, these project-related operational emissions are almost entirely from mobile sources. Table 4.2.2-13 shows the daily vehicle trip rates from the Traffic Impact Analysis (Appendix L) and the approximate percentage of the emissions from each vehicle category (based on the EMFAC2011 emissions factors built-in to CalEEMod).

³ Refer to the CalEEMod User's Guide (<http://caleemod.com/>), Sections 4.4 through 4.9 for information on how CalEEMod models these emissions sources.

Table 4.2.2-13. Project-Related Vehicle Emissions Percentages

Vehicle Category	Daily Trips	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Cars	5,081	58.7%	15.1%	81.9%	55.6%	13.1%	13.1%
2-Axle Trucks	220	1.7%	0.6%	2.8%	3.2%	0.3%	0.3%
3-Axle Trucks	295	4.4%	3.5%	4.3%	5.1%	1.2%	1.2%
4+-Axle Trucks	787	35.2%	80.7%	11.1%	36.1%	85.5%	85.3%

Source: Appendix F.

CO = carbon monoxide

NO_x = nitrogen oxides

PM₁₀ = particulate matter 10 microns or less in diameter

PM_{2.5} = particulate matter 2.5 microns or less in diameter

ROG = reactive organic gases

SO_x = sulfur oxides

Even though the large haul trucks only compose about 12% of the project vehicles, their exhaust composes about 80 to 85% of the overall mobile source emissions (NO_x, PM₁₀, and PM_{2.5}). It should be noted that this operational emissions evaluation is based on a conservative analysis year of 2014, which is the most conservative from an emissions generation standpoint because air quality emissions from vehicles would decrease over time due to implementation of regulatory requirements and vehicle fleet turnover. For example, EPA has developed the Smartway program that provides mechanisms to improve fuel economy of haul trucks. The Smartway improvements would be required by 2017 and could accomplish a 17.9% improvement in fuel economy and a 44.6% reduction in NO_x emissions from mobile sources, which reduces NO_x emissions from 440 lbs/day to 244 lbs/day. However, emissions would continue to exceed the threshold of 55 lbs/day and **Mitigation Measures AQ-9 through AQ-14**, including **Mitigation Measure AQ-11** for incorporation of Smartway features, are being included to reduce impacts. As a result, these long-term regional project operation emissions would be significant and unavoidable with implementation of mitigation.

The proposed project would develop warehouse buildings that may utilize forklifts and other machinery that generate emissions. The default emissions shown in Table 4.2.2-12 include 4 CNG-fueled forklifts that may be used during operation of the project. However, the project would be designed to provide for both CNG and electric-powered forklifts and/or other interior vehicles, as described in **Mitigation Measure AQ-14**. The default assumption that includes four CNG-fueled forklifts is conservative, and likely overstates emissions from forklift uses.

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category g include lawnmowers, shredders/grinders, blowers, trimmers, chainsaws, and hedge trimmers used to maintain the landscaping of the project. The emissions associated with landscape maintenance equipment were calculated based on assumptions provided in the CalEEMod model and are included in Tables 4.2.2-11 and 4.2.4-12.

Because the use of refrigerants is dependent on the specific businesses that would ultimately occupy the project site, details regarding refrigerants to be used on the project site are unknown at this time. Based on information from the industrial real estate broker, Lee & Associates, of the 1,058 available industrial building spaces, over 100,000 square feet in size, that Lee & Associates is

tracking, only five are identified as being climate controlled (J. Smith pers. comm. October 13, 2014). Recognizing that tenants might install climate-controlled warehouse space after leasing a building, Lee & Associates estimates that no more than 2% of the warehouse buildings would install climate-controlled storage space, which would typically encompass 10 to 20% of total warehouse area in those buildings. To provide a worst-case analysis, it was assumed that 5% of trucks serving the project site and up to 5% of the warehouse area within the site would be climate controlled.

In addition, as provided by **Specific Plan Requirement SP-GG-4** electrical outlets will be provided in loading dock areas to provide power for trucks when refrigeration is needed. This allows trucks with refrigerated cargo to keep their cargo cool without using their engines, minimizing idling time to reduce air emissions and use of fuel onsite. Additionally, perfluorocarbons and sulfur hexafluoride are typically used in industrial applications, none of which would be used on the project site. Therefore, it is not anticipated that the project would contribute significant emissions of these additional chemicals.

As listed above, the project has included specific plan requirements to reduce operational emissions from the project. However, because the majority of project-related emissions would be from large haul trucks, the only mitigation to substantially reduce the large haul truck emissions below thresholds (beyond compliance with new regulations) is to reduce the number of operational truck trips or amount of diesel fuel burned, either by reducing the distance traveled or improving fuel economy. It would be inconsistent with the project's objectives as a warehouse distribution center to place restrictions on the number of operational truck trips or the distance trucks could travel to serve the future uses of the warehousing center. Placing such restrictions on warehouses within the WVLCSP would render the project uncompetitive with warehouse complexes elsewhere in Fontana and in the adjacent communities of Ontario, Rancho Cucamonga, and Rialto that would have no restrictions on the number of operational truck trips or the distance trucks could travel.

Improving the fuel economy of the large haul trucks is feasible; however, neither the owners nor operators of businesses within the project site would likely own the large trucks that service the site. Therefore, impacts resulting from these long-term operating emissions related to truck trips would be significant and unavoidable. Compliance with existing regulatory requirements and implementation of **Regulatory Requirement RR-AQ-6** and **Mitigation Measures AQ-9** through **AQ-14** would reduce the operational air quality impacts, but not eliminate the significant and unavoidable impacts.

Operational Impacts Significance

As shown in Table 4.2.2-12, the unmitigated peak long-term operational emissions would exceed SCAQMD thresholds of significance for ROG and NO_x, which would be generated from diesel engine exhaust and primarily from the large number of haul trucks planned for use by the project, and CO. Mitigation for operational impacts is therefore required.

Specific Plan Requirement and Regulatory Requirements

The applicant shall implement the following specific plan requirement and regulatory requirements, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **SP-GG-4:** Provide Electrical Loading Docks.
- **RR-AQ-1:** Comply with SCAQMD Rule 401 – Visible Emissions.
- **RR-AQ-2:** Comply with SCAQMD Rule 402 – Nuisance.

- **RR-AQ-3:** Comply with SCAQMD Rule 403 – Fugitive Dust.
- **RR-AQ-4:** Comply with SCAQMD Rule 1113 – Architectural Coatings.
- **RR-AQ-5:** Comply with Rule 1301 – General.
- **RR-AQ-6:** Comply with Title 24 – Building Energy Conservation.

Mitigation Measures

Mitigation Measure AQ-1: Incorporate Dust Suppression Measures. The Construction Contractor will ensure that the following dust suppression measures in the SCAQMD CEQA Air Quality Handbook will be implemented to reduce the project's emissions:

- Revegetate disturbed areas as quickly as possible.
- Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph.
- Sweep all streets once per day if visible soil materials are carried to adjacent streets (recommend water sweepers with reclaimed water).
- Install "shaker plates" prior to construction activity where vehicles enter and exit unpaved roads onto paved roads, or wash trucks and any equipment prior to leaving the site.
- Pave, water, or chemically stabilize all on-site roads as soon as feasible.
- Minimize at all times the area disturbed by clearing, grading, earthmoving, or excavation operations.

Mitigation Measure AQ-2: Utilize Tier 3 Construction Equipment. The Construction Contractor will use off-road diesel construction equipment that complies with EPA Tier 3 emissions standards during all construction phases and will ensure that all construction equipment be tuned and maintained in accordance with the manufacturer's specifications.

Mitigation Measure AQ-3: Use Electricity Rather than Internal Combustion Engines during Construction. The Construction Contractor will require by contract specifications that construction operations rely on the electricity infrastructure surrounding the construction site rather than electrical generators powered by internal combustion engines to the extent commercially available.

Mitigation Measure AQ-4: Use Alternative Fueled Technology during Construction. The Construction Contractor will require the use of alternative fueled, engine retrofit technology, after-treatment products (e.g., diesel oxidation catalysts, diesel particulate filters), and/or other options as they become available, including all off-road and portable diesel-powered equipment.

Mitigation Measure AQ-5: Require Proper Maintenance of Construction Equipment. The Construction Contractor will require that construction equipment be maintained in good operational condition so as to reduce emissions. The construction contractor shall ensure that all construction equipment is being properly serviced and maintained per the manufacturers' specifications. Maintenance records shall be available at the construction site for City verification.

Mitigation Measure AQ-6: Submit Construction Plans. Prior to the issuance of any grading permits, the applicant and/or building operators shall submit construction plans and a construction vehicle management plan to the City of Fontana denoting the proposed schedule and projected equipment use. The construction vehicle management plan will include such things as: specifying

idling time requirements; requiring hour meters on equipment; and requiring documentation of the serial number, horsepower, age, and fuel of all on-site equipment. The plan will include that California state law requires equipment fleets to limit idling to no more than 5 minutes. Construction Contractors shall provide evidence that low-emission mobile construction equipment will be utilized, or that its use was investigated and found to be infeasible for the project. Contractors shall also conform to any construction measures imposed by the SCAQMD as well as City of Fontana Community Development Department Planning Staff.

Mitigation Measure AQ-7: Require Construction Equipment to Turn Off When Not in Use. The Construction Contractor will require by contract specifications that construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, will be turned off when not in use for more than 5 minutes.

Mitigation Measure AQ-8: Encourage Ridesharing and Transit Incentives. The Building Operator for each building within the WVLCSP will support and encourage ridesharing and transit incentives for the construction crew by providing crews with the needed resources to organize rideshares, through such means as bulletin boards or email announcements. The Construction Contractor will also fully or partially subsidize transit fares or passes for the construction crew members who can feasibly use transit.

Mitigation Measure AQ-9: Request Construction Contractors and Building Operators to Use Particulate Matter Traps on All On-road Heavy-Duty Diesel Trucks. Construction Contractors and building operators shall ensure (by contract specifications) that on-road heavy-duty diesel trucks with a gross vehicle weight rating greater than 14,000 pounds will have a 2010 model year engine or newer or will be equipped with a particulate matter trap, as available.

Mitigation Measure AQ-10: Require Operational Equipment to Turn Off When Not in Use. Building operators shall ensure (by contract specifications) that equipment, including heavy-duty equipment, motor vehicles, and portable equipment, will be turned off when not in use for more than 5 minutes. Truck idling shall not exceed 5 minutes in time. All facilities will post signs requiring that trucks shall not be left idling for more than 5 minutes pursuant to Title 13 of the California Code of Regulations, Section 2485, which limits idle times to not more than 5 minutes. Nighttime truck idling (between the hours of 10:00 p.m. and 7:00 a.m. or as specified by the City) will not be permitted.

Mitigation Measure AQ-11: Incorporate EPA Smartway Features. The City will require operators of the project to ensure that haul trucks incorporate EPA Smartway features, as required by ARB. Project operators will maintain a daily log of incoming and outgoing haul trucks that are fitted with the combination of aerodynamic kits and low rolling resistance tires to reduce fuel consumption.

Mitigation Measure AQ-12: Incorporate Energy Efficiency in Vendor Trucks. The City will require operators of the proposed facilities to encourage the vendor trucks to incorporate energy efficiency improvement features through the Carl Moyer Program—including truck modernization, retrofits, and/or aerodynamic kits and low rolling resistance tires—to reduce fuel consumption.

Mitigation Measure AQ-13: Incorporate Electric Vehicle Charging Stations and Carpool Parking. The project will be designed to incorporate electric vehicle charging stations and five carpool parking spaces at each building for employees and the public to use.

Mitigation Measure AQ-14: Provide Electric Interior Vehicles. All buildings will be designed to provide infrastructure to support use of electric-powered forklifts and/or other interior vehicles.

Residual Impacts

Construction

Implementation of **Specific Plan Requirement SP-GG-4, Regulatory Requirements RR-AQ-1 through RR-AQ-5, and Mitigation Measures AQ-1 through AQ-9** would reduce but not eliminate significant and unavoidable impacts related to NO_x, ROG, and CO emissions. Therefore, construction emissions would result in a significant and unavoidable impact.

Operation

With implementation of **Specific Plan Requirement SP-GG-4, Regulatory Requirement AQ-6, and Mitigation Measures AQ-9 through AQ-14**, operational air quality impacts would be reduced, but nothing less than a reduction of operational truck trips (that would be inconsistent with the project description and objectives) would eliminate the significant and unavoidable impacts.

Health Effects of Significant Unavoidable Impacts Related to NO_x, ROG, and CO Emissions

The May 27, 2014 Fifth Appellate District court decision *Sierra Club et. al. v. County of Fresno et. al.* concludes that an EIR should disclose and evaluate the public health consequences associated with increasing air pollutants. As discussed in *Environmental Setting*, above, all criteria pollutants generated by the project would be associated with some form of health risk (e.g., asthma, asphyxiation). Adverse health effects induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, the number and character of exposed individual [e.g., age, gender]). In particular, ozone precursors (ROG and NO_x) affect air quality on a regional scale. Health effects related to ozone are therefore the product of emissions generated by numerous sources throughout a region. Existing models have limited sensitivity to small changes in criteria pollutant concentrations, and, as such, translating project-generated criteria pollutants to specific health effects or additional days of nonattainment would produce meaningless results. In other words, minor increases in regional air pollution from project-generated ROG, and NO_x, and CO would have nominal or negligible impacts on human health.⁴

Accordingly, consistent with the current state-of-practice and published guidance by CAPCOA (2009), OEHHA (2003), and ARB (2000), the analysis focuses only on those pollutants with the greatest potential to result in a significant, material impact on human health, which are (1) DPM⁵ (DPM is a TAC and is discussed below in the context of cancer risk), (2) locally concentrated CO (i.e., CO hot-spots, discussed below)⁶, and (3) naturally occurring asbestos (discussed above).

⁴ As an example, the Bay Area Air Quality Management District's Multi-Pollutant Evaluation Method requires a 3 to 5% increase in regional ozone precursors to produce a material change in modeled human health impacts. Based on 2008 ROG and NO_x emissions in the Bay Area, a 3 to 5% increases equates to over 20,000 pounds per day of ROG and NO_x. While this example is specific to the Bay Area, similar model limitations would be observed in the SCAB.

⁵ DPM is the primary TAC of concern for mobile sources—of all controlled TACs, emissions of DPM are estimated to be responsible for about 70% of the total ambient TAC risk (California Air Resources Board 2000). Given the risks associated with DPM, tools and factors for evaluating human health impacts from project-generated DPM have been developed and are readily available. Conversely, tools and techniques for assessing project-specific health outcomes as a result of exposure to other TACs (e.g., benzene) remain limited. These limitations impede the ability to evaluate and precisely quantify potential public health risks posed by TAC exposure.

⁶ While SO₂ and lead may also concentrate locally, the project would not represent a significant source of these pollutants. Accordingly, these emissions are not discussed or evaluated further.

Impact AQ-3. 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)

The project would contribute criteria pollutants to the area during temporary project construction. A number of individual projects in the area may be under construction simultaneously with the proposed project. Depending on construction schedules and actual implementation of projects in the area, generation of fugitive dust and pollutant emissions during construction could result in substantial short-term increases in air pollutants. This would be a contribution to short-term cumulative air quality impacts.

Currently, the SCAB is in nonattainment for PM₁₀, PM_{2.5}, and O₃. Construction of the proposed project, in conjunction with other planned developments within the cumulative study area, would contribute to the existing nonattainment status. Therefore, the proposed project would exacerbate nonattainment of air quality standards within SCAB and contribute to adverse cumulative air quality impacts.

The Traffic Impact Study included vehicular trips from all present and future projects in the project vicinity (Appendix L). The CO hot spot concentrations calculated at these intersections include the cumulative traffic effect. Based on Tables 4.2.2-17 through 4.2.2-19 provided later in this EIR section, 1-hour and 8-hour CO concentrations at nearby intersections would not exceed federal and state standards and no significant cumulative CO impacts would occur. As the project would contribute at most a 0.1 ppm increase, project operations are not expected to result in significant pollutant emissions, and they would not contribute cumulatively to increases in long-term area emissions.

Cumulative Health Risk Assessment

OEHHA recommends the 70-year exposure duration be used for determining residential cancer risks. Lifetime or 70-year exposure is the historical benchmark for comparing facility impacts on receptors and for evaluating the effectiveness of air pollution control measures. Although it is not likely that most people will remain at a single residence for 70 years, it is common that people will spend their entire lives in a major urban area. While residing in urban areas, it is very possible to be exposed to the emissions of another facility at the next residence. In order to help ensure that people do not accumulate an excess unacceptable cancer risk from cumulative exposure to stationary facilities at multiple residences, OEHHA recommends the 70-year exposure duration for risk management decisions. Exposure durations of 9 years and 30 years are optionally included as supplemental information to show the range of cancer risk based on more typical residency periods.

SCAQMD does not provide a threshold to determine if existing sources plus the project and reasonably foreseeable sources would result in a significant cumulative TAC impact. The current *Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act* (AB2588), last revised in 2011, does not provide a cumulative threshold for TAC emissions (South Coast Air Quality Management District 2011b). In practice, SCAQMD has not recommended preparing a cumulative TAC impact assessment that inventories existing and

probable future TAC sources to determine if a cumulative impact exists, but has documented⁷ that the ambient (existing) carcinogenic health risk in the project area is approximately 800 in a million.

As described in more detail in the Impact AQ-4 discussion, project TAC emissions would contribute no more than 1.5 in a million, well under the 10 in a million project threshold. As stated, this does not take into consideration the improvements to diesel engines and resulting 75% reduction in particle emissions from diesel-powered trucks and other equipment (as compared to 2000 levels), or future reductions of 85% total reductions by 2020. Based upon the air dispersion modeling and additional information, the project would add 0.19% to the overall ambient cancer risk level under the worst-case scenario. As a result, the project has a less-than-significant individual impact and would not make a cumulatively considerable contribution to a regional significant cumulative impact because it does not exceed the threshold. Therefore, the project's health risk from TACs is less than significant.

Specific Plan Requirement and Regulatory Requirements

The applicant shall implement the following specific plan requirement and regulatory requirements, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **SP-GG-4:** Provide Electrical Loading Docks.
- **RR-AQ-1:** Comply with SCAQMD Rule 401 – Visible Emissions.
- **RR-AQ-2:** Comply with SCAQMD Rule 402 – Nuisance.
- **RR-AQ-3:** Comply with SCAQMD Rule 403 – Fugitive Dust.
- **RR-AQ-4:** Comply with SCAQMD Rule 1113 – Architectural Coatings.
- **RR-AQ-5:** Comply with SCAQMD Rule 1301 – General.
- **RR-AQ-6:** Comply with Title 24 – Building Energy Conservation.

Mitigation Measures

Implement **Mitigation Measures AQ-1** through **AQ-14** to reduce short-term and long-term area source emissions.

Residual Impacts

The project would have no cumulative health risk. However, impacts related to pollutant emissions from project operations would be significant after implementation of **Specific Plan Requirement SP-GG-4**, **Regulatory Requirements RR-AQ-1** through **RR-AQ-6**, and **Mitigation Measures AQ-1** through **AQ-14**, which would reduce impacts but not to a less-than-significant level. Therefore, the project would result in significant and unavoidable operational air quality impacts.

⁷The Multiple Air Toxics Exposure Study III (MATES III), September 2008, is a monitoring and evaluation study conducted in the SCAB. The study is a follow-up to previous air toxics studies in the SCAB and is part of the SCAQMD Governing Board's 2003-04 Environmental Justice Work Plan. The study focuses on the carcinogenic risk from exposure to air toxics. The study found that carcinogenic risk from air toxics in the SCAB, based on the average concentrations at the study monitoring sites, is about 1,200 per million (South Coast Air Quality Management District 2008b).

Impact AQ-4. Expose sensitive receptors to substantial pollutant concentrations***Localized Significance Thresholds (LST)***

For this analysis, LSTs were considered to determine pollutant concentration exposure on sensitive receptors. The LST methodology requires that PM₁₀ and PM_{2.5} emissions be evaluated at sensitive receptors because the averaging period for the state standard is 24 hours and because, per SCAQMD's definition, an individual could remain at a sensitive receptor location for the full 24 hours. The LST methodology also requires that for pollutants with standards based on shorter averaging periods, such as NO₂ and CO, emissions should be evaluated at industrial and commercial receptors because it is reasonable to assume that a worker at these sites could be present for periods of 1 to 8 hours. VOC does not have an ambient air quality standard and is, therefore, not addressed in the LST methodology. Off-site mobile emissions are not included in the LST evaluation, in accordance with LST methodology.

Construction

As shown in Table 4.2.2-10, the construction phase with the greatest daily emissions is the building construction phase during which the proposed project would result in a maximum of 4 acres disturbed on any 1 day during the grading as detailed in Table 4.2.2-9. Therefore, LSTs for a 4-acre site are applicable for the project. Table 4.2.2-14 shows that the emissions of these pollutants on the peak day of grading would not result in concentrations of pollutants at nearby residences or other sensitive receptors that are at or above the SCAQMD thresholds of significance. This impact would be less than significant.

Table 4.2.2-14. Construction LST Impacts Based on Mitigated Construction Emissions

Emissions Sources	NO _x	CO	PM ₁₀	PM _{2.5}
On-site emissions (lbs/day)	30	38	8.0	4.8
LST	302	2,396	44	10
Significant emissions?	No	No	No	No

Source: South Coast Air Quality Management District 2008a.

Source Receptor Area: Central San Bernardino Valley, 5 acres, 50 meters (approximately 150 feet) of distance

CO = carbon monoxide

lbs/day = pounds per day

LST = Localized Significance Thresholds

NO_x = nitrogen oxides

PM₁₀ = particulate matter 10 microns or less in diameter

PM_{2.5} = particulate matter 2.5 microns or less in diameter

Operation

Table 4.2.2-15 shows the calculated emissions for the proposed operational activities compared with the appropriate LSTs for a 5-acre site, which is the largest site for which the LST tables provide emissions thresholds. The LST analysis only includes on-site sources. To ensure a worst-case scenario assessment, the emissions shown in Table 4.2.2-15 include all on-site stationary sources and 4% of the mobile sources, which is an estimate of the amount of project-related vehicle traffic that will occur on site. Considering that the average trip length of most of the project vehicles is

assumed to be 40 miles and a typical on-site travel distance would be less than 1,000 feet, the 4% assumption is conservative.

Table 4.2.2-15. Long-Term Operational LST Emissions

Emissions Sources	NO _x	CO	PM ₁₀	PM _{2.5}
On-site emissions	56	64	8.6	5.0
LST	297	2,292	9.9	2.8
Significant emissions?	No	No	No	Yes

Source: South Coast Air Quality Management District 2008a.
Source Receptor Area: Central San Bernardino Valley, 5 acres, 150-foot distance, on-site traffic 4% of total
CO = carbon monoxide
lbs/day = pounds per day
LST = Localized Significance Thresholds
NO_x = nitrogen oxides
PM₁₀ = particulate matter 10 microns or less in diameter
PM_{2.5} = particulate matter 2.5 microns or less in diameter

While the emissions of NO_x and CO would exceed the regional significance thresholds (as shown in Table 4.2.2-12), Table 4.2.2-15 shows that none of the operational emission rates of criteria pollutants would result in any concentrations that exceed the LST of ambient air quality standards at nearby residences, with the exception of PM_{2.5}. The exceedance of the significance threshold for PM_{2.5} would be primarily from on-site forklifts and TRUs. While emissions from on-site forklifts would be primarily contained within buildings and would not affect nearby sensitive receptors, and on-site emissions from TRUs would be minimized by requiring use of electrical connections for refrigeration of parked cargos, the conservative assumptions that warehouses will not be automated and that 4% of the project's total TRU emissions will occur on site nevertheless indicate that a significant impact would result. The ambient air quality standards are, by definition, the concentration levels at which health risk levels would become significant. Therefore, project-related emissions of these pollutants could have significant health effects on nearby sensitive receptors, and proposed operational activity would result in a locally significant air quality impact in relation to PM_{2.5} should emissions from on-site forklifts be experienced outside of buildings and should on-site TRU use reach 4% of total TRU project-related emissions.

Health Risk Assessment

Acute Project-Related Emission Impacts

As described above, within the SCAB, an impact would be considered significant if the cumulative increase in total acute hazard index from project emissions exceeds 1.0 at the receptor locations. As shown in Table 4.2.2-16, emissions of toxic air pollutants would not exceed the threshold. As a result, this impact would be less than significant.

Carcinogenic and Chronic Project-Related Emission Impacts

The results of the conservative modeling are shown in Table 4.2.2-16 for carcinogenic and chronic inhalation health risks at the sensitive receptors. Even with the conservative modeling technique used (assuming that an individual stays outdoors at his or her residence 24 hours per day for

70 years, which is the state-required period of time that all health risk assessments must assess), no sensitive receptor would be exposed to an unmitigated inhalation cancer risk greater than 1.5 in 1 million, less than the threshold of 10 in a million. Figure 5 of Appendix G shows the carcinogenic risk levels for the project. The greatest chronic hazard index at a sensitive receptor would be 0.00094, less than the threshold of 1.0. No significant health risk would occur from project-related truck traffic, and no mitigation is necessary. Refer to Appendix F for the Hotspots Analysis Reporting Program model reports and AERMOD information.

Table 4.2.2-16. Long-Term Health Risk Levels from Project Operations

Location	Maximum Cancer Risk (risk per million)	Maximum Chronic Risk (Hazard Index)
SCAQMD Threshold	10	1
Residential neighborhood to the east	1.50	0.00094
Residential neighborhood to the south	1.48	0.00093
Residential neighborhood to the north	0.49	0.00031
Significant?	No	No
Source: Appendix G.		
SCAQMD = South Coast Air Quality Management District		

As these results show that project risk levels are well below health risk assessment thresholds, this impact would be less than significant.

CO Analysis

Vehicular trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the project vicinity. Localized air quality impacts would occur when emissions from vehicular traffic increase in local areas as a result of the proposed project. The primary mobile source pollutant of local concern is CO, which is a direct function of vehicle idling time and, thus, of traffic flow conditions. Table 4.2.2-17 lists the CO concentrations at the 12 existing signalized intersections analyzed in the Traffic Impact Study for the *without project* and *with project* scenarios. As shown in Table 4.2.2-17 under the existing conditions, the intersections analyzed for the daily peak hour would experience 1-hour and 8-hour CO concentrations below the federal and state standards.

Table 4.2.2-17. CO Concentrations without and with Project Traffic ¹ Under Existing Conditions

Intersection	Receptor Distance to Road Centerline (meters)	Project- Related Increase 1-Hour/ 8-Hour (ppm)	Without/with Project 1-Hour CO Concentration (ppm)	Without/with Project 8-Hour CO Concentration (ppm)	Exceeds State Standards ²	
					1-Hour	8-Hour
Sierra Ave. and Slover Ave.	19 / 19	3.8 / 3.8	0.0 / 0.0	2.5 / 2.5	No	No
	21 / 21	3.7 / 3.7	0.0 / 0.0	2.5 / 2.5	No	No
	22 / 22	3.7 / 3.7	0.0 / 0.0	2.5 / 2.5	No	No
	20 / 20	3.6 / 3.6	0.0 / 0.0	2.4 / 2.4	No	No
Sierra Ave. and Jurupa	19 / 19	3.2 / 3.2	0.0 / 0.0	2.1 / 2.1	No	No
	19 / 19	3.1 / 3.1	0.0 / 0.0	2.0 / 2.0	No	No

Intersection	Receptor Distance to Road Centerline (meters)	Project-Related Increase 1-Hour/8-Hour (ppm)	Without/with Project 1-Hour CO Concentration (ppm)	Without/with Project 8-Hour CO Concentration (ppm)	Exceeds State Standards ²	
					1-Hour	8-Hour
Ave.	19 / 19	3.1 / 3.1	0.0 / 0.0	2.0 / 2.0	No	No
	21 / 21	3.1 / 3.1	0.0 / 0.0	2.0 / 2.0	No	No
Armstrong Rd. and Sierra Ave.	12 / 12	3.8 / 3.9	0.1 / 0.1	2.5 / 2.6	No	No
	15 / 12	3.6 / 3.6	0.0 / 0.0	2.4 / 2.4	No	No
	12 / 15	3.5 / 3.6	0.1 / 0.1	2.3 / 2.4	No	No
	12 / 15	3.5 / 3.5	0.0 / 0.0	2.3 / 2.3	No	No
Alder Ave. and Jurupa Ave.	8 / 8	2.2 / 2.2	0.0 / 0.0	1.4 / 1.4	No	No
	8 / 8	2.2 / 2.2	0.0 / 0.0	1.4 / 1.4	No	No
	8 / 8	2.2 / 2.2	0.0 / 0.0	1.4 / 1.4	No	No
	8 / 8	2.2 / 2.2	0.0 / 0.0	1.4 / 1.4	No	No
Locust Ave. and Slover Ave.	8 / 8	2.9 / 3.0	0.1 / 0.1	1.9 / 2.0	No	No
	8 / 8	2.8 / 2.9	0.1 / 0.1	1.8 / 1.9	No	No
	8 / 8	2.8 / 2.8	0.0 / 0.0	1.8 / 1.8	No	No
	8 / 8	2.8 / 2.8	0.0 / 0.0	1.8 / 1.8	No	No
Locust Ave. and Jurupa Ave.	7 / 8	2.5 / 2.8	0.3 / 0.2	1.6 / 1.8	No	No
	8 / 7	2.5 / 2.7	0.2 / 0.2	1.6 / 1.8	No	No
	7 / 7	2.5 / 2.7	0.2 / 0.2	1.6 / 1.8	No	No
	8 / 8	2.5 / 2.7	0.2 / 0.2	1.6 / 1.8	No	No
Locust Ave. and 11 th St. – Driveway 6	7 / 8	2.5 / 2.7	0.2 / 0.2	1.6 / 1.8	No	No
	8 / 8	2.5 / 2.7	0.2 / 0.2	1.6 / 1.8	No	No
	7 / 8	2.4 / 2.7	0.3 / 0.3	1.5 / 1.8	No	No
	7 / 8	2.4 / 2.7	0.3 / 0.3	1.5 / 1.8	No	No
Locust Ave. – Armstrong Rd. and 7 th St.	8 / 8	2.5 / 2.7	0.2 / 0.2	1.6 / 1.8	No	No
	8 / 8	2.5 / 2.7	0.2 / 0.2	1.6 / 1.8	No	No
	8 / 8	2.5 / 2.7	0.2 / 0.2	1.6 / 1.8	No	No
	8 / 8	2.5 / 2.6	0.1 / 0.1	1.6 / 1.7	No	No
Cedar Ave. and Slover Ave.	12 / 12	3.2 / 3.3	0.1 / 0.1	2.1 / 2.2	No	No
	14 / 14	3.2 / 3.3	0.1 / 0.1	2.1 / 2.2	No	No
	14 / 14	3.1 / 3.2	0.1 / 0.1	2.0 / 2.1	No	No
	14 / 14	3.1 / 3.2	0.1 / 0.1	2.0 / 2.1	No	No
Cedar Ave. and Jurupa Ave.	10 / 10	3.1 / 3.2	0.1 / 0.1	2.0 / 2.1	No	No
	10 / 10	3.1 / 3.2	0.1 / 0.1	2.0 / 2.1	No	No
	14 / 14	3.1 / 3.2	0.1 / 0.1	2.0 / 2.1	No	No
	14 / 14	3.1 / 3.2	0.1 / 0.1	2.0 / 2.1	No	No
Cedar Ave. and 7 th St.	10 / 14	3.0 / 3.1	0.1 / 0.0	2.0 / 2.0	No	No
	14 / 14	3.0 / 3.1	0.1 / 0.0	2.0 / 2.0	No	No
	14 / 10	3.0 / 3.0	0.0 / 0.0	2.0 / 2.0	No	No
	10 / 10	2.9 / 3.0	0.1 / 0.1	1.9 / 2.0	No	No

Intersection	Receptor Distance to Road Centerline (meters)	Project-Related Increase 1-Hour/8-Hour (ppm)	Without/with Project 1-Hour CO Concentration (ppm)	Without/with Project 8-Hour CO Concentration (ppm)	Exceeds State Standards ²	
					1-Hour	8-Hour
Rubidoux Blvd. and 20 th St. – Market St.	12 / 12	3.3 / 3.4	0.1 / 0.0	2.2 / 2.2	No	No
	10 / 10	3.3 / 3.4	0.1 / 0.0	2.2 / 2.2	No	No
	12 / 12	3.3 / 3.4	0.1 / 0.0	2.2 / 2.2	No	No
	10 / 10	3.2 / 3.3	0.1 / 0.1	2.1 / 2.2	No	No

Source: Appendix F.

¹ Includes ambient 1-hour concentration of 2.2 ppm and ambient 8-hour concentration of 1.4 ppm. Measured at the 14360 Arrow Blvd., Fontana, CA Air Quality Station in San Bernardino County.

² The state 1-hour standard is 20 ppm, and the 8-hour standard is 9 ppm.

CO = carbon monoxide

ppm = parts per million

Table 4.2.2-18 lists the CO concentrations at the 12 existing signalized intersections analyzed in the Traffic Impact Study for the 2014 without and with project scenarios (Appendix L). As shown in Table 4.2.2-18, the intersections analyzed for the daily peak hour would experience 1-hour and 8-hour CO concentrations below the federal and state standards under the 2014 conditions.

Table 4.2.2-18. 2014 CO Concentrations without and with Project Traffic ¹

Intersection	Receptor Distance to Road Centerline (meters)	Project-Related Increase 1-Hour/8-Hour (ppm)	Without/with Project 1-Hour CO Concentration (ppm)	Without/with Project 8-Hour CO Concentration (ppm)	Exceeds State Standards ²	
					1-Hour	8-Hour
Sierra Ave. and Slover Ave.	19 / 19	3.6 / 3.6	0.0 / 0.0	2.4 / 2.4	No	No
	21 / 21	3.5 / 3.5	0.0 / 0.0	2.3 / 2.3	No	No
	22 / 22	3.5 / 3.5	0.0 / 0.0	2.3 / 2.3	No	No
	20 / 20	3.4 / 3.4	0.0 / 0.0	2.2 / 2.2	No	No
Sierra Ave. and Jurupa Ave.	19 / 19	3.0 / 3.1	0.1 / 0.0	2.0 / 2.0	No	No
	19 / 19	3.0 / 3.0	0.0 / 0.0	2.0 / 2.0	No	No
	19 / 19	3.0 / 3.0	0.0 / 0.0	2.0 / 2.0	No	No
	19 / 21	2.9 / 3.0	0.1 / 0.1	1.9 / 2.0	No	No
Armstrong Rd. and Sierra Ave.	12 / 12	3.5 / 3.6	0.1 / 0.1	2.3 / 2.4	No	No
	15 / 15	3.3 / 3.4	0.1 / 0.0	2.2 / 2.2	No	No
	12 / 15	3.3 / 3.3	0.0 / 0.0	2.2 / 2.2	No	No
	15 / 12	3.3 / 3.3	0.0 / 0.0	2.2 / 2.2	No	No
Alder Ave. and Jurupa Ave.	8 / 8	2.2 / 2.2	0.0 / 0.0	1.4 / 1.4	No	No
	8 / 8	2.2 / 2.2	0.0 / 0.0	1.4 / 1.4	No	No
	8 / 8	2.2 / 2.2	0.0 / 0.0	1.4 / 1.4	No	No
	8 / 8	2.2 / 2.2	0.0 / 0.0	1.4 / 1.4	No	No

Intersection	Receptor Distance to Road Centerline (meters)	Project-Related Increase 1-Hour/8-Hour (ppm)	Without/with Project 1-Hour CO Concentration (ppm)	Without/with Project 8-Hour CO Concentration (ppm)	Exceeds State Standards ²	
					1-Hour	8-Hour
Locust Ave. and Slover Ave.	8 / 8	2.8 / 2.8	0.0 / 0.0	1.8 / 1.8	No	No
	8 / 8	2.8 / 2.7	-0.1 / 0.0	1.8 / 1.8	No	No
	8 / 8	2.7 / 2.7	0.0 / 0.0	1.8 / 1.8	No	No
	8 / 8	2.7 / 2.7	0.0 / 0.0	1.8 / 1.8	No	No
Locust Ave. and Jurupa Ave.	7 / 7	2.5 / 2.7	0.2 / 0.2	1.6 / 1.8	No	No
	8 / 7	2.5 / 2.7	0.2 / 0.2	1.6 / 1.8	No	No
	8 / 8	2.5 / 2.7	0.2 / 0.2	1.6 / 1.8	No	No
	8 / 8	2.4 / 2.6	0.2 / 0.2	1.5 / 1.7	No	No
Locust Ave. and 11 th St. – Driveway 6	7 / 8	2.4 / 2.6	0.2 / 0.2	1.5 / 1.7	No	No
	7 / 8	2.4 / 2.6	0.2 / 0.2	1.5 / 1.7	No	No
	7 / 8	2.4 / 2.6	0.2 / 0.2	1.5 / 1.7	No	No
	7 / 8	2.4 / 2.6	0.2 / 0.2	1.5 / 1.7	No	No
Locust Ave. – Armstrong Rd. and 7 th St.	8 / 8	2.5 / 2.6	0.1 / 0.1	1.6 / 1.7	No	No
	8 / 8	2.5 / 2.6	0.1 / 0.1	1.6 / 1.7	No	No
	8 / 8	2.4 / 2.6	0.2 / 0.2	1.5 / 1.7	No	No
	8 / 8	2.4 / 2.6	0.2 / 0.2	1.5 / 1.7	No	No
Cedar Ave. and Slover Ave.	14 / 12	3.0 / 3.1	0.1 / 0.0	2.0 / 2.0	No	No
	12 / 14	3.0 / 3.1	0.1 / 0.0	2.0 / 2.0	No	No
	14 / 12	3.0 / 3.0	0.0 / 0.0	2.0 / 2.0	No	No
	12 / 14	2.9 / 3.0	0.1 / 0.1	1.9 / 2.0	No	No
Cedar Ave. and Jurupa Ave.	10 / 10	3.0 / 3.0	0.0 / 0.0	2.0 / 2.0	No	No
	14 / 10	3.0 / 3.0	0.0 / 0.0	2.0 / 2.0	No	No
	14 / 10	3.0 / 3.0	0.0 / 0.0	2.0 / 2.0	No	No
	10 / 14	2.9 / 3.0	0.1 / 0.1	1.9 / 2.0	No	No
Cedar Ave. and 7 th St.	14 / 10	2.9 / 2.9	0.0 / 0.0	1.9 / 1.9	No	No
	10 / 10	2.8 / 2.9	0.1 / 0.1	1.8 / 1.9	No	No
	10 / 10	2.8 / 2.9	0.1 / 0.1	1.8 / 1.9	No	No
	10 / 10	2.8 / 2.9	0.1 / 0.1	1.8 / 1.9	No	No
Rubidoux Blvd. and 20 th St. – Market St.	12 / 12	3.2 / 3.3	0.1 / 0.0	2.1 / 2.2	No	No
	12 / 12	3.1 / 3.2	0.1 / 0.1	2.0 / 2.1	No	No
	10 / 10	3.1 / 3.2	0.1 / 0.1	2.0 / 2.1	No	No
	10 / 10	3.1 / 3.2	0.1 / 0.1	2.0 / 2.1	No	No

Source: Appendix F.

¹ Includes ambient 1-hour concentration of 2.2 ppm and ambient 8-hour concentration of 1.4 ppm. Measured at the 14360 Arrow Blvd., Fontana, CA Air Quality Station in San Bernardino County.

² The state 1-hour standard is 20 ppm, and the 8-hour standard is 9 ppm.

Table 4.2.2-19 lists the CO concentrations at the 12 existing signalized intersections analyzed in the Traffic Impact Study for the 2035 without and with project scenarios. As shown in Tables 4.2.2-19,

the intersections analyzed for the daily peak hour would experience 1-hour and 8-hour CO concentrations below the federal and state standards under the 2035 conditions.

Table 4.2.2-19. 2035 CO Concentrations without and with Project Traffic ¹

Intersection	Receptor Distance to Road Centerline (meters)	Project-Related Increase 1-Hour/8-Hour (ppm)	Without/with Project 1-Hour CO Concentration (ppm)	Without/with Project 8-Hour CO Concentration (ppm)	Exceeds State Standards ²	
					1-Hour	8-Hour
Sierra Ave. and Slover Ave.	19 / 19	3.1 / 3.1	0.0 / 0.0	2.0 / 2.0	No	No
	22 / 22	3.0 / 3.0	0.0 / 0.0	2.0 / 2.0	No	No
	21 / 21	2.9 / 2.9	0.0 / 0.0	1.9 / 1.9	No	No
	20 / 20	2.9 / 2.9	0.0 / 0.0	1.9 / 1.9	No	No
Sierra Ave. and Jurupa Ave.	19 / 19	2.8 / 2.8	0.0 / 0.0	1.8 / 1.8	No	No
	19 / 19	2.8 / 2.8	0.0 / 0.0	1.8 / 1.8	No	No
	19 / 19	2.8 / 2.8	0.0 / 0.0	1.8 / 1.8	No	No
	19 / 19	2.7 / 2.8	0.1 / 0.0	1.8 / 1.8	No	No
Armstrong Rd. and Sierra Ave.	15 / 15	2.9 / 2.9	0.0 / 0.0	1.9 / 1.9	No	No
	12 / 14	2.9 / 2.9	0.0 / 0.0	1.9 / 1.9	No	No
	12 / 14	2.8 / 2.8	0.0 / 0.0	1.8 / 1.8	No	No
	14 / 14	2.8 / 2.8	0.0 / 0.0	1.8 / 1.8	No	No
Alder Ave. and Jurupa Ave.	8 / 8	2.3 / 2.3	0.0 / 0.0	1.5 / 1.5	No	No
	8 / 8	2.3 / 2.2	-0.1 / -0.1	1.5 / 1.4	No	No
	8 / 8	2.3 / 2.2	-0.1 / -0.1	1.5 / 1.4	No	No
	8 / 8	2.3 / 2.2	-0.1 / -0.1	1.5 / 1.4	No	No
Locust Ave. and Slover Ave.	8 / 8	2.7 / 2.7	0.0 / 0.0	1.8 / 1.8	No	No
	8 / 8	2.6 / 2.7	0.1 / 0.1	1.7 / 1.8	No	No
	8 / 8	2.6 / 2.6	0.0 / 0.0	1.7 / 1.7	No	No
	8 / 8	2.6 / 2.6	0.0 / 0.0	1.7 / 1.7	No	No
Locust Ave. and Jurupa Ave.	7 / 7	2.4 / 2.6	0.2 / 0.2	1.5 / 1.7	No	No
	8 / 8	2.4 / 2.6	0.2 / 0.2	1.5 / 1.7	No	No
	7 / 8	2.4 / 2.5	0.1 / 0.1	1.5 / 1.6	No	No
	8 / 7	2.4 / 2.5	0.1 / 0.1	1.5 / 1.6	No	No
Locust Ave. and 11 th St. – Driveway 6	7 / 8	2.4 / 2.6	0.2 / 0.2	1.5 / 1.7	No	No
	7 / 8	2.4 / 2.6	0.2 / 0.2	1.5 / 1.7	No	No
	8 / 8	2.4 / 2.6	0.2 / 0.2	1.5 / 1.7	No	No
	8 / 8	2.4 / 2.6	0.2 / 0.2	1.5 / 1.7	No	No
Locust Ave. – Armstrong Rd. and 7 th St.	8 / 8	2.4 / 2.5	0.1 / 0.1	1.5 / 1.6	No	No
	8 / 8	2.4 / 2.5	0.1 / 0.1	1.5 / 1.6	No	No
	8 / 8	2.4 / 2.5	0.1 / 0.1	1.5 / 1.6	No	No
	8 / 8	2.4 / 2.5	0.1 / 0.1	1.5 / 1.6	No	No

Intersection	Receptor Distance to Road Centerline (meters)	Project-Related Increase 1-Hour/8-Hour (ppm)	Without/with Project 1-Hour CO Concentration (ppm)	Without/with Project 8-Hour CO Concentration (ppm)	Exceeds State Standards ²	
					1-Hour	8-Hour
Cedar Ave. and Slover Ave.	12 / 12	2.7 / 2.7	0.0 / 0.0	1.8 / 1.8	No	No
	12 / 12	2.6 / 2.6	0.0 / 0.0	1.7 / 1.7	No	No
	14 / 14	2.6 / 2.6	0.0 / 0.0	1.7 / 1.7	No	No
	14 / 14	2.6 / 2.6	0.0 / 0.0	1.7 / 1.7	No	No
Cedar Ave. and Jurupa Ave.	10 / 10	2.6 / 2.6	0.0 / 0.0	1.7 / 1.7	No	No
	10 / 10	2.6 / 2.6	0.0 / 0.0	1.7 / 1.7	No	No
	10 / 10	2.6 / 2.6	0.0 / 0.0	1.7 / 1.7	No	No
	14 / 10	2.6 / 2.6	0.0 / 0.0	1.7 / 1.7	No	No
Cedar Ave. and 7 th St.	10 / 10	2.5 / 2.5	0.0 / 0.0	1.6 / 1.6	No	No
	10 / 10	2.5 / 2.5	0.0 / 0.0	1.6 / 1.6	No	No
	10 / 10	2.5 / 2.5	0.0 / 0.0	1.6 / 1.6	No	No
	10 / 10	2.5 / 2.5	0.0 / 0.0	1.6 / 1.6	No	No
Rubidoux Blvd. and 20 th St. – Market St.	12 / 14	2.9 / 2.9	0.0 / 0.0	1.9 / 1.9	No	No
	10 / 14	2.9 / 2.8	-0.1 / -0.1	1.9 / 1.8	No	No
	12 / 14	2.8 / 2.8	0.0 / 0.0	1.8 / 1.8	No	No
	10 / 14	2.8 / 2.8	0.0 / 0.0	1.8 / 1.8	No	No

Source: Appendix F.

¹ Includes ambient 1-hour concentration of 2.2 ppm and ambient 8-hour concentration of 1.4 ppm. Measured at the 14360 Arrow Blvd., Fontana, CA Air Quality Station in San Bernardino County.

² The state 1-hour standard is 20 ppm, and the 8-hour standard is 9 ppm.

CO = carbon monoxide

ppm = parts per million

The proposed project would contribute to increased CO concentrations at intersections in the project vicinity. As shown in Tables 4.2.2-18 and 4.2.2-19, under the 2014 and 2035 conditions, respectively, all intersections analyzed would experience 1-hour and 8-hour CO concentrations below the federal and state standards. The proposed project would contribute at most a 0.1-ppm increase to the 1-hour and 8-hour CO concentrations at these intersections. Because no CO hot spots would occur, the proposed project would have a less-than-significant impact on local air quality for CO, and no mitigation measures would be required.

The ARB recommendation for separation of 1,000 feet between distribution centers and sensitive receptors is intended as a “rule of thumb” for separation of these uses in the absence of health risk assessments. As discussed above, the health risk assessment prepared for the WVLCSP and the analysis of LSTs both determined that impacts on sensitive receptors would be less than significant. Therefore, locating proposed warehouse uses closer to residential uses than the 1,000 feet recommended by ARB would have a less-than-significant effect.

Specific Plan Requirement and Regulatory Requirements

The applicant shall implement the following specific plan requirement and regulatory requirements, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **SP-GG-4:** Provide Electrical Loading Docks.
- **RR-AQ-1:** Comply with SCAQMD Rule 401 – Visible Emissions.
- **RR-AQ-2:** Comply with SCAQMD Rule 402 – Nuisance.
- **RR-AQ-3:** Comply with SCAQMD Rule 403 – Fugitive Dust.
- **RR-AQ-4:** Comply with SCAQMD Rule 1113 – Architectural Coatings.
- **RR-AQ-5:** Comply with SCAQMD Rule 1301 – General.
- **RR-AQ-6:** Comply with Title 24 – Building Energy Conservation.

Mitigation Measures

The exceedance of the significance threshold for PM_{2.5} would be primarily from on-site forklifts and TRUs. While emissions from on-site forklifts would be primarily contained within buildings and would not affect nearby sensitive receptors, and on-site emissions from TRUs would be minimized by requiring use of electrical connections for refrigeration of parked cargos, the conservative assumption that 4% of the project's total TRU emissions will occur on site nevertheless indicate that a significant impact would result. Because forklifts and TRUs already comply with stringent emissions regulations, there is no feasible mitigation to further reduce these emissions.

Residual Impacts

As noted above, no feasible mitigation measures are available to reduce PM_{2.5} emissions to a less-than-significant level, even with the implementation of **Specific Plan Requirement SP-GG-4, Regulatory Requirements RR-AQ-1 through RR-AQ-6, and Mitigation Measures AQ-1 through AQ-14.**

Health Effects of Significant Unavoidable Impacts Related to NO_x, ROG, and CO Emissions

In *Sierra Club v. County of Fresno* (2014) 226 Cal.App.4th 704, the court held that an EIR must provide a correlation between a project's emissions and likely resulting impacts on human health. As previously discussed, existing models have limited sensitivity to small changes in criteria pollutant concentrations, and, as such, translating project-generated criteria pollutants to specific health effects or additional days of nonattainment would produce meaningless results. In other words, minor increases in regional air pollution from project-generated ROG, NO_x, and CO would have nominal or negligible impacts on human health.

Impact AQ-5. Create objectionable odors affecting a substantial number of people

Heavy-duty equipment in the project area during construction would emit odors. However, they are not anticipated to be offensive and are not likely to affect a substantial number of people. Construction activity would be short term and would cease to occur after construction is completed. Therefore, construction-related odor impacts would be less than significant and no mitigation measures are recommended.

The proposed uses are not anticipated to emit any objectionable odors. The project would not involve land uses that are typically associated with the generation of objectionable odors, such as wastewater treatment plants or manufacturing uses. The project would provide for warehousing and distribution uses. Heavy manufacturing or processing of raw materials that could generate objectionable odors would not be permitted by the WVLCSP.

Furthermore, the project would be implemented in compliance with SCAQMD Rule 402 (included as **Regulatory Requirement RR-AQ-2**), which states that "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which cause, or have a natural tendency to cause, injury or damage to business or property." Therefore, objectionable odors posing a health risk to potential on site and existing off site uses would not occur as a result of the proposed project. This impact would be less than significant.

Regulatory Requirement

The applicant shall implement the following regulatory requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **RR-AQ-2:** Comply with SCAQMD Rule 402 – Nuisance.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

4.2.3 Biological Resources

Introduction

This section describes the environmental and regulatory setting for biological and jurisdictional resources. It also describes impacts on biological resources that would result from implementation of the West Valley Logistics Center Specific Plan (WVLCSP) project and mitigation for significant impacts where feasible and appropriate. The Existing Conditions and Impact Analysis sections below are based on information from the *West Valley Logistics Center Habitat Assessment* (RBF 2014), in Appendix D.

Terminology

- **Project Site.** The area studied for biological resources, which consists of nine parcels, Lot A, and an additional buffer area for a total of 298 acres (refer to Figure 2-3, Aerial Map, in Chapter 2.2 and Exhibit 3 within Appendix D).
- **Limits of Disturbance.** All areas that would have ground disturbance, including the seven light industrial buildings, staging areas, and temporary construction areas. This area consists of Parcels 1 through 7, which would be developed with seven light industrial buildings, along with Lot A, the location of the existing detention basin to be improved as part of the project (see Figure 2-4, Tentative Parcel Map 19156, in Chapter 2.2).
- **Special-Status Species.** Plant and animal species that have special federal or state regulatory or management status. This includes species that are listed, proposed for listing, or candidates for future listing as threatened or endangered under the federal Endangered Species Act (FESA); species that are listed or proposed for listing as threatened or endangered and species of special concern under the California Endangered Species Act (CESA); plants designated with a California Rare Plant Ranking (CRPR) by the California Native Plant Society (CNPS) (CNPS 2013); species that are on the United States Watchlist of Birds of Conservation Concern; and species that are fully protected in California.

Environmental Setting

A habitat assessment was conducted in February 2013, during which vegetation communities were identified and evaluated for the potential to support sensitive plant and animal species, wildlife movement corridors and linkages, and potential jurisdictional features. Sensitive plant surveys were conducted in April and June 2013 to coincide with the flowering periods of the sensitive plant species that have the potential to occur on the project site. The delineation of federal and state jurisdictional waters was conducted in February and March 2013. A supplemental habitat assessment was conducted in August 2014.

Physical Conditions

Land Uses

The project site primarily consists of vacant, undeveloped but heavily disturbed land. Historically, the project site was used for agriculture and was also a borrow site where materials have been removed from the site. More recently the property has been fallow, but has also been subjected to various other human disturbances, including unauthorized horseback riding, extensive off-road

vehicle use, and illegal dumping of trash and debris. These heavy levels of disturbance have prevented native habitat from reoccupying the project site. There are remnants of a house on the northern portion of the project site. The use of the central portion of the site as a borrow site, combined with the more recent off-road vehicle use, have created small depressions that retain water after storm events.

The area surrounding the project site is primarily developed as residential except for the Jurupa Hills to the west and southwest, and Rattlesnake Mountain to the east and southeast, which have been maintained as undeveloped open space. The project site is bordered by residential developments to the south and along the northern half of the eastern boundary. The Jurupa Hills consist of undisturbed open space along the western boundary, the northern boundary, and southeastern corner of the project site. Rattlesnake Mountain is also undisturbed open space along the southern half of the eastern boundary. There is a Southern California Edison (SCE) corridor along the northern boundary of the project site (north of Parcels 1 and 2 and Lot A, and south of Parcel 7) that has also been maintained as open space, as well as an SCE easement running through the southeastern portion of the site between Parcels 5 and 6.

Local Climate

The region is characterized as having a year-round Mediterranean climate (or semi-arid climate), with warm, sunny, dry summers and cool, rainy, mild winters. Average annual precipitation ranges from 12 inches per year in the coastal plain to 18 inches per year in the inland alluvial valleys, reaching 40 inches or more in the San Bernardino Mountains. Most of the precipitation occurs between November and March in the form of rain with variable amounts of snow in the higher elevations. The climatological cycle of the region results in higher surface water flows in the spring and early summer and lower flows during the dry season. Winter and spring floods generated by storms are not uncommon in wet years. Similarly, during the dry season, infrequent summer storms can cause torrential floods in local streams. Weather conditions during the surveys included temperatures in the low 70s (degrees Fahrenheit) and minimal winds with no clouds present overhead.

Topography and Soils

The project site is along the northeastern edge of the Jurupa Hills, along the southern boundary of San Bernardino County. The topography of the project site consists of gently sloping to steeper hills with elevations ranging from 1,000 to 1,240 feet above mean sea level. According to the U.S. Department of Agriculture Natural Resources Conservation Service Soil Survey, soils on site are characterized as Hanford coarse sandy loam (9–15% slopes), Tujunga loamy sand (0–5% slopes), Cienega sandy loam (9–15 % slopes), and Delhi fine sand (Figure 4.2.3-1, NRCS Soils Map). Other areas of the site are characterized as quarries and pits (the site of the former Crestmore Landfill) and Cienega-rock outcrop complex (at the highest point of the Jurupa Hills on site). The past agricultural land uses, routine disking, and recreational uses have severely disturbed surface soils, resulting in the removal of native soils from the project site.

Biological Conditions

Vegetation Communities

The project site can be categorized into six vegetation communities: Riversidian sage scrub (including disturbed Riversidian sage scrub), mulefat scrub, nonnative grassland, ruderal, disturbed,

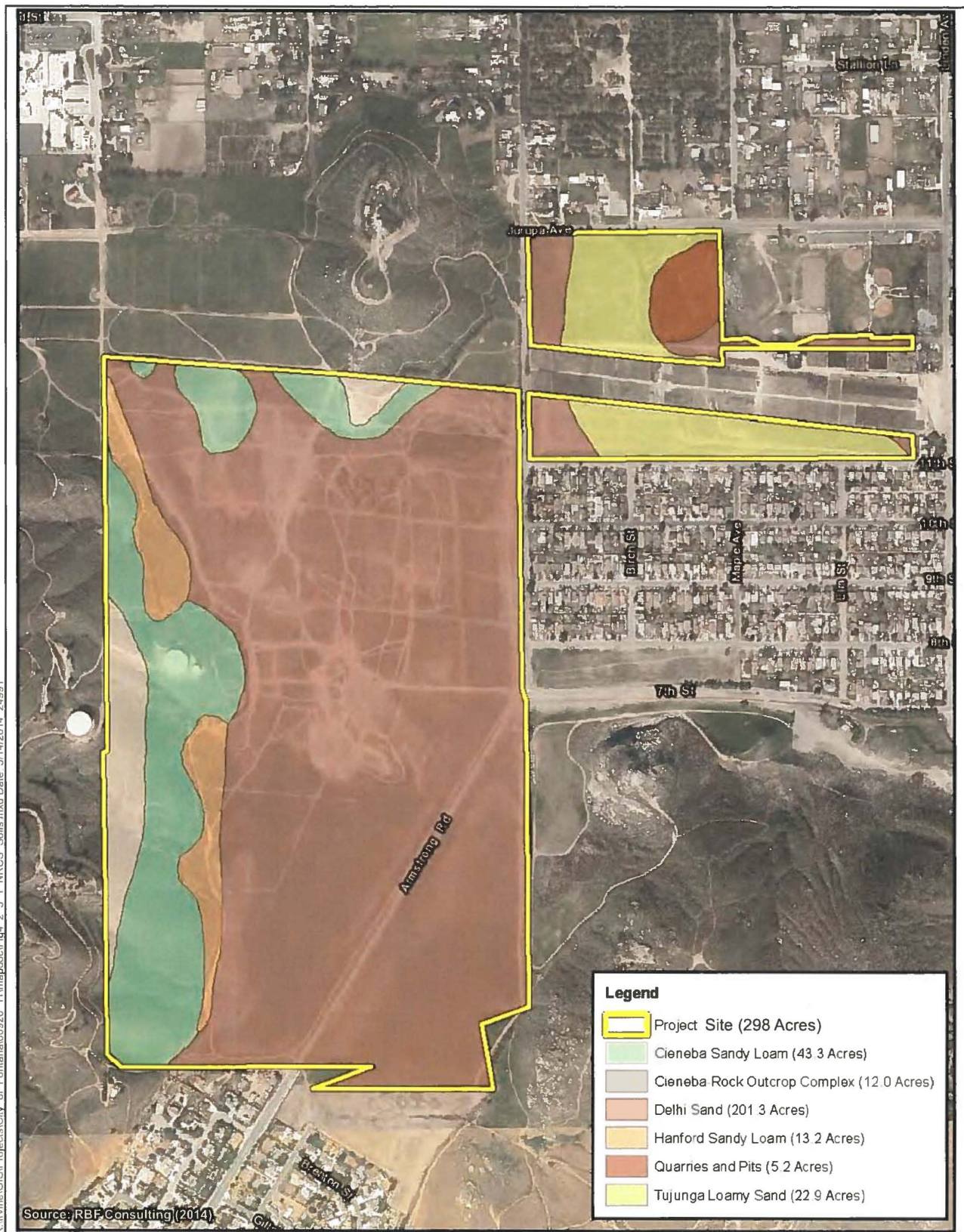


Figure 4.2.3-1
NRCS Soils Map
West Valley Logistics Center Specific Plan EIR

and developed (Figure 4.2.3-2, Vegetation Map). These plant communities are identified in Table 4.2.3-1 and described in detail below.

Table 4.2.3-1. Vegetation Communities

Community	Project Site Acreage	Percentage
Riversidian Sage Scrub	44.8	15
Disturbed Riversidian Sage Scrub	25.1	8.4
Mulefat Scrub	0.5	0.2
Nonnative Grassland	169.0	56.6
Ruderal	30.2	10.1
Disturbed	20.7	7
Developed	2.8	0.9
Other ¹	5.3	1.8
Total	298.4	100%
¹ Other = Depressional features, eucalyptus row, and olive tree row		

Riversidian Sage Scrub

The Riversidian sage scrub (RSS) vegetation community is found primarily along the western boundary of the project site, along the foothills of the Jurupa Hills. The RSS is an open, sparse plant community dominated by brittlebush (*Encelia farinosa*) with an understory dominated by nonnative grasses. Other plant species observed on the project site include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and deerweed (*Acmispon glaber*). Nonnative plant species include shortpod mustard (*Hirschfeldia incana*), and Russian thistle (*Salsola tragus*).

Mulefat Scrub

A fragmented mulefat scrub vegetation community, dominated by mulefat (*Baccharis salicifolia*), is found in association with depressional features found in the central portion of the project site. Other plant species observed in this vegetation community included elderberry (*Sambucus nigra*), sycamore (*Platanus racemosa*), and castor bean (*Ricinus communis*).

Nonnative Grassland

The dominant plant community within the project site is nonnative grassland. Historical land uses and existing disturbances have resulted in the removal most of the native plants on the project site and have allowed nonnative grasslands to become established. The dominant plant species in the nonnative grassland included red brome (*Bromus madritensis*), ripgut (*Bromus diandrus*), wild oat (*Avena barbata*), and cheat grass (*Bromus tectorum*).

Ruderal

There are numerous disturbed areas on site that are ruderal. These areas consist of early successional plant species and nonnative plants. Early successional plant species found on site include fiddleneck (*Amsinckia menziesii*), common sunflower (*Helianthus annuus*), telegraph weed (*Heterotheca grandiflora*), California buckwheat, and sagebrush. Nonnative species observed

included Peruvian pepper tree (*Schinus molle*), tree tobacco (*Nicotiana glauca*), London rocket (*Sisymbrium irio*), red-stemmed filaree (*Erodium cicutarium*), and horehound (*Marrubium vulgare*).

Disturbed

Disturbed areas are those that continue to be used for off-road vehicle activities and those that have been heavily compacted from use of the central portion of the project site for borrow. The high levels of disturbances and compacted soils restrict the growth of vegetation.

Developed

The project site includes developed areas, which consist of paved roads and water reservoir tanks.

Other

There are rows of olive trees along the western edge of the limits of disturbance. There are also eucalyptus trees present within the project site. These trees may provide suitable habitat for nesting or foraging birds.

Wildlife

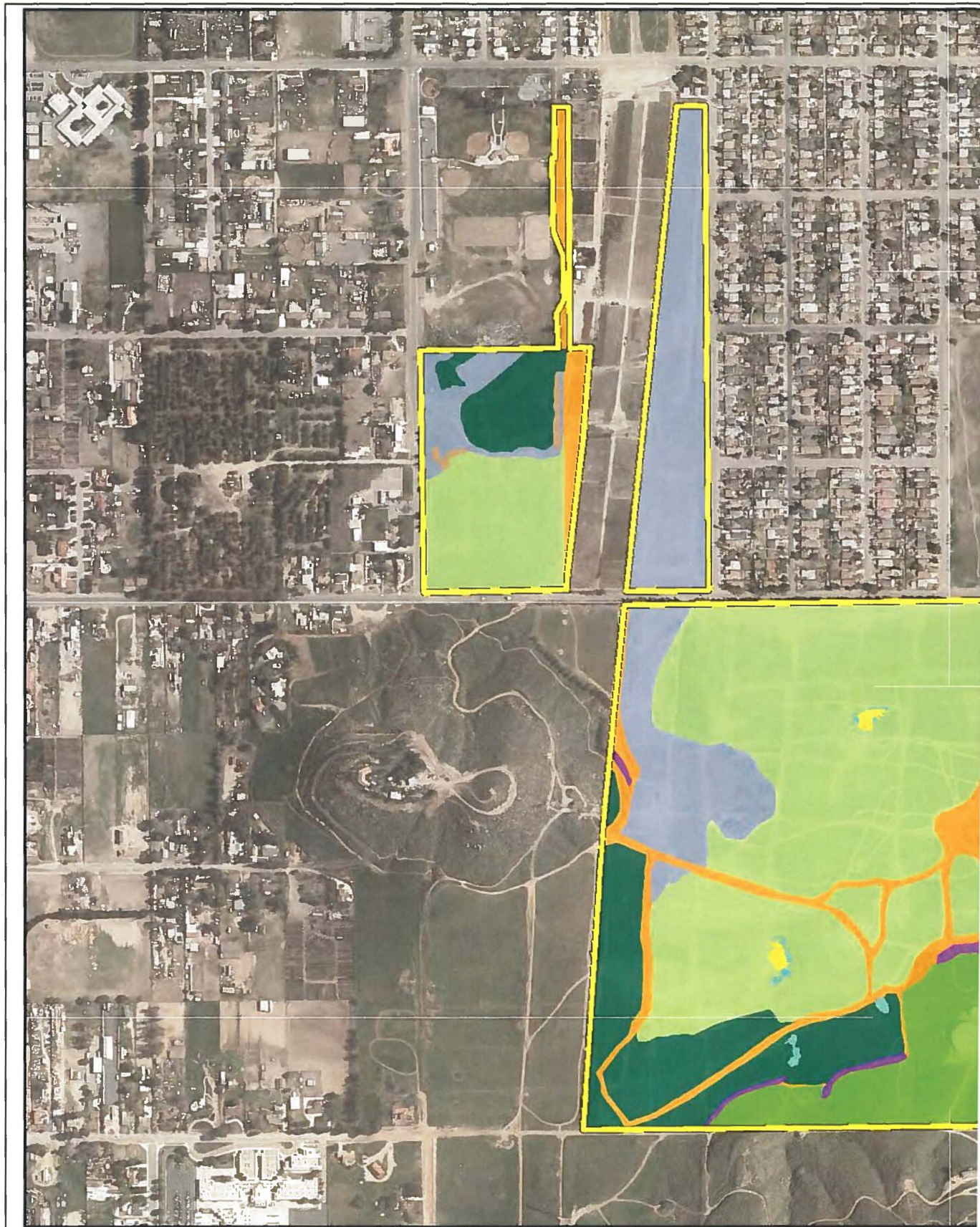
This section provides a discussion of wildlife species observed and/or detected during field surveys conducted for the project. The discussion is to be used as a general reference and is limited by the season, time of day, and weather condition in which the survey was conducted. Wildlife was determined to be present based on visual observation of the species or by detection through songs, calls, scat, tracks, and burrows.

The most common animals detected within the project site were birds. The dominant bird species detected and observed were: American crow (*Corvus brachyrhynchos*), Anna's hummingbird (*Calypte anna*), house finch (*Carpodacus mexicanus*), mourning dove (*Zenaida macroura*), lesser goldfinch (*Spinus psaltria*), bushtit (*Psaltirparus minimus*), red-tailed hawk (*Buteo jamaicensis*), northern mockingbird (*Mimus polyglottos*), California towhee (*Pipilo crissalis*), Say's phoebe (*Sayornis saya*), yellow-rumped warbler (*Setophaga coronata*), western meadowlark (*Sturnella neglecta*), Cassin's kingbird (*Tyrannus vociferans*), turkey vulture (*Cathartes aura*), and white-crowned sparrow (*Zonotrichia leucophrys*). The next most common species detected were mammals and included cottontail rabbits (*Sylvilagus audubonii*), Botta's pocket gopher (*Thomomys bottae*), and California ground squirrel (*Otospermophilus beecheyi*). There were also small mammal burrows noted within the project site. The only reptile observed was western fence lizard (*Sceloporus occidentalis*).

No special-status species were observed during the habitat assessment.

Special-status Biological Resources

A search of published records for special-status species and sensitive natural communities was conducted for the Fontana, Guasti, Corona North, Riverside West, Riverside East, and San Bernardino South U.S. Geological Survey (USGS) 7.5-minute quadrangles using the California Natural Diversity Database (CNDDB) Rarefind 4 online software (2013). The CNPS Inventory of Rare and Endangered Vascular Plants of California (CNPS 2013) supplied information regarding the distribution and habitats of vascular plants in the vicinity. Additional sources consulted for the region included the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), the California Wildlife Habitat Relationships (California Department of Fish and Wildlife 2008)



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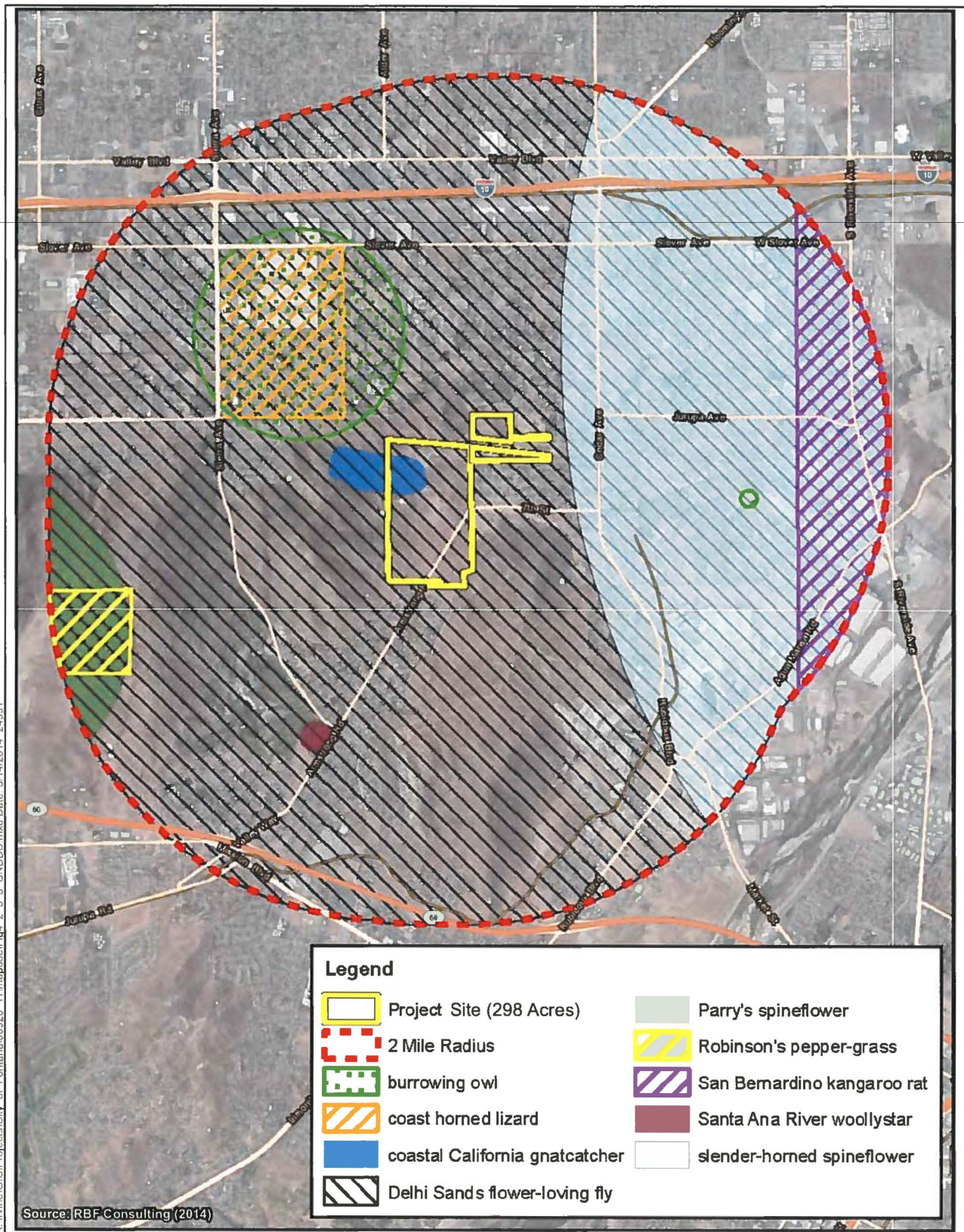


Figure 4.2.3-3
California Natural Diversity Database (CNDDDB) Map
West Valley Logistics Center Specific Plan EIR



species notes (2008), technical publications, and miscellaneous information available through the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW). Figure 4.2.3-3 (CNDDB Map) shows the locations of species tracked through the CNDDB within 2 miles of the project site.

The literature search identified 30 special-status wildlife species, 29 special-status plant species, and six sensitive natural vegetation communities that have potential to occur in the region. Sensitive plant and wildlife species were evaluated for their potential to occur based on species' habitat requirements, availability and quality of suitable habitat on the project site, and known species' distributions. Species determined to have the potential to occur within the region are presented in Table 4.2.3-2 along with summarized conclusions from analysis and field surveys regarding the potential occurrence of listed and sensitive plant and wildlife species within the project site.

Table 4.2.3-2. Suitable Habitats and Potentially Occurring Sensitive Plant and Wildlife Species

Scientific Name Common Name	Status	Habitat	Observed on Project Site	Potential to Occur
ANIMAL SPECIES				
<i>Agelaius tricolor</i> tricolored blackbird	Fed: None CA: CSC	Can be found in a wide variety of habitat including annual grasslands, wet and dry vernal pools and other seasonal wetlands, agricultural fields, cattle feedlots, and dairies. Occasionally forage in riparian scrub habitats along marsh borders. Basic habitat requirements for breeding include open accessible water, protected nesting substrate (freshwater marsh dominated by cattails, willows, and bulrushes [<i>Schoenoplectus</i> spp.]), and either flooded or thorny or spiny vegetation and suitable foraging space providing adequate insect prey.	No	Low: Minimal suitable habitat, no breeding habitat present on site.
<i>Aimophila ruficeps canescens</i> Southern California rufous-crowned sparrow	Fed: None CA: WL	Typically found between 3,000 and 6,000 feet in elevation. Breed in sparsely vegetated scrubland on hillsides and canyons. Prefers coastal sage scrub dominated by California sagebrush (<i>Artemisia californica</i>), but can also be found breeding in coastal bluff scrub, low-growing serpentine chaparral, and along the edges of tall chaparral habitats.	No	Moderate: Suitable habitat on the western boundary within the RSS, outside the limits of disturbance.
<i>Amphispiza belli belli</i> Bell's sage sparrow	Fed: None CA: WL	Occurs in chaparral dominated by fairly dense stands of chamise. Also found in coastal sage scrub in south of range.	No	Presumed Absent: No suitable habitat.
<i>Anniella pulchra pulchra</i> silvery legless lizard	Fed: None CA: CSC	Occurs primarily in areas with sandy or loose loamy soils under sparse vegetation of beaches, chaparral, or pine-oak woodland; or near sycamores, oaks, or cottonwoods that grow on stream terraces. Often found under or in the proximity of logs, rocks, old boards, and the compacted debris of woodrat nests.	No	Presumed Absent: No suitable habitat.
<i>Aspidoscelis hyperythra</i> orangethroat whiptail	Fed: None CA: CSC	Semi-arid brushy areas typically with loose soil and rocks, including washes, streamsides, rocky hillsides, and coastal chaparral.	No	Presumed Absent: No suitable habitat.

Scientific Name Common Name	Status	Habitat	Observed on Project Site	Potential to Occur
<i>Aspidoscelis tigris stejnegeri</i> coastal whiptail	Fed: None CA: CSC	Found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage and chaparral, woodland, and riparian areas.	No	Presumed Absent: No suitable habitat.
<i>Athene cunicularia</i> burrowing owl	Fed: None CA: CSC	Occurs in dry, open areas such as grasslands, prairies, savannas, deserts, farmlands, golf courses, and other urban areas.	No	Moderate: Suitable vegetation communities are present; however no burrowing owls, owl sign, or suitable burrows were observed on the project site. Therefore, a focused survey was not conducted.
<i>Catostomus santaanae</i> Santa Ana sucker	Fed: THR CA: CSC	Occur in the watersheds draining the San Gabriel and San Bernardino Mountains of Southern California. Streams that Santa Ana sucker inhabit are generally perennial streams with water ranging in depth from a few inches to several feet and with currents ranging from slight to swift.	No	Presumed Absent: No suitable habitat (i.e., streams) is present on the project site.
<i>Chaetodipus fallax fallax</i> northwestern San Diego pocket mouse	Fed: None CA: CSC	Open habitat on the Pacific slope from southwestern San Bernardino County to northwestern Baja California.	No	Low: Minimal habitat on the western boundary within the RSS, outside the limits of disturbance.
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	Fed: FCE Ca: END	Obligate riparian species with a primary habitat association of willow-cottonwood riparian forest.	No	Presumed Absent: No suitable habitat.

Scientific Name Common Name	Status	Habitat	Observed on Project Site	Potential to Occur
<i>Crotalus ruber</i> red-diamond rattlesnake	Fed: None CA: CSC	Can be found from the desert through dense chaparral in the foothills (avoids the mountains above around 4,000 feet), to warm inland mesas and valleys, all the way to the cool ocean shore. Most commonly associated with heavy brush with large rocks or boulders. Dense chaparral in the foothills, cactus- or boulder-associated coastal sage scrub, oak and pine woodlands, and desert slope scrub associations are known to carry populations of the northern red-diamond rattlesnake; however, chamise and red shank associations may offer better structural habitat for refuges and food resources for this species than other habitats.	No	Moderate: Suitable habitat on the western boundary within the RSS, outside the limits of disturbance.
<i>Dendroica petechial brewsteri</i> Yellow Warbler	Fed: None CA: CSC	Nests over all of California except the Central Valley, the Mojave Desert region, and high altitudes and the eastern side of the Sierra Nevada. Winters along the Colorado River and in parts of Imperial and Riverside Counties. Nests in riparian areas dominated by willows, cottonwoods, sycamores, or alders or in mature chaparral. May also use oaks, conifers, and urban areas near stream courses.	No	Presumed Absent: No suitable habitat.
<i>Dipodomys stephensi</i> Stephens' kangaroo rat	Fed: END CA: THR	Occurs in arid and semi-arid habitats with some grass or brush. Prefers open habitats with less than 50% protective cover. Requires soft, well-drained substrate for building burrows and is typically found in areas with sandy soil.	No	Presumed Absent: No suitable habitat.
<i>Eremophila alpestris actia</i> California horned lark	Fed: None CA: WL	Prefers riparian woodlands along streams and rivers with mature, dense stands of willows, cottonwoods, or smaller spring-fed or boggy areas with willows or alders.	No	Presumed Absent: No suitable habitat.

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Scientific Name Common Name	Status	Habitat	Observed on Project Site	Potential to Occur
<i>Eumops perotis californicus</i> Western mastiff bat	Fed: None CA: CSC	Primarily a cliff-dwelling species; roosts generally under exfoliating rock slabs. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least 9.8 feet below the entrance for flight. In California, most frequently encountered in broad open areas. Foraging habitat includes dry desert washes, floodplains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas.	No	Presumed Absent: No suitable habitat.
<i>Gila orcuttii</i> arroyo chub	Fed: None CA: CSC (THR in native Range)	Warm streams of the Los Angeles Plain, which are typically muddy torrents during the winter, and clear quiet brooks in the summer, possibly drying up in places. Found both in slow-moving and fast-moving sections generally deeper than 40 cm.	No	Presumed Absent: No suitable habitat (i.e., streams) is present on the project site.
<i>Icteria virens</i> Yellow-breasted chat	Fed: None CA: CSC	Primarily found in tall, dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories. Nesting areas are associated with streams, swampy ground, and the borders of small ponds. Breeding habitat must be dense to provide shade and concealment. Winters south in Central America.	No	Presumed Absent: No suitable habitat.
<i>Lanius ludovicianus</i> Loggerhead shrike	Fed: None CA: CSC	Often found in broken woodlands, shrublands, and other habitats. Prefers open country with scattered perches for hunting and fairly dense brush for nesting.	No	Low: Suitable foraging habitat present, no breeding habitat present on site.
<i>Lasiurus xanthinus</i> Western yellow bat	Fed: None CA: CSC	Roosts in palm trees in foothill riparian, desert wash, and palm oasis habitats with access to water for foraging.	No	Presumed Absent: No suitable roosting or foraging habitat is present on the project site.
<i>Lepus californicus bennettii</i> San Diego black-tailed jackrabbit	Fed: None CA: CSC	Occupies many diverse habitats, but primarily is found in arid regions supporting short-grass habitats.	No	Low: Minimal suitable habitat.

Scientific Name Common Name	Status	Habitat	Observed on Project Site	Potential to Occur
<i>Neotoma lepida</i> <i>intermedia</i> San Diego desert woodrat	Fed: None CA: CSC	Inhabits a variety of shrub and desert habitats, primarily associated with rock outcroppings, boulders, cacti, or areas of dense undergrowth. Also occurs within pinyon-juniper hillsides at lower elevations and juniper woodland. Often associated with large cactus patches and within coastal sage scrub communities.	No	Low: Minimal suitable habitat, no breeding habitat present on the project site.
<i>Nyctinomops</i> <i>femorosaccus</i> pocketed free-tailed bat	Fed: None CA: CSC	Roosts primarily in crevices of rugged cliffs, high rocky outcrops, and slopes. Has been found in a variety of plant associations, including desert shrub and pine-oak forests. May also roost in buildings, caves, and under roof tiles.	No	Presumed Absent: No suitable roosting or foraging habitat is present on the project site.
<i>Onychomys torridus</i> <i>ramona</i> Southern grasshopper mouse	Fed: None CA: CSC	Inhabits a variety of low open and semi-open scrub habitats including coastal sage scrub, mixed chaparral, low sagebrush, riparian scrub, and annual grassland with scattered shrubs.	No	Presumed Absent: No suitable habitat.
<i>Perognathus</i> <i>longimembris</i> <i>brevinasus</i> Los Angeles pocket mouse	Fed: None CA: CSC	Occurs in lower elevation grasslands and coastal sage scrub communities in and around the Los Angeles Basin. Prefers open ground with fine sandy soils.	No	Low: Minimal habitat on the western boundary within the RSS, outside the limits of disturbance.
<i>Phrynosoma blainvillii</i> coast horned lizard	Fed: None CA: CSC	Found in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland, and coniferous forest. The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low but relatively dense shrubs for refuge.	No	Presumed Absent: No suitable habitat.

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Scientific Name Common Name	Status	Habitat	Observed on Project Site	Potential to Occur
<i>Poliophtila californica californica</i> coastal California gnatcatcher	Fed: THR CA: CSC	Obligate resident of sage scrub habitats that are dominated by California sagebrush (<i>Artemisia californica</i>). Generally occurs below 750 feet elevation in coastal regions and below 1,500 feet inland. Prefers habitat with more low-growing vegetation.	No	Moderate: Suitable habitat occurs within the Riversidian sage scrub on the foothills of the Jurupa Hills along the western boundary of the project site. Critical Habitat (Unit 10) for this species is also present on the project site. Species was not observed in RSS during the 2013 focused survey and was not detected during 2014 focused surveys, but has been observed on the site prior to 2013.
<i>Rhaphiomidas terminatus abdominalis</i> Delhi Sands flower- loving fly (DSFLF)	Fed: END CA: CSC	The DSFLF habitat is limited to areas that include Delhi fine sand, an aeolian (wind deposited) soil type. The highest density of DSFLF has been found in habitat that includes a variety of plants including California buckwheat, California croton, deerweed, and telegraph weed.	No	Presumed Absent: Two consecutive years of negative focused surveys were conducted in 2011 and 2012. Clean Delhi fine sand does not occur at the project site.
<i>Spea hammondi</i> western spadefoot	Fed: None CA: CSC	Prefers open areas with sandy or gravelly soils in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rain pools that do not contain bullfrogs, fish, or crayfish are necessary for breeding.	No	Presumed Absent: No suitable habitat.
<i>Taxidea taxus</i> American badger	Fed: None CA: CSC	Primarily occupy grasslands, parklands, farms, tallgrass and shortgrass prairies, meadows, shrub-steppe communities, and other treeless areas with sandy loam soils where it can dig more easily for its prey. Occasionally found in open chaparral (with less than 50% plant cover) and riparian zones.	No	Presumed Absent: No suitable habitat.

Scientific Name Common Name	Status	Habitat	Observed on Project Site	Potential to Occur
<i>Vireo bellii pusillus</i> least Bell's vireo	Fed: END CA: END	Primarily occupy Riverine riparian habitat that typically features dense cover within 3.3–6.6 feet of the ground and a dense, stratified canopy. Typically associated with southern willow scrub, cottonwood-willow forest, mulefat scrub, sycamore alluvial woodlands, coast live oak riparian forest, arroyo willow riparian forest, or mesquite in desert localities.	No	Presumed Absent: No riparian habitat is present that would be suitable for the species.
PLANTS				
<i>Abronia villosa</i> Chaparral sand verbena	Fed: None CA: None CNPS: 1B.1	Found on the coastal side of the Southern California mountains in chaparral and coastal sage scrub plant communities in areas of full sun and sandy soils.	No	Presumed Absent: No suitable habitat present.
<i>Ambrosia pumila</i> San Diego ambrosia	Fed: END CA: None CNPS: 1B.1	Occurs in chaparral, coastal scrub, valley and foothill grassland, and vernal pools, often in disturbed areas.	No	Presumed Absent: No suitable habitat present.
<i>Arenaria paludicola</i> marsh sandwort	Fed: END CA: END CNPS: 1B.1	Grows mainly in wetlands and freshwater marshes in arid climates. Grows from sea level to 1,476 feet. Can grow in saturated acidic bog soils and soils that are sandy with a high organic content.	No	Presumed Absent: No suitable freshwater marsh habitat is present.
<i>Astragalus hornii</i> var. <i>hornii</i> Horn's milk-vetch	Fed: None CA: None CNPS: 1B.1	Occurs in meadows, seeps, and playas.	No	Presumed Absent: No suitable habitat present.
<i>Berberis nevinii</i> Nevin's barberry	Fed: END CA: END CNPS: 1B.1	Occurs on sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian scrub plant communities.	No	Presumed Absent: No suitable habitat present.
<i>Calochortus plummerae</i> Plummer's mariposa-lily	Fed: None CA: None CNPS: 1B.2	Prefers openings in chaparral, foothill woodland, coastal sage scrub, valley and foothill grasslands, cismontane woodland, lower montane coniferous forest, and yellow pine forest. Found on dry, rocky slopes and soils and brushy areas. Can be very common after fire.	No	Low: Minimal habitat on the western boundary within the RSS, outside the limits of disturbance. Suitable habitat is present, but species not found during the 2013 focused survey.

Scientific Name Common Name	Status	Habitat	Observed on Project Site	Potential to Occur
<i>Carex comosa</i> Bristly sedge	Fed: None CA: None CNPS: 2.1	Found in marshes and swamps.	No	Presumed Absent: No suitable habitat (i.e., marshes/ swamps) present on project site.
<i>Centromadia pungens</i> <i>ssp. laevis</i> Smooth tarplant	Fed: None CA: None CNPS: 1B.1	Upper terraces and higher edges of coastal salt marshes where tidal inundation is periodic.	No	Low: Minimal habitat on the western boundary within the RSS, outside the limits of disturbance. Suitable habitat is present, but species not found during the 2013 focused survey.
<i>Chloropyron maritimum</i> <i>ssp. maritimum</i> salt marsh bird's-beak	Fed: END CA: END CNPS: 1B.2	Upper terraces and higher edges of coastal salt marshes where tidal inundation is periodic.	No	Presumed Absent: There are no coastal salt marshes in the project site.
<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry's spineflower	Fed: None CA: None CNPS: 1B.1	Occurs within the alluvial chaparral and scrub of the San Gabriel, San Bernardino, and San Jacinto Mountains, at elevations of 328–4,265 feet above mean sea level.	No	Low: Minimal habitat on the western boundary within the RSS, outside the limits of disturbance. Suitable habitat is present, but species not found during the 2013 focused survey.
<i>Cladium californicum</i> California saw-grass	Fed: None CA: None CNPS: 2.2	Occurs in freshwater and alkali marshes and seeps.	No	Presumed Absent: No suitable habitat (i.e., marshes/seeps) present on project site.
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i> Peruvian dodder	Fed: None CA: None CNPS: 2.1	Occurs in freshwater marsh and swamps.	No	Presumed Absent: No suitable habitat (i.e., marshes) present on project site.
<i>Dodecahema leptoceras</i> slender-horned spineflower	Fed: END CA: END CNPS: 1B.1	Found only within open washes and early successional alluvial fan scrub on open slopes above main watercourses on fluvial deposits where flooding and scouring occur at a frequency that allows the persistence of open shrublands. Suitable habitat comprises patchy distribution of gravelly soils, sandy soils, rock mounds, and boulder fields.	No	Presumed Absent: No habitat with alluvial processes is present.

Scientific Name Common Name	Status	Habitat	Observed on Project Site	Potential to Occur
<i>Dudleya multicaulis</i> Many-stemmed dudleya	Fed: None CA: None CNPS: 1B.1	Often on clay soils and around granitic outcrops in chaparral, coastal sage scrub, and grasslands; below 2,500-foot elevation; Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties.	No	Presumed Absent: No suitable habitat with clay soils is present.
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i> Santa Ana River woollystar	Fed: END CA: END CNPS: 1B.1	Found only within open washes and early successional alluvial fan scrub on open slopes above main watercourses on fluvial deposits where flooding and scouring occur at a frequency that allows the persistence of open shrublands. Suitable habitat comprises patchy distribution of gravelly soils, sandy soils, rock mounds, and boulder fields.	No	Presumed Absent: No habitat with alluvial processes is present.
<i>Galium californicum</i> ssp. <i>primum</i> Alvin Meadow bedstraw	Fed: None CA: None CNPS: 1B.1	Chaparral, lower montane coniferous forest between 1,350 and 2,100 feet in elevation.	No	Presumed Absent: No suitable habitat.
<i>Helianthus nuttallii</i> ssp. <i>parishii</i> Los Angeles sunflower	Fed: None CA: None CNPS: 1A	Occurs in marshes, swamps, and on damp riverbanks.	No	Presumed Absent: No suitable habitat (i.e., marshes/ swamps) present on project site.
<i>Horkelia cuneata</i> var. <i>puberula</i> mesa horkelia	Fed: None CA: None CNPS: 1B.1	Open sandy fields and chaparral to 2,500 feet, mostly away from the coast, old dunes, foothill edge of LA Basin, south Coast, Peninsular range.	No	Presumed Absent: No suitable habitat is present.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i> Coulter's goldfields	Fed: None CA: None CNPS: 1B.1	Usually alkaline soils in marshes, playas, vernal pools, and valley and foothill grassland below 4,600 feet elevation.	No	Presumed Absent: No suitable habitat.
<i>Lepidium virginicum</i> var. <i>robinsonii</i> Robinson's pepper- grass	Fed: None CA: None CNPS: 1B.2	Dry soils on chaparral and coastal sage scrub.	No	Low: Minimal habitat on the western boundary within the RSS, outside the limits of disturbance. Suitable habitat is present, but species not found during the 2013 focused survey.

Scientific Name Common Name	Status	Habitat	Observed on Project Site	Potential to Occur
<i>Lycium parishii</i> Parish's desert-thorn	Fed: None CA: None CNPS: 2.3	Coastal scrub, Sonoran Desert Scrub with sandy plains and desert washes.	No	Presumed Absent: No suitable habitat.
<i>Monardella pringlei</i> Pringle's monardella	Fed: None CA: None CNPS: 1A	Sandy soils in coastal sage-scrub vegetation at 984–1,312 feet above mean sea level.	No	Low: Minimal habitat on the western boundary within the RSS, outside the limits of disturbance. Suitable habitat is present, but species not found during the 2013 focused survey.
<i>Muhlenbergia californica</i> California muhly	Fed: None CA: None CNPS: 4.3	Chaparral, coastal scrub, lower montane coniferous forest, meadows, and seeps.	No	Presumed Absent: No suitable habitat.
<i>Nasturtium gambelii</i> Gambel's water cress	Fed: END CA: THR CNPS: 1B.1	Brackish marsh, freshwater marsh, swamps, and wetlands.	No	Presumed Absent: No suitable habitat (i.e., marshes/swamps) present on project site.
<i>Navarretia prostrata</i> Prostrate vernal pool navarretia	Fed: None CA: None CNPS: 1B.1	Vernal pools within coastal scrub, valley, and foothill and valley grasslands.	No	Presumed Absent: No suitable habitat.
<i>Ribes divaricatum</i> var. <i>parishii</i> Parish's gooseberry	Fed: None CA: None CNPS: 1A	Found in riparian woodland and other riparian habitats.	No	Presumed Absent: No suitable habitat (i.e., riparian) is present on the project site.
<i>Senecio aphanactis</i> chaparral ragwort	Fed: None CA: None CNPS: 2.2	Cismontane woodland, coastal scrub, drying alkaline flats.	No	Presumed Absent: No suitable habitat present.
<i>Sphenopholis obtusata</i> prairie wedge grass	Fed: None CA: None CNPS: 2.2	Brackish or salt marshes and flats, in lakes or ponds, in rivers or streams, man-made or disturbed habitats, marshes, ridges, or ledges, shores or rivers or lakes, woodlands.	No	Presumed Absent: No marsh or stream habitat is present in project site.

Scientific Name Common Name	Status	Habitat	Observed on Project Site	Potential to Occur
<i>Symphotrichum defoliatum</i> San Bernardino aster	Fed: None CA: None CNPS: 1B.2	Grows in grasslands and disturbed areas to about 4,500 feet elevation in the San Gabriel and San Bernardino Mountains and Peninsular Range. Occurs in vernal wet sites including ditches, streams, and springs in many plant communities.	No	Low: Minimal habitat throughout the project site, but species not found during the 2013 focused survey.
SENSITIVE NATURAL COMMUNITIES				
Riversidian Alluvial Fan Sage Scrub	CDFW Sensitive Habitat	Occurs within broad washes of sandy alluvial drainages that carry rainfall runoff sporadically in winter and spring but remain relatively dry through the remainder of the year. Restricted to drainages and floodplains with very sandy substrates that have a dearth of decomposed plant material. These areas do not develop into riparian woodland or scrub due to the limited water resources and scouring by occasional floods.	No	Absent
Southern California Arroyo Chub/Santa Ana Sucker Stream	CDFW Sensitive Habitat	Characterized by a functioning hydrological system that experiences peaks and ebbs in the water volume throughout the year; a mosaic of loose sand, gravel, cobble, and boulder substrates in a series of riffles, runs, pools, and shallow sandy stream margins; water depths greater than 1.2 inches and water bottom velocities of more than 0.01 feet per second; nonturbid conditions or only seasonally turbid water; water temperatures less than 86° Fahrenheit; and stream habitat that includes algae, aquatic emergent vegetation, macroinvertebrates, and riparian vegetation.	No	Absent
Southern Cottonwood Willow Riparian Forest	CDFW Sensitive Habitat	Dominated by cottonwood (<i>Populus</i> spp.) and willow (<i>Salix</i> spp.) trees and shrubs. Considered to be an early successional stage, as both species are known to germinate almost exclusively on recently deposited or exposed alluvial soils.	No	Absent
Southern Riparian Scrub	CDFW Sensitive Habitat	Riparian zones dominated by small trees or shrubs, lacking taller riparian trees.	No	Absent

Scientific Name Common Name	Status	Habitat	Observed on Project Site	Potential to Occur
Southern Sycamore Alder Riparian Woodland	CDFW Sensitive Habitat	Below 6,162 feet in elevation; sycamore and alder often occur along seasonally-flooded banks; cottonwoods and willows also are often present. Poison-oak, mugwort, elderberry, and wild raspberry may be present in the understory.	No	Absent
Southern Willow Scrub	CDFW Sensitive Habitat	Dense, broadleaved, winter-deciduous riparian thickets dominated by several <i>Salix</i> species, with scattered emergent <i>Populus fremontii</i> and <i>Platanus racemosa</i> . Most stands are too dense to allow much understory development. Loose, sandy, or fine gravelly alluvium deposited near stream channels during flood flows. This early seral type required repeated flooding to prevent succession to Southern Cottonwood-Sycamore Riparian Forest.	No	Absent

Status:**Federal: USFWS**

END: Federal Endangered

THR: Federal Threatened

FCE: Federal Candidate Endangered

California: CDFW

END: California Endangered

THR: California Threatened

CSC: California Species of Concern

WL: Watch List

CNPS California Rare Plant Rank

1A: Plants rare, threatened, or endangered in CA and elsewhere

1B: Plants rare, threatened, or endangered in CA but more common elsewhere

2: Lack information to assign a rank (review list)

3: Limited Distribution or infrequent throughout a broader area in California (Watch list)

Threat Rank

0.1: Seriously threatened in California

0.2: Fairly threatened in California

0.3: Not very threatened in California

Source: *West Valley Logistics Center, Appendix B of the Habitat Assessment* (RBF 2014) (Appendix D)

AR00004857

A habitat assessment was conducted in 2013 and 2014 and is included in Appendix D. The habitat assessment concluded that focused studies were needed for coastal California gnatcatcher (*Polioptila californica californica*), Delhi sands flower-loving fly (DSFLF; *Rhaphiomidas terminatus abdominalis*), and rare plants. Due to the lack of suitable burrows, sign, and no recent recorded occurrences within the general vicinity of the project site, a focused survey was not conducted for burrowing owl (*Athene cunicularia*).

Rare Plants Focused Survey Results

The rare plant focused survey was conducted in April and May of 2013 by RBF Consulting following the CDFW *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2009) and the USFWS *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants* (USFWS 1996). Although the majority of the project site is heavily disturbed and does not provide suitable habitat for most special-status plants, there is a low potential for six rare plants to occur within the disturbed RSS along the western boundary of the limits of disturbance: Plummer's mariposa-lily (*Calochortus plummerae*), smooth tarplant (*Centromadia pungens* ssp. *laevis*), Parry's spineflower (*Chorizanthe parryi* var. *parryi*), Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*), Parish's desert-thorn (*Lycium parishii*), Pringle's monardella (*Monardella pringlei*), and San Bernardino aster (*Symphyotrichum defoliatum*). All of these plant species are listed by CNPS as sensitive plants, but none of them are federally or state listed as threatened or endangered. No sensitive plant species were found on the project site during the 2013 sensitive plant survey, and they are all presumed absent.

Coastal California Gnatcatcher Focused Survey Results

The coastal California gnatcatcher (CAGN) is an obligate resident of sage scrub habitats dominated by California sagebrush and has been documented in the RSS in the Jurupa Hills west of the project site (Figure 4.2.3-3; CDFW 2013). The habitat assessment (Appendix D) concludes that all verified observations of this species in the vicinity of the project site are within the RSS habitat along the western site boundary and not within the project building footprint or area of disturbance. While the RSS community found on the western boundary of the project site provides suitable habitat for CAGN, the species was not observed during the 2013 habitat assessment, 2013 focused survey, or 2014 focused survey effort. Therefore, the species has a moderate potential to occur within the RSS habitat along the western boundary of the project site based on past occupation and presence of suitable RSS habitat.

The project site occurs within CAGN federally designated Critical Habitat, Unit 10. Unit 10 includes MSHCP lands and the Jurupa Hills adjacent to the project site. The MSHCP identifies CAGN as potentially occurring within the Jurupa Hills Subunit of the Jurupa Area Plan, which is located just south and west of the project site.

Delhi Sands Flower-loving Fly Focused Survey Results

DSFLF habitat is limited to areas that include Delhi fine sand, an aeolian (wind-deposited) soil type. The highest density of DSFLF has been found in habitat that includes a variety of plants including California buckwheat, California croton (*Croton californicus*), and telegraph weed (*Heterotheca grandiflora*). Areas known to have been occupied by DSFLF or areas that contain suitable habitat for the fly have been divided into three recovery units (Colton, Jurupa, and Ontario Recovery Units).

These recovery units are defined as large geographic areas based on geographic proximity, similarity of habitat, and potential genetic exchange. The project site occurs within the Jurupa Recovery Unit. Land with suitable DSFLF habitat include only those areas with open, undisturbed Delhi Series soils that have not been permanently altered by residential, commercial, or industrial development or other human actions (USFWS 1997).

The MSHCP has identified the Jurupa Mountains Subunit of the Jurupa Area Plan in Riverside County as containing core and linkage habitat for DSFLF; however, the project site is not within the MSHCP plan area.

According to USFWS protocol, two consecutive years of negative surveys are required to demonstrate absence of DSFLF from a project site. Consecutive protocol surveys conducted for DSFLF between 2003 and 2009 did not detect this species. Consecutive focused surveys in 2011, 2012, and 2013 also resulted in negative findings (species not present). Based on these results, the species has been determined to be absent from the project site, and it is not addressed further in this document.

Burrowing Owl Habitat Assessment Results

Burrowing owl is a grassland specialist distributed throughout western North America, where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. Burrowing owls are dependent upon the presence of burrowing mammals (such as ground squirrels) whose burrows are used for roosting and nesting (Haug and Didiuk 1993). Burrowing owls can also occupy man-made structures, such as buried and non-functioning drain pipes, stand-pipes, dry culverts, rock and debris piles, and concrete blocks and pads. There is a moderate potential for burrowing owl to occur on the project site based the presence of suitable open habitat and foraging areas.

Although the vegetation communities on the project site provide the open vegetation needed by burrowing owls, no burrowing owls or burrowing owl sign were observed during the habitat assessment. Additionally, no suitable burrows needed for nesting were observed during the habitat assessment. Existing conditions at the project site including the routine disking activities and off-road vehicle activities have likely kept burrowing owls from inhabiting or colonizing the project site. Due to the lack of suitable burrows and sign, and no recent recorded occurrence within the general vicinity of the project site, a focused survey was not conducted for burrowing owl. Burrowing owls are presumed absent from the project site.

Wildlife Corridors and Linkages

The Jurupa Hills extend from Riverside County into San Bernardino County (see Appendix D, Exhibit 3). The MSHCP recognizes the Jurupa Hills as a large non-contiguous block of habitat that serves as a "stepping stone" for avian species, including the CAGN, that migrate between Riverside and San Bernardino Counties. The project site occurs directly adjacent to the Jurupa Hills at the northern edge of the MSHCP area. Approximately 44.8 acres of intact RSS habitat occur along the site's western boundary contiguous with existing RSS habitat areas within the Jurupa Hills and the boundary of the MSHCP.

CAGN have been observed within the 44.8-acre RSS habitat at the project site during surveys conducted at the site between 2004 and 2008, although, as stated above, individuals of the species were been detected during 2013 and 2014 surveys of the habitat. However, the Jurupa Hills support

CAGN and their movement between Riverside and San Bernardino Counties. As part of the California Environmental Quality Act (CEQA) analysis for the WVLCSP, the potential for the movement of California gnatcatcher between the Jurupa Hills and the nearby undeveloped portions of Rattlesnake Mountain was evaluated (Appendix D-3). Currently, there are no existing habitat features that occur between Rattlesnake Mountain and the Jurupa Hills that would be expected to support a wildlife movement corridor (see Appendix D, Exhibits 1 and 3). The two areas are separated by open land that has been routinely disked or disturbed by other uses, and no longer supports native vegetation complexes. Existing vegetation between the Jurupa Hills and Rattlesnake Mountain is currently lacking and the intervening undeveloped area is composed of maintained dirt fields.

Avian species, including the CAGN, have been documented migrating through the RSS and chaparral habitats within the Jurupa Hills adjacent to the project site. The majority of the project site is heavily disturbed and no longer supports large blocks of native habitat that would accommodate live-in habitat for wildlife, with the exception of the relatively undisturbed RSS habitat block found along the western boundary of the project site. As noted in Table 4.2.3-2, CAGN have been observed within this area during focused surveys that occurred between 2004 and 2008, but were not detected during 2013 or 2014 surveys. There are large blocks of RSS west and southwest of the project site in the Jurupa Hills and east of the project site on Rattlesnake Mountain. There is a potential that the project site is being used for movement by this species as a means of attaining access to the Jurupa Hills or the Rattlesnake Mountain region.

Additionally, there is an SCE easement along the northern boundary of the project site that may provide a potential movement corridor for wildlife, and this area is potentially restorable habitat as described in the Jurupa Recovery Plan (USFWS 1997) for the DSFLF. The Recovery Plan identifies this easement as a movement corridor within and between the three DSFLF Recovery Units. Other localized non-listed or special-status species could potentially use the SCE easement as a movement corridor. The SCE easement between proposed Buildings 5 and 6 would not serve as a movement corridor due to the proposed buildings constricting potential movement into a narrow passage that lacks suitable habitat. In addition, the proposed buildings as shown on the conceptual site plan would restrict the view of habitat east of the project boundary.

Jurisdictional Water Resources

There were four ephemeral drainages (A, A1, B, and B1) and one wetland documented within the project site boundary identified during the jurisdictional delineation (Appendix D). All of the features are isolated and therefore are presumed to be jurisdictional only under the State. These features account for 0.27 acre (2,564 linear feet) of surface waters of the State from which a total of 0.05 acre constitutes wetlands. Table 4.2.3-3 below lists the total jurisdiction of each regulatory agency for the features that were delineated within the project site.

Table 4.2.3-3. Jurisdictional Water Resources

Jurisdictional Feature	USACE	Regional Water Quality Control Board	CDFW	
	Non-Jurisdictional On-Site Acreage ¹	On-site Acreage	On-Site Acreage	
		Surface Waters	Adjacent Riparian Vegetation	Adjacent Riparian Vegetation
Drainage A	0.09	0.09	-	0.09
Drainage A1	0.005	0.005	-	0.005
Drainage B	0.11	0.11	-	0.11
Drainage B1	0.005	0.005	-	0.005
Wetland 1	0.05	0.05	0.21	0.05
Total	0.27	0.27	0.21	0.27

¹ Surface waters documented on site are isolated and therefore not regulated by the U.S. Army Corps of Engineers (USACE). It is RBF's opinion that the aquatic resources on site are intrastate isolated waters with no apparent interstate or foreign commerce connection. Non-jurisdictional acreages have been shown so that USACE concurrence can be obtained during consultation as part of permit applications.

Vernal Pools and Fairy Shrimp

Vernal pools are seasonally inundated, ponded areas that form in areas where specialized soil and climatic conditions exist. During fall and winter rains typical of Mediterranean climates, water collects in shallow depressions where downward percolation of water is prevented by the presence of a hard pan or clay pan layer (duripan) below the soil surface. Later in the spring when rains decrease and the weather warms, the water evaporates and the pools generally disappear by May. The shallow depressions remain relatively dry until late fall and early winter with the advent of greater precipitation and cooler temperatures. Vernal pools provide unusual "flood and drought" habitat conditions to which certain plant and wildlife species have specifically adapted, along with invertebrate species such as fairy shrimp. The project site lacks natural depressional topography that would support vernal pools.

Based on the literature review and site conditions, there is no potential for fairy shrimp to occur on the project site. Two general classes of soils are known to be associated with listed and vernal pool plant species: clay soils and Traver-Domino Willow association soils. The specific clay soils known to be associated with listed and sensitive species within this area include Bosanko, Auld, Altamont, and Porterville series soils. None of these soils occur on the project site. Although there are a number of depressional areas that retain water, these have directly resulted from mechanical removal of soils (i.e., at borrow sites) and retain high levels of disturbance from recreational usage of the project site. Therefore, sensitive fairy shrimp and vernal pools are not expected to be present.

Western Riverside County MSHCP Species

The southern edge of the project site sits on the San Bernardino-Riverside County line and abuts MSHCP conservations areas in Riverside County. In particular, the project site abuts the northeastern corner of Subunit 2 of the Jurupa Area Plan of the MSHCP. Subunit 2 is a "Noncontiguous Habitat Block" that encompasses the Jurupa Hills (refer to Exhibit 10 of Appendix D). A primary goal of the Noncontiguous Habitat Block is to maintain large intact blocks of coastal sage scrub (such as RSS), chaparral, and grasslands to support CAGN and to maintain core

and linkage habitat for DSFLF. In addition, the Jurupa Hills may also provide core habitat for the Bell's sage sparrow, loggerhead shrike, San Bernardino kangaroo rat, and Los Angeles pocket mouse. Although the project site does not occur within the boundaries of the MSHCP, there is a potential for the target special-status species listed above in Table 4.2.3-2 to be present on the project site. Refer to the *Regulatory Setting* below for additional details on the MSHCP.

Regulatory Setting

This section summarizes federal, state, and local regulations applicable to the project related to biological resources.

Federal

Federal Endangered Species Act

This act provides guidance for the conservation of endangered and threatened species and the ecosystems upon which they depend. Species listed by the USFWS as endangered and/or threatened under the FESA are protected under Section 9 of the FESA, which forbids any person to "take" an endangered or threatened species. "Take" is defined in Section 3 of the FESA as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." The U.S. Supreme Court ruled in 1995 that the term "harm" includes destruction or modification of habitat. Sections 7 and 10 of the FESA may authorize "incidental take" for an otherwise lawful activity if it is determined that the activity would not jeopardize the species' survival or recovery or cause adverse modification of critical habitat for the species. Section 7 applies to federalized projects where a federally listed species is present and there is a federal nexus (such as a federal Clean Water Act Section 404 permit) that is required. Section 10 applies when a federally listed species is present but no federal nexus is present.

Clean Water Act, Section 404

The discharge (temporary or permanent) of dredged or fill material into waters of the U.S., including wetlands, typically requires authorization from the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act (CWA).

Waters of the United States

USACE-regulated activities under Section 404 of the CWA involve the discharge of dredged or fill material including, but not limited to, grading, placing riprap for erosion control, pouring concrete, laying sod, and stockpiling excavated material into waters of the U.S. Activities that generally do not involve a regulated discharge (if performed specifically in a manner to avoid discharges) include driving pilings, some drainage channel maintenance activities, constructing temporary mining and farm/forest roads, and excavating without stockpiling.

Clean Water Act, Section 401

Under Section 401 of the CWA, any project activities that involve a discharge to waters of the U.S. must comply with the applicable provisions of the CWA. The Regional Water Quality Control Board (RWQCB) regulates at the state level all activities that are regulated at the federal level by USACE. Under the Porter-Cologne Water Quality Control Act, the RWQCB regulates all such activities, as well as dredging, filling, or discharging materials into waters of the State, that are not regulated by

USACE due to a lack of connectivity with a navigable water body or lack of an ordinary high water mark (OHWM).

Executive Order 11990 for the Protection of Wetlands

This order establishes a national policy to avoid adverse impacts on wetlands whenever there is a practicable alternative. If wetland impacts cannot be avoided, then all practicable measures to minimize harm must be included.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) makes it unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, or kill migratory birds. The law applies to the removal of nests and the abandonment of nests occupied by migratory birds during the breeding season.

State

California Endangered Species Act

The CESA establishes the State's policy to conserve, protect, restore, and enhance threatened or endangered species and their habitats. CESA mandates that State agencies not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. There are no State agency consultation procedures under CESA. For projects that affect both a State- and federally listed species, compliance with the FESA would satisfy CESA if CDFW determines that the federal incidental take authorization is consistent with CESA under California Fish and Game Code Section 2080.1. For projects that would result in take of a State-only listed species, CDFW must apply for a take permit under Section 2081(b).

California Fish and Game Code, Section 1600–1616 Regulations

Under current California Fish and Game Code Sections 1600–1616, CDFW has authority to regulate work that would substantially divert or obstruct the natural flow—or substantially change or use any material from the bed, channel, or bank—of any river, stream, or lake. CDFW also has authority to regulate work that would deposit or dispose of debris, water, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. This regulation takes the form of a requirement for a Lake or Streambed Alteration Agreement (SAA) and is applicable to all projects involving State or local government discretionary approvals.

Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act, the State Water Resources Control Board and regional boards assert jurisdiction over many discharges into waters of the State. Where resources are subject to both State and federal regulations, Porter-Cologne compliance is coordinated with CWA Section 401 certification. Jurisdiction includes those water features having an OHWM as well as features not regulated by USACE due to a lack of connectivity with a navigable water body or lack of an OHWM.

California Fish and Game Code (3503, 3503.5, 3505, 3800, 3801.6)

These California Fish and Game Code sections protect all native birds, birds of prey, and non-game birds, including eggs and nests, that are not already listed as fully protected and that occur naturally in the state.

Local**Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)**

The MSHCP is a comprehensive regional habitat conservation plan focusing on conservation of species and their associated habitats in western Riverside County. The MSHCP allows for the County of Riverside and cities within the MSHCP area to manage local land-use decisions and maintain a strong economic climate while addressing the requirements of the state and federal Endangered Species Acts. The MSHCP is one of several large, multi-jurisdictional habitat-planning efforts in Southern California with the overall goal of maintaining biological and ecological diversity within a rapidly urbanizing region. Adopted in June 2003, the purpose of the MSHCP was to develop methods and procedures to provide for development that protected environmental resources in the western Riverside County area over a 75-year period.

The importance of the MSHCP to projects within its boundaries in Riverside County is that it streamlines the environmental review and permitting processes for projects that affect biological resources. This is accomplished by having established survey and analysis requirements that directly support the identified conservation goals of the MSHCP and that lead to development of a comprehensive biological resources reserve system that provides conservation of biological resources in perpetuity. The overall benefit to a project proponent is the streamlined forms of mitigation and CESA and FESA take authorizations. Although the WVLCSP does not occur within the boundaries of the MSHCP, it has been included because the WVLCSP occurs directly adjacent to the MSHCP.

City of Fontana Tree Preservation Ordinance

The City of Fontana Tree Preservation Ordinance was developed to preserve and protect heritage, significant, and/or specimen trees within the city limits. The City values such trees because they will enhance the scenic beauty of the City, provide wind protection, prevent soil erosion, promote urban forestation, conserve the City's tree heritage, and promote public health, safety, and welfare. A *heritage tree* under this ordinance is defined as:

- of historical value because of its association with a place, building, natural feature, or event of local, regional, or national historical significance as identified by City Council resolution; or
- representative of a significant period of the City's growth or development (i.e., windrow tree [series of at least four trees, usually Eucalyptus trees] and European Olive tree); or
- a protected or endangered species as specified by federal or state statute; or
- deemed historically or culturally significant by the City Manager or his or her designee because of size, condition, location or aesthetic qualities.

Significant trees consist of the following species: Southern California black walnut (*Juglans californica*), coast live oak (*Quercus agrifolia*), deodara cedar (*Cedrus deodara*), California sycamore (*Platanus racemosa*), and London plane (*Platanus acerifolia*).

Specimen trees are defined as mature trees (not heritage or significant trees) that are examples of the species structure and aesthetic and warrant preservation, relocation, or replacement.

The Tree Preservation Ordinance provides the guidelines for permit acquisition when a tree will be removed, tree replacement and relocation guidelines, and protective measures.

Impact Analysis

Methodology

Potential impacts from the proposed project are analyzed by identifying the potential permanent and/or temporary impacts that would occur on sensitive biological and jurisdictional resources due to the construction and operation of the proposed project. For this analysis, all project activities within the limits of disturbance would be considered permanent impacts and include any ground-disturbing activities, staging, and construction areas that would not be returned to preconstruction conditions. Based on the current project design, no impacts are anticipated to occur outside of the limits of disturbance (along the western boundary of the project site). In addition, there are potential direct, indirect, and cumulative effects that were reviewed. *Direct effects* are those effects that can be expected from direct removal and disturbances to land and a resource. This would include mortality of individuals and permanent loss of habitat. *Indirect effects* are those effects that are delayed, secondary effects, such as fragmentation, pollination interruption, increased levels of environmental toxins, plant and wildlife dispersal interruption, increased risk of fire, and invasion of nonnative animals and plants. Indirect effects are those that can be assumed to increase mortality, reduce productivity, and/or reduce the functions and values of natural open space for native species. *Cumulative effects* are those direct and indirect effects that the proposed project would contribute to (at a considerable level) regionally in conjunction with other past, present, or reasonable foreseeable projects.

This analysis was based on an evaluation of the proposed project in relation to existing biological conditions and probable effects the proposed project would have. Impacts associated with the proposed development and identification of mitigation measures were determined based on a review of existing literature, site reconnaissance, mapping of resources, and subsequent analysis conducted by RBF Consulting for the project site in 2013 (Appendix D).

Thresholds of Significance

Criteria for determining the significance of impacts related to biological resources are based on criteria contained in Appendix G of the State CEQA Guidelines. The proposed project could have a significant impact on the environment if it would:

- BIO-1** 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 Wildlife and Game or U.S. Fish and Wildlife Service.
- BIO-2** 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 Wildlife, Regional Water Quality Control Board, and the U.S. Fish and Wildlife Service.

- BIO-3** Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- BIO-4** 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.
- BIO-5** Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- BIO-6** Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Project Design Features

The following biological resource-related project design features, which include regulatory requirements, would prevent or reduce potentially significant impacts.

Regulatory Requirements

RR-B-1: Obtain Permits for Jurisdictional Waters of the State and State Streambeds. Prior to issuance of a grading permit, the project applicant will obtain the following regulatory approvals for construction activities proposed within the identified jurisdictional and non-jurisdictional areas: U.S. Army Corps of Engineers (USACE) Clean Water Act Jurisdictional Determination documenting isolated conditions and lack of jurisdictional authority; Regional Water Quality Control Board Porter-Cologne Water Quality Certification; and California Fish and Game Code Section 1602 Streambed Alteration Agreement.

RR-B-2: Procure Approved Determination from USACE. An approved determination from USACE will be required prior to a grading permit confirming that the four ephemeral drainages and wetland feature on the project site are non-jurisdictional.

RR-B-3: Obtain Permits for Removal of Heritage Trees. The project applicant will obtain required permits pursuant to the Fontana Tree Preservation Ordinance for removal of any on-site trees prior to a grading permit subject to the provisions of the ordinance.

Impacts and Mitigation

Impact BIO-1. 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

There are approximately 44.8 acres of RSS occurring along the western boundary of the project site that provide potentially suitable habitat for a number of special-status species including rare plants, migratory birds, and listed species, such as CAGN. As described in Chapter 3, *Project Description*, the proposed WVLCSP would retain Parcel 8 of the project site as native habitat and open space, which would preserve potentially suitable habitat areas for these special-status resources.

Occurrences of CAGN have been documented between 2004 and 2008 in the RSS along the western site boundary (Parcel 8). There are an additional 25.1 acres of disturbed RSS within the project site

that do not provide suitable habitat for CAGN (Appendix D). Focused surveys were conducted during the CAGN breeding season in 2013 and 2014, and the species was not found in either year. The project site occurs within federally designated Critical Habitat Unit 10, which indicates that habitat essential for the species' conservation occurs in the area. The proposed project would directly remove 25.1 acres of CAGN Critical Habitat; however, none of the habitat is currently suitable for the species. **Mitigation Measure BIO-1** would ensure that construction work within the 25.1 acres of disturbed RSS would not affect CAGN that may have dispersed into the disturbed RSS.

There is a low potential for Plummer's mariposa lily, smooth tarplant, Parry's spineflower, Robinson's pepper-grass, Parish's desert-thorn, and Pringle's monardella to occur within the RSS community. None of these plant species were found during the 2013 focused survey. The project site was also surveyed for rare plants in 2005 and the results were consistent with the 2013 survey results, as there were no occurrences documented in either survey.

The RSS also has a low to moderate potential for migrating or foraging animals, including tricolored blackbird (*Agelaius tricolor*), Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), burrowing owl, northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), red-diamond rattlesnake (*Crotalus ruber*), loggerhead shrike (*Lanius ludovicianus*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), San Diego desert woodrat (*Neotoma lepida intermedia*), and Los Angeles pocket mouse (*Perognathus longimembris brevinasus*). No focused surveys were required to be conducted for these species. In addition, the 44.8 acres of RSS within the project site would not be affected because they are outside of the limits of project-related disturbance and have been included as preserved habitat by the proposed project. Therefore, no direct impact would occur on the species listed above (except for burrowing owl) or CAGN.

There is a potential the proposed project could directly and indirectly affect birds nesting, including burrowing owl and CAGN, within or adjacent to the limits of disturbance and the RSS outside of the limits of disturbance. Nesting birds are protected by the MBTA and the California Fish and Game Code, and impacts on nesting birds would be significant. Implementation of **Mitigation Measure BIO-2** would ensure all nesting birds are avoided during the nesting season (February 1 to August 31).

Focused surveys were not conducted for burrowing owl, as the species is currently presumed absent based on lack of suitable burrows, burrowing owl sign, and high levels of human disturbance on the project site. However, based on the species biology and presence of suitable foraging habitat within the limits of disturbance, there is a potential for burrowing owl to colonize the project site prior to construction. If construction of the project affects occupied burrowing owl burrows, this would be significant. **Mitigation Measure BIO-3** would require preconstruction surveys to determine if burrowing owls are present prior to any construction activities and would provide for buffers and seasonal restrictions that would avoid impacts on this ground-nesting species, if present.

There is a potential for indirect impacts from project construction and operation to occur to species potentially occupying the RSS, such as the introduction of nonnative species and an increased risk of fire that could occur adjacent to the RSS and affect the habitat. Indirect effects may result in a significant impact. Implementation of **Mitigation Measures BIO-4 through BIO-6** would minimize any potential indirect impacts on RSS habitat and the special-status species potentially occurring within and adjacent to the project area to a level that is considered to be less than significant.

Approximately 203 acres of the soil substrate of the project site have been mapped by the NRCS as Delhi fine sands, which are known to support the DSFLF; however, the high level of disturbance to

the soils on the project site over the years has either removed (i.e., site use as a borrow site) or disturbed (from agricultural activities, disking, and off-road vehicle use) these areas. Protocol-level focused surveys for DSFLF were conducted in 2011 and 2012 within areas mapped as having Delhi fine sands within the limits of disturbance, and no DSFLF were found. In addition, there were also seven consecutive focused surveys completed between 2003 and 2009, and the species was not observed (Appendix D). Project site disturbances and existing development in the general vicinity of the project site have removed or contaminated the Delhi fine sands on the site and removed the native vegetation required by DSFLF. Therefore, suitable habitat needed by DSFLF no longer occurs on the project site. Consequently, there would be no impact on this species or its habitat as a result of the proposed project.

Although there are a number of depressional areas that retain some water, these depressions were formed artificially (i.e., excavated as a borrow site) and are subject to high levels of soil disturbances from informal recreational usage of the site. None of the native soils (i.e., clay and Traver-Domino Willow association soils) associated with fairy shrimp habitat occur on the project site. Since no suitable habitat for fairy shrimp is present, the proposed project would not affect special-status fairy shrimp.

Mitigation Measures

The following mitigation measures would ensure that any potential impacts on special-status species potentially occurring in the RSS along the western boundary of the project site would be avoided and/or minimized.

Mitigation Measure BIO-1: Preconstruction Focused Survey for Coastal California

Gnatcatcher. A protocol-level focused survey for CAGN shall be conducted by a qualified ornithologist in the spring prior to project development to determine whether CAGN have colonized the potentially suitable habitat within 300 feet of the limits of disturbance subsequent to the surveys previously conducted within the project site. If CAGN are found to occur within 300 feet of the limits of disturbance, consultation with USFWS will be necessary to determine whether an Individual Take Permit is required. In addition, if the species is confirmed present, either (1) construction shall be prohibited within 300 feet of potential CAGN habitat between March 15 and August 31 or (2) a preconstruction nesting survey for CAGN will be performed to ensure that no CAGN nests are within 300 feet of the limits of disturbance. If nesting CAGN are found, an avoidance buffer no less than 300 feet shall be established around the nest until all young have fledged and the nest is confirmed by a qualified biologist to be no longer active.

Mitigation Measure BIO-2: Preconstruction Nesting Bird Survey. Nesting birds are protected pursuant to the MBTA and California Fish and Game Code. If ground-disturbing activities or removal of any trees, shrubs, or any other potential nesting habitat are scheduled within the avian nesting season (January 1 to August 31), a preconstruction clearance survey for nesting birds shall be completed no more than 3 days prior to ground disturbance. This will ensure that no nesting birds adjacent to the construction area will be disturbed during construction. If nesting birds are found, an avoidance buffer no less than 300 feet shall be established around the nest until all young have fledged and the nest is confirmed by a qualified biologist to be no longer active.

Mitigation Measure BIO-3: Preconstruction Survey for Burrowing Owl. The project applicant shall retain a qualified biologist to conduct preconstruction surveys for burrowing owls no less than 14 days prior to any ground-disturbing activities, to be repeated 24 hours prior to grading. The preconstruction surveys shall be approved by the City of Fontana Director of Community

Development and conducted in accordance with current survey protocols provided in the CDFW Staff Report on Burrowing Owl Mitigation (March 7, 2012). In the event a burrowing owl is found to be present on site during the preconstruction survey, the project applicant shall ensure that the applicable avoidance measures outlined in the CDFW Staff Report on Burrowing Owl Mitigation (March 7, 2012) are applied to the proposed project (e.g., avoid direct impacts on occupied burrows during nesting season). Any active avoidance measures during the breeding season must to be coordinated with CDFW.

Mitigation Measure BIO-4: Installation of Environmentally Sensitive Area Fencing during Construction. Access to sensitive resources, in particular the RSS community in the preserved lands (refer to **Mitigation Measure BIO-6**) shall be restricted during construction of the proposed project. At or before the start of construction, including establishment of staging areas and/or grading activities, Environmentally Sensitive Area (ESA) fencing shall be installed along the western limits of disturbance to prevent unauthorized access into preserved lands. Educational signage shall also be posted to inform workers and residents in the area of the sensitivity of biological resources in the area. The fencing shall be inspected by a qualified biological monitor once per week during construction to ensure the fencing is intact and construction activities are not encroaching into preserved lands. Another option would be to install the permanent fencing or barrier called for in **Mitigation Measure BIO-5**.

Mitigation Measure BIO-5: Protection of RSS Post-Construction. A permanent fence or barrier shall be erected along the western edge of the limits of disturbance to protect the 44.8 acres of RSS on the project site. The design and materials used for the fencing shall be consistent with fuel management zone specifications for fencing. The fence shall consist of a three- or four-rail wooden fence, three- or four-strand barbless wire with metal t-posts, or other such materials and configuration that will allow for the passage of wildlife while restricting project personnel and the public from accessing the preserved lands. Coordination with a qualified biologist shall occur for the fence design to ensure the fence will not restrict movement of mammals or entangle wildlife. Signage will also be installed that clearly states that access beyond the fence is prohibited. To remain consistent with aesthetic considerations, signage shall be installed where it is easily visible, but not visually obtrusive. The project applicant shall be responsible for the cost and implementation of fencing and signage. The project applicant shall also be responsible for maintenance of the fencing and signage until a management entity is established that will assume such responsibility in perpetuity. This measure may also be implemented at or before the start of construction activities in place of **Mitigation Measure BIO-4**.

Mitigation Measure BIO-6: Implement Habitat Management Plan for the Protection of RSS in Perpetuity. To ensure consistency with applicable General Plan policies, the project applicant shall implement a habitat management and maintenance plan for the 44.8-acre preservation area within Parcel 8.

The habitat management plan, which is included in Appendix E, sets forth requirements to:

- Document the baseline conditions within RSS open space area.
- Eradicate weeds and other undesirable plants within the disturbed portions of the RSS open space area. Tasks include conducting weed eradication or thinning, disposal of weed species to occur annually, and reseeding and biannual monitoring of the site to document treatment actions.

- Control and prevent trespassing, dumping, and other human intrusion into the RSS open space area through permanent fencing, signage, and coordination with the City of Fontana. Signs of human disturbance will be removed through annual clean up.
- Create vegetated areas along the southern boundary of the site to accommodate potential avian movement between Rattlesnake Mountain and the Jurupa Hills regions.

Residual Impacts

Implementation of **Mitigation Measure BIO-1** would determine if CAGN are nesting within the limits of disturbance or within 300 feet of the limits of disturbance, avoid indirect impacts on nesting CAGN, and determine whether consultation with USFWS would be necessary. This would reduce the potential indirect impacts on CAGN to less-than-significant levels. Because suitable habitat for CAGN is absent from the limits of disturbance, it is not anticipated that direct take of the species would occur. Preservation of RSS habitat (**Mitigation Measures BIO 4 through BIO 6**) along the western boundary of the project site would ensure there are no future indirect impacts on CAGN from operation of the proposed project. Additionally, implementation of the habitat management plan would potentially support movement of CAGN between the Jurupa Hills and Rattlesnake Mountains and could improve the health of RSS so it has a higher potential of providing improved nesting CAGN habitat in the mitigation area.

With mitigation measures **Mitigation Measures BIO-4 through BIO-6** incorporated, potential indirect impacts on special-status species potentially occurring within the RSS adjacent to the limits of disturbance would be less than significant.

Implementation of **Mitigation Measure BIO-3** would ensure that there are no direct or indirect impacts on burrowing owl.

There would be no impacts on fairy shrimp or DSFLF.

Impact BIO-2. 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 Wildlife, Regional Water Quality Control Board, or the U.S. Fish and Wildlife Service

There are three ephemeral drainages and one wetland within the boundaries of the project site that would be directly affected by the proposed project, as shown in Table 4.2.3-4. It was determined by RBF Consulting (refer to Appendix D) that these features account for approximately 0.26 acre of surface waters of the State (under the jurisdiction of the RWQCB and CDFW), of which a total of 0.05 acre constitutes wetlands. Additionally, a 0.21-acre patch of mulefat scrub occurs adjacent to the wetland and is potentially subject to regulation by CDFW.

Table 4.2.3-4. Impacts on Jurisdictional Water Resources

Jurisdictional Feature	Permanent Impacts			
	USACE	RWQCB	CDFW	
	Non-Jurisdictional On-Site Acreage ¹	On-site Acreage	On-Site Acreage	
		Surface Waters	Adjacent Riparian Vegetation	Unvegetated Streambed
Drainage A	0.09	0.09	-	0.09
Drainage B	0.11	0.11	-	0.11
Drainage B1	0.005	0.005	-	0.005
Wetland 1	0.05	0.05	0.21	0.05
Total Permanent Impacts	0.26	0.26	0.21	0.26
¹ Surface waters documented on site are isolated and therefore not regulated by USACE. It is RBF's opinion that the aquatic resources on site are intrastate isolated waters with no apparent interstate or foreign commerce connection. Non-jurisdictional acreages have been shown so that USACE concurrence can be obtained during consultation as part of permit applications.				

Direct impacts associated with project site development would include the loss of 0.26 acre of waters of the State (which includes 0.05 acre wetland) subject to RWQCB and CDFW jurisdiction, and 0.21 acre of riparian habitat (mulefat scrub) potentially subject to CDFW jurisdiction. Removal of 0.26 acre of waters of the State and CDFW unvegetated streambed and 0.21 acre of CDFW riparian habitat would require a RWQCB Waste Discharge Requirement under the Porter-Cologne Water Quality Act, including compensatory mitigation, and an SAA per the CDFW 1602 process (**Regulatory Requirement RR-B-1**), including any mitigation under the California Fish and Game Code.

Wetland habitats have declined substantially statewide over the last several decades. The 0.05-acre isolated wetland and its associated riparian habitat (0.21 acre) occur in an area that has been heavily disturbed and provides little additional value to wildlife beyond that of adjacent terrestrial habitats.

Compensatory mitigation would be required due to the adoption of a no net loss of wetlands policy by RWQCB and CDFW, following standards set by USACE. At a minimum, mitigation ratios are set at 1:1 for impacts on waters of the State, with the final acreage of required mitigation subject to approval by the individual regulatory agency. Therefore, at a minimum, compensation of 0.21 acre of drainage and 0.05 acre of wetland would occur through the purchase of credits at a local mitigation bank at a 1:1 ratio. Because of the low functions and values of the drainages and wetland, compensation at a 1:1 ratio would be sufficient.

The 0.21 acre of mulefat scrub (that occurs adjacent to the 0.05 acre wetland mentioned above) that occurs on the project site would be permanently removed during construction of the proposed project. Since the 0.21 acre of mulefat scrub occurs in a heavily disturbed environment, it provides little value to wildlife; however, the 0.21 acre is one of the few locations on site that provides cover for wildlife. In addition, mulefat scrub is considered riparian habitat, which is in decline regionally. Mitigation for the removal of mulefat scrub habitat would be compensated at a 1:1 ratio (total of 0.21 acre) through the purchase of credits at a local mitigation bank.

Riversidian sage scrub is another community that provides habitat for many special-status species and is also in rapid decline. Although RSS is present within the project site, it occurs outside of the limits of disturbance and this community would not be affected. The RSS would be preserved over the long term through implementation of **Mitigation Measures BIO-4** through **BIO-6**. The disturbed RSS within the limits of disturbance (approximately 25.1 acres) would be permanently removed; however, this habitat is not currently suitable for special-status species and removal would be less than significant under CEQA.

As previously mentioned, there are no vernal pools or other sensitive natural communities on the project site.

Regulatory Requirements

The applicant shall implement the following regulatory requirements, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **RR-B-1:** Obtain Permits for Jurisdictional Waters of the State and State Streambeds.
- **RR-B-2:** Procure Approved Determination from USACE.

Mitigation Measures

Mitigation Measure BIO-7: Replacement of Affected Wetland Areas. Implementation of on-site mitigation at a 1:1 ratio for loss of wetlands and drainage channels regulated by RWQCB and CDFW shall be required to compensate for the loss of State-regulated wetlands. Approximately 0.05 acre of wetland, 0.21 acre of drainage, and 0.21 acre of mulefat scrub would be mitigated at an off-site mitigation bank using an in-lieu fee program at a 1:1 ratio (total of 0.47 acre), with the cost per acre to be determined at the time of project development. Final costs will depend upon negotiation with an approved mitigation bank and will be based upon the current market value for wetland mitigation credit purchase.

Residual Impacts

With the incorporation of **Regulatory Requirements RR-B-1** and **RR-B-2** and **Mitigation Measure BIO-7**, this impact would be less than significant.

Impact BIO-3. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means

It was determined by RBF Consulting (Appendix D) that the ephemeral drainages and wetland feature on the project site account for 0.26 acre of surface waters of the State, of which 0.05 acre constitutes wetlands. These features are isolated and do not have any apparent connection to interstate or foreign commerce; therefore, none of these feature are considered waters of the U.S. under USACE jurisdiction.

An approved determination from USACE will be required confirming that the drainage and wetland features on the project site are non-jurisdictional. With compliance with Regulatory Requirements **RR-B-1** and **RR-B-2**, the proposed project would not have a substantial adverse effect on wetlands or federally jurisdictional waters.

Regulatory Requirements

The applicant shall implement the following regulatory requirements, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **RR-B-1:** Obtain Permits for Jurisdictional Waters of the State and State Streambeds.
- **RR-B-2:** Procure Approved Determination from USACE.

Mitigation Measures

None required.

Residual Impacts

There would be no impact.

Impact BIO-4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites

The Jurupa Hills extend from Riverside County into San Bernardino County (see Appendix D, Exhibit 3). The MSHCP recognizes the Jurupa Hills as a large non-contiguous block of habitat that serves as a “stepping stone” for avian species, including the CAGN, that migrate between Riverside and San Bernardino Counties. The majority of the project site is highly disturbed and no longer supports the native habitat needed to accommodate wildlife movement. Approximately 44.8 acres of intact RSS habitat occur in the foothills of the Jurupa Hills found along the site’s western boundary and are contiguous with the RSS found within the Jurupa Hills.

CAGN have been observed within this area during previous focused surveys. Biological issues identified for the Jurupa Hills within the MSHCP boundaries focus on the conservation of large intact blocks of RSS, chaparral, and grasslands to support CAGN. In addition, CAGN are rare in San Bernardino County due to a severe decline of suitable habitat, and severing any potential movement between Riverside and San Bernardino Counties would be significant under CEQA. Therefore, as part of the CEQA analysis for the WVLCSP, the potential for the movement of CAGN between Rattlesnake Mountain and the Jurupa Hills was evaluated.

The project site is currently the only open space connecting the native RSS habitats in the Jurupa Hills and Rattlesnake Mountain (Figure 4.2.3-2). Due to past disturbance (i.e., disking) and degradation of habitat, the open space lacks native habitat that would support a wildlife movement corridor between Rattlesnake Mountain and the Jurupa Hills (see Appendix D, Exhibits 1 and 3). Because of a lack of vegetative cover, the only species that would be expected to migrate between Rattlesnake Mountain and the Jurupa Hills are avian species, including CAGN. While adult CAGN may be less likely to move between these two ranges due to their existing territories, juvenile CAGN will disperse outside of natal areas to establish their own territories. Establishment of a narrow vegetated linkage or route along the WVLCSP’s southern boundary would support movement opportunities for CAGN and other avian species between Rattlesnake Mountain and the Jurupa Hills.

Under the current project design, the proposed project would permanently remove the remaining open space between the Jurupa Hills and Rattlesnake Mountain, restricting movement for CAGN. Since there are no other linkages that could be used by avian species, including CAGN, for movement between the Jurupa Hills and Rattlesnake Mountain, the complete removal of the open space area by the proposed project would be a significant impact. Implementation of **Mitigation Measure BIO-8**

would ensure avian species, including CAGN, could safely move between the Jurupa Hills and Rattlesnake Mountain. In addition, the proposed WVLCSP would retain Parcel 8, which is in the western portion of the project site, as native habitat and open space.

Mitigation Measures

Mitigation Measure BIO-8: Maintain an Open Space Corridor between the Jurupa Hills and Rattlesnake Mountain. To facilitate and support opportunities for CAGN to access the RSS habitat preserved on site and encourage movement between Rattlesnake Mountain and the Jurupa Hills, an area approximately 100 feet wide along the project site's southern boundary shall be maintained as a vegetative linkage. The 100-foot-wide vegetated area will be accommodated by maintaining a 100-foot easement along the project site's southern border and will be clear of buildings in perpetuity. Vegetation will include a few large scrubs/trees and native RSS vegetation species, and may include ornamental vegetation species compatible with the RSS vegetation structure and function. This type of vegetation will provide resting areas for CAGN dispersing between the preserved RSS habitat on site in the Jurupa Hills and Rattlesnake Mountain (see Appendix D, Exhibit 4). The RSS plant community found in the region is an open, sparsely vegetated plant community dominated by brittlebush (*Encelia farinosa*), sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and deerweed (*Acmispon glaber*), and as such these species will be included in the plantings. Vegetation shall be planted at minimum 75-foot intervals, leaving sufficient gaps between the shrubs such that the CAGN would not establish nests or territories but would effectively meet the dispersal needs of CAGN. The Habitat Mitigation and Monitoring Plan (Appendix E) provides detailed specifications on installation, irrigation, maintenance, and performance standards for the vegetation plantings.

Residual Impacts

Implementation of **Mitigation Measure BIO-8** would support movement of avian species, including CAGN, between the Jurupa Hills and Rattlesnake Mountain. No new impacts on wildlife were determined to occur in association with Armstrong Road from lighting, road mortality, or other exposure, as project-related improvements would not include additional lanes of traffic, lighting, or other exposure that are different from existing conditions. In addition, maintenance of the corridor would ensure the long-term use of this corridor by local resident wildlife. With creation of the corridor, potential effects to wildlife corridors and linkages would be less than significant.

Impact BIO-5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance

There are windrows of olive trees and eucalyptus trees on the project site that qualify as heritage trees under the City of Fontana Tree Preservation Ordinance. Olive trees occur just outside the western border (outside of the limits of disturbance). The olive trees would not be affected by the proposed project and would be preserved through implementation of **Mitigation Measures BIO-4** through **BIO-6**. The eucalyptus trees on the northeastern portion of the project site would be removed permanently by the proposed project. Removal of these heritage trees would be in conflict with the Tree Preservation Ordinance and would be a significant impact if the required permits, relocation, replacement, and/or preservation of trees were not conducted. Adherence to the guidelines and policies of the Tree Preservation Ordinance (as included per **Regulatory Requirement RR-B-3**) would occur through implementation of **Mitigation Measure BIO-9**. Therefore, potential impacts would be less than significant.

Regulatory Requirement

The applicant shall implement the following regulatory requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **RR-B-3:** Obtain Permits for Removal of Heritage Trees.

Mitigation Measures

Implement **Mitigation Measures BIO-4** through **BIO-6**.

Mitigation Measure BIO-9: Perform Tree Inventory and Protect, Relocate, or Replace any City-designated Heritage, Significant, or Specimen Trees in Accordance with City Code Requirements.

A certified arborist shall perform a tree inventory to identify the heritage, significant, or specimen trees within the limits of disturbance. The arborist will document species, age, size, structure, and trunk diameter. If one or more heritage, significant, or specimen trees that occur within the limits of disturbance would be disturbed or removed by project activities, the project applicant shall be responsible for the protection, relocation, and/or replacement of the tree(s). A permit for the removal of these trees will be required (Section 28-68) along with implementation of the protective measures (Section 28-66) to avoid impacts on heritage, significant, and specimen trees outside of the limits of disturbance. Trees that will be removed must be replaced or relocated per the guidelines in Section 28-67 of the Tree Preservation Ordinance.

As indicated by Section 28-65 of the Tree Preservation Ordinance, no permit or replacement shall be required for the removal of: damaged parts of a heritage, significant, or specimen tree that has sustained an injured trunk, broken limbs, or uprooting as a result of storm damage or other acts of God, which create a hazard to life or property; trees that are determined to be diseased and/or dead by a certified arborist and approved by the City staff; trees that are determined to be hindering the safe application or installation of traffic control devices or roadway improvements in the public right-of-way or trees that hinder the line of site as determined by the City engineer; or trees that are determined to be within the ultimate right-of-way as shown within the circulation element of the City's General Plan.

Residual Impacts

Acquisition of the tree removal permit described in **Mitigation Measure BIO-9** and **Mitigation Measures BIO-4** through **BIO-6**, and pursuant to **Regulatory Requirement RR-B-3**, from the City and the relocation, replacement, and/or preservation of heritage, significant, or specimen trees would ensure there are no residual impacts on these trees.

Impact BIO-6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan

The proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or State Habitat Conservation Plan. However, the southern boundary of the project site abuts the boundary of the Western Riverside County MSHCP. Specifically, the project site abuts the northeastern corner of Subunit 2 of the Jurupa Area Plan. The Jurupa Conservation Area is a non-contiguous habitat block of RSS, chaparral, and nonnative grassland habitats that has been set aside to support CAGN and to maintain core and linkage habitat for DSFLF. Further, the block of habitat was characterized as a stepping stone for migratory birds moving between San Bernardino County

and Riverside County. However, these habitat types do not occur within the limits of disturbance, and were determined through focused surveys not to support CAGN or DSFLF.

Although the limits of disturbance were mapped by USGS as supporting Delhi Sands, which is required by DSFLF, the project has been subjected to routine disturbance for several decades for agricultural activities, as well as use as a borrow site, and no longer provides the clean Delhi Sands needed by the species. A total of ten focused surveys have been conducted on the project site since 2003, and all focused surveys have been negative.

The western boundary of the project site supports a narrow band of RSS habitat, which is adjacent to and an extension of the non-contiguous habitat block designated by Riverside County under their MSHCP for the Jurupa Conservation Area. The RSS habitat would not be affected and, instead, would be permanently preserved for wildlife and CAGN core habitat (**Mitigation Measures BIO-4 through BIO-6**). These mitigation measures would complement the conservation goals of the MSHCP. Therefore, the proposed project would not conflict with an approved HCP, NCCP, or local, regional, or State conservation plan.

Mitigation Measures

Implementation of **Mitigation Measures BIO-4** through **BIO-6** would ensure the proposed project aligns with the goals of the MSHCP for the region.

Residual Impacts

No residual impacts would occur.

4.2.4 Cultural Resources

Introduction

This section evaluates potential cultural (historic and archaeological) and paleontological resources impacts associated with construction and operation of the West Valley Logistics Center Specific Plan (WVLCSP). This section first describes the prehistoric and historic setting of the surrounding region and project site based on the *Cultural Resources Assessment, West Valley Logistics Center Project, City of Fontana, San Bernardino County, California* (BCR Consulting 2014) in Appendix E. This section also describes the cultural resources and regulations pertinent to the project and evaluates the potential for impacts involving cultural resources. The discussion of paleontological resources relies upon the evaluation previously performed for the Valley Trails Specific Plan Environmental Impact Report (EIR) conducted in 2006 and a paleontology collection records search conducted by the Natural History Museum of Los Angeles County for BCR Consulting for the project in January 2013 (see Appendix E). Mitigation measures, regulatory requirements, and standard requirements that are necessary to reduce impacts are identified where applicable.

Terminology

- **Archaeological resources.** *Archaeological resource* means any material remains of human life or activities that are at least 100 years of age, and that are of archaeological interest. A unique or significant archaeological resource is an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it (1) contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information; (2) has a special and particular quality, such as being the oldest of its type or the best available example of its type; and (3) is directly associated with a scientifically recognized important prehistoric or historic event or person.
- **Before Present (BP).** BP years is a time scale used to specify when events in the past occurred. BP, when placed after a number (as in 2,500 BP), means “years before the present.” This terminology is used in this section to refer to dates that were obtained through the radiocarbon dating method.
- **Cultural resources.** *Cultural resources* are defined as buildings, sites, structures, or objects, each of which may have historic, architectural, archaeological, cultural, or scientific importance, according to the California Environmental Quality Act (CEQA).
- **Historical resources.** A *historical resource* is defined as “a resource listed or eligible for listing on the California Register of Historical Resources” (CRHR) (Public Resources Code, Section 5024.1; 14 CCR 15064.5).
- **Paleontological resources.** *Paleontological resources* include any fossilized remains, traces, or imprints of organisms, preserved in or on the earth’s crust, that are of paleontological interest and that provide information about the history of life on earth, except that the term does not include any materials associated with an archaeological resource or any cultural item defined as Native American human remains. Significant paleontological resources are defined as fossils or assemblages of fossils that are unique, unusual, rare, uncommon, or important to define a

particular time frame or geologic strata, or that add to an existing body of knowledge in specific areas, in local formations, or regionally.

Existing Conditions

The largely undeveloped project site currently contains mostly open space, with major portions previously devoted to agricultural production.

Prehistory

It appears likely that humans first arrived in Southern California about 12,000 BP. Occupation of the proposed project vicinity appears to have begun approximately 9,000 years ago, based on dates derived from excavations at sites near Lake Perris (Perris Reservoir), approximately 17 miles southeast of the project site, and in Diamond Valley Lake (Eastside Reservoir), approximately 30 miles southeast of the southern end of the proposed project area. The prehistoric cultural chronology of inland coastal Southern California is composed of five periods: the Paleoindian Period (ca. 12,000–7,000 BP), Pinto Period (ca. 7,000–4,000 BP), Gypsum Period (ca. 4,000–1,500 BP), Saratoga Springs Period (ca. 1,500–650 BP [A.D. 500–A.D. 1200]), and Proto-Historic or Shoshonean Period (ca. 650–150 B. P. [ca. A.D. 1200 to the 1800s]). These periods represent a general trend of change over time in climatic conditions (from wetter to drier conditions), settlement patterns (from small mobile groups to larger, more sedentary groups), technology (from fewer tools focused on hunting to a variety of tools focused on plant use), and cultural elaboration (increasingly specialized tools, ornamental items, and the development of trade networks). Distinct ethnographic groups appear to have developed during the Proto-Historic Period, when Patayan populations appear to have entered inland coastal California from the Lake Cahuilla area. Subsequently, Spanish exploration and establishment of the Mission system during the late 1700s mark the end of prehistoric life ways (ICF International 2012).

Ethnography

The project site is in an area historically occupied by the Gabrieleno Indians after the establishment of Mission San Gabriel Arcángel in 1771. The area may have also been occupied at times by the Luiseño/Juaneño and the Cahuilla. In 1769, Gaspar de Portola's expedition was the first group of Europeans to have a documented encounter with the Gabrieleno, who shared customs and speech with other Cupan speakers from the Takic branch of the Uto-Aztecan language family, including the Cahuilla and the Luiseño/Juaneño. These groups' settlement patterns included seasonally based, permanent base camps with associated task-oriented sites. Technology was based on flaked stone projectile points, scrapers, choppers, and drills, and bedrock mortars, groundstone milling stones, handstones, mortars, and pestles. Other major tools included the bow and arrow, wooden throwing sticks, traps, nets, burden baskets, carrying nets, and a small number of ceramic forms, mostly undecorated. The Gabrieleno manufactured and traded steatite items (ICF International 2012; also see Appendix E).

The Gabrieleno located their villages along major rivers, such as the Santa Ana, or associated creeks. Often administering multiple villages, Gabrieleno chiefs typically descended through the male line. Gabrieleno social structure appears to have entailed three hierarchically positioned social classes with differing ownership rights, social status, and social obligations. The Gabrieleno made heavy use of seeds, especially from oaks (acorns), but also from grasses and sage. Inland faunal protein sources

included rabbits and deer, while coastal populations made use of fish, shellfish, and marine mammals (ICF International 2012; also see Appendix E).

The project site is situated at the northwestern edge of Luiseño/Juaneño territory, the environmental diversity of which included coastline, lagoons and marshes, interior foothills and river valleys, and mountains. Typically small and politically independent, Luiseño/Juaneño villages were administered by hereditary chiefs and organized along patrilineal lines. The Luiseño/Juaneño conferred private property rights to land on villages and rights to houses, gardens, ritual equipment, trade beads, eagle nests, and songs to individuals. Like the Gabrieleno, the Luiseño/Juaneño depended heavily on seeds that they dried and cooked. They hunted animals such as deer, rabbit, jackrabbit, wood rat, mice, antelope, and birds, and made use of fire in collective rabbit hunts and crop management (ICF International 2012; also see Appendix E).

The Cahuilla stretched from the Salton Sea into the San Geronio Pass and the northwestern reaches of the San Bernardino Mountains. The Cahuilla were divided into three groups based on geographical concentration and variation in language and culture: Desert Cahuilla, Mountain Cahuilla, and Western (or Pass) Cahuilla. A key prehistoric trade route, the Cocopa-Maricopa Trail, ran through Cahuilla territory. From villages near dependable water sources, the Cahuilla engaged in hunting and seed gathering, as well as a form of proto-agriculture involving corn, beans, squash, and melons (see Appendix E).

History

Spanish missionaries settled San Bernardino and Riverside Counties in the early eighteenth century and colonized local native populations. The Spanish mission fathers of San Gabriel Arcángel colonized lands in the San Bernardino Valley to establish the San Bernardino Rancho and Mission Asistencia, Rancho Agua Caliente, and Rancho Jamuba. These lands were used for grazing large herds of mission-owned cattle and sheep. In 1776 and again in 1778, Spanish army Captain Juan Bautista de Anza led an overland expedition through the region on a 1,200-mile route from Nogales, Arizona to San Francisco, California. He traveled the area along the historic route now designated the Juan Bautista de Anza Historic Trail. Mission fathers made use of the Anza Trail to travel to and from the San Bernardino Valley until the mid-1920s, when a more direct route was established between the mission and the San Bernardino Asistencia. This more direct route, the San Bernardino-Sonora Road, also became the northern branch of the Emigrant Trail, the main travel artery through Southern California, which Jedediah Smith utilized in 1827. This trail passed through the project site, which was part of Rancho Jurupa. Territorial governor Juan B. Alvarado granted Rancho Jurupa to Juan Bandini in 1838. The rancho's boundaries encompassed lands that would become part of San Bernardino and Riverside Counties (Hoover et al. 2002: 322, 324-25; also see Appendix E).

San Bernardino County was established in 1853, five years after the United States acquired California and other Mexican territory with the signing of the Treaty of Guadalupe Hidalgo, three years after California was admitted to the Union, and three years after the northern branch of the Emigrant Trail was designated the "Colorado Road" by the Los Angeles Court of Sessions. Cattle, sheep, and horses continued to be raised on Bandini's Rancho Jurupa during these years. In 1857, Bandini sold the majority of the 40,569-acre rancho to his son-in-law, Abel Stearns, who maintained it until his death in 1871 (Bean and Rawls 2003: 95, 123; Hoover et al. 2002:320, 323; also see Appendix E).

Fontana took shape during the first half of the twentieth century. Around the turn of the century, the Fontana Development Company created small residential farms on portions of the former Rancho

San Bernardino. In 1913, the settlement of Rosena was renamed Fontana. A. B. Miller promoted Fontana's advantages for producing citrus, grain, grapes, pork, and poultry. Industrialist Henry J. Kaiser was attracted to the area, and after receiving major government contracts for ship construction at the outset of World War II, he established the largest steel mill in the western United States in Fontana. Amid the ensuing industrialization of Fontana, the project area at the present-day southeastern outskirts of the City remained decidedly rural. By the late 1940s, the historic San Bernardino-Sonora Road (northern branch of the Emigrant Trail) no longer appeared on maps of the area, and a winery had been established within the project area. Giuseppe Guerrieri developed the winery to supply grapes to his Santa Fe Vintage Company in Los Angeles. The winery included several buildings situated at the northern portion of the project site. None of those buildings continue to stand within the project site today (Hoover et al. 2002: 329-30; also see Appendix E).

Historic aerial photographs and topographic maps indicate that a transmission alignment crossed the southeastern corner of the project site by 1938. This transmission feature does not appear to have been associated with early electricity transmission development in the region. Remotely generated electricity in the region first occurred in the 1890s when the San Antonio Light and Electric Company transmitted power 14 miles from a generation plant to the City of Pomona. More advanced transmission lines appeared across the southern and northern California landscapes over the next few decades. During World War I, tightened energy supply prompted state regulators to encourage independent power companies to interconnect major transmission lines so that electricity could be transmitted from localities with abundant hydroelectric sources to localities where demand exceeded available supply. The resulting interconnection effort proved successful. It spread to other states and created incentives for technological improvement, including introduction of 220-kilovolt-ampere (kVA) transmission lines in the early 1920s. The next phase of major technological advancement in power generation and transmission capacity took place after World War II (Williams 1997; also see Appendix E).

Paleontological Setting

Paleontological resources are fossilized remains of ancient environments, including fossilized bone, shell, and plant parts; impressions of plants, insects, or animals parts preserved in stone; and preserved tracks of insects and animals. Paleontological resources are best preserved in fine sedimentary rocks such as limestone and siltstone, but are also found in metamorphosed sedimentary rock, such as shale, and other geologic units. Paleontological resources are valued for the information they yield about the history of the earth and its past ecological settings. In addition, fossils provide important chronological information that is used to interpret geological processes and regional history.

The Jurupa Hills on the western end of the project site are made up of granitic and metamorphic rocks, while the lower slopes and level areas consist of alluvial fan sediments. The project area is underlain by alluvial fan deposits of middle to late Pleistocene age, overlain in some areas by a thin veneer of Holocene alluvium. Generally speaking, the Holocene veneer has a low potential to contain fossil remains, but the subsurface Pleistocene fan sediments can have a high potential to contain paleontological resources. The uppermost few feet of this alluvium are unlikely to contain significant fossil remains because the area was previously used for agricultural production and the soil has been repeatedly plowed.

Regulatory Setting

State

The California Office of Historic Preservation (OHP), as an office of the California Department of Parks and Recreation, implements the policies of the National Historic Preservation Act (NHPA) of 1966 on a statewide level. OHP also carries out the duties set forth in the California Public Resources Code (PRC) and maintains the California Historic Resources Inventory (California Public Resources Code Section 5024.1(a)). The State Historic Preservation Officer (SHPO) is an appointed official who implements historic preservation programs within the State's jurisdictions.

Also implemented at the state level, CEQA requires projects to identify any substantial adverse impacts that may affect the significance of identified historical resources, and is the primary state law that may affect cultural resources, as described in more detail below. Other laws governing cultural resources include California PRC 5097.9 et seq. and Health and Human Safety Code 7050.5 et seq. Records about Native American graves, cemeteries, and sacred places, as well as information about the location of archaeological sites, must not be disclosed to the public (California Government Code 6254.10). Such information is considered sensitive and confidential and should not be contained in any public document.

California Environmental Quality Act

CEQA mandates that local agencies consider potential significant environmental impacts on cultural resources as a result of proposed projects. Significant resources are those that are listed in or considered eligible for listing in the CRHR. However, the fact that a resource or property is not listed in the CRHR does not preclude it from being significant and does not make it exempt from CEQA evaluation.

State CEQA Guidelines Section 15064.5(a) defines three ways that a property may qualify as a historical resource for the purposes of CEQA review:

1. The resource is listed in or determined eligible for listing in the CRHR.
2. The resource is included in a local register of historical resources, as defined California PRC Section 5020.1(k) or identified as significant in a historical resource survey that meets the requirements of California PRC Section 5024.1(g), unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3. The lead agency determines the resource to be significant as supported by substantial evidence in light of the whole record.

These three conditions are related to the eligibility criteria for inclusion in the CRHR. A cultural resource may be eligible for inclusion in the CRHR for the same criteria listed for the National Register of Historic Places (NRHP). The CRHR criteria are summarized as follows:

1. 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).
2. Associated with the lives of persons important to local, California, or national history (Criterion 2).
3. 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).

4. 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).

In addition, properties that are listed in or eligible for listing in the NRHP are considered eligible for listing in the CRHR, and thus are significant historical resources for the purposes of CEQA.

CEQA Section 21083.2(g) states that a unique archaeological resource is an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that the resource:

- contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; or
- has a special and particular quality, such as being the oldest of its type or the best available example of its type; or
- is directly associated with a scientifically recognized important prehistoric or historic event or person.

The State CEQA Guidelines (Section 15064.5(a)(3)) define *historical resources* broadly to include any object, site, area, or place that a lead agency determines to be historically significant. As such, paleontological resources are protected therein by requiring that they be identified and mitigated as historical resources under CEQA.

Paleontologically sensitive sedimentary units are those units with a high potential for containing significant paleontologic resources (i.e., rock units within which vertebrate fossils or significant invertebrate fossils have been determined by previous studies to be present or likely to be present). These units include, but are not limited to, sedimentary formations that contain significant paleontologic resources anywhere within their geographical extent, as well as sedimentary rock units temporally or lithologically suitable for the preservation of fossils. Fossils can be considered to be of significant scientific interest if one or more of the following criteria apply:

- the fossils provide data on the evolutionary relationships and developmental trends among organisms, both living and extinct;
- the fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein;
- the fossils provide data regarding the development of biological communities or interaction between paleobotanical and paleozoological biotas;
- the fossils demonstrate unusual or spectacular circumstances in the history of life; or
- the fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation and are not found in other geographic locations.

According to CEQA, a project that may cause a substantial adverse change in the significance of a paleontological resource is a project that may have a significant effect on the environment (State CEQA Guidelines Section 15064.5(b)). CEQA further states that a *substantial adverse change in the significance of a resource* means the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance would be materially impaired. Therefore, for purposes of the analyses in this EIR and in accordance with Appendix G of the State

CEQA Guidelines, the proposed project would have a potentially significant effect on the environment if it directly or indirectly destroys a unique paleontological resource or site.

Consultation with Native American Tribes on General/Specific Plans and Amendments

Public Resources Code §65352.3 (formerly known as Senate Bill 18) requires city and county governments to notify and consult with California Native American tribes prior to the adoption of, or any amendment to, a general plan or specific plan. The intent of the bill is to provide the tribes an opportunity to participate in local land use decisions at an early stage for the purpose of protecting or mitigating impacts on cultural places. As defined in California PRC Sections 5097.9 and 5097.995, California Native American Cultural Places include:

- Native American-sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine; and
- Native American historic, cultural, or sacred site that is listed or may be eligible for listing in the CRHR, including any historic or prehistoric ruins, any burial ground, and any archaeological or historic site.

California Health and Safety Code

Human remains are also sometimes associated with archaeological sites. According to CEQA, “archaeological sites known to contain human remains shall be treated in accordance with the provisions of State Health and Safety Code Section 7050.5.” The protection of human remains is also ensured by California PRC Sections 5097.94, 5097.98, and 5097.99.

If human remains are exposed during construction, State Health and Safety Code Section 7050.5 states that no further disturbance will occur until the county coroner has made the necessary findings as to origin and disposition pursuant to California PRC Section 5097.98. Construction must halt in the area of the discovery of human remains, the project proponent must ensure that the area is protected, and consultation and treatment will occur as prescribed by law.

Local

City of Fontana General Plan

The proposed project is subject to compliance with the City of Fontana General Plan goals, policies, and strategies. Cultural resources are addressed in the General Plan Open Space & Conservation Element. Four goals concerning cultural resources are outlined in this element and include commitments to identify cultural resources, support preservation, incorporate important cultural resources into economic development strategies, and increase public awareness and enjoyment of Fontana’s heritage (Goals 4.1 through 4.4) (City of Fontana 2003).

Impact Analysis

Methodology

Record Search and Field Survey

A record search was undertaken by BCR Consulting to determine previously recorded cultural resources and associated studies of sites within a 1-mile radius of the project site. BCR Consulting conducted the record search at the San Bernardino Archaeological Information Center (SBAIC) at

the San Bernardino County Museum in Redlands, and at the Eastern Information Center (EIC) at the University of California at Riverside. The record search revealed that 30 studies of cultural resources have been undertaken within a 1-mile radius of the project site, and that 23 cultural resources have been identified within that 1-mile radius. One of these studies previously assessed the majority of the project site and was conducted for a different proposal on the site (LSA 1987). Four of those 23 cultural resources were recorded wholly or partially within the project site. Additional research was conducted using the University of California, Riverside Library's map collection, records of the Bureau of Land Management, the Riverside County Land Information System, the San Bernardino County Geologic Information System, and various internet resources.

An additional record search was completed previously for the Valley Trails Specific Plan project in 2005 (Jones & Stokes 2006), which covered the majority of the current project area. The current record search results do not differ from the 2005 record search results.

On February 15, 21, and 25, 2013, and August 1, 2014, BCR Consulting completed a cultural resources field survey of Parcels 1 through 7 and the detention basin, encompassing all areas of the project site where ground disturbance might occur as the result of proposed project development. The survey was conducted by walking parallel transects spaced approximately 15 meters apart across the project site, where accessible. The results of the survey, fully included within the *Cultural Resources Assessment, West Valley Logistics Center Project, City of Fontana, San Bernardino County, California* in Appendix E, are summarized below. Parcels 1 through 6 and Parcel 8 had been previously surveyed in 1987 (LSA 1987) and Parcel 7 was surveyed in 2005 (Jones & Stokes 2006). Parcel 9 on the southern edge of a former landfill was not surveyed, as no ground disturbance would occur on that parcel as part of project site development.

Native American Consultation

A Sacred Lands File Search was conducted through the Native American Heritage Commission (NAHC). The search did not reveal any Native American resources within 0.5 mile of the project site. NAHC also provided a list of local Native American tribes and organizations to contact regarding potential cultural resources in the project area, to which BCR Consulting sent certified letters and follow-up emails. Representatives of the following tribes and organizations were contacted: the Pechanga Band of Mission Indians, the Gabrielino/Tongva Nation, the Ramona Band of Cahuilla Indians, the Morongo Band of Mission Indians, the San Manuel Band of Mission Indians, the Gabrielino/Tongva San Gabriel Band of Mission Indians, and the Soboba Band of Luiseno Indians. No responses containing specific information on cultural resources in the project site were received. Sam Dunlap of the Gabrielino/Tongva Nation recommended archaeological monitoring and Native American monitoring by the Gabrielino/Tongva Nation. Anthony Morales of the Gabrielino/Tongva San Gabriel Band of Mission Indians recommended archaeological and Native American monitoring. Joseph Ontiveros of the Soboba Band of Luiseno Indians requested consultation with the developer/land owner, transfer of information as the project progresses, and the presence of Soboba Monitors during ground disturbances.

Archaeological Sites

The records search identified four prehistoric archaeological sites partially or wholly within the project area, described below.

Site CA-SBR-1573: this site was recorded in 1937 and revisited in 1949 and 1962 by Gerald Smith. According to site records on file at the SBAIC, CA-SBR-1573 consists of a prehistoric campsite and

scattered artifacts in the vicinity of the basin east of Locust Avenue. In 1987, Beth Padon revisited the site and encountered no surface remnants. Padon noted that at least some of the area had recently been bulldozed. BCR Consulting visited the site twice and conducted systematic pedestrian surveys at 5-meter intervals within areas of the site near the project. The area surveyed had been subject to mechanical excavation and dumping of excavation materials, likely associated with the construction of the detention basin (Lot A). No site remnants were located during the survey efforts.

Resource P-36-10232: this resource was originally recorded by Beth Padon in 1987. It consists of a single isolated prehistoric core reduction flake. BCR Consulting conducted a pedestrian survey of the site and surrounding area at 5-meter intervals using a global positioning system unit to approximate a 100-meter buffer around the mapped site. Neither the previous isolate nor any other artifacts were located.

Site CA-SBR-714: this resource is a bedrock milling slick site located outside of the project site, within 1 mile.

Resource P-19-17932: this resource is also a bedrock milling slick site located nearby, but outside of the project site.

Historic-era Resources

The records search identified two historic-era resources within the project area, described below.

Resource P-36-16417 (CPHI-SBR-21): Plotted through a portion of the project area by the SBAIC, this resource consisted of the San Bernardino/Sonora Road. No site records were available for this resource. The San Bernardino/Sonora Road has been designated a California Point of Historical Interest (CPHI-SBR-21). As such, it is considered a historical resource for the purposes of CEQA. Additional map research allowed BCR Consulting to approximate the location of the resource. No sign of the road segment plotted across the project site was observed during the field survey. Because the portion of the resource through the project area is no longer identifiable, it does not retain historical integrity. For this reason, the segment within the project site does not contribute to the historical significance of the San Bernardino/Sonora Road. Therefore, the segment through the project area does not appear to be a historical resource under CEQA.

Resource P-36-25455: This resource is a historic-era transmission line plotted through the project area by the SBAIC as a continuation of the historic-era transmission line segment recorded by Jennifer M. Santa and W. Gillean Atkins 3 miles west of the project area in 2012. The transmission line appears to date to ca. 1938. This transmission line crosses the southeastern corner of the project area. One of the line's steel lattice-style towers is within the project site. The transmission line has not been formally evaluated for CRHR eligibility. As such, for the purposes of this evaluation, it is considered a historical resource for the purposes of CEQA.

Paleontological Sites

The Los Angeles County Natural History Museum conducted a paleontological file search of their records for the project site and surrounding vicinity on January 24, 2013. Exposed igneous and metamorphic rocks, which would not contain fossils, are reported in the elevated western portion of the project site. Most of the lower central portions of the project site consist of surficial sediments composed of older Quaternary alluvial fan deposits in the south and younger Quaternary alluvial fan deposits in the north, both derived from the surrounding hills. The records search found no known vertebrate fossil localities in the project site, nor any nearby localities from the same or similar

sedimentary deposits as those within the project site. The closest fossil vertebrate locality in older Quaternary sediments is LACM 1207, directly southwest of the project site, just north of the City of Corona, where a specimen of a fossil deer, *Odocoileus*, was found in sediments deposited in a fluvial environment. (Appendix E.)

The Division of Geological Sciences of the San Bernardino County Museum conducted a search of its records for the proposed project vicinity for the Valley Trails Specific Plan project on the site in 2006. No known vertebrate fossil localities lie directly within the proposed project site, but the museum did identify nearby localities from the same or similar sedimentary deposits as those that occur within the near-surface Pleistocene alluvial fan deposits within the proposed project area. The closest known vertebrate fossil locality, SBCM 5.1.11, found within similar Quaternary deposits, is approximately 4 miles west of the project site. This location produced fossil remains of the extinct saber-toothed cat, *Smilodon*. At that time, no paleontological field survey was conducted for the Valley Trails Specific Plan project due to the heavily disturbed conditions and low potential for disturbance to paleontological resources as a result of the project.

Previous geotechnical testing characterized the site geology and subsurface soil conditions of Parcels 1 through 6 and Parcel 8 (Appendix H: Leighton and Associates, Inc. 2007). Parcels previously used for agriculture are Parcels 1, 2, and 3. Undocumented artificial fill associated with previous grading of a once-planned golf course is present across the northern half of the site, and additional fill is located in Parcels 1 and 4. Alluvium covers the majority of the lower elevations of the site (Parcels 5 and 6) that were not impacted by previous grading and agriculture. Based on this information, the only areas within Parcels 1 through 6 and Parcel 8 with the potential for paleontological resources are Parcels 5 and 6 in the southeastern portion of the project site.

Thresholds of Significance

Criteria for determining the significance of impacts related to cultural resources are based on criteria contained in Appendix G of the State CEQA Guidelines. The proposed project could have a significant impact on the environment if it would result in any of the following.

- CUL-1** Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5.
- CUL-2** Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5.
- CUL-3** Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
- CUL-4** Disturb any human remains, including those interred outside of formal cemeteries.

The State CEQA statutes define significant resources as described in the *Regulatory Setting* section.

Project Design Features

The following cultural resources-related project design features, which include regulatory requirements and standard requirements, would prevent or reduce potentially significant impacts.

Regulatory Requirement

RR-C-1: Comply with Requirements if Unanticipated Discovery of Human Remains Occurs. If human remains are discovered or recognized during construction-related activities, State Health and Safety Code Section 7050.5 requires there to be no further excavation or disturbance of the immediate location of the remains until the County coroner has been informed and has determined that no investigation of the cause of death is required. If the remains are determined by the coroner to be of Native American origin, the coroner will notify the Native American Heritage Commission (NAHC), which will then identify a most likely descendant (MLD) (§7050.5; Public Resources Code [PRC] §5097.98). The MLD will make a recommendation to the landowner as to the means of treating or disposing of the human remains and any associated grave goods with appropriate dignity, as stipulated in California PRC §5097.98. Upon discovery of human remains, the landowner will ensure that the immediate vicinity is not damaged or disturbed until specific conditions are met through discussions with the descendants regarding their preferences for treatment. If the NAHC is unable to identify a descendant, or the descendant fails to respond within 48 hours after being notified by the NAHC, the landowner is required to reinter the human remains on the property and to protect the site where the remains were reinterred from further and future disturbance. According to the State Health and Safety Code, six or more human burials at one location constitute a cemetery (§8100), and disturbance of Native American cemeteries is a felony (§7052).

Standard Requirement

SR-C-1: Comply with City of Fontana Municipal Code Chapter 5, Buildings and Building Regulations, Article XIII, Section 5-351: Preservation of Historic Resources. The Code states that this article is “adopted to implement the goals and policies of the general plan, which recognize the presence of archaeological sites and buildings that have historic importance for the city. The city council finds and declares that historic, archaeological and cultural resources symbolize the city and its people, reveal how the city’s character was shaped, and instill pride in the community. The creation and functions of the planning commission and the identification, preservation and protection of historic, archaeological and cultural resources within the city shall be governed by the provisions of this article.” The applicant or developer will evaluate cultural resources to determine presence on the site, and protect and preserve resources or mitigate any potential project-related impacts, as necessary, to ensure compliance with this Code.

Impacts and Mitigation

Impact CUL-1. Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5

As described above, two historic-era resources were identified within the project site. The portion of resource P-36-16417 (CPHI-SBR-21) plotted through the project site formerly comprised a segment of the historic San Bernardino/Sonora Road that could not be identified during the most recent cultural resource survey of the area. Therefore, the portion of the resource through the project site no longer retains historical integrity, and does not contribute to the significance of the historic San Bernardino/Sonora Road. Consequently, the proposed project would have no significant impact on portions of the San Bernardino/Sonora Road historic resource within the project site, and would not have significant impacts on any portions that may remain identifiable outside of the project area.

Resource P-36-25455, the historic-era transmission line running through the southeastern corner of the project area in the easement between Parcels 5 and 6, has not been formally evaluated for the

CRHR. It may meet one or more of the CRHR significance criteria. The line and towers extend miles east of the project site, through areas that have undergone a great deal of development since the 1930s, when the transmission line appears to have been constructed. Indirect visual impacts on the resource, such as changes to the setting of the resource from development of the proposed project, would not significantly impact any significance attributed to it. Previous development has altered the transmission line's setting beyond the project area. In the case of an engineering feature such as a historic transmission line and associated structures, the resource's physical integrity itself, particularly its integrity of design and materials, is necessary to convey significance, not its setting. The area containing the transmission line is within a Southern California Edison easement between Parcels 5 and 6, and no physical modifications to any structure associated with the transmission line would be undertaken within the easement in accordance with the proposed WVLCSP; therefore, the resource would be preserved, and no direct impacts on the resource would occur. As described in the Cultural Technical Study prepared for the project (Appendix E), preservation is the preferred manner of treatment for the portion of P-36-25455 within the project site. Furthermore, since substantial modern development has occurred in the vicinity of the resource outside of the project area, the development of the project site, including minor disturbance to improve accessibility, would not result in significant indirect visual impacts on the historic transmission line resource (Appendix E). In addition, **Standard Requirement SR-C-1** provides for preservation of historic resources. Therefore, impacts related to historic resources from implementation of the proposed project would be less than significant.

Standard Requirement

The applicant shall implement the following standard requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **SR-C-1:** Comply with City of Fontana Municipal Code Chapter 5, Buildings and Building Regulations, Article XIII, Section 5-351: Preservation of Historic Resources.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts on the significance of historical resources would be less than significant.

Impact CUL-2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5

As described in the *Archaeological Sites* section above, two prehistoric resources were identified within the project site. Resource P-36-10232 is an isolated artifact; isolated artifacts do not offer context or research potential that contributes to the understanding of prehistory and are by definition not eligible for the CRHR. Archaeological site CA-SBR-1573 is adjacent to the project area on land that is now developed as a residential subdivision. No evidence of the archaeological site was found within the project site; therefore, the project would not cause a substantial adverse change to the significance of the resource. Two additional archaeological sites were recorded near the project site: P-19-17932 and CA-SBR-714. Both of these are bedrock milling slick sites.

Although CA-SBR-1573 would not be adversely affected by the proposed project, prehistoric cultural resources have been identified within and adjacent to the project site, and the project site is

considered to be potentially sensitive in terms of buried prehistoric cultural resources, as it is possible that unknown significant archaeological materials could be discovered and disturbed during project excavation activities. The proposed project would involve surface disturbance and grading, installation of a proposed new lift station northwest of the 11th Street/Linden Avenue intersection within Lot "A" of the proposed site plan, and potentially extensive trenching for utilities installation and relocation. Grading and trenching, along with other ground-disturbing actions during construction, have the potential to disturb and destroy both known and unknown historic and archaeological resources on the project site as well as within roadway rights-of-way where infrastructure improvements are proposed. Disturbance of any significant historic and archaeological resource would result in a significant adverse impact. As a result, **Mitigation Measures CUL-1** and **CUL-2** provided below include preparation of an archaeological monitoring plan and contain preventative measures to ensure that the proposed project would not adversely affect known or unknown archaeological resources.

Regulatory Requirement and Standard Requirement

The applicant shall implement the following regulatory requirement and standard requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **RR-C-1:** Comply with Requirements if Unanticipated Discovery of Human Remains Occurs. **SR-C-1:** Comply with City of Fontana Municipal Code Chapter 5, Buildings and Building Regulations, Article XIII, Section 5-351: Preservation of Historic Resources.

Mitigation Measures

Mitigation Measure CUL-1: Monitoring for Archaeological Resources during Construction.

Prior to commencement of any grading activity on the project site and consistent with the findings and recommendations of the cultural resources surveys and reports for the proposed project, a qualified archaeological monitor shall be retained by the applicant after consultation with interested tribal and Native American representatives to be present during all excavation activities occurring within 100 meters of each of following sites: P-19-17932, CA-SBR-1573, and CA-SBR-714. The monitor shall work under the direct supervision of a cultural resources professional who meets the Secretary of the Interior's Professional Qualification Standards for archaeology. The monitor shall be empowered to temporarily halt or redirect construction work in the vicinity of any find until a qualified archaeologist can evaluate it. The monitor shall be present at the pre-grade conference in order to explain the cultural mitigation measures associated with the project, and shall be present on site during all ground-disturbing activities.

Mitigation Measure CUL-2: Preparation of Archaeological Monitoring Plan. Prior to commencement of any grading activity on the project site and consistent with the findings and recommendations of the cultural resources reports pertaining to the sensitivity of each area on the project site for cultural resources, the qualified archaeologist shall prepare an Archaeological Monitoring Plan. The Monitoring Plan shall be prepared for review and approval by the City of Fontana Director of Community Development and shall, include at a minimum:

- A list of personnel involved in the monitoring activities;
- A description of how the monitoring will occur;
- A description of the frequency of monitoring (e.g., full time, part-time, spot checking);
- A description of what resources may be discovered;

- A description of circumstances that would result in the halting of work at the project site (e.g., what is considered a “significant” archaeological site);
- A description of the procedures for halting work on the site and notification procedures; and
- A description of monitoring reporting procedures.

Should any cultural resources be discovered during monitoring of project construction activities, the on-site cultural resources monitor shall stop work actions within 100 feet of the discovery until such time as the resource can be evaluated by a qualified archaeologist to determine its significance and make appropriate treatment recommendations. Project personnel shall not collect or move any cultural resource materials. To the extent feasible, project activities shall avoid such resources. Where avoidance is not feasible, the resources shall be evaluated for their eligibility for listing in the California Register of Historical Resources. If a resource is not eligible, avoidance is not necessary. If a resource is determined eligible, adverse effects on the resource shall be avoided or such effects must be mitigated. Mitigation can include, but is not necessarily limited to, excavation of the deposit in accordance with a cultural resource mitigation or data recovery plan that makes provisions for adequately recovering the scientifically consequential information from and about the resource (see CCR Title 4(3) Section 15126.4(b)(3)(C)). The data recovery plan shall be prepared and adopted prior to any excavation and should make provisions for sharing information with tribes that have requested Senate Bill 18 consultation. Results of the data recovery plan shall be deposited with the regional California Historical Resources Information Center repository.

Prehistoric resources may include lithics, ceramics, animal bone, or concentrations of burned rock, while historical resources may include glass, ceramics, or building foundations.

It shall be the responsibility of the City of Fontana Department of Public Works to verify that the Archaeological Monitoring Plan is implemented by the applicant during project grading and construction.

As part of the Archaeological Monitoring Plan, upon completion of all mitigation activities, the consulting archaeologist shall submit a monitoring report to the City of Fontana Director of Community Development and to the San Bernardino Archaeological Information Center summarizing all monitoring and mitigation activities and confirming that all mitigation requirements have been met. The monitoring report shall be prepared consistent with the guidelines of the Office of Historic Preservation’s *Archaeological Resources Management Reports (ARMR): Recommended Contents and Format*. The City of Fontana Director of Community Development or designee shall be responsible for reviewing any reports produced by the archaeologist to determine the appropriateness and adequacy of the findings and recommendations.

Residual Impacts

With implementation of **Regulatory Requirement RR-C-1, Standard Requirement SR-C-1, and Mitigation Measures CUL-1 and CUL-2**, residual impacts on cultural resources would be less than significant.

Impact CUL-3. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature

The Pleistocene alluvial fan deposits within the project site could contain unidentified paleontological resources. The steep elevated portions around the margins of the project site are bedrock exposures of igneous or metamorphic rocks that would not contain recognizable fossils. In

most of the proposed project site in the lower-lying central portions, there are surficial sediments composed of older Quaternary alluvial fan deposits in the south and younger Quaternary alluvial fan deposits in the north, both derived from the surrounding hills (Appendix E). There are no known localities nearby from these deposits and, because they are adjacent to igneous and metamorphic rocks, they are relatively coarse-grained and unlikely to contain significant vertebrate fossils. The closest fossil vertebrate locality in older Quaternary sediments is LACM 1207, southwest of the proposed project area, just north of the City of Corona, where a specimen of a fossil deer, *Odocoileus*, was found but from sediments deposited in a fluvial environment. A previous assessment also concluded that the fossil remains of the extinct saber-toothed cat, *Smilodon*, were found within similar Quaternary deposits on a site approximately 4 miles west of the proposed project area. Based on paleontological record searches, available information, and geotechnical studies performed for the project site, only Parcels 5 and 6 in the southeastern portion of the proposed project site have potential for the discovery of paleontological resources.

As stated previously, the paleontological resources assessment performed for the project (Appendix E) did not reveal vertebrate fossil localities directly within the project site or in the immediate vicinity from the same or similar sedimentary deposits as occur within the project site. Excavations in the igneous and metamorphic rocks exposed around the margins of the project site would not encounter any fossils. Excavations in the relatively coarse-grained Quaternary deposits exposed in most of the project site also likely would not encounter significant vertebrate fossil remains.

If relatively fine-grained sedimentary deposits are determined to be located within the project site boundaries (which has not occurred to date), earthmoving activity related to project construction would not result in a significant impact on paleontological resources, and paleontological monitoring or mitigation would not be required as provided in **Mitigation Measure CR-3**. However, should fine-grained Quaternary sediments at depths below 5 feet be discovered during construction (see **Mitigation Measures GEO-1** and **GEO-2**), site grading at depths below 5 feet could disturb previously unknown paleontological resources, resulting in a significant impact.

Mitigation Measure

Mitigation Measure CUL-3. Monitoring of Paleontological Resources and Reporting. A Paleontological Monitoring Plan will be prepared by the applicant or its designee for City approval. If fine-grained quaternary sediments are discovered below 5 feet in depth within Parcels 5 or 6 either during preparation of the Final Geotechnical Reports or geotechnical testing or during construction, a qualified paleontology monitor shall monitor excavation in these areas based on the Paleontological Monitoring Plan. The paleontology monitor shall retain the option to reduce monitoring if, in his or her professional opinion, sediments being monitored are previously disturbed. Monitoring may also be reduced if the potentially fossiliferous geologic units previously described are not found to be present or, if they are present, are determined by qualified paleontological personnel to have low potential to contain fossil resources.

The monitor shall be equipped to salvage fossils and samples of sediments as they are unearthed to avoid construction delays and shall be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Any recovered specimens shall be prepared to a point of identification and permanent preservation, and shall be curated into a professional, accredited museum repository with permanent retrievable storage. A report of findings, with an appended itemized inventory of specimens, shall be prepared. The report and inventory, when submitted to

the City of Fontana, will signify completion of the program to mitigate impacts on paleontological resources.

Residual Impacts

With implementation of **Mitigation Measure CUL-3**, residual impacts on paleontological resources would be less than significant.

Impact CUL-4. Disturb any human remains, including those interred outside of formal cemeteries

No human remains have been identified in the project area. However, if any human remains are encountered during construction of the project, the proposed project would be required to follow required procedures (as included in **Regulatory Requirement RR-C-1**) for the unanticipated discovery of human remains pursuant to State Health and Safety Code Section 7050.5, which specifies that if human remains are discovered or recognized during construction-related activities, there shall be no further excavation or disturbance of the immediate location of the remains until the County coroner has been informed. Adherence to **Regulatory Requirement RR-C-1** would reduce the potential impact to a less-than-significant level.

Regulatory Requirement

The applicant shall implement the following regulatory requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **RR-C-1:** Comply with Requirements if Unanticipated Discovery of Human Remains Occurs.

Mitigation Measures

No mitigation is required.

Residual Impacts

With adherence to **Regulatory Requirement RR-C-1**, residual impacts related to discovery of human remains, including those interred outside of formal cemeteries, would be less than significant.

4.2.5 Geology and Soils

Introduction

This section evaluates potential geologic, seismic, and soils (geological) impacts associated with construction and operation of the proposed West Valley Logistics Center Specific Plan (WVLCSP) project. Specifically, the geological regulatory framework in California and the region is examined in relation to the project and compared to existing geologic features and resources in the proposed project area. This section also addresses the potential for impacts involving landform grading and alterations. Mitigation measures, regulatory requirements, and standard requirements to reduce impacts are identified where applicable.

The *Existing Conditions* and *Impact Analysis* sections below are based largely on the *Updated Preliminary Geotechnical Report, Proposed Project Black Distribution Center, Vicinity Of Locust Avenue and 11th Street, City Of Fontana, California* (2007) and the *Supplemental Geotechnical Investigation and Infiltration Testing – West Valley Logistics Center, East and West of Locust/Armstrong Avenue, South of Jurupa, City of Fontana, California* prepared for the proposed project in December 2013. Both reports, prepared by Leighton and Associates, Inc., are included in their entirety in Appendix H.

Terminology

- **Earthquake.** An earthquake is the result of a sudden release of energy in the earth's crust that creates seismic waves. Earthquakes are classified by their magnitude, which is a measure of the amount of energy released during an event. The seismicity or seismic activity of an area refers to the frequency, type, and size of earthquakes experienced over a period of time.
- **Expansive soils.** Expansive soils are soils containing water-absorbing minerals that expand as they take in water. These soils can damage buildings due to the force they exert as they expand.
- **Foliation.** A characteristic of metamorphosed rocks in which minerals are aligned in one direction so that the rock can readily be split into thin layers.
- **Liquefaction.** Liquefaction is the phenomenon in which saturated granular sediments temporarily lose their shear strength during periods of earthquake-induced strong groundshaking. The susceptibility of a site to liquefaction is a function of depth to density, water content of granular sediments, and the magnitude and frequency of earthquakes in the surrounding region. Saturated, unconsolidated silt, sand, and silty sand within 50 feet of the ground surface are most susceptible to liquefaction. Liquefaction-related phenomenon may include lateral spreading, ground oscillation, loss of bearing strength, subsidence, and buoyancy effects.
- **Rippability.** Rippability is the ease with which soil or rock can be mechanically excavated.

Existing Conditions

Local Geology

The project site is along the northeasterly flank of the Jurupa Hills, adjacent to the Rialto-Colton Basin. The hills within the region are underlain by metasedimentary rocks and Cretaceous igneous (granitic) rocks. The site is in an area of large-scale crustal disturbance where the relatively

northwestward-moving Peninsular Range Province collides with the Transverse Range Province to the north. Several active or potentially active earthquake faults have been mapped in the region and are believed to accommodate compression associated with this collision. The project site is within the Perris Block, which is bounded on the east by the San Jacinto Fault and on the west by the Elsinore Fault (Appendix E: BCR 2013). Alluvial soils are present in the valley areas. The alluvium is expected to be in excess of 200 feet thick near Armstrong Road. Artificial fill from past grading activities is also present.

This province is characterized by elongated, northwest to southeast trending geologic structures. The Peninsular Ranges province extends approximately 900 miles from the Santa Monica Mountains south to the tip of Baja California. Local sediments are dominated by decomposed granitic alluvium derived from the Jurupa Hills, which surround the project site to the west, north, and southeast. The project site's northern block exhibits gentle slopes on its western boundary and steeper slopes on its eastern boundary. These generally convey water to the southeast via local drainages approximately three miles to the Santa Ana River. The project site's southern block occupies a pass between peaks of the Jurupa Hills that serves as a miniature divide conveying water northeast and southwest, respectively.

Faults and Seismicity

The Southern California region is characterized by, and has a history of, faults and associated seismic activity. A review of available literature indicates that there are no active or potentially active faults that cross the project site, nor is the site within an Alquist-Priolo Earthquake Fault Zone (Appendix H). However, there are several faults in the region that could produce earthquakes resulting in seismic impacts (City of Fontana 2003). The nearest active or potentially active faults to the site include the Cucamonga, San Jacinto, Elsinore, and San Andreas faults. These faults could generate earthquakes and other seismic hazards in the project area. Peak Horizontal Ground Accelerations (PHGAs) for the site were determined using EQFAULT. According to analysis, the San Jacinto Fault could potentially produce a maximum 6.7 magnitude earthquake and would have the greatest PHGA of 0.31g¹ (Appendix H). Specific characteristics of each fault that could affect the site are provided below.

Cucamonga Fault

The Cucamonga Fault is a 25-mile-long "family of thrust faults that runs along the southern front of the San Gabriel Mountain from San Antonio Canyon eastward to Lytle Creek" (Earth Consultants International 2002). The Cucamonga Fault zone crosses the northern portion of the City of Fontana. The Cucamonga Fault is estimated to be capable of producing an earthquake of 7.0 maximum magnitude at the epicenter.

San Jacinto Fault

The San Bernardino segment of the San Jacinto Fault zone is approximately 5.6 miles north-northeast of the site. The San Jacinto Fault is an approximately 130-mile-long, right-lateral strike slip fault. The last major earthquake on this fault, an estimated 6.8 magnitude, occurred in 1918 northeast of the site on the southerly portion of the fault. The seismic potential of the San Jacinto Fault and its potential to affect the project site and future residents are based on estimated strain

¹ Peak ground acceleration can be expressed in g (the acceleration due to Earth's gravity, equivalent to g-force) as either a decimal or percentage.

rates of 1.2 centimeters per year along the San Jacinto Fault.² It was determined that the maximum credible earthquake for the San Jacinto Fault is a 6.7 magnitude event.

Elsinore Fault

The Elsinore Fault is a right-lateral strike slip fault that is approximately 111 miles long (not including its branches—the Whittier and Chino faults to the north and the Laguna Salada Fault to the south) and is within 20 miles of the project area to the southwest. The last major event of this fault was an estimated 6.0 magnitude earthquake on May 15, 1910.

San Andreas Fault

The San Andreas Fault is a right-lateral strike slip fault that is approximately 745 miles long. It runs the length of California, including branches and fractures throughout its length. The San Andreas Fault makes up the boundary between the Pacific and North American tectonic plates. The nearest segment of this fault is within 20 miles north of the project site. The last major event on the San Andreas Fault was an estimated 8.0 magnitude earthquake that occurred on January 9, 1857.

Groundwater and Liquefaction

According to earlier geotechnical studies of the project site (Ebberhart 2000; see Appendix H), no groundwater was encountered in borings to a depth of 64 feet. The more recent geotechnical studies performed on the project site (Leighton 2007 in Appendix H) did not encounter groundwater in any excavations to a depth of 21.5 feet. Regional groundwater data suggests that, in 1933 and 1960, water levels were at depths in excess of 150 feet across the site (Appendix H),

The site is not in an area mapped as potentially liquefiable in the San Bernardino County Geologic Hazard Overlay for the Fontana Quadrangle. Shallow groundwater conditions are not known to exist on the site. Therefore, the potential for liquefaction occurrence at the project site is considered to be very low. (Appendix H.)

Bedrock and Soils

Native soils on the site are characterized as Hanford coarse sandy loam (9–15% slopes), Tujunga loamy sand (0–5% slopes), Cieneba sandy loam (9–15% slopes), and Delhi fine sand (found on a majority of the property). Further, the project site is underlain by undocumented artificial fill, colluvial and alluvial soil, and bedrock as described below.

Quartz Diorite (Granitic) Bedrock

Cretaceous quartz diorite bedrock has been mapped along the hillside in the northern and southeastern portions of the project site. This bedrock was also observed within the lower portion of the relatively deep cut present in the central area of the site (south of the east-west trending water line). In general, quartz diorite bedrock is comparable to a granitic rock in general composition and consistency. As encountered during the geotechnical investigation, the unit is typically medium- to coarse-grained, massive, and weathered near the surface, becoming very dense to hard at depth. (Appendix H.)

² Because of its proximity and seismic potential for strong groundshaking on site, the San Jacinto Fault was used as the design fault to evaluate UBC seismic parameters on site for the project. However, this does not preclude the possibility of strong groundshaking associated with an event on the San Andreas or Cucamonga faults.

Metasedimentary Bedrock

Metasedimentary rocks have been mapped in the hills on the west side of the project site. These rocks have been mapped as interlayered biotite schist and quartzite. The rock is expected to be weathered near the surface but very dense to hard at depth. This unit was not encountered during the geotechnical investigation. The unit consists of sediment that was altered (metamorphosed) during intrusion of quartz diorite bedrock. (Appendix H.)

Colluvium

Colluvium accumulates as a result of slope wash and in-place weathering of the underlying bedrock and is typically present on the tops and flanks of natural slopes. Colluvial soil is generally shallow on the flanks of hillsides and thickens toward the base of natural slopes. Colluvium is generally expected to be several feet thick and consist of clayey, sandy soil that is porous and may contain varying amounts of organic debris. (Appendix H.)

Alluvium

Alluvium covers the majority of the lower elevations of the site that were not impacted by previous site grading. Alluvial soils typically consist of clayey sand and silty sand that is loose and dry to moist near the surface. Gravel was encountered in some areas. In most areas, the alluvium becomes stiff or dense with depth; however, localized areas of relatively soft alluvium to depths on the order of 18 feet were noted during the geotechnical investigation. (Appendix H.)

Undocumented Artificial Fill

Undocumented artificial fill associated with previous grading is present across the northern portion of the project site. Some of this undocumented fill was presumably placed as compacted fill; however, no reports regarding its placement were available for review during the geotechnical investigation. Based on the test pits excavated during investigations on site, it appears as if removal of surficial vegetation was completed prior to fill placement. However, the removal of native soils to competent material was not completed; therefore, the competence of the documented fills is not suitable for structures. (Appendix H.)

Based on a comparison of historic and current aerial photos, undocumented fill appears to have been derived and placed on the larger project area west of Locust Avenue during construction of the existing detention basin on the site (Lot A). This material generally consists of fine- to coarse-grained sand with gravel and cobbles. Other areas where fill is present are consistent with the alluvial soils present in other parts of the site. During a previous investigation, artificial fill with a highly organic odor was encountered at a depth of 15 feet. (Appendix H.)

Rippability

Geophysical rippability studies were conducted to evaluate the density of the bedrock in the area of the planned deeper cuts. These studies, conducted by Terra Geosciences, involved the placement of 17 lines in the vicinity of current and previously planned cut areas in the western, northern, and southeastern portions of the site. Based on the geophysical studies, dense bedrock is present in the near subsurface in the elevated portions of the site, mantled by a surficial mils and weathered bedrock. Within the area of planned development (as shown in the site plan, Figure 3-2), dense bedrock with moderate rippability potential was encountered on site, depending on the degree of

fracturing and other factors. This material would be difficult to excavate with a backhoe or excavator and is essentially non-rippable with increasing depth, requiring blasting. (Appendix H.)

No significant quantities of oversized material were observed on site, although some oversize material may be encountered in the uncontrolled fill previously placed on site. In addition, oversize material may be generated from cut in hard bedrock areas. (Appendix H.)

Slope Stability and Erosion

The natural slopes surrounding the site are mapped as having a potential for slope instability. However, no evidence of landslides or deep-seated slope instability was noted during the 2004 or 2007 geotechnical investigations conducted for the project site. Loose soil on steeper portions of the slopes above the development could be prone to shallow surficial failures and erosion. In addition, berms manufactured of undocumented fill are located in two drainage areas west of and above the proposed area of development. These could be sources of debris. (Appendix H.)

Regulatory Setting

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy (State of California Department of Conservation, California Geological Survey 2013). Under the Alquist-Priolo Act, the California State Geologist identifies areas in the state that are at risk from surface fault rupture. The primary purpose of the Alquist-Priolo Act is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. Unlike damage from groundshaking, which can occur at great distances from the fault, impacts from fault rupture are limited to the immediate area of the fault zone where the fault breaks along the surface, generally within 50 feet. Accordingly, 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).

California Building Code

The California Building Code (CBC) consists of 11 parts that contain administrative regulations of the California Building Standards Commission and regulations of all State agencies that implement or enforce building standards. Local agencies must ensure that development in their jurisdictions comply with guidelines contained in the CBC. Cities and counties can, however, adopt building standards beyond those provided in the CBC.

Geologic resources and geotechnical hazards are governed primarily by local jurisdictions. Most local jurisdictions rely on the CBC for a basis of seismic design. All local jurisdictions must comply with regulations of the Alquist-Priolo Act.

Local

City of Fontana General Plan Safety Element

The City of Fontana General Plan Safety Element contains mechanisms to protect the community from any undue risks related to natural and manmade hazards and addresses issues concerning

police services, earthquakes, fires, and floods. The Safety Element includes mapping of known seismic and other geologic hazards. Specific to seismic hazards, the General Plan recognizes that damage from seismic events is an ever-present danger, and that the City can minimize risks and respond to events through the implementation of goals and policies related to public safety. Applicable goals and policies pertaining to seismic safety include items such as minimizing fatalities and injuries, the burden on public and emergency resources, public and private cost of cleanup, and impacts caused by disruption of households and businesses. (City of Fontana 2003.)

The purpose of the Safety Element is to improve the safety of the community and in the process make it more sustainable and prosperous. The Safety Element addresses “a variety of natural and man-made hazards and provides goals and policies aimed at reducing the risk associated with these hazards.” (City of Fontana 2003.)

The Open Space and Conservation Element of the City of Fontana General Plan also contains policies for the protection of geologic features and avoidance of geologic hazards. Section 4.2.9, *Land Use and Planning*, addresses the goals and policies from the Safety Element and the Open Space and Conservation Element of the General Plan applicable to the proposed project.

Grading Ordinance

Local grading ordinances establish detailed procedures for excavation and earthwork required during construction. Rules and regulations pertaining to earth resources and grading are set forth in Section 17.04.010, Purpose and Intent, of the City of Fontana Municipal Code. The rules and regulations are intended to further implement the goals and objectives of the City of Fontana General Plan to control excavation, grading, and earthwork construction, including fills and embankments. The municipal code also establishes the administrative procedures for grading plan approval, issuance of grading permits, and site inspections, and it establishes penalties for unauthorized grading activity. The purpose of this portion of the code is to protect life, limb, property, public welfare, and the physical environment by regulating grading on private property. It also regulates hillside and arroyo grading in a manner that minimizes the adverse effects of grading on natural landforms, soil erosion, dust control, water runoff, and construction equipment emissions (City of Fontana 2004). The City also adopted and enforces building standards provided in the CBC as part of their municipal code.

Impact Analysis

Methodology

The analysis of geology and soils focuses on the potential for impacts on people and structures due to the construction and operation of the proposed project. This geological analysis was based on the qualitative evaluation of the proposed project in relation to existing geological conditions and probable effects the proposed project would have. Impacts associated with the proposed development were determined and mitigation measures have been prescribed based on a review of existing literature, site reconnaissance, testing, and subsequent laboratory analysis conducted by Leighton and Associates for project areas west of Locust Avenue and Armstrong Avenue in 2004 and 2007. An addendum to the 2007 report was also prepared in 2013 for the project areas east of Locust Avenue. As noted previously, Appendix H includes the 2007 Preliminary Geotechnical Report and the 2013 Supplemental Geotechnical Investigation and Infiltration Testing Report. The 2004

geotechnical report is included in the appendix for the Valley Trails Specific Plan Environmental Impact Report (EIR) and has been incorporated by reference.

The 2004 investigation was conducted for the previously approved Valley Trails Specific Plan residential project on the project site, while the 2007 investigation was conducted for a proposed industrial project. In 2004, all available data pertinent to the site were reviewed, and subsurface exploration (consisting of 24 exploratory borings and 23 backhoe trenches), four seismic refraction surveys, and laboratory testing of soil samples were analyzed in a single geotechnical report. The report presented findings, conclusions, and recommendations concerning development of the site based on the engineering analysis of the geotechnical properties of the subsurface conditions, as discussed above. In 2007, Leighton and Associates performed additional field investigations and laboratory tests, as well as a new rippability investigation. The 2013 Supplemental Geotechnical Investigation and Infiltration Testing Report explored the subsurface soils at the locations of the proposed detention basins for evaluation of infiltration at discrete depths within the borings. Additionally, the 2013 supplemental geotechnical report updated the previous geotechnical report based on the currently proposed WVL CSP and the CBC. Specifically, a total of 12 hollow-stem-auger borings were drilled, logged, and sampled. Additionally, infiltration testing was conducted within eight of the borings in the proposed basins in general accordance with applicable County of San Bernardino Flood Control District guidelines.

The 2013 supplemental geotechnical report includes updated recommendations pertaining to infiltration basins, trench backfill, pavement section thickness, and retaining wall backfill and subdrains. Measures related to seismic design are similar those included in the 2007 Preliminary Geotechnical Report.

The impact analysis assumed that the proposed project activities would, as required, conform to the latest CBC standards, City of Fontana General Plan policies, local ordinances, and local permit requirements.

Thresholds of Significance

Criteria for determining the significance of impacts related to geology and soils are based on criteria contained in Appendix G of the California Environmental Quality Act Guidelines. The proposed project could have a significant impact on the environment if it would result in any of the following.

- GEO-1** Expose people or structures to 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. Refer to Division of Mines and Geology Special Publication 42.
 - ii. Strong seismic ground shaking.
 - iii. Seismic-related ground failure, including liquefaction.
 - iv. Landslides.
- GEO-2** Result in substantial soil erosion or the loss of topsoil.

- GEO-3** Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.
- GEO-4** Be located on expansive soil, as defined in Table 18-1-B of the UBC (1994), creating substantial risks to life or property.
- GEO-5** Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

Project Design Features

The following geology and soils-related project design features, which include regulatory requirements and a standard requirement, would prevent or reduce potentially significant impacts.

Regulatory Requirements

RR-G-1: Comply with Fontana Municipal Code, Chapter 5, Article III, 2013 Edition of the California Building Code (CBC). The project would be required to comply with the 2013 Edition of the CBC, known as the California Code of Regulations, Title 24, Part 2, Volumes 1 and 2, based on the 2012 Edition of the International Building Code, published by the International Code Council, including Appendices C, I, and J, adopted as the Building Code of the City of Fontana. The CBC as adopted by the City contains performance standards for grading and construction to provide an acceptable level of safety in relation to seismic and geologic hazards, as well as provisions to ensure acceptable design for buildings in relation to soils conditions. The proposed project grading and construction plans will be submitted by the applicant for review by the City for compliance with the Fontana Municipal Code and CBC.

RR-HW-1: Prepare and Implement a Stormwater Pollution Prevention Plan (SWPPP). A SWPPP will be developed by a qualified engineer or erosion control specialist in accordance with Santa Ana Regional Water Quality Control Board (RWQCB) requirements for National Pollutant Discharge Elimination System (NPDES) compliance and implemented prior to the issuance of any grading permit before construction. The SWPPP will be kept on site during construction activity and will be made available upon request to representatives of the Santa Ana RWQCB.

The SWPPP will detail how the sediment and erosion control practices, referred to as Best Management Practices (BMPs), will be implemented. Possible BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater and other nonpoint-source runoff. Measures range from source control, such as reduced surface disturbance, to treatment of polluted runoff, such as detention or retention basins. BMPs to be implemented as part of the stormwater management program and general permit may include, but are not limited to, the following measures.

- Temporary erosion control measures (such as silt fences, stacked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, watering of bare soils, and temporary revegetation or other ground cover) will be employed to control erosion from disturbed areas.
- Drainage facilities in downstream off-site areas will be protected from sediment using BMPs acceptable to the Santa Ana RWQCB.

- All construction activities will cease during high wind (winds exceeding 25 miles per hour) and rain storm events.
- Grass or other vegetative cover will be established on the construction site as soon as possible after disturbance. No disturbed surfaces will be left without erosion control measures in place during the wet season.
- Maintenance of all erosion control measures, including the clearing of excess debris, throughout all construction phases will be performed to the satisfaction of the City engineer.

RR-HW-2: Submit a Final Stormwater Quality Management Plan (SWQMP) for City Approval.

A SWQMP based on final design for each phase of the WVLCSP will be submitted to the Fontana Director of Engineering for approval prior to issuance of grading permits. The SWQMP will provide project-specific site design, source control, and treatment control BMPs including Low Impact Development to be incorporated into final design. The BMPs will be required to be properly designed and maintained to target pollutants of concern in accordance with the City's Municipal Storm Water Management Plan and the County Municipal Separate Storm Sewer System (MS4) Permit.

Standard Requirement

SR-G-1: Develop and Implement an Erosion Control Plan. The applicant or developer will prepare and submit to the City Department of Engineering for approval 30 days prior to construction an Erosion Control Plan. (Note: The Erosion Control Plan may be part of the same document as the Stormwater Pollution Prevention Plan.) The Erosion Control Plan will identify the locations of all soil-disturbing activities (including but not limited to sites involving new development or roadways), the locations of all drainage structures that will be directly affected by soil-disturbing activities, and the locations and types of all Best Management Practices (BMPs) that will be installed. The plan will also include a proposed schedule for the implementation and maintenance of erosion control measures and a description of the erosion control practices, including appropriate design details. As part of the plan, the construction contractor will maintain a logbook of the erosion-prevention effectiveness of the BMPs, as well as a description of any post-storm modifications to those BMPs.

Impacts and Mitigation

Impact GEO-1. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

- Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42.**
- Strong seismic ground shaking.**
- Seismic-related ground failure, including liquefaction.**
- Landslides.**

No known active or potentially active faults traverse the site, and the project site is not within an Alquist-Priolo Earthquake Fault Zone, according to the geotechnical reports prepared by Leighton and Associates (Appendix H). Structures associated with the future development of the proposed

WVLCSP would be built using the current CBC building standards at the time building permits are issued, which establish requirements for the seismic and structural safety of all structures. Therefore, because surface rupture is generally limited to the immediate vicinity of an active fault and project activities would cause no change in current conditions with respect to surface rupture or faulting hazards, impacts associated with the exposure of people or structures to potential substantial adverse effects—including the risk of loss, injury, or death involving rupture of a known earthquake fault—would not occur. Impacts related to fault rupture would be less than significant.

The San Jacinto Fault, because of its proximity and greater seismic potential, was used as the design fault to evaluate the seismic parameters of the proposed project site. It was determined that a 6.7-magnitude earthquake was the maximum probable earthquake that would occur on the San Jacinto Fault. Ground motion and vibrations generated by an earthquake could cause damage to above- and below-ground structures. Although the San Jacinto fault was used as the design fault, strong groundshaking associated with an event on the San Andreas or Cucamonga faults could occur. Therefore, earthquake-induced groundshaking due to seismic activity on the San Jacinto Fault, or any the regional faults, has the potential to result in substantial damage to structures; this would be a significant impact.

The implementation of proper seismic design specifications and techniques would allow structures to withstand intense groundshaking without collapse. Design of any proposed structures associated with the WVLCSP would be required to conform to current codes and specifications that support protection and stability against seismic events. The seismic design would be based on the most current CBC. Implementation of **Regulatory Requirement RR-G-1, Standard Requirement SR-G-1, and Mitigation Measures GEO-1 and GEO-2** provided below would reduce any potential impacts related to seismically induced hazards to less-than-significant levels.

Regulatory Requirements and Standard Requirement

The applicant shall implement the following regulatory requirement and standard requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **RR-G-1:** Comply with Fontana Municipal Code, Chapter 5, Article III, 2013 Edition of the California Building Code.
- **SR-G-1:** Develop and Implement an Erosion Control Plan.

Mitigation Measures

Mitigation Measure GEO-1: Final Geotechnical Studies/Incorporate Foundation Design Elements Appropriate for the Project Geographic Area. Prior to approval of grading permits, a specific final geotechnical study for each planning area of the WVLCSP will be provided by the applicant to the City for review and approval. A qualified registered geologist or engineer will verify to the satisfaction of the City Director of Engineering or the Director's designee that foundations designed for all proposed structures are appropriate and meet code requirements.

Recommendations included in Section 3.0 and Appendix D of the 2007 Preliminary Geotechnical Report and on pages 5 through 8 of the 2013 Supplemental Geotechnical Investigation and Infiltration Testing Report (geotechnical reports are included as Appendix H to this Recirculated Draft EIR) regarding foundations, overexcavation, and recompaction of the footing subgrade soils, slab-on-grade, and seismic design parameters will be incorporated into the final geotechnical reports as appropriate based on updated findings. All foundations will be designed in accordance

with CBC and local requirements. The footings for one- to two-story tilt-up precast concrete structures will have a minimum embedment depth of 18 inches, with a minimum width of 24 and 18 inches for isolated and continuous footings, respectively.

Additional recommendations from the 2007 Preliminary Geotechnical Report and the 2013 Supplemental Geotechnical Investigation and Infiltration Testing Report addendum pertaining to site clearing and preparation, temporary excavation, engineered fill placement, infiltration basins, trench backfilling, foundation design, retaining walls, slope stability, rippability, pavement design and thickness, cement type, shrinkage, and surface drainage will be implemented per the findings of final geotechnical studies required by this mitigation measure in order to minimize any negative effects associated with erosion and sedimentation.

Mitigation Measure GEO-2: Geotechnical Testing During Construction. Geotechnical observations and testing will be conducted as necessary during excavation and all phases of grading operations, consistent with the conclusions and recommendations presented in the final geotechnical studies (required per **Mitigation Measure GEO-1**) for each planning area of the project. In accordance with the final geotechnical studies, the 2007 Preliminary Geotechnical Report and the 2013 Supplemental Geotechnical Investigation and Infiltration Testing Report measures related to trench backfill and retaining wall backfill subdrain will be implemented. Geotechnical observation and testing will be provided during the following:

- After completion of site clearing.
- During overexcavation of compressible soil.
- During compaction of all fill materials.
- After excavation of all footings and prior to placement of concrete.
- During retaining wall back drain construction and backfilling.
- During utility trench backfilling and compaction.
- During pavement subgrade and base preparation.
- When any unusual conditions are encountered.

Residual Impacts

With implementation of **Mitigation Measures GEO-1** and **GEO-2**, **Regulatory Requirement RR-G-1**, and **Standard Requirement SR-G-1**, impacts would be less than significant.

Impact GEO-2. Result in substantial soil erosion or the loss of topsoil

Grading and excavation activities and the removal of vegetation cover associated with project construction would increase the potential for temporary or sporadic erosion and sedimentation events to occur. Construction activities also have potential to induce soil compaction and wind erosion conditions that could result in the substantial soil erosion and/or loss of topsoil. Any future development of the WVLCSP would comply with the County's approved Construction General Permit, the San Bernardino Stormwater Pollution Prevention Program and MS4 Permit, local stormwater ordinances, and other related water quality regulatory requirements as provided in the WVLCSP. The proposed project would be required to adhere to **Regulatory Requirement RR-HW-1**, **Regulatory Requirement RR-HW-2**, and **Standard Requirement SR-G-1**, as listed below. In addition, preparation of final geotechnical studies per **Mitigation Measure GEO-1** and maintenance

of detention basins and biotreatment areas, as required by the Construction General Permit per **Mitigation Measure HYD-1** (from Section 4.2.8, *Hydrology and Water Quality*), would reduce potential impacts related to soil erosion and loss of topsoil to less-than-significant levels.

Regulatory Requirements and Standard Requirement

The applicant shall implement the following regulatory requirements and standard requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **RR-G-1:** Comply with Fontana Municipal Code, Chapter 5, Article III, 2013 Edition of the California Building Code.
- **RR-HW-1:** Prepare and Implement a Stormwater Pollution Prevention Plan.
- **RR-HW-2:** Submit a Stormwater Quality Management Plan for City Approval.
- **SR-G-1:** Develop and Implement an Erosion Control Plan.

Mitigation Measures

Implement **Mitigation Measure GEO-1** and **Mitigation Measure HYD-1** (Maintain Stormwater Detention Basins and Biotreatment Areas).

Residual Impacts

With implementation of **Mitigation Measures GEO-1** and **HYD-1**, **Standard Requirement SR-G-1**, and **Regulatory Requirements RR-G-1**, **RR-HW-1**, and **RR-HW-2** as specified above, impacts related to soil erosion and loss of topsoil would be less than significant.

Impact GEO-3. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse

The project is east of the Jurupa Hills and contains slopes of approximately 25 to 50 feet in height along the western property boundary. A small portion of the plan area is identified as steep to very steep slopes and is susceptible to rockfalls, small slides, and slumps. No evidence of rockfalls or landslides was identified within the project area during the site reconnaissance survey. Conditions associated with the on-site bedrock suggest that landslides of deep-seated slope failures are not expected and should not constrain proposed development. Design cut slopes excavated into the native alluvial soil or bedrock are expected to perform satisfactorily when constructed at 2:1 (horizontal to vertical) or flatter. No significant fracture or foliation patterns were observed within the bedrock that would indicate the proposed slopes would be unstable from a gross stability standpoint (Appendix H). As future development of the site could construct graded slopes not exceeding 2:1, as provided in the 2007 Preliminary Geotechnical Report (Appendix H), impacts are not considered significant. However, shallow surficial slides and debris flows do have the potential to occur.

The main area of the project site (Planning Area 1 located west of Locust Avenue) contains large quantities of undocumented fills. According to the preliminary geotechnical investigation of the site, these undocumented fills are “considered unsuitable for the support of structures or additional fills” (Leighton and Associates 2004). Without mitigation, impacts could be significant and would require mitigation. Therefore, implementation of **Mitigation Measure GEO-1** is required.

Design of any proposed structures within the WVLCSP site would conform to current codes and specifications that support protection and stability against seismic events. The seismic design would be based on the most current CBC, which would be implemented by **Regulatory Requirement RR-G-1**. However, impacts could be significant and would require implementation of **Mitigation Measures GEO-1 and GEO-2**.

Although the site has a potential for groundshaking from earthquakes generated by faults in the region, the site is not located in an area that has been mapped as potentially liquefiable. The regional depth of groundwater is 150 feet. Groundwater on the site was discovered at a depth of 64 feet in geotechnical studies (Appendix H). These factors effectively negate liquefaction hazards. Expansion testing on near-surface soils indicates that on-site soils have an expansion index of 2 or less. The test findings state, "near surface soils have a very low expansion potential" (Leighton and Associates 2004). Seismically induced settlement was estimated at a potential total settlement on the order of 1 inch, and the potentially seismically induced differential settlement was estimated at half of the total settlement. The proposed project would comply with CBC requirements and **Mitigation Measures GEO-1 and GEO-2**. Impacts related to liquefaction would be less than significant.

Regulatory Requirement

The applicant shall implement the following regulatory requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **RR-G-1:** Comply with Fontana Municipal Code, Chapter 5, Article III, 2013 Edition of the California Building Code.

Mitigation Measures

Implement **Mitigation Measures GEO-1 and GEO-2**.

Residual Impacts

With implementation of **Mitigation Measures GEO-1 and GEO-2** and **Regulatory Requirement RR-G-1**, impacts would be less than significant.

Impact GEO-4. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property

According to Appendix H, the soils on site exhibit a very low expansion potential. Design of any proposed structures within the WVLCSP site would conform to current regulatory codes and specifications that support protection and stability against seismic events. The design of the proposed buildings would be based on the most current CBC, which would be implemented by **Regulatory Requirement RR-G-1**. **Mitigation Measure GEO-1** would ensure that final design would be consistent with required design codes and **Mitigation Measure GEO-2** requires geotechnical and soils testing during construction. As soils are considered to have low expansive qualities, impacts would be less than significant.

Regulatory Requirement

The applicant shall implement the following regulatory requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **RR-G-1:** Comply with Fontana Municipal Code, Chapter 5, Article III, 2013 Edition of the California Building Code.

Mitigation Measures

Implement **Mitigation Measures GEO-1** and **GEO-2**.

Residual Impacts

With implementation of **Mitigation Measures GEO-1** and **GEO-2** and **Regulatory Requirement RR-G-1**, impacts would be less than significant.

Impact GEO-5. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water

The project would be connected to the City's wastewater system and would not use septic tanks or alternative wastewater disposal systems. Therefore, there would be no impacts related to septic tanks or alternative wastewater disposal systems.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

4.2.6 Greenhouse Gas Emissions

Introduction

This section describes the environmental and regulatory setting for greenhouse gas (GHG) emissions and climate change. It also describes GHG emissions impacts and impacts related to climate change that would result from implementation of the West Valley Logistics Center Specific Plan (WVLCSP) project, along with mitigation for significant impacts where feasible and appropriate. The Existing Conditions and Impact Analysis sections below are based on the *Greenhouse Gas Emissions and Global Climate Change Study, West Valley Logistics Center* (LSA Associates, Inc. 2014), in Appendix I.

Terminology

- **Emission Factor.** For stationary sources, the emission factor is the relationship between the amount of pollution produced and the amount of raw material processed or burned. For mobile sources, it is the relationship between the amount of pollution produced and the number of vehicle miles traveled. By using the emission factor of a pollutant and specific data regarding quantities of materials used by a given source, it is possible to compute emissions for the source (California Air Resources Board n.d.).
- **Emissions Inventory.** Emissions inventory is the estimate of the amount of pollutants emitted into the atmosphere from major mobile, stationary, area-wide, and natural source categories over a specific period of time, such as a day or a year (California Air Resources Board 2013a).
- **Global Climate Change.** Global climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans, along with other significant changes in climate (such as precipitation or wind) that last for an extended period of time. The term *global climate change* is often used interchangeably with the term *global warming*, but *global climate change* is preferred to *global warming* because it helps convey that GHG emissions may result in other changes in addition to rising temperatures.
- **Global Warming.** Global warming is an average increase in the temperature of the Earth's troposphere. Global warming has occurred in the past as a result of natural influences, but the term is most often used to refer to the warming predicted by computer models to occur as a result of increased emissions of GHGs created by man-made sources (California Air Resources Board 2013a).
- **Global Warming Potential (GWP).** GWP is the relative warming of a GHG over a specified period of time as compared to carbon dioxide (GWP of 1). GWP allows for the conversion of different GHG emissions into the same emissions unit, carbon dioxide equivalents (CO₂e) (California Air Resources Board n.d.).
- **Greenhouse Effect.** The greenhouse effect is the warming effect of the Earth's atmosphere. Light energy from the sun that passes through the Earth's atmosphere is absorbed by the Earth's surface and is radiated into the atmosphere as heat energy. The heat energy is then trapped by the atmosphere, creating a situation similar to that which occurs in a car with its windows rolled up. It is now widely accepted that the emission of CO₂ and other gases into the atmosphere increases the greenhouse effect and contributes to global warming (California Air Resources Board n.d.).

- **Greenhouse Gas.** GHG refers to any gases that absorb and emit infrared radiation within the thermal infrared range. The most prevalent GHG is carbon dioxide (CO₂), along with methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆) (California Air Resources Board 2013a).
- **Intergovernmental Panel on Climate Change (IPCC).** IPCC is a scientific intergovernmental body set up by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP) to provide decision makers and others interested in climate change with an objective source of information about climate change (California Air Resources Board n.d.).
- **Troposphere.** The troposphere is the zone of the atmosphere characterized by water vapor, weather, winds, and decreasing temperature with increasing altitude.

Existing Conditions

Environmental Setting

Global Climate Change

Climate change refers to any change in measures of weather (such as temperature, precipitation, or wind) lasting for an extended period (decades or longer). Climate change may result from natural factors, such as changes in the sun's intensity; natural processes within the climate system, such as changes in ocean circulation; or human activities, such as the burning of fossil fuels, land clearing, or agriculture. The primary observed effect of global climate change has been a rise in the average global tropospheric temperature of 0.36 degrees Fahrenheit (°F) per decade, determined from meteorological measurements worldwide between 1990 and 2005. Climate change modeling shows that further warming could occur, which would induce additional changes in the global climate system during the current century. Changes to the global climate system, ecosystems, and the environment of California could include higher sea levels, drier or wetter weather, changes in ocean salinity, changes in wind patterns, or more energetic aspects of extreme weather, including droughts, heavy precipitation, heat waves, extreme cold, and increased intensity of tropical cyclones. Specific effects in California might include a decline in the Sierra Nevada snowpack, erosion of California's coastline, and seawater intrusion in the Delta.

Global surface temperatures have risen by $1.33^{\circ}\text{F} \pm 0.32^{\circ}\text{F}$ over the last 100 years (1906 to 2005). The rate of warming over the last 50 years is almost double that over the previous 100 years (Intergovernmental Panel on Climate Change 2007). The latest projections, based on state-of-the-art climate models, indicate that temperatures in California are expected to rise 3 to 10.5°F by the end of the century. The prevailing scientific opinion on climate change is that "most of the warming observed over the last 50 years is attributable to human activities" (Intergovernmental Panel on Climate Change 2007).

Increased amounts of CO₂ and other GHGs are the primary causes of the human-induced component of warming. The observed warming effect associated with the presence of GHGs in the atmosphere (from either natural or human sources) is often referred to as the greenhouse effect.¹

GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:²

- CO₂
- CH₄
- N₂O
- HFCs
- PFCs
- SF₆

Over the last 200 years, human activities have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, which is believed to be causing global warming. While GHGs produced by human activities include naturally occurring GHGs such as CO₂, CH₄, and N₂O, some gases, like HFCs, PFCs, and SF₆ are completely new to the atmosphere. Certain other gases, such as water vapor, are short-lived in the atmosphere as compared to these GHGs that remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is generally excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation. For the purposes of this section, the term *GHGs* will refer collectively to the six gases identified in the bulleted list provided above.

These gases vary considerably in terms of GWP, which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO₂, the most abundant GHG. The definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO₂ over a specified time period. GHG emissions are typically measured in terms of pounds or tons of CO₂e. Table 4.2.6-1 shows the GWPs for each type of GHG. For example, SF₆ is 23,900 times more potent at contributing to climate change than CO₂.

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- ¹ The temperature on Earth is regulated by a system commonly known as the "greenhouse effect." Just as the glass in a greenhouse lets heat from sunlight in and reduces the amount of heat that escapes, greenhouse gases like CO₂, CH₄, and N₂O in the atmosphere keep the Earth at a relatively even temperature. Without the greenhouse effect, the Earth would be a frozen globe; thus, although an excess of greenhouse gas results in global warming, the *naturally occurring* greenhouse effect is necessary to keep our planet at a comfortable temperature.
- ² The greenhouse gases listed are consistent with the definition in Assembly Bill 32 (Government Code 38505), as discussed later in this section.

Table 4.2.6-1. Global Warming Potential of Greenhouse Gases

Greenhouse Gases	Global Warming Potential (100 years)	Lifetime (years)	2005 Atmospheric Abundance
CO ₂ (ppm)	1	50–200	379
CF ₄	6,500	50,000	74
CH ₄ (ppb)	21	9–15	1,774
N ₂ O (ppb)	310	120	319
HFC-23 (ppt)	11,700	264	18
HFC-134 (ppt)	1,300	14.6	64
HFC-152 (ppt)	140	1.5	3.9
SF ₆ (ppt)	23,900	3.20	5.6

Sources: Intergovernmental Panel on Climate Change 1996, 2001.

CF = hydrofluorocarbons

CH₄ = methane

CO₂ = carbon dioxide

N₂O = nitrous oxide

ppb = parts per billion by volume

ppm = parts per million by volume

ppt = parts per trillion by volume

The following discussion summarizes the characteristics of the six primary GHGs.

Carbon Dioxide

In the atmosphere, carbon generally exists in its oxidized form, as CO₂. Natural sources of CO₂ include the respiration (breathing) of humans and animals, volcanic outgassing, decomposition of organic matter, and evaporation from the oceans. Human-caused sources of CO₂ include the combustion of fossil fuels and wood, waste incineration, mineral production, and deforestation. The Earth maintains a natural carbon balance; when concentrations of CO₂ are upset, the system gradually returns to its natural state through natural processes. Natural changes to the carbon cycle work slowly, especially compared to the rapid rate at which humans are adding CO₂ to the atmosphere. Natural removal processes, such as photosynthesis by land- and ocean-dwelling plant species, cannot keep pace with this extra input of human-made CO₂; consequently, the gas is building up in the atmosphere. The concentration of CO₂ in the atmosphere has risen approximately 30% since the late 1800s (California Environmental Protection Agency 2006).

Methane

CH₄ is produced when organic matter decomposes in environments lacking sufficient oxygen. Natural sources include wetlands, termites, and oceans. Anthropogenic or human-caused sources include rice cultivation, livestock breeding and ranching, landfills and waste treatment, biomass burning, and fossil fuel combustion (burning of coal, oil, natural gas, etc.). Decomposition occurring in landfills and enteric or intestinal fermentation (emissions from the digestive processes of livestock) account for the majority of human-related CH₄ emissions in California. Agricultural processes such as farming livestock, manure management, biomass burning in croplands, fertilizer use, and rice cultivation are also significant sources of human-made CH₄ in California. CH₄ accounted for approximately 8% of gross climate change emissions (CO₂e) in California in 2012 (California Air

Resources Board 2012a). It is estimated that over 60% of global methane emissions are related to human-related activities (U.S. Environmental Protection Agency 2010). As with CO₂, the major removal process of atmospheric CH₄—a chemical breakdown in the atmosphere—cannot keep pace with source emissions, and CH₄ concentrations in the atmosphere are increasing.

Nitrous Oxide

N₂O is produced naturally by a wide variety of biological sources, particularly microbial action in soils and water. Tropical soils and oceans account for the majority of natural source emissions. N₂O is a product of the reaction that occurs between nitrogen and oxygen during fuel combustion. Both mobile and stationary combustion emit N₂O, and the quantity emitted varies according to the type of fuel, technology, and pollution control devices used, as well as maintenance and operating practices. Agricultural soil management and fossil fuel combustion are the primary sources of human-generated N₂O emissions in California. N₂O emissions accounted for 2.9% of human-made GHG emissions (CO₂e) in California in 2012 (California Air Resources Board 2012b).

Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride

HFCs are primarily used as substitutes for ozone (O₃)-depleting substances regulated under the Montreal Protocol.³ PFCs and SF₆ are emitted from various industrial processes, including aluminum smelting, semiconductor manufacturing, electric power transmission and distribution, and magnesium casting. There is no aluminum or magnesium production in California; however, the rapid growth in the semiconductor industry, which is active in California, leads to greater use of PFCs. SF₆ accounted for 0.1% of total emissions, and other halogenated gases constituted approximately 4% of human-made GHG emissions (CO₂e) in California in 2012 (California Air Resources Board 2012b).

Emissions Sources and Inventories

An emissions inventory that identifies and quantifies the primary human-generated sources and “sinks” of GHGs is a well-recognized and useful tool for addressing climate change. A GHG “sink” is a process that occurs when GHGs are removed from the atmosphere, such as when a tree sequesters CO₂ out of the atmosphere. This section summarizes the latest information on global, national, and state GHG emission inventories. However, because GHGs persist for a long time in the atmosphere (see Table 4.6.2-1), accumulate over time, and are generally well-mixed, their impact on the atmosphere and climate cannot be tied to a specific point of emission; instead, their impact is tied to types of activities that produce emissions.

United States Emissions

In 2010, the United States emitted approximately 6.8 billion metric tons of CO₂e. Of the six economic sectors nationwide—electric power industry, transportation, industry, agriculture, commercial, and residential—the electric power industry and transportation sectors combined accounted for approximately 62% of the GHG emissions; the majority of the electrical power industry and all of the transportation emissions are generated from direct fossil fuel combustion. Overall, from 1990 to

³ The Montreal Protocol is an international treaty that was approved on January 1, 1989, and was designated to protect the ozone layer by phasing out the production of several groups of halogenated hydrocarbons believed to be responsible for ozone depletion.

2011, total emissions of CO₂ increased by 627.6 Tg⁴ CO₂e (9.9%), while total emissions of CH₄ decreased by 52.7 Tg CO₂e (8.2%), and total emissions of N₂O increased by 12.6 Tg CO₂e (3.7%). During the same period, aggregate weighted emissions of HFCs, PFCs, and SF₆ rose by 52.5 Tg CO₂e (58.2%). From 1990 to 2011, HFCs increased by 92.1 Tg CO₂e (249.6%), PFCs decreased by 13.6 Tg CO₂e (66.0%), and SF₆ decreased by 23.2 Tg CO₂e (71.2%). (U.S. Environmental Protection Agency 2013.)

State of California Emissions

Table 4.2.6-2 lists the California Air Resources Board (ARB) emissions inventory estimates. Emissions in 2010 decreased by 1.1% from 2009 and by 0.3% from 2010 to 2011 (California Air Resources Board 2012a). The large amount of CO₂e emissions in California is due primarily to the sheer size of California compared to other states. By contrast, California has the fourth lowest per-capita CO₂ emission rate from fossil fuel combustion in the country, due to the success of its energy efficiency and renewable energy programs and commitments that have lowered the state's GHG emissions rate of growth by more than half of what it would have been otherwise (Appendix I).

Table 4.2.6-2. California Greenhouse Gas Inventory for 2010–2012 by Category

Source Category	2010	2011	2012
Transportation	170.46	168.13	167.38
Electric power	90.30	88.04	95.09
Commercial and residential	43.82	44.32	42.28
Industrial	88.51	88.34	89.16
Recycling and waste	8.34	8.42	8.49
High GWP	15.89	17.35	18.41
Agriculture	35.73	36.34	37.86
Total gross emissions	453.06	450.94	458.68

Source: California Air Resources Board 2012a.

All values in million tonnes of CO₂e (based on IPCC Second Assessment Report's Global Warming Potentials)

Regulatory Setting

This section summarizes federal, state, and local regulations related to GHG emissions and climate change that are applicable to the project.

Federal

The United States has historically had a voluntary approach to reducing GHG emissions. However, on April 2, 2007, the U.S. Supreme Court ruled that the U.S. Environmental Protection Agency (EPA) has the authority to regulate CO₂ emissions under the federal Clean Air Act (CAA). While there currently are no adopted federal regulations for the control or reduction of GHG emissions, EPA took several actions in 2009 that are intended to implement a regulatory approach to global climate change.

⁴ Tg = teragram, equivalent to a million metric tons

On September 30, 2009, EPA announced a proposal that focuses on large facilities emitting over 25,000 tons of GHG emissions per year. These facilities would be required to obtain permits that would demonstrate they are using the best practices and technologies to minimize GHG emissions.

On December 7, 2009, the EPA Administrator signed a final action with two distinct findings regarding GHGs under Section 202(a) of the CAA:

- The Administrator is proposing to find that the current and projected concentrations of the mix of six key GHGs (CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆) in the atmosphere constitute a threat to public health and welfare of current and future generations. This is referred to as the endangerment finding.
- The Administrator is further proposing to find that the combined emissions of CO₂, CH₄, N₂O, and HFCs from new motor vehicles and motor vehicle engines contribute to the atmospheric concentrations of these key GHGs and hence to the threat of global climate change. This is referred to as the cause or contribute finding.

This EPA action does not impose any requirements on industry or other entities. However, the findings are a prerequisite to finalizing the GHG emission standards for light-duty vehicles mentioned below.

On April 1, 2010, EPA and the U.S. Department of Transportation's National Highway Traffic Safety Administration announced a final joint rule to establish a national program consisting of new standards for model years 2012–2016 light-duty vehicles that will reduce GHG emissions and improve fuel economy. EPA is reviewing the national GHG emissions standards under the CAA, and the National Highway Traffic Safety Administration is finalizing Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act. The EPA GHG standards require these vehicles to meet an estimated combined average emissions level of 250 grams of CO₂ per mile in model year 2016, equivalent to 35.5 miles per gallon (mpg).

In October 2012 new fuel economy standards for cars and light-duty trucks were adopted by the U.S. Department of Transportation and EPA that will increase fuel economy to the equivalent of 54.5 mpg by model year 2025 (National Highway Traffic Safety Administration 2012). When combined with previous standards, this will nearly double the fuel efficiency of those vehicles compared to new vehicles currently in use. The U.S. Department of Transportation and EPA are currently adopting amendments to the 2011 GHG emissions standards and fuel efficiency standards for medium- and heavy-duty engines and vehicles.

State

Assembly Bill 1493

In a response to the transportation sector's significant contribution to California's CO₂ emissions, Assembly Bill (AB) 1493 (Pavley) was enacted on July 22, 2002. AB 1493 requires ARB to set GHG emission standards for passenger vehicles and light-duty trucks (and other vehicles whose primary use is noncommercial personal transportation in the state) manufactured in 2009 and all subsequent model years. ARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards will result in a reduction of approximately 22% in GHG emissions compared to the emissions from the 2002 fleet, while the midterm (2013–2016) standards will result in a reduction of approximately 30%.

Senate Bill 1078

Approved by Governor Davis in September 2002, Senate Bill (SB) 1078 established the Renewal Portfolio Standard program, which requires an annual increase in renewable generation by the utilities equivalent to at least 1% of sales, with an aggregate goal of 20% by 2017. This goal was subsequently accelerated, requiring utilities, including Southern California Edison (SCE), to obtain 20% of their power from renewable sources by 2010 (see SB 107 and Executive Order [EO] S-14-08). According to the California Public Utilities Commission, as of 2013, SCE generated 21.6% of its sales from renewable energy sources (California Public Utilities Commission 2014).

Executive Order S-3-05

In June 2005, Governor Schwarzenegger established California's GHG emissions reduction targets in EO S-3-05. This EO established the following goals for California: GHG emissions should be reduced to 2000 levels by 2010; GHG emissions should be reduced to 1990 levels by 2020; and GHG emissions should be reduced to 80% below 1990 levels by 2050⁵. The Secretary of the California Environmental Protection Agency is required to coordinate the efforts of various agencies in order to collectively and efficiently reduce GHGs.

Representatives from several state agencies compose the Climate Action Team, which is responsible for coordinating and implementing GHG emission reduction programs that fall outside of ARB's jurisdiction. The Climate Action Team fulfilled its report requirements through the March 2006 Climate Action Team Report to Governor Schwarzenegger and the legislature (California Environmental Protection Agency 2006) and has released subsequent reports for 2009 and 2010.

Assembly Bill 32 and ARB Scoping Plan

California's major initiative for reducing GHG emissions is outlined in AB 32, the "Global Warming Solutions Act," passed by the California State legislature on August 31, 2006. AB 32 required ARB to take the following steps.

- Establish a statewide GHG emissions cap for 2020, based on 1990 emissions, by January 1, 2008.
- Adopt mandatory reporting rules for significant sources of GHG emissions by January 1, 2008.
- Adopt an emissions reduction plan by January 1, 2009, indicating how emissions reductions will be achieved via regulations, market mechanisms, and other actions.
- Adopt regulations to achieve the maximum technologically feasible and cost-effective reductions of GHGs by January 1, 2011.
- Prepare a scoping plan outlining the state's strategy to achieve the 2020 GHG emissions limit.

ARB has established that the level of annual GHG emissions in 1990 was 427 million metric tons of carbon dioxide equivalent (MMTCO₂e) (California Air Resources Board 2007a). The emissions target of 427 million metric tons of CO₂e (MMTCO₂e) requires the reduction of 80 MMTCO₂e from the state's projected business-as-usual 2020 emissions of 507 MMTCO₂e (i.e., the 1990 levels are approximately 16% below "business-as-usual") (California Air Resources Board 2010a). "Business-as-usual" is a forecast of the California economy in 2020 without implementation of any of the GHG

⁵ The state's "First Update to the Climate Change Scoping Plan" (May 2014) reports that the state is "on target" to meeting its 2020 goal.

reduction measures identified in the Scoping Plan (California Air Resources Board 2008a). The Scoping Plan was approved by ARB on December 11, 2008, and includes measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures (California Air Resources Board 2008b). More specifically, the Scoping Plan includes aggressive energy efficiency goals and methods for increasing renewable energy use. Meeting the goals in the Scoping Plan will require expanded utility-based energy efficiency programs, more stringent building and appliance standards, green building practices, waste reduction, and innovative strategies that go beyond traditional approaches. The Scoping Plan also relies on expanded efforts by the California Energy Commission (CEC) and California Public Utilities Commission (CPUC). In August 2011, the Scoping Plan was reapproved by ARB and included the Final Supplement to the Scoping Plan Functional Equivalent Document. Emission reductions that are projected to result from the recommended measures in the 2011 Scoping Plan are sufficient to allow California to attain the emissions goal of 427 MMTCO_{2e} by 2020.

AB 32 requires that the Scoping Plan be updated at least every 5 years. The update to the initial Scoping Plan developed by ARB in collaboration with the California Climate Action Team builds upon the initial Scoping Plan with new strategies and expanded measures, and identifies opportunities to leverage existing and new funds to drive GHG emission reductions through strategic planning and targeted program investments. The update to the AB 32 Scoping Plan was approved on May 22, 2014 by ARB.

The updated Scoping Plan adjusted the emissions reductions required to meet the 2020 statewide GHG emissions limit. The 2020 statewide emissions limit was adjusted because the original Scoping Plan relied on the IPCC's 1996 Second Assessment Report to assign the GWP of GHGs. Recently, in accordance with the United Nations Framework Convention on Climate Change, international climate agencies have agreed to begin using the scientifically updated GWP values in the IPCC's Fourth Assessment Report (AR4) that was released in 2007. Because ARB has begun to transition to the use of the AR4 100-year GWP in its climate change programs, ARB recalculated the Scoping Plan's 1990 GHG emissions level with the AR4 GWP. The recalculation resulted in 431 MMTCO_{2e} as the estimated 1990 GHG emissions levels. As a result, the 2020 GHG emissions limit was also readjusted slightly, so that the 2020 "business-as-usual" forecast of GHG emissions is now 509 MMTCO_{2e}. Therefore, a 15% reduction below the estimated "business-as-usual" levels was determined to be necessary to return to 1990 levels by 2020 (California Air Resources Board 2014). As noted above, "business-as-usual" is defined as emissions that would be generated prior to AB 32-related emission restrictions beginning in 2006 (e.g., Pavley standards).

The ARB 2008 Climate Change Scoping Plan includes a range of GHG reduction actions that includes direct regulations, alternative compliance mechanisms, monetary and nonmonetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system. Table 4.2.6-3 lists Recommended Actions from ARB's Scoping Plan.

Table 4.2.6-3. Recommended Actions from ARB Climate Change Scoping Plan

ID #	Sector	Strategy Name
T-1	Transportation	Pavley I and II – Light-Duty Vehicle GHG Standards
T-2	Transportation	Low Carbon Fuel Standard (Discrete Early Action)
T-3	Transportation	Regional Transportation-Related GHG Targets
T-4	Transportation	Vehicle Efficiency Measures
T-5	Transportation	Ship Electrification at Ports (Discrete Early Action)
T-6	Transportation	Goods-movement Efficiency Measures
T-7	Transportation	Heavy Duty Vehicle GHG Emission Reduction Measure – Aerodynamic Efficiency (Discrete Early Action)
T-8	Transportation	Medium and Heavy-Duty Vehicle Hybridization
T-9	Transportation	High Speed Rail
E-1	Electricity and Natural Gas	Increased Utility Energy efficiency programs More stringent Building and Appliance Standards
E-2	Electricity and Natural Gas	Increase Combined Heat and Power Use by 30,000 GWh
E-3	Electricity and Natural Gas	Renewables Portfolio Standard
E-4	Electricity and Natural Gas	Million Solar Roofs
CR-1	Electricity and Natural Gas	Energy Efficiency
CR-2	Electricity and Natural Gas	Solar Water Heating
GB-1	Green Buildings	Green Buildings
W-1	Water	Water Use Efficiency
W-2	Water	Water Recycling
W-3	Water	Water System Energy Efficiency
W-4	Water	Reuse Urban Runoff
W-5	Water	Increase Renewable Energy Production
W-6	Water	Public Goods Charge (Water)
I-1	Industry	Energy Efficiency and Co-benefits Audits for Large Industrial Sources
I-2	Industry	Oil and Gas Extraction GHG Emission Reduction
I-3	Industry	GHG Leak Reduction from Oil and Gas Transmission
I-4	Industry	Refinery Flare Recovery Process Improvements
I-5	Industry	Removal of methane (CH ₄) Exemption from Existing Refinery Regulations
RW-1	Recycling and Waste Management	Landfill methane (CH ₄) Control (Discrete Early Action)
RW-2	Recycling and Waste Management	Additional Reductions in Landfill methane (CH ₄) – Capture Improvements
RW-3	Recycling and Waste Management	High Recycling/Zero Waste
F-1	Forestry	Sustainable Forest Target

ID #	Sector	Strategy Name
H-1	High GWP Gases	Motor Vehicle Air Conditioning Systems (Discrete Early Action)
H-2	High GWP Gases	SF ₆ Limits in Non-Utility and Non-Semiconductor Applications (Discrete Early Action)
H-3	High GWP Gases	Reduction in Perfluorocarbons in Semiconductor Manufacturing (Discrete Early Action)
H-4	High GWP Gases	Limit High GWP Use in Consumer Products (Discrete Early Action, Adopted June 2008)
H-5	High GWP Gases	High GWP Reductions from Mobile Sources
H-6	High GWP Gases	High GWP Reductions from Stationary Sources
H-7 ^a	High GWP Gases	Mitigation Fee on High GWP Gases
A-1	Agriculture	Methane (CH ₄) Capture at Large Dairies

^a This original measure in the 2008 Scoping Plan was subsequently excluded by ARB in the Final Supplement to the Scoping Plan Functional Equivalent Document in 2011, as ARB staff concluded that implementation of this measure would not be feasible.

Source: California Air Resources Board 2008b.

It is important to note that the Scoping Plan, even after ARB Board approval, remains a recommendation. The measures in the Scoping Plan will not be binding until after they are adopted through the normal rulemaking process. The ARB rule-making process includes preparation and release of each of the draft measures, public input through workshops and a public comment period, and an ARB Board hearing and rule adoption.

In addition to reducing GHG emissions to 1990 levels by 2020, AB 32 directed ARB and the Climate Action Team to identify a list of "discrete early action GHG reduction measures" that could be adopted and made enforceable by January 1, 2010. On January 18, 2007, Governor Schwarzenegger signed EO S-1-07, further solidifying California's dedication to reducing GHGs by setting a new Low Carbon Fuel Standard. This EO set a target to reduce the carbon intensity of California transportation fuels by at least 10% by 2020 and directed ARB to consider the Low Carbon Fuel Standard as a discrete early action measure. ARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production of biofuels, including those from alternative sources such as algae, wood, and agricultural waste. In addition, the Low Carbon Fuel Standard would drive the availability of plug-in hybrid, battery electric, and fuel-cell power motor vehicles. The Low Carbon Fuel Standard is anticipated to replace 20% of the fuel used in motor vehicles with alternative fuels by 2020.

In June 2007, ARB approved a list of 37 early action measures, including three discrete early action measures (Low Carbon Fuel Standard, Restrictions on High Global Warming Potential Refrigerants, and Landfill Methane Capture). ARB adopted an additional six early action measures in October 2007 (California Air Resources Board 2007b). These measures relate to truck efficiency, port electrification, reduction of PFCs from the semiconductor industry, reduction of propellants in consumer products, proper tire inflation, and SF₆ reductions from the non-electricity sector. The combination of early action measures is estimated to reduce statewide GHG emissions by nearly 16 million metric tons (California Air Resources Board 2007c).

Senate Bill 1368

In September 2006, Governor Schwarzenegger signed SB 1368, which requires CEC to develop and adopt regulations for GHG emissions performance standards for the long-term procurement of electricity by local, publicly owned utilities. These standards must be consistent with the standards adopted by CPUC. This effort will help to protect energy customers from financial risks associated with investments in carbon-intensive generation by allowing new capital investments in power plants whose GHG emissions are as low as or lower than new combined-cycle natural gas plants, by requiring imported electricity to meet GHG performance standards in California and requiring that the standards be developed and adopted in a public process.

Senate Bill 97

To assist public agencies in analyzing the effects of GHGs under the California Environmental Quality Act (CEQA), SB 97 (Chapter 185, 2007) required the Governor's Office of Planning and Research (OPR) to develop CEQA guidelines on how to minimize and mitigate a project's GHG emissions. On December 30, 2009, the Natural Resources Agency adopted CEQA Guideline Amendments related to climate change. These amendments became effective on March 18, 2010. The amended guidelines established several new State CEQA Guideline requirements concerning the analysis of GHGs, including:

- Requiring a lead agency to "make a good faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of GHG emissions resulting from a project" (§15064(a)).
- Providing a lead agency with the discretion to determine whether to use quantitative or qualitative analysis or performance standards to determine the significance of GHG emissions resulting from a particular project (§15064.4(a)).
- Requiring a lead agency to consider the following factors when assessing the significant impacts from GHG emissions on the environment:
 1. The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting.
 2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
 3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. (§15064.4(b))
- Allowing lead agencies to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or offsite measures, including offsets that are not otherwise required (§ 15126.4(c)).

The amended guidelines also established two new guidance questions regarding GHG emissions in the Environmental Checklist set forth in Appendix G of the State CEQA Guidelines, as discussed later in this section.

The adopted amendments do not establish a GHG emission threshold; instead, they allow a lead agency to develop, adopt, and apply its own thresholds of significance or use a threshold developed by other agencies or experts. The Natural Resources Agency also acknowledges that a lead agency

may consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions. (California Natural Resources Agency 2009.)

Senate Bill 375

SB 375, signed into law on October 1, 2008, is intended to enhance ARB's ability to achieve AB 32 goals by directing ARB to develop regional GHG emissions reduction targets to be achieved within the automobile and light truck sectors for 2020 and 2035. The targets are required to consider the emission reductions associated with vehicle emission standards (see SB 1493), the composition of fuels (see EO S-1-07), and other ARB-approved measures to reduce GHG emissions. In late September 2010, ARB announced GHG reduction goals for implementation by regional land use and transportation agencies. As shown below in Table 4.2.6-4, the regional emissions reduction goal for Southern California is 8% by 2020 and 13% by 2035, compared to 2005 emissions levels.

Table 4.2.6-4. September 2010 ARB SB 375 Reduction Goals

	By 2020 (%)*	By 2035 (%)*
San Francisco Bay Area	7	15
San Diego	7	13
Sacramento	7	16
Central Valley/San Joaquin	5	10
Los Angeles/Southern California	8	13

Source: California Air Resources Board 2011.

* Targets are expressed as percent change in per capita GHG emissions relative to 2005.

ARB = California Air Resources Board

SB = Senate Bill

ARB will work with California's 18 Metropolitan Planning Organizations to align their regional transportation, housing, and land use plans and prepare a "Sustainable Communities Strategy" within the Regional Transportation Plan to reduce the number of vehicle miles traveled in their respective regions and demonstrate the region's ability to attain its GHG reduction targets. If a Sustainable Communities Strategy is unable to achieve the GHG reduction target, a Metropolitan Planning Organization must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies. SB 375 provides incentives for streamlining State CEQA Guideline requirements by substantially reducing the requirements for "transit priority projects," as specified in SB 375, and eliminating the analysis of the impacts of certain residential projects on global warming and the growth-inducing impacts of those projects when the projects are consistent with the Sustainable Communities Strategy or Alternative Planning Strategy.

Senate Bill X1-2

On April 12, 2011, Governor Jerry Brown signed SB X1-2, which requires California electricity providers to obtain at least 33% of their energy from renewable resources by the year 2020. This bill supersedes the 20% by 2020 Renewables Portfolio Standard (RPS) created by EO S-14-08 that Governor Arnold Schwarzenegger previously signed.

Executive Order S-21-09

On September 15, 2009, Governor Schwarzenegger issued EO S-21-09. This EO directed ARB to adopt a regulation consistent with the goal of EO S-14-08 by July 31, 2010. On September 23, 2010, ARB adopted the "Renewable Electricity Standard" (RES) to require a 33% by 2020 renewable energy procurement mandate for most retail sellers of electricity in California (California Air Resources Board 2010b).

California Green Building Code and California 2013 Building Energy Efficiency Standards

California Green Buildings Standards Code (CALGreen Code) (California Code of Regulations [CCR], Title 24, part 11) was adopted by the California Building Standards Commission in 2010 and became effective in January 2011. The code applies to all newly constructed residential, nonresidential, commercial, mixed-use, and state-owned facilities, as well as schools and hospitals. CALGreen Code is composed of Mandatory Residential and Nonresidential Measures and more stringent Voluntary Measures (TIERs I and II).

Mandatory Measures are required to be implemented on all new construction projects and consist of a wide array of green measures concerning project site design, water use reduction, improvement of indoor air quality, and conservation of materials and resources. The CALGreen Building Code refers to Title 24, Part 6 compliance with respect to energy efficiency; however, it encourages 15% energy use reduction over that required in Part 6. Voluntary Measures are optional, more stringent measures that may be used by jurisdictions that strive to enhance their commitment toward green and sustainable design and achievement of AB 32 goals. Under TIERs I and II, all new construction projects are required to reduce energy consumption by 15% and 30%, respectively, below the baseline required by CEC, as well as implement more stringent green measures than those required as mandatory by the code.

In early 2013, the California Building Standards Commission adopted the 2013 California Building Standards Code that also included the latest 2013 CALGreen Code, which became effective on January 1, 2014. The mandatory provisions of the code are anticipated to reduce 3 million metric tons of GHG emissions by 2020, reduce water use by 20% or more, and divert 50% of construction waste from landfills. The 2013 California Energy Code (Title 24, Part 6), which is also part of the CALGreen Code (Title 24, Part 11, Chapter 5.2), became effective on July 1, 2014.

Cap and Trade

The development of a cap-and-trade program was included as a key reduction measure of ARB's AB 32 Climate Change Scoping Plan. The cap-and-trade emissions trading program developed by ARB took effect on January 1, 2012, with enforceable compliance obligations beginning January 1, 2013. The cap-and-trade program aims to regulate GHG emissions from the largest producers in the state by setting a statewide firm limit, or cap, on allowable annual GHG emissions. The cap contains three compliance phases. In compliance phase one, large emitters from the electricity and industrial sector come under the cap. In compliance phase two, which commences in 2015, fuels will be subject to the cap. Compliance phase three will include all three sectors (electricity, industry, fuels) and will be in effect until 2020. ARB administered the first auction on November 14, 2012, with many of the qualified bidders representing corporations or organizations that produce large amounts of GHG emissions, including energy companies, agriculture and food industries, steel mills, cement companies, and universities (California Air Resources Board 2012c). California is working closely with British Columbia, Ontario, Quebec, and Manitoba through the Western Climate Initiative to

develop harmonized cap-and-trade programs that will deliver cost-effective emission reductions. Two lawsuits have been filed against cap-and-trade, but the cap-and-trade program will be implemented as is until further notice.

Local

South Coast Air Quality Management District

In April 2008, the South Coast Air Quality Management District (SCAQMD) convened a GHG CEQA Significance Threshold Working Group in order to provide guidance to local lead agencies on determining the significance of GHG emissions identified in CEQA documents.⁶ The goal of the working group was to develop and reach consensus on an acceptable CEQA significance threshold for GHG emissions that would be used on an interim basis until ARB (or some other state agency) developed statewide guidance on assessing the significance of GHG emissions under CEQA.

Initially, SCAQMD staff presented the working group with a significance threshold that could be applied to various types of projects—residential, nonresidential, industrial, etc. However, the threshold is still under development. In December 2008, staff presented the SCAQMD Governing Board with a significance threshold for stationary source projects in which it is the lead agency. This threshold used a tiered approach to determine a project's significance, with 10,000 metric tons of carbon dioxide equivalent (MTCO_{2e}) as a screening numerical threshold

In September 2010, the working group released additional revisions, which recommended a project-level efficiency target of 4.8 MTCO_{2e} per service population (SP) as a 2020 target and 3.0 MTCO_{2e}, per SP as a 2035 target. The recommended plan-level target for 2020 was 6.6 MTCO_{2e}, and the plan level target for 2035 was 4.1 MTCO_{2e}. SCAQMD has not announced when staff is expected to present a finalized version of these thresholds to the Governing Board. SCAQMD has also adopted Rules 2700, 2701, and 2702, which address GHG reductions; however, these rules are currently applicable only to boilers and process heaters, forestry, and manure management projects.

San Bernardino County Regional Greenhouse Gas Reduction Plan

In response to initiatives for the reduction of GHG emissions, a partnership led by the San Bernardino Associated Governments (SANBAG), in cooperation with 21 cities within the County, compiled an inventory of GHG emissions and provided an evaluation of reduction measures that could be adopted by the 21 Partnership Cities of San Bernardino County called the *San Bernardino County Regional Greenhouse Gas Reduction Plan* (SANBAG 2013a). The 21 partnership cities participating in this plan are Adelanto, Big Bear Lake, Chino, Chino Hills, Colton, Fontana, Grand Terrace, Hesperia, Highland, Loma Linda, Montclair, Needles, Ontario, Rancho Cucamonga, Redlands, Rialto, San Bernardino, Twentynine Palms, Victorville, Yucaipa, and Yucca Valley. The city reduction plans developed as part of this plan were intended to serve as a foundation upon which each individual jurisdiction may decide to develop its own customized and comprehensive climate action plan. SANBAG anticipates that individual cities may choose to use the plan to complete and adopt their own climate action plans with individual programs and policies tailored to each city's needs. The City of Fontana entered into a memorandum of understanding with SANBAG in February 2010 for the management and payment of the plan and related environmental impact report (EIR). The plan was certified on March 5, 2014 at the SANBAG Board of Directors Meeting.

⁶ For more information see: <http://www.aqmd.gov/ceqa/handbook/GHG/GHG.html>.

The *San Bernardino County Regional Greenhouse Gas Reduction Plan* specifies that cities select a goal to reduce their communities' GHG emissions. The City of Fontana selected the goal of reducing GHG emissions to a level that is 15% below its 2008 GHG emissions by 2020⁷ (SANBAG 2013a). According to the plan, the City's GHG emissions total is 1,238,926 MTCO_{2e}. The 2020 emissions with implementation of the plan are projected to be 1,053,087 MTCO_{2e}, or a 24% reduction from the "business-as-usual" projection and a reduction that exceeds the City's 15% goal. The 24% reduction is anticipated to be achieved largely through implementation of state vehicle standards and other standards including: SB X7-7 (Water-4); GHG Performance Standard for New Development (PS-1); and Implementation of the SCS (Transportation-1).

The *San Bernardino County Regional Greenhouse Gas Reduction Plan* includes several reduction measures that may be applicable to the proposed project, including:

- **State-2:** Title 24 Standards: Requires that building shells and building components be designed to conserve energy and water. 2013 Title 24 standards are effective starting January 1, 2014. The 2013 Title 24 standards are 30% more stringent than the 2008 Title 24 standards for nonresidential buildings. The standards will be periodically updated between 2014 and 2020.
- **State-6:** AB 1493 (Pavley): AB 1493 will reduce GHG emissions from automobiles and light duty trucks by 30% from 2002 levels by the year 2016. The regulations affect 2009 models and newer. The "Advanced Clean Cars" regulations introduces new standards for model years 2017–2025, and will reduce GHG emissions from automobiles and light duty trucks by 34% from 2017 levels by 2025. The Low Carbon Fuel Standard (LCFS) reduces GHG emissions by requiring a low carbon intensity of transportation fuels sold in California by at least 10% by the year 2020.
- **State-7:** GHG Emission Reduction Plan: The state Heavy-Duty Vehicle GHG Emission Reduction Program will increase heavy-duty vehicle (long-haul trucks) efficiency by requiring installation of best available technology and/or ARB approved technology to reduce aerodynamic drag and rolling resistance.
- **State-8:** Low Carbon Fuel Standard: The LCFS requires a 10% reduction in the carbon intensity of California's transportation fuels by 2020. As a result, the standard will reduce statewide emissions from transportation-based fuels by 15 MMTCO_{2e}. This is equivalent to an 8.9% reduction in emissions from transportation fuels.
- **PS-1:** New Development: New projects would be required to quantify project-generated GHG emissions and adopt feasible reduction measures to reduce project emissions to a level that is a certain percentage below "business-as-usual" project emissions. This does not mean that the other state and local measures would apply on an equal basis for every single project; individual new development projects may have higher or lower project-level burdens than the average.
- **Energy-5:** Solar Installations for New Commercial/Industrial Development: Encourage new businesses to install rooftop solar using Power Purchase Agreements (PPAs) and other low or zero up-front cost options for installing solar photovoltaic systems. This could be implemented through discretionary approvals and permitting for new projects. Establish a goal for solar installations on new buildings to be achieved before 2020.

⁷ Refer to Section 3.7, *City of Fontana*, of the Regional Greenhouse Gas Emissions Inventories and Reduction Plan for additional detail regarding the setting, sources, inventory, and the emissions reduction strategy for the City.

- **Energy-6:** Onsite Solar Energy for New and Existing Warehouse Space: Applies to new and existing warehouse space. Promote and incentivize solar installations on existing warehouse space through partnerships with SCE and other private sector funding sources including SunRun, SolarCity, and other solar lease or PPA companies. Establish a goal such that all new warehousing projects install solar to provide a minimum of 25% or more of the project's new on-site energy needs. This goal could be supported through non-financial incentives or streamlined permitting.
- **Water-1:** Require Adoption of the Voluntary CALGreen Water Efficiency Measures for New Construction: CALGreen voluntary measures recommend use of certain water-efficient appliances, and plumbing and irrigation systems, including: use of low-water irrigation systems; installation of rainwater and graywater systems; and installation of water-efficient appliances and plumbing fixtures. This would result in a 30–40% reduction over “business-as-usual” conditions in indoor water use, and a 55–60% reduction in outdoor potable water use (CALGreen Tier 1 or 2).
- **Water-3:** Encourage Water-Efficient Landscaping Practices.
- **Water-4:** Senate Bill X7-7, The Water Conservation Act of 2009: SB X7-7 was enacted in November 2009 and requires urban water agencies throughout California to increase conservation to achieve a statewide goal of a 20% reduction in urban per capita use by December 31, 2020.

City of Fontana General Plan Air Quality Element

Although the Air Quality Element is not a required chapter of the General Plan, the City has nevertheless included this element in its General Plan. In doing so, the City has acknowledged the existing condition of the quality of the air, and the City's commitment to the improvement the City's residents' quality of life. Although the City General Plan does not include any specific GHG or climate change policies or goals, a number of the goals, policies, and programs identified in the Air Quality Element would result in an indirect reduction in GHG emissions through reductions in vehicle trips, vehicle miles traveled, and energy use. Applicable goals and policies are provided in Table 4.2.6-5.

Table 4.2.6-5. Fontana General Plan Air Quality Goals and Policies

Goal/Policy
Air Quality Goal No. 2: Fontana has a diverse and efficiently operated ground transportation system that generates the minimum feasible pollutants.
Policy 2.1: The City shall seek to integrate land use and transportation planning to the maximum extent practical.
Policy 2.2: Mixed-use development should be planned for and incentivized to develop in our City.
Policy 2.3: Employers locating in our City should be encouraged to develop trip reduction plans to promote alternative work schedules, ridesharing, telecommuting, and work-at-home programs, employee education and preferential parking.
Policy 2.4: Incentives, regulations, and Transportation Demand Management systems shall be developed in cooperation with surrounding jurisdictions to eliminate vehicle trips that would otherwise be made.
Policy 2.5: Merchants in our City should be assisted in getting their customers to shift from single occupancy vehicles to transit, carpools, bicycles, or foot.
Policy 2.6: Developers in our community shall work to reduce vehicle trips and total vehicle miles traveled in projects that are approved here.

Goal/Policy

Policy 2.7: The City should manage parking supply to discourage auto use, while ensuring that economic development goals will not be sacrificed.

Policy 2.8: Efforts to expand bus, rail, and other forms of transit in the portion of the South Coast Air Basin within San Bernardino County shall be cooperatively pursued with Omnitrans, MTA and other transit providers.

Policy 2.9: The City should invest in clean fuel systems on new local government fleet vehicles as their service life ends, and promote similar actions by other units of government.

Policy 2.10: The City shall manage traffic flow through signal synchronization, while coordinating with and permitting the free flow of mass transit vehicles, as a way to achieve enhanced mobility.

Policy 2.11: Traffic signals should be synchronized throughout the City and with those of adjoining cities and the California Department of Transportation.

Air Quality Goal No. 3: A concerted effort to reduce energy consumption in Fontana results in reduced emissions.

Policy 3.1: Source reduction, recycling, and other appropriate measures to reduce the dependence on and processing of new raw materials shall be promoted.

Policy 3.2: Energy conservation shall be achieved through a combination of incentives and regulations for private and public developments.

Policy 3.3: The City shall promote and provide incentives for the incorporation of energy-efficient design elements, including appropriate site orientation and the use of shade and windbreak trees to reduce fuel consumption for heating and cooling.

Policy 3.4: The City shall promote and provide incentives for the use of energy efficient building materials/methods that reduce emissions.

Policy 3.5: The City shall promote and provide incentives for the use of efficient heating equipment and other appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces, and boiler units.

Policy 3.6: Centrally heated facilities to utilize automated time clocks or occupant sensors to control heating shall be required in facilities of a size and character to yield a positive return on investment.

Policy 3.7: The City shall require residential building construction to comply with energy use guidelines detailed in Title 24 of the California Administrative Code and shall promote and provide incentives for residential building construction that goes beyond the guidelines detailed in Title 24.

Policy 3.8: Stationary pollution sources shall be managed to prevent the release of toxic pollutants through:

- Design features
- Operating procedures
- Preventive maintenance
- Operator training and
- Emergency response planning.

Policy 3.9: Stationary air pollution sources shall comply with applicable air district rules and control measures.

Policy 3.10: Any project that exceeds allowable emissions, as established by the SCAQMD, shall mitigate its anticipated emissions to the extent reasonably feasible.

Policy 3.11: Alternative energy sources development shall be promoted in Fontana.

Source: City of Fontana 2003.

MTA = Metropolitan Transit Authority

SCAQMD = South Coast Air Quality Management District

Impact Analysis

Methodology

A number of modeling tools are available to assess GHG impacts of projects. In addition, certain air districts, such as SCAQMD, have created guidelines and requirements to conduct GHG analyses. SCAQMD's guidelines, *CEQA Air Quality Handbook, April 1993* and associated updates,⁸ were used to assess GHG impacts for the proposed project. The air quality models identified in the document (including an older version of the URBEMIS model) are outdated; therefore, the newer SCAQMD model, California Emissions Estimator Model (CalEEMod) Version 2013.2.1, was used to estimate project-related mobile and stationary sources emissions in this analysis.

This analysis includes estimated GHG emissions associated with short-term construction and long-term operation of the proposed project. GHGs with regional impacts would be emitted by project-related vehicular trips, as well as by emissions associated with stationary sources used on site.

As noted above, the City's General Plan does not include any specific GHG or climate change policies or goals. Nevertheless, a number of policies and goals would result in an indirect reduction in GHG emissions through reductions in vehicle trips, vehicle miles traveled, and energy use. The goals, policies, and programs identified in the Air Quality Element have been analyzed in conjunction with the proposed project in order to determine consistency and potential conflicts with the goals and policies provided previously in Table 4.2.6-5.

Construction

As stated in further detail in Section 4.2.2, *Air Quality*, construction activities produce combustion emissions from various sources, such as site grading, utility engines, onsite heavy-duty construction vehicles, asphalt paving, and motor vehicles transporting the construction crew. Exhaust emissions from construction activities envisioned on site would vary daily as construction activity levels change.

The project could be built in phases or in one phase, depending on market conditions. This analysis assumes the more conservative scenario of the entire site built in one phase. Site preparation (mass grading and/or fine grading) would be completed before other construction activities would occur. Table 4.2.6-6 lists the construction schedule based on this conservative assessment of possible project buildout. It is also conservatively assumes that the Building Construction and Architectural Coating phases overlap.

Table 4.2.6-6. Construction Schedule

Phase Number	Phase Name	Number of Days/Week	Number of Days
1	Site Preparation	5	10
2	Grading	5	44
3	Building Construction	5	358
4	Architectural Coating	5	327
5	Paving	5	44

Source: Project Plans and CalEEMod.

⁸ Including the SCAQMD update to Greenhouse Gas CEQA Significance Thresholds: <http://www.aqmd.gov/ceqa/handbook/GHG/GHG.html>.

Table 4.2.6-7 lists a representative set of equipment to be used on any one day for each phase. While there may be other sets of equipment in use on other days in each phase, this set is representative of the peak day for each phase. The phasing is based on anticipated project buildout; the equipment type, amount, hours per day, and horsepower are CalEEMod defaults.

Table 4.2.6-7. Construction Equipment Utilized by Construction Phase

Construction Phase	Off Road Equipment Type	Off-Road Equipment Unit Amount	Hours Used per Day	Horsepower	Load Factor
Site Preparation	Rubber-tired dozers	3	8	358	0.40
	Tractors/loaders/backhoes	4	8	75	0.37
Grading	Excavators	2	8	157	0.38
	Graders	1	8	162	0.41
	Rubber-tired dozers	1	8	358	0.40
	Scrapers	2	8	356	0.48
	Tractors/loaders/backhoes	2	8	75	0.37
Building Construction	Cranes	1	7	208	0.29
	Forklifts	3	8	149	0.20
	Generator sets	1	8	84	0.74
	Tractors/loaders/backhoes	3	7	75	0.37
	Welders	1	8	46	0.45
Architectural Coating	Air compressors	1	6	78	0.48
Paving	Pavers	2	8	89	0.42
	Paving equipment	2	8	82	0.36
	Rollers	2	8	84	0.38

Source: Project Plans, CalEEMod Defaults, October 2013.

Operation

Overall, the following activities associated with operation of the proposed project could directly or indirectly contribute to the generation of GHG emissions:

- **Removal of Vegetation:** The net removal of vegetation for construction results in a loss of the carbon sequestration in plants. However, planting of additional vegetation would result in additional carbon sequestration and would lower the overall carbon footprint of the project.
- **Construction Activities (amortized over 30 years):** During construction of the project, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs, such as CO₂, CH₄, and N₂O.
- **Gas, Electricity, and Water Use:** Natural gas use results in the emissions of two GHGs: CH₄ (the major component of natural gas) and CO₂ from the combustion of natural gas, including use for forklifts. Electricity use can result in GHG production if the electricity is generated by combusting fossil fuel. California's water conveyance system is energy-intensive. CEC estimates

indicate that the total energy used to pump and treat this water exceeds 6.5% of the total electricity used in the state per year (California Energy Commission 2005).

- **Solid Waste Disposal:** Solid waste generated by the project could contribute to GHG emissions in a variety of ways. Landfilling and other methods of disposal use energy for transporting and managing the waste, and they produce additional GHGs to varying degrees. Landfilling, the most common waste management practice, results in the release of CH₄ from the anaerobic decomposition of organic materials. CH₄ is 25 times more potent a GHG than CO₂. However, landfill CH₄ can also be a source of energy. In addition, many materials in landfills do not decompose fully, and the carbon that remains is sequestered in the landfill and not released into the atmosphere.
- **Motor Vehicle Use:** Transportation associated with the proposed project would result in GHG emissions from the combustion of fossil fuels in daily automobile and truck trips, including use of refrigeration on trucks or transport refrigeration units (TRUs).

Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride Emissions. At present, there is a federal ban on chlorofluorocarbons (CFCs) and halons; therefore, it is assumed the project would not generate emissions of CFCs or halons. The project may emit a small amount of HFC emissions from leakage and service of refrigeration and air conditioning equipment and from disposal at the end of the life of the equipment. All refrigerants would be stored, used, and disposed of in compliance with existing federal and state regulations; however, the specific details regarding refrigerants to be used in the project site are unknown at this time. PFCs and sulfur hexafluoride are typically used in industrial applications, none of which would be used for the warehousing uses and support office spaces planned for the project site. However, any use of refrigerants within the project site would involve only refrigerants permitted by law, and refrigerants would be transported to the site, handled, used, and ultimately disposed of in accordance with all applicable federal, state, and local requirements. Therefore, it is not anticipated that the project would contribute significant emissions of these additional GHGs.

ARB's AB 32 Scoping Plan. As described above, the May 22, 2014 update to the ARB Scoping Plan determined that in order to achieve 1990 level of emissions statewide to satisfy the requirements of AB 32, California would need to reduce its overall 2020 emissions for all sectors by 15% below the "business-as-usual" 2020 projection. A project would be consistent with ARB's Scoping Plan (approved May 22, 2014) if it is constructed and operated in a manner that would result in 15% less GHG emissions than the "business-as-usual" 2020 projection. As previously stated, the City of Fontana is anticipating it will exceed this GHG emissions reduction target by as much as 9%, achieving a 24% reduction from the "business-as-usual" 2020 projection.

While an individual project's emissions would amount to a small fraction of statewide GHG emissions, AB 32's assessment of global warming as posing a "serious threat" warrants consideration of the impact of emissions from the project on climate change as cumulatively considerable, and triggers compliance with the 15% reduction from "business-as-usual" 2020 requirement under AB 32.

Thresholds of Significance

Criteria for determining the significance of impacts related to GHG emissions are based on criteria contained in Appendix G of the State CEQA Guidelines. The proposed project could have a significant impact on the environment if it would result in any of the following.

- GHG-1** Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- GHG-2** Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.
- GHG-3** Result in impacts to the project from global climate change.⁹

California State Governor's Office of Planning and Research (OPR) Guidance. The recommended approach for GHG analysis included in OPR's June 2008 guidance document that led to the adoption of the new GHG CEQA Guidelines is to: (1) identify and quantify GHG emissions; (2) assess the significance of the impact on climate change; and (3) if significant, identify alternatives and/or mitigation measures to reduce the impact below a level of significance (Governor's Office of Planning and Research 2008). The June 2008 OPR guidance provides some additional direction regarding planning documents as follows:

CEQA can be a more effective tool for GHG emissions analysis and mitigation if it is supported and supplemented by sound development policies and practices that will reduce GHG emissions on a broad planning scale and that can provide the basis for a programmatic approach to project-specific CEQA analysis and mitigation.... For local government lead agencies, adoption of general plan policies and certification of general plan EIRs that analyze broad jurisdiction-wide impacts of GHG emissions can be part of an effective strategy for addressing cumulative impacts and for streamlining later project-specific CEQA reviews.

The State CEQA Guidelines include the following direction regarding determination of significant impacts from GHG emissions (§ 15064.4):

- (a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency should make a good-faith effort, based on available information, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:
 - (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; or
 - (2) Rely on a qualitative analysis or performance based standards.
- (b) A lead agency may consider the following when assessing the significance of impacts from greenhouse gas emissions on the environment:
 - (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
 - (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.

⁹ In addition to the Appendix G CEQA thresholds, this threshold was used to evaluate the effects that global climate change would have on the project.

- (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

State CEQA Guidelines Section 15064(b) provides that the "determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data." It also states that an "ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting."

While individual projects are unlikely to measurably affect global climate change, each project incrementally contributes toward the potential for global climate change on a cumulative basis, in concert with all other past, present, and probable future projects. Despite this, the CEQA statutes and OPR guidelines do not prescribe thresholds of significance (i.e., the numeric amount of GHG emissions that would constitute a significant impact on the environment) or particular methodologies for performing an impact analysis; as with most environmental topics, significance criteria are left to the judgment and discretion of the lead agency as supported by substantial evidence (State CEQA Guidelines Sections 15064.4(a) and 15064.7(c)).

SCAQMD and CEQA. As SCAQMD has recognized, the analysis of GHGs is a much different analysis than that of criteria pollutants for several reasons. For criteria pollutants, significance thresholds are based on daily emissions because attainment or nonattainment is based on daily exceedances of applicable ambient air quality standards. Further, several ambient air quality standards are based on relatively short-term exposure effects on human health (e.g., 1-hour and 8-hour). GHG emissions operate differently. For example, because the half-life of CO₂ is approximately 100 years, the effects of GHGs are longer term, affecting the global climate over a relatively long timeframe. As a result, SCAQMD's current position is to evaluate GHG effects over a longer timeframe than a single day.

SCAQMD released a draft guidance document regarding interim CEQA GHG significance thresholds in October 2008. On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for "Interim Greenhouse Gas (GHG) Significance Threshold to be Used by the AQMD for Industrial Source Projects, Rules and Plans When it is the Lead Agency for Projects Subject to CEQA" ("AQMD Interim Threshold") (SCAQMD 2008). The SCAQMD Interim Threshold established a fixed 10,000 MTCO₂E threshold based on a goal of a 90% emission capture rate for all new or modified stationary source/industrial projects for which SCAQMD is the lead agency under CEQA. The SCAQMD Governing Board resolution adopting the Interim Threshold expressly provided that:

[the SCAQMD] "Governing Board does not intend, at this time, to require other public agencies to use the AQMD's Board-adopted GHG significance threshold for industrial sources when in preparation or review of their CEQA documents for land use projects."

SCAQMD does not currently have GHG significance thresholds for projects, such as the WVLCSP, in which it is not the lead agency; instead, SCAQMD encourages local governments to adopt a qualified GHG reduction strategy consistent with AB 32 goals. Although SCAQMD is not the lead agency for the proposed project, rather than adopt a qualified GHG reduction strategy consistent with AB 32 goals

(15% reduction from “business-as-usual”), the original Draft EIR for the WVLCSP utilized the 10,000 MTCO₂e per year threshold to assess the significance of GHG emissions impacts associated with the proposed industrial warehouse project.

Although SCAQMD adopted the 10,000 MTCO₂e threshold for analysis of industrial projects, which would include mechanical equipment and industrial processes not normally present in a warehouse, the thresholds cited by SCAQMD are for projects where SCAQMD is the lead agency. Such projects typically include single, stand-alone industrial facilities seeking emissions permit(s) from SCAQMD. Therefore, the data sets used to create the interim threshold adopted by SCAQMD for use when it is the lead agency do not consider off-site indirect GHG emissions, including mobile emissions. Consequently, the City has determined that the SCAQMD Interim Threshold used in the original Draft EIR for the WVLCSP was not an ideal measure for uses that are heavily vehicle-dependent, such as the distribution and logistics center proposed for the WVLCSP, with its high-cube warehouse uses.

ARB Scoping and AB 32. Since the 2008 adoption of the State CEQA Guidelines regulating GHG emissions, local agencies have been moving toward use of the “business-as-usual” threshold approach. The rationale behind the “business-as-usual” threshold is State CEQA Guidelines Section 15064.4(b)(3), which provides that, when determining the significance of GHG emissions, a lead agency may consider whether a project complies with the regulations or requirements adopted pursuant to a statewide plan intended to reduce or mitigate GHG.¹⁰

ARB’s Climate Change Scoping Plan (“Scoping Plan”), originally prepared in 2008 and reapproved and updated in August 2011 as part of ARB’s mandate to implement AB 32, is one such plan. Consistent with AB 32, the Scoping Plan mandates a reduction in California’s GHG emissions to 1990 levels by 2020 and sets forth strategies for GHG reductions to reach this target through a combination of regulations, market mechanisms, and other actions. To achieve the reduction goal established in AB 32, the Scoping Plan projected the reasonable expected GHG emissions growth by 2020 absent such reduction strategies (i.e., “business-as-usual”) and then calculated the GHG emission reductions that are anticipated to occur as a result of the Scoping Plan’s strategies.

As described above, the methodology used to analyze the project’s compliance with the ARB Scoping Plan’s requirement of a 15% reduction from “business-as-usual” 2020 under AB 32 includes a calculation of the project’s construction and operational GHG emissions under both a “business-as-usual” scenario and a present conditions scenario. The emissions generated for the “business-as-usual” scenario do not take into account any GHG emissions reductions that would result from any AB 32-related emission restrictions (i.e., Pavley standards or LCFS), while the present conditions scenario takes these emission restrictions into account. The significance analysis compares the numeric level of emissions generated by the proposed project under these two scenarios to determine whether the project complies with the required reductions in GHG emissions under AB 32, which would be a 15% reduction below “business-as-usual” conditions.

San Bernardino County Regional Greenhouse Gas Reduction Plan. In March 2014, SANBAG, with participation of its member agencies, including the City of Fontana, adopted its own regional plan utilizing the “business-as-usual” approach in the San Bernardino County Regional Greenhouse Gas Reduction Plan (the “Reduction Plan”). Specifically, SANBAG compiled an inventory of GHG

¹⁰ The City used a “business-as-usual” approach for the Amended and Restated Redevelopment Plan for the Southwest Industrial Park Project Area prepared in 2010.

emissions and developed reduction strategies for adoption by the 21 cities of San Bernardino County.

As stated on page 3-47 of the Reduction Plan and page 4.6-13 of the Reduction Plan EIR (SANBAG 2013b), the “City of Fontana selected a goal to reduce its community GHG emissions to a level that is 15% below its 2008 GHG emissions level by 2020. The City will meet and exceed this goal subject to reduction measures that are technologically feasible and cost-effective per AB 32.” The Reduction Plan details several measures and policies explaining how Fontana “will meet and exceed this goal subject to reduction measures that are technologically feasible and cost-effective per AB 32 through a combination of state (~83%) and local (~17%) efforts” (see Reduction Plan, pages 3-47 through 3-63).

The thresholds set forth in the Reduction Plan EIR are:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases

The analytic method used by SANBAG to determine whether a significant GHG impact would result was to analyze impacts based on reduction of GHG emissions from 2020 “business-as-usual” conditions.

It is therefore appropriate that, should a project be consistent with state and regional policies and goals for reducing GHG emissions, the project would not result in a significant impact, nor would a project conflict with the plan. The Reduction Plan advises cities to select a goal to reduce their community’s GHG emissions. As noted above, the Reduction Plan and its EIR report that the City of Fontana selected a goal of reaching a reduction level that is 15% below its 2008 GHG emissions level by 2020¹¹ (SANBAG 2013b).

Conclusion. In light of the recent adoption of the SANBAG Reduction Plan and certification of the Reduction Plan EIR, both of which accurately report that the City of Fontana has selected a goal to reduce its community GHG emissions to a level that is 15% below its 2008 GHG emissions level by 2020, coupled with the fact that the SCAQMD Interim Threshold does not address mobile source emissions and was not intended to be used for projects for which SCAQMD is not the lead agency, the City determined, consistent with the City’s and SANBAG’s goals for the reduction of GHG emissions, the “business-as-usual” approach would be a more appropriate threshold to use in the Revised Draft EIR for the WVLCSF than was the interim SCAQMD threshold of 10,000 MTCO_{2e} used in the original Draft EIR.

Project Design Features

The following GHG-related project design features, which include specific plan requirements and a standard requirement, would prevent or reduce potentially significant impacts.

¹¹ Refer to Section 3.7 of the Reduction Plan, *City of Fontana*, and Section 4.6.7 of the Reduction Plan Draft EIR, *City of Fontana*, for additional detail regarding the setting, sources, inventory, and the emissions reduction strategy for the City.

SP-GG-1: Incorporate Water Conservation and Efficient Measures for Landscaping. The project will devise a comprehensive water conservation strategy in compliance with the California Green Building Standards Code (CALGreen) Water Efficiency Measures and Leadership in Energy and Environmental Design (LEED) Neighborhood Development standards to reduce water use during project operation. The strategy will include the following, plus other innovative measures that may be appropriate.

- Install drought-tolerant plants for landscaping.
- Use reclaimed water for landscape irrigation within the project where reasonably available. Install the infrastructure to deliver and use reclaimed water, on the property frontage only.
- Install water-efficient irrigation systems, such as weather-based and soil-moisture-based irrigation controllers and sensors, for landscaping according to the California Department of Water Resources Model Efficient Landscape Ordinance.
- Ensure that all landscape and irrigation measures are in compliance with the City's Municipal Code Article IV, Landscaping and Water Conservation.

SP-GG-2: Design Building Components to Meet 2013 Title 24 Standards. The project will design building shells and building components, such as windows, roof systems and electrical systems, to meet 2013 Title 24 standards, which are 30% more stringent than the 2008 Title 24 standards for nonresidential buildings.

SP-GG-3: Design CALGreen-Compliant Buildings. Buildings will be designed to provide CALGreen standards with LEED features for potential certification and will employ energy and water conservation measures in accordance with such standards. This includes design considerations related to the building envelope, heating, ventilating, and air conditioning (HVAC), lighting, and power systems.

SP-GG-4: Provide Electrical Loading Docks. Electrical outlets will be provided in loading dock areas to provide power for trucks when refrigeration is needed. This allows trucks with refrigerated cargo to keep their cargo cool without using their engines, minimizing idling time to reduce air emissions and use of fuel on site.

SP-GG-5: Utilize Energy-Efficient Lighting. The project will utilize energy-efficient interior and exterior lighting, including light-emitting diodes (LED), T5 and T8 fluorescent lamps, or other lighting that is at least as efficient. Lighting will incorporate motion sensors that turn them off when not in use.

SP-GG-6: Select Efficient Refrigerants and HVAC Systems. Refrigerants and HVAC equipment will be selected to minimize or eliminate the emission of compounds that contribute to ozone depletion and global warming. Ventilation and HVAC systems will be designed to meet or exceed the minimum outdoor air ventilation rates described in the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHREA) standards and/or per California Title 24 requirements.

SP-GG-7: Provide Landscaped Parking Lots. Surface parking lots will be well landscaped to reduce the heat island effect. Parking lot landscaping will be planted with 15-gallon trees, one per every four parking stalls. The trees may be clustered, but a minimum of one cluster will be provided for each 100 feet of parking row. Trees will be selected and placed to provide canopy and shade for the parking lots.

SR-GG-1: Provide Waste Reduction and Recycling Education. The property operator will distribute readily available information provided by the City for employee education about reducing waste and available recycling services.

Impacts and Mitigation

Impact GHG-1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment

Construction

Construction activities produce GHG emissions from various sources, such as site preparation and grading, onsite heavy-duty construction equipment, asphalt paving, and motor vehicles transporting the construction crew and building materials to the site. The construction emissions analysis makes the conservative assumption that the project is built out at a single time, rather than constructed in several different phases. It is also conservatively assumed that building construction overlaps architectural coating activities.

Table 4.2.6-8 lists the unmitigated peak annual emissions during the most intense construction activities from both on- and off-site emissions, which would total 4,831 metric tons per year (MT/yr) from a combination of building, grading, paving, and other associated construction activities. As indicated, the highest annual CO₂ emissions associated with construction would be during the building construction phase, at approximately 4,200 MT/yr without mitigation. In other words, the multi-year building construction phase would emit 4,200 MT of CO₂e without mitigation during the peak year and lower for the other years of building construction. The total GHG emissions over the entire construction period are expected to be 8,300 MT. Details of emissions factors and other assumptions used in the analysis of construction GHG emissions can be found in the Greenhouse Gas Emissions Study prepared for project site development (Appendix I).

Table 4.2.6-8. Short-Term Construction Emissions with Project, without Mitigation

	Total Pollutant Emissions, MT/yr			
Construction Phase	CO ₂	CH ₄	N ₂ O	CO ₂ e
Site Preparation	20	0.0056	0	20
Grading	140	0.039	0	140
Building Construction	4,200	0.23	0	4,200
Architectural Coating	420	0.029	0	420
Paving	51	0.014	0	51
Source: Appendix I				
CH ₄ = methane		MT/yr = metric tons per year		
CO ₂ = carbon dioxide		N ₂ O = nitrous oxide		
CO ₂ e = carbon dioxide equivalent				

However, these unmitigated construction-related GHG emissions would be reduced through implementation of **Specific Plan Requirements SP-GG-1** through **SP-GG-7** and **Mitigation Measures GHG-1** and **GHG-2** as listed below. In addition, the following air quality-related mitigation measures (**Mitigation Measures AQ-2** through **AQ-8** and **AQ-12**) would be implemented to further reduce GHG emissions from construction activities:

- **Mitigation Measure AQ-2:** Utilize Tier 3 Construction Equipment
- **Mitigation Measure AQ-3:** Use Electricity Rather than Internal Combustion Engines during Construction
- **Mitigation Measure AQ-4:** Use Alternative Fueled Technology during Construction
- **Mitigation Measure AQ-5:** Require Proper Maintenance of Construction Equipment
- **Mitigation Measure AQ-7:** Require Construction Equipment to Turn Off When Not in Use
- **Mitigation Measure AQ-8:** Encourage Ridesharing and Transit Incentives
- **Mitigation Measure AQ-12:** Energy Efficiency in Vendor Trucks

With implementation of these GHG and air quality specific plan requirements and mitigation measures, peak construction-related GHG emissions would be reduced from 4,831 MT/yr to 4,620 MT/yr, as shown in Table 4.2.6-9. Details of the emission factors and other assumptions are included in Appendix I.

Table 4.2.6-9. Short-Term Construction Emissions with Project, with Mitigation

	Total Pollutant Emissions, MT/yr			
Construction Phase	CO ₂	CH ₄	N ₂ O	CO ₂ e
Site Preparation	20	0.0056	0	20
Grading	140	0.04	0	140
Building Construction	4,000	0.2	0	4,000
Architectural Coating	420	0.025	0	410
Paving	51	0.014	0	51
Source: Appendix I				
CH ₄ = methane		MT/yr = metric tons per year		
CO ₂ = carbon dioxide		N ₂ O = nitrous oxide		
CO ₂ e = carbon dioxide equivalent				

Architectural coatings, carpet systems, composite wood products, and resilient flooring contain volatile organic compounds that are similar to reactive organic compounds and are part of the O₃ precursors. Emissions associated with carpet systems, composite wood products, and resilient flooring could be reduced by using natural, rapidly renewable materials. Emissions could be further minimized by adherence to the California Green Building Code 2010, Pollutant Control Section.

Operation

The WVLCSP would facilitate construction of up to 3,473,690 square feet of warehousing uses. Operation of the project would generate GHG emissions, with the majority of energy consumption (and associated generation of GHG emissions) occurring during the project's operation (as opposed to its construction). Typically, more than 80% of the total lifecycle energy consumption takes place during the use of buildings, and less than 20% is consumed during construction (United Nations Environment Programme 2007). The large majority of GHG emissions generated by operation of the proposed project would be from truck transport of goods to and from the warehousing distribution center. Vehicle emissions related to operation of the project would contribute approximately 77% of the project's total CO₂e emissions.

As described above, the ARB Scoping Plan states that a 15% reduction below the estimated “business-as-usual” levels was determined to be necessary to return GHG emissions to 1990 levels by 2020 (California Air Resources Board 2014). “Business-as-usual” is defined as emissions that would be generated prior to AB 32-related emission restrictions beginning in 2006 (e.g., Pavley standards). In addition, as noted above, the City of Fontana has selected the goal set forth in the SANBAG GHG Inventories and Reduction Plan to reduce emissions of GHGs 15% below the 2008 GHG emissions level by 2020.

The GHG emission estimates presented in Table 4.2.6-10 show the emissions associated with operation of the proposed industrial warehouse buildings under “business-as-usual” conditions. Appendix I includes the CalEEMod modeling output for these GHG emissions. As shown, operation of the project under “business-as-usual” conditions would result in 42,900 MTCO₂e per year.

Table 4.2.6-10. Operational Greenhouse Gas Emissions—Business as Usual

Construction Phase	Total Greenhouse Gas Emissions Per “Business-as-Usual,” MT/yr					
	Bio-CO ₂	NBio-CO ₂	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Construction emissions amortized over 30 years	0	260	260	0.014	0	260
Operational Emissions						
Area	0	0.142	0.142	0.0005	0	0.152
Energy	0	8,250	8,250	0.326	0.0851	8,280
Mobile (Passenger Cars)	0	7,930	7,930	0.56	0	7,940
Mobile (Trucks)	0	24,200	24,200	0.406	0	24,200
On-site Equipment (Forklifts and TRUs)	0	450	450	0.075	0	450
Waste	663	0	663	39	0	1,490
Water	7.0	113	120	0.727	0.018	141
Total Project Emissions	670	41,300	42,000	41	0.103	42,900

Source: Appendix I.

Note: CalEEMod does not provide a model option for 2008; as such, a 2010 analysis year was used for this “business-as-usual” analysis. A 2010 analysis year results in a more conservative approach (i.e., would understate the percentage reduction from “business-as-usual” because a 2010 analysis year for vehicular emissions would result in fewer emissions than a 2008 analysis year).

Bio-CO₂ = biologically generated CO₂

MT/yr = metric tons per year

CH₄ = methane

N₂O = nitrous oxide

CO₂ = carbon dioxide

NBio-CO₂ = Non-biologically generated CO₂

CO₂e = carbon dioxide equivalent

TRU = transport refrigeration units

The operational GHG emissions totals provided in Table 4.2.6-11 show the emission reductions that would result from AB 32 emission restrictions on motor vehicles, but without implementation of the specific plan requirements, standard requirements, and mitigation measures. As shown, 35,400 MTCO₂e per year, which is 0.035 MMTCO₂e per year, would be generated, and the largest amount of emissions would be generated from motor vehicle emissions. Emissions listed in Table 4.2.6-11 include the short-term construction emissions of 4,620 MT total amortized over 30 years. SCAQMD methodology requires that construction related GHG emissions be amortized over 30 years.

Table 4.2.6-11. Operational Greenhouse Gas Emissions—without Mitigation

Construction Phase	Total Regional Pollutant Emissions, MT/yr					
	Bio-CO ₂	NBio-CO ₂	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Construction emissions amortized over 30 years	0	260	260	0.014	0	260
Operational Emissions						
Area	0	0.142	0.142	0.0038	0	0.15
Energy	0	5,910	5,910	0.317	0.0823	5,940
Mobile (Passenger Cars)	0	5,510	5,510	0.228	0	5,520
Mobile (Trucks)	0	21,600	21,600	0.169	0	21,600
On-site Equipment (Forklifts and TRUs)	0	440	440	0.075	0	440
Waste	663	0	663	39	0	1,490
Water	7.0	79	83	0.727	0.0181	106
Total Project Emissions	670	33,800	34,500	41	0.1	35,400
Source: Appendix I.						
Bio-CO ₂ = biologically generated CO ₂			MT/yr = metric tons per year			
CH ₄ = methane			N ₂ O = nitrous oxide			
CO ₂ = carbon dioxide			NBio-CO ₂ = Non-biologically generated CO ₂			
CO ₂ e = carbon dioxide equivalent			TRU = transport refrigeration units			

As shown in Table 4.2.6-11, the predominant (78%) GHG emissions associated with the project would be generated by mobile sources. Overall, 62% of total project-related GHG emissions would be generated by truck travel in the region. As the mobile GHG emissions are directly correlated with the amount of annual truck trips and mileage traveled by the trucks associated with the proposed industrial warehouses during operations, no feasible mitigation measure is available to reduce these GHG emissions.

Specific Plan Requirements and Standard Requirement

The applicant shall implement the following specific plan requirements and standard requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **SP-GG-1:** Incorporate Water Conservation and Efficient Measures for Landscaping.
- **SP-GG-2:** Design Building Components to Meet 2013 Title 24 Standards.
- **SP-GG-3:** Design CalGreen-Compliant Buildings.
- **SP-GG-4:** Provide Electrical Loading Docks.
- **SP-GG-5:** Utilize Energy-Efficient Lighting.
- **SP-GG-6:** Select Efficient Refrigerants and HVAC Systems.
- **SP-GG-7:** Provide Landscaped Parking Lots.
- **SR-GG-1:** Provide Waste Reduction and Recycling Education.

Mitigation Measures

Mitigation Measures AQ-2 through AQ-5 and AQ-7 through AQ-14.

Mitigation Measure GHG-1: Incorporate More Energy-Efficient Measures Related to Construction and Building Materials. The project will be required to implement the following measures to improve energy efficiency during construction:

- Use locally produced and/or manufactured building materials for at least 10% of the construction materials used for the project.
- Use “green” building materials, such as those materials that are resource efficient and recycled and manufactured in an environmentally friendly way, for at least 10% of the project.

Mitigation Measure GHG-2: Incorporate Energy Efficiency Measures for New Warehouse Buildings. Prior to the issuance of building permits, the WVLCSP will demonstrate the incorporation of the following project design features that will achieve a minimum of 15% reduction in GHG emissions from “business-as-usual” conditions, pursuant to the San Bernardino County Regional Greenhouse Gas Reduction Plan and AB 32 and the GHG emissions reduction goal selected by the City of Fontana as part of that regional program. Future projects (either constructed by the applicant as core and shell buildings or by building operators) will also be required to implement the Regional Greenhouse Gas Reduction Plan and meet the 15% reduction by incorporating the following design features:

Energy Efficiency

- Design buildings to be energy efficient, meet 2013 Title 24 requirements, and comply with the CALGreen Code. Under Tier I, all new construction projects are required to reduce energy consumption by 15% below the baseline required by CEC, as well as implement more stringent green measures than those required by mandatory code.
- Install efficient lighting and lighting control systems. Solar or LED lighting will be installed for outdoor lighting. The site and buildings will be designed to take advantage of daylight, such that use of daylight is an integral part of the lighting systems in buildings.
- Use trees, landscaping, and sun screens on west and south exterior building walls to reduce energy use.
- Install light-colored “cool” roofs over air conditioned spaces and cool pavements.
- Install energy-efficient heating and cooling systems, appliances and equipment, and control systems that are Energy Star rated.
- Implement design features to increase the efficiency of the building envelope (i.e., the barrier between conditioned and unconditioned spaces). This includes installation of insulation to minimize heat transfer and thermal bridging and to limit air leakage through the structure or within the heating and cooling distribution system to minimize energy consumption.
- Provide vegetative or human-made exterior wall shading devices or window treatments for east-, south-, and west-facing walls with windows.
- Incorporate Energy Star rated windows, space heating and cooling equipment, light fixtures, appliances, or other applicable electrical equipment.
- Install and use equipment and machinery that only use less than 3,900 GWP HFC refrigerants or natural refrigerants (ammonia, propane, CO₂) for refrigeration and fire-suppression equipment.

Renewable Energy

- Install solar-ready infrastructure so that solar panels could be included over any future parking locations internal to the project. No solar panels will be placed in areas visible from Jurupa Avenue, Locust Street, Armstrong Road or the new private street west of the Armstrong/Locust/7th Street intersection and glare would not produce spill-over that affects nearby sensitive receptors.
- Design buildings to have solar-ready roofs that will structurally accommodate later installation of rooftop solar panels. Building operators providing rooftop solar panels will submit plans for solar panels prior to occupancy.
- Use combined heat and power in appropriate applications.

Water Conservation and Efficiency

- Create water-efficient landscapes with a preference for a xeriscape landscape palette. Provide a landscape and development plan for the project that takes advantage of shade, prevailing winds, and landscaping.
- Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls and sensors for landscaping, according to the California Department of Water Resources' Model Efficient Landscape Ordinance.
- Install landscape irrigation infrastructure along the property frontage to deliver and use reclaimed water, should reclaimed water supplies become available through the City.
- Design buildings to be water efficient. Install water-efficient fixtures and appliances (e.g., EPA WaterSense labeled products).
- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff.
- Restrict the use of water for cleaning outdoor surfaces and vehicles.
- Implement low-impact development practices that maintain the existing hydrologic character of the site to manage storm water and protect the environment. The project will retain storm water runoff on site and construct basins to hold and filter water.
- Implement a comprehensive water conservation strategy through methods described in the WVLCSP that are appropriate for the project and location.
- The building operator(s) will provide education about water conservation and available programs and incentives to distribute to employees.

Solid Waste Measures

- Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).
- Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas.
- The applicant will provide education and publicity about reducing waste and available recycling services to the building operators to distribute to employees.

Transportation and Motor Vehicles

- Limit idling time for commercial vehicles to no more than five minutes, including delivery and construction vehicles, per ARB requirements.
- The construction contractor and project operator will promote ride sharing programs (e.g., by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading and waiting areas for ride sharing vehicles, and providing a web site or message board for coordinating rides).
- Provide electric vehicle charging facilities to encourage the use of low- or zero-emission vehicles.
- Incorporate bicycle lanes and routes into street improvements within the WVLCSP area.
- Provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. For large employers, provide facilities that encourage bicycle commuting (e.g., locked bicycle storage or covered or indoor bicycle parking).

Residual Impacts

The project would result in the generation of GHG emissions, and implementation of specific plan requirements, standard requirements, and mitigation measures would reduce those emissions. Refer to Impact GHG-2 below for a discussion of impacts in relation to established goals for the reduction of GHG emissions and thresholds of significance. As demonstrated below, the proposed project development would result in GHG emissions more than 15% below “business-as-usual” levels with implementation of specific plan requirements, standard requirements, and mitigation measures, consistent with applicable GHG emissions reduction plans and existing statewide GHG reduction measures, including AB 32, the ARB Scoping Plan, and the SANBAG Regional GHG Reduction Plan (see Table 4.2.6-12).

Impact GHG-2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases

The project would be required to comply with existing state and federal regulations regarding the energy efficiency of buildings, appliances, and lighting, which would reduce the project’s electricity demand compared with that of older buildings. The proposed project would be designed to meet 2013 Title 24, CALGreen Water Efficiency Measures, and LEED Neighborhood Development standards. In addition, the project would implement **Specific Plan Requirements SP-GG-1 through SP-GG-7, Standard Requirement SR-GG-1, and Mitigation Measures AQ-2 through AQ-5, AQ-7 through AQ-14, GHG-1, and GHG-2.**

As described above, the ARB Scoping Plan and the City of Fontana’s goal in the County GHG Inventories and Reduction Plan is to meet a 15% reduction below “business-as-usual” levels. With implementation of the specific plan requirements, standard requirements, and the air quality and GHG-related mitigation measures, the project would achieve an 18.2% reduction of GHG emissions from 42,400 to 34,700 MTCO₂e annually. Therefore, the project would be consistent with the ARB Scoping Plan, County GHG Inventories and Reduction Plan goal, and AB 32.

Many of the ARB Scoping Plan Recommended Actions listed previously in Table 4.2.6-3, such as those related to transportation, are implemented by state and federal standards or related to activities and emissions that would not result from the proposed project. However, the following strategies from the ARB Scoping Plan that are related to the project are included as specific plan

requirements or would be implemented by mitigation measures: energy efficient buildings and appliances, solar water heating, solar infrastructure, green buildings, water use efficiency, water system efficiency, water recycling, reuse of urban runoff, increase of renewable energy production, and recycling. As a result, the project would be consistent with the ARB Scoping Plan Recommended Actions.

Table 4.2.6-11 shown previously provides the project operational activities that would directly or indirectly affect GHG emissions, as summarized below:

- **Landscaping and Vegetation:** The project would remove existing vegetation for construction, which would result in a temporary loss of the carbon sequestration in plants. The project would install approximately 22 acres of new landscaping that would provide carbon sequestration and would lower the carbon footprint of the project by approximately 95 MTCO₂e per year. With the addition of approximately 50 parking area trees, an additional sequestration of approximately 35 MTCO₂e per year would result.
- **Gas, Electricity, and Water Use:** The gas, electricity, and water use-related emissions would total approximately 6,046 MTCO₂e per year.
- **Solid Waste Disposal:** Solid waste-related emissions would be approximately 1,490 MTCO₂e per year.
- **Motor Vehicle Use:** Transportation associated with the proposed project would result in GHG emissions from the combustion of fossil fuels in daily automobile and truck trips. As shown in Table 4.2.6-12, the motor vehicle emissions would be approximately 27,120 MTCO₂e per year (5,520 + 21,600), which is 78% of the project's total GHG emissions.

Table 4.2.6-12 provides details of the GHG emission reductions that would result from implementation of existing statewide GHG reduction measures, specific plan requirements, regulatory requirements, standard requirements, and mitigation measures related to both air quality and GHG emissions as they would affect GHG emissions. Table 4.2.6-12 quantifies the differences between "business-as-usual" GHG emissions and the emissions that would occur after applying existing statewide GHG reduction measures, all project-related specific plan requirements, regulatory requirements, standard requirements, and project-specific mitigation measures.

Table 4.2.6-12. GHG Emissions Reductions from “Business-as-Usual” by Source

	CO ₂ e Emissions (MT/yr)				Net Project GHG Emissions (2020)
	“Business-as-Usual” Emissions	GHG Reduction—State Measures	GHG Reduction—Specific Plan Requirements and Mitigation Measures	Total GHG Reduction	
Construction	260	0.0	0.0	0.0	260
Area	0.15	0.0	0.0	0.0	0.15
Energy Use	8,280	2,340: Renewable Portfolio Standards, 2013 Title 24 Requirements	0.0	2,340	5,940
Mobile Sources (Passenger Cars)	7,940	2,420: Pavley Fuel Efficiency Standards (AB 1493), Title 17 California Code of Regulations (Low Carbon Fuel Standard)	0.0	2,420	5,520
Mobile Sources (Trucks)	24,200	2,600: Natural turnover of vehicle fleet. Older vehicles will be replaced with newer fleets which have more efficient engines and emit fewer emissions, Title 17 California Code of Regulations (Low Carbon Fuel Standard)	0.0	2,600	21,600
Off-road (On-site Equipment)	78	7.7: Natural turnover of vehicle fleet. Older vehicles will be replaced with newer fleets which have more efficient engines and emit fewer emissions, Title 17 California Code of Regulations (Low Carbon Fuel Standard)	0.0	7.7	70
Waste Disposed	1,490	0.0	300: Mitigation Measure GHG-2. Recycling and composting to achieve at minimum of a 20% reduction	300	1,190
Water Use	141	34: Renewables Portfolio Standards create an indirect reduction in water use demand that is a result of a decrease in energy intensity. This is due to the fact that water demand is correlated to the energy needed to collect, move, and treat water throughout the state.	23: Mitigation Measure GHG-2. Reduction of water use by 20% indoor/30% outdoor	57	84
Total	42,400	6,800	320	7,700	34,700

Source: Appendix I.

CO₂e = carbon dioxide equivalent

GHG = greenhouse gas

MT/yr = metric tons per year

Table 4.2.3-13 provides the total GHG emissions (both construction and operation) that would result from implementation of the project along with existing statewide GHG reduction measures,

proposed specific plan requirements, standard requirements, and mitigation measures related to both air quality and GHGs.

Table 4.2.6-13. Operational Greenhouse Gas Emissions, with Mitigation

Construction Phase	Total Regional Pollutant Emissions, MT/yr					Net GHG Emissions (CO ₂ e)
	Bio-CO ₂	NBio-CO ₂	Total CO ₂	CH ₄	N ₂ O	
Construction emissions amortized over 30 years	0	260	260	0.014	0	260
Operational Emissions (see Table 4.2.6.12)						
Area	0	0.142	0.142	0.00038	0	0.15
Energy	0	5,910	5,910	0.317	0.0823	5,940
Mobile (Passenger Cars)	0	5,510	5,510	0.228	0	5,520
Mobile (Trucks)	0	21,600	21,600	0.169	0	21,600
Onsite (Forklifts and TRUs)	0	440	440	0.075	0	440
Waste	663	0	663	39	0	1,190
Water	7.0	79	86	0.727	0.0181	84
Total Project Emissions	670	33,800	34,500	41	0.1	35,100

Source: Appendix I.

Bio-CO₂ = biologically generated CO₂

CH₄ = methane

CO₂ = carbon dioxide

CO₂e = carbon dioxide equivalent

MT/yr = metric tons per year

N₂O = nitrous oxide

NBio-CO₂ = Non-biologically generated CO₂

TRU = transport refrigeration units

As described above, the ARB Scoping Plan provides a goal of meeting a 15% reduction below the estimated “business-as-usual” levels and the City of Fontana has selected a goal in the County GHG Inventories and Reduction Plan to reach a level of GHGs that are 15% below the 2008 GHG emissions level by 2020. With implementation of the specific plan requirements, standard requirements, and air quality and GHG-related mitigation measures, the project would obtain a 17.5% reduction from 42,400 to 34,700 MTCO₂e per year (shown in Tables 4.2.6-12 and 4.2.6-13). As a result, implementation of the project would exceed the 15% reduction goals from the ARB Scoping Plan and County GHG Inventories and Reduction Plan, and would be consistent with AB 32.

Table 4.2.6-14 below and Table 3-3, *Sustainability Features Included within the WVLCSP*, in Chapter 3 provide GHG reduction strategies that are either part of the project design, requirements under local or state ordinances, or measures identified the ARB Scoping Plan, AB 32, and EO S-3-05. As described, the project would be compliant with all of the reduction strategies listed, and conflict with these requirements would not occur.

Table 4.2.6-14. Project Compliance with Greenhouse Gas Emission Reduction Strategies

Strategy	Project Compliance
Mandatory Code	
California Green Building Code. This code prescribes a wide array of measures that would directly and indirectly result in reduction of GHG emissions from the Business as Usual Scenario (California Building Code). The mandatory measures that are applicable to non-residential projects include site selection, energy efficiency, water efficiency, materials conservation and resource efficiency, and environmental quality measures.	Compliant. The project would meet or exceed requirements of the California Green Building Code.
Energy Efficiency Measures	
Energy Efficiency. <ul style="list-style-type: none"> Maximize energy efficiency building and appliance standards. Pursue additional efficiency efforts, including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities). Renewables Portfolio Standard. <ul style="list-style-type: none"> Achieve a 33% renewable energy mix statewide. Green Building Strategy. <ul style="list-style-type: none"> Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. 	Compliant with Mitigation Incorporated. The project would comply with the updated 2013 Title 24 and CALGreen standards, including the 2010 California Building Code. In addition, the project would be required to comply with all applicable standard requirements and Mitigation Measures GHG-1 and GHG-2 , including measures to incorporate energy efficient building design features and to install solar infrastructure to support a minimum of 30% of the energy needs anticipated for new warehouse buildings.
Water Conservation and Efficiency Measures	
Water Use Efficiency and Green Buildings. Continue efficiency programs and use cleaner energy sources to move and treat water. Approximately 19% of all electricity, 30% of all natural gas, and 88 million gallons of diesel are used to convey, treat, distribute and use water and wastewater. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions.	Compliant. The project would implement the California Green Building Code and 2013 Title 24 measures, specific plan requirements, and mitigation measures that would develop green buildings and require measures to increase water use efficiency.
Solid Waste Reduction Measures	
Increase Waste Diversion, Composting, and Commercial Recycling, and Move Toward Zero-Waste. Increase waste diversion from landfills beyond the 50% mandate to provide for additional recovery of recyclable materials. Composting and commercial recycling could have substantial GHG reduction benefits. In the long term, zero-waste policies that would require manufacturers to design products to be fully recyclable may be necessary.	Compliant. Data available from the California Integrated Waste Management Board indicates that Fontana has achieved the 50% diversion rate. The project would include California Green Building Code facilities to implement solid waste diversion, composting, and recycling.

Strategy	Project Compliance
Transportation and Motor Vehicle Measures	
<p>Vehicle Climate Change Standards. AB 1493 (Pavley) required the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of GHG emissions from passenger vehicles and light-duty trucks. Regulations were adopted by ARB in September 2004.</p> <p>Light-Duty Vehicle Efficiency Measures. Implement additional measures that could reduce light-duty GHG emissions. For example, measures to ensure that tires are properly inflated can both reduce GHG emissions and improve fuel efficiency.</p> <p>Heavy- and Medium-Duty Fuel and Engine Efficiency Measures. These measures require retrofits to improve the fuel efficiency of heavy-duty trucks that could include devices that reduce aerodynamic drag and rolling resistance. This measure could also include hybridization of and increased engine efficiency of vehicles.</p> <p>Low Carbon Fuel Standard. ARB identified this measure as a Discrete Early Action Measure. This measure would reduce the carbon intensity of California's transportation fuels by at least 10% by 2020.</p> <p>Regional Transportation-Related Greenhouse Gas Targets. Develop regional GHG emissions reduction targets for passenger vehicles. Local governments will play a significant role in the regional planning process to reach passenger vehicle GHG emissions reduction targets. Local governments have the ability to directly influence both the siting and design of new residential and commercial developments in a way that reduces GHGs associated with vehicle travel.</p>	<p>Compliant. The project does not involve the manufacture of vehicles. However, vehicles that are purchased and used within the project site would comply with any vehicle and fuel standards that ARB adopts. The project would pose no conflict with these transportation and motor vehicle measures.</p>
<p>Measures to Reduce High GWP Gases. ARB has identified Discrete Early Action measures to reduce GHG emissions from the refrigerants used in car air conditioners, semiconductor manufacturing, and consumer products. ARB has also identified potential reduction opportunities for future commercial and industrial refrigeration, changing the refrigerants used in auto air conditioning systems, and ensuring that existing car air conditioning systems do not leak.</p>	<p>Compliant. New products used or serviced on the project site (after implementation of the reduction of GHG gases) would comply with future ARB rules and regulations.</p>
Source: Appendix I.	

The San Bernardino County Regional Greenhouse Gas Reduction Plan includes reduction measures that are applicable to the proposed project, which are listed in Table 4.2.6-15. As described, the

project would be compliant with all of the reduction strategies listed, and conflict with the San Bernardino County Regional Greenhouse Gas Reduction Plan Measure Methods would not occur.

Table 4.2.6-15. Project Compliance with San Bernardino County Regional Greenhouse Gas Reduction Plan Measure Methods

Strategy	Project Compliance
State-2: Title 24 Standards: Requires that building shells and building components be designed to conserve energy and water. 2013 Title 24 standards are effective starting January 1, 2014. The 2013 Title 24 standards are 30% more stringent than the 2008 Title 24 standards for nonresidential buildings. The standards will be periodically updated between 2014 and 2020.	Compliant. The project would meet the requirements of 2013 Title 24 Standards.
State-6: AB 1493 (Pavley): AB 1493 will reduce GHG emissions from automobiles and light duty trucks by 30% from 2002 levels by the year 2016. The regulations affect 2009 models and newer. The "Advanced Clean Cars" regulations introduces new standards for model years 2017–2025, and will reduce GHG emissions from automobiles and light duty trucks by 34% from 2017 levels by 2025. The LCFS reduces GHG emissions by requiring a low carbon intensity of transportation fuels sold in California by at least 10% by the year 2020.	Compliant. Vehicles working from the proposed project will be subject to vehicle emission standards and aerodynamic and hybridization requirements as established by ARB; no feature of the project would interfere with implementation of state requirements and programs.
State-7: GHG Emission Reduction Plan: The state Heavy-Duty Vehicle GHG Emission Reduction Program will increase heavy-duty vehicle (long-haul trucks) efficiency by requiring installation of best available technology and/or CARB approved technology to reduce aerodynamic drag and rolling resistance.	Compliant. Heavy-duty vehicles working from the proposed project will be subject to ARB aerodynamic and hybridization requirements, and no feature of the project would interfere with implementation of ARB requirements.
State-8: Low Carbon Fuel Standard: The LCFS requires a 10% reduction in the carbon intensity of California's transportation fuels by 2020. As a result, the standard will reduce statewide emissions from transportation-based fuels by 15 MMTCO ₂ e. This is equivalent to an 8.9% reduction in emissions from transportation fuels.	Compliant. No feature of the project would interfere with implementation of state low carbon fuel standards.
PS-1: New Development: New projects would be required to quantify project-generated GHG emissions and adopt feasible reduction measures to reduce project emissions to a level which is a certain percent below "business-as-usual" project emissions. This does not mean that the other state and local measures would apply on an equal basis for every single project; individual new development projects may have higher or lower project-level burdens than the average.	Compliant. As described within this section, the EIR has quantified project-generated GHG emissions from both construction and operation and has included specific plan requirements, standard requirements, and mitigation measures that would reduce project emissions 17.5% below "business-as-usual."

Strategy	Project Compliance
Energy-5: Solar Installations for New Commercial/Industrial Development: Encourage new businesses to install rooftop solar using PPAs and other low or zero up-front cost options for installing solar photovoltaic systems. This could be implemented through discretionary approvals and permitting for new projects. Establish a goal for solar installations on new buildings to be achieved before 2020.	Compliant. The project buildings would be designed to have solar-ready roofs and solar ready infrastructure to be included in future parking areas.
Energy-6: On-site Solar Energy for New and Existing Warehouse Space: Applies to new and existing warehouse space. Promote and incentivize solar installations on existing warehouse space through partnerships with SCE and other private sector funding sources including SunRun, SolarCity, and other solar lease or PPA companies. Establish a goal such that all new warehousing projects install solar to provide a minimum of 25% or more of the project's new on-site energy needs. This goal could be supported through non-financial incentives or streamlined permitting.	Compliant. The project would install solar-ready infrastructure so that solar panels could be included over any future parking locations internal to the project, and all buildings would be designed to have solar-ready roofs.
Water-1: Require Adoption of the Voluntary CALGreen Water Efficiency Measures for New Construction: CALGreen voluntary measures recommend use of certain water-efficient appliances, and plumbing and irrigation systems, including: use of low-water irrigation systems; installation of rainwater and graywater systems; installation of water-efficient appliances and plumbing fixtures. This would result in a 30–40% reduction over “business-as-usual” conditions in indoor water use, and a 55–60% reduction in outdoor potable water use (CALGreen Tier 1 or 2).	Compliant. The project would meet or exceed requirements of CALGreen Water Efficiency Measures for New Construction.
Water-3: Encourage Water-Efficient Landscaping Practices: Encourage Water-Efficient Landscaping Practices.	Compliant. The project would implement water-efficient landscaping practices.
Water-4: Senate Bill X7-7 The Water Conservation Act of 2009: SB X7-7 was enacted in November 2009 and requires urban water agencies throughout California to increase conservation to achieve a statewide goal of a 20% reduction in urban per capita use by December 31, 2020.	Compliant. The project would include low irrigation landscaping and water conservation features that 2013 Title 24 and CALGreen Water Efficiency Measures.

The individual measures listed in Tables 4.2.6-14 and 4.2.6-15 are already included as part of the specific plan requirements or are required as part of mitigation measures. As described, the project would not conflict with any of the local or state ordinances or measures identified in AB 32 or EO S-3-05. As shown in Table 4.2.6-12, project site development as proposed with implementation of existing statewide GHG reduction measures, specific plan requirements, regulatory requirements, standard requirements, and mitigation measures related to both air quality and GHG emissions would achieve an 18.2% reduction from “business-as-usual” emissions, exceeding the 15% from “business-as-usual” targets set in EO S-3-05, AB 32, and ARB’s Scoping Plan, as well as SANBAG’s San Bernardino County Regional Greenhouse Gas Reduction Plan, and the 15% reduction target Fontana selected as part of that regional GHG emissions reduction plan.

Additionally, through implementation of the specific plan requirements, standard requirements, and mitigation measures, the project will be consistent with the goals, objectives, policies, and programs identified in the City's Air Quality Element of the General Plan, which include: increasing energy efficiency and recycling; and incorporating energy-efficient design elements, building materials, and equipment/appliances. As a result, impacts related to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs would be less than significant.

Specific Plan Requirements and Standard Requirement

The applicant shall implement the following specific plan requirements and standard requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **SP-GG-1:** Incorporate Water Conservation and Efficient Measures for Landscaping.
- **SP-GG-2:** Design Building Components to Meet 2013 Title 24 Standards.
- **SP-GG-3:** Design CalGreen-Compliant Buildings
- **SP-GG-4:** Provide Electrical Loading Docks.
- **SP-GG-5:** Utilize Energy-Efficient Lighting.
- **SP-GG-6:** Select Efficient Refrigerants and HVAC Systems.
- **SP-GG-7:** Provide Landscaped Parking Lots.
- **SR-GG-1:** Provide Waste Reduction and Recycling Education.

Mitigation Measures

Implement **Mitigation Measures AQ-2 through AQ-5, AQ-7 through AQ-14, GHG-1, and GHG-2.**

Residual Impacts

After implementation of **Mitigation Measures AQ-2 through AQ-5, AQ-7 through AQ-14, GHG-1, and GHG-2**, the WVLCSP would be consistent with applicable plans for GHG emissions reductions and impacts related to the conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs would be less than significant.

Impact GHG-3. Result in impacts on the proposed project from global climate change

Local temperatures could increase in time as a result of global climate change, with or without development as envisioned by the project. This increase in temperature could lead to other climate effects, including increased flooding due to increased precipitation and runoff. At present, the extent of climate change impacts is uncertain and more extensive monitoring of runoff is necessary for greater understanding of changes in hydrologic patterns. Studies indicate that increased temperatures could result in a greater portion of peak streamflows occurring earlier in the spring, with decreases in late spring and early summer. These changes could have implications for water supply, flood management, and ecosystem health. The following is an analysis of potential impacts of climate change to the project.

- The project site is in an elevated location and, therefore, would not be threatened from rising waters.
- The region in which the project site is located is subject to seasonal wildfires. The project buildings would have all required fire suppression systems, minimizing the risk of fire damage.

Climate change impacts to the project are expected to be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

4.2.7 Hazards and Hazardous Materials

Introduction

This section evaluates potential hazards and hazardous materials impacts associated with the implementation and operation of the West Valley Logistics Center Specific Plan (WVLCSP) project. Specifically, hazardous conditions of the study area are compared with future planned land uses and conditions proposed by the specific plan. Potential impacts are identified according to existing and post-project conditions in the plan area and impact thresholds established by the City of Fontana. Mitigation measures are also identified to avoid, minimize, rectify, reduce, or compensate for potential impacts in accordance with the requirements of the California Environmental Quality Act (CEQA).

Hazardous materials information in this section is based in part on the Phase I Environmental Site Assessment (Phase I ESA) prepared by Golden State Land & Tree Assessment in March of 2013 (provided in Appendix C) and the Valley Trails Specific Plan Environmental Impact Report (EIR) prepared by Jones and Stokes in October of 2006. The project area for the Valley Trails Specific Plan is similar to and encompasses a majority of the WVLCSP site, and was therefore considered relevant to the analysis conducted for the proposed WVLCSP project.

Terminology

- **Airport Influence Area.** According to San Bernardino County, an airport influence area is the area in which current or future airport-related noise, overflight, safety, or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses as determined by an airport land use commission (Shutt Moen Associates 2003).
- **Fire hazards.** Fire hazards are determined by the types and combination of the following contributing factors: topography, climate, and fuels (vegetation and structures).
- **Fire risk.** A risk occurs when fire hazards come into conflict with human use and occupancy.
- **Hazardous materials.** A hazardous material is defined by the California Department of Toxic Substances Control (DTSC) as "a substance or material, including a hazardous substance, which has been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and which has been so designated." The State of California defines hazardous materials as substances that are toxic, ignitable, flammable, reactive, or corrosive.
- **Extremely hazardous material.** An extremely hazardous material is a substance that shows high, acute, or chronic toxicity; is a carcinogen (causes cancer); has bioaccumulative properties (accumulates in the body's tissues); is persistent in the environment; or is reactive in water.
- **Hazardous waste.** A hazardous waste is a substance that (1) may cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating reversible illness; and (2) poses a substantial present or potential future hazard to human health or the environment when it is improperly treated, stored, transported, disposed of, or otherwise managed. Hazardous waste is also ignitable, corrosive, or reactive (explosive) (40 Code of Federal Regulations [CFR] 261.3) (City of Fontana 2003).

- **Treatment.** Treatment of hazardous waste is defined as any process that changes the physical, chemical, or biological character of the waste to make it less of an environmental threat. Treatment can include neutralizing the waste, recovering energy or material resources from the waste, rendering the waste less hazardous, or making the waste safer to transport, dispose of, or store.
- **Storage.** Storage is the holding of waste for a temporary period of time. The waste is treated, disposed of, or stored at a different facility at the end of the storage period.
- **Disposal.** Disposal is the permanent placement of the waste into or on the land. Disposal facilities are usually designed to contain the waste permanently and to prevent the release of harmful pollutants to the environment.
- **Pesticides.** According to the U.S. Environmental Protection Agency (EPA), pesticides are substances or mixtures of substances intended for preventing, destroying, repelling, or mitigating any pest.
- **Urban wildland interface.** The area where the wildlands meet urban development is considered an urban wildland interface area. There are three types of interface: mixed interface, occluded interface, and classic interface. Mixed interface occurs when isolated homes are surrounded by large tracts of land. Occluded interface is characterized by large wildland areas (usually within an urban park setting) surrounded by an urban area. Classic interface occurs when new construction presses against wildland vegetation across a broad front.

Existing Conditions

The following section describes the existing conditions within the project site. Issues discussed include potential hazardous materials on site and surrounding the site, potential releases of hazardous materials, distance from schools, distance from airports and airstrips, adopted emergency response plans, and exposure to wildland fires.

Hazardous Materials

As mentioned above, a Phase I ESA was prepared for the project in conformance with American Society for Testing and Materials (ASTM) Standard E 1527-05. This report is included as Appendix C of this EIR. The Phase I ESA identified, to the extent feasible, recognized environmental conditions in connection with the plan area.

Federal and state databases were reviewed in preparation of the Phase I ESA to ascertain the presence of known environmentally impaired sites within a specific radius of the property and to determine their impact to the site, if any. Various public agencies and individuals were also contacted in order to provide insight into the previous and current uses of the site with respect to hazardous materials. Aerial photographs from 1938 through 2010 were also reviewed to document historical conditions and use. Concurrent with the governmental agency interviews and literature research, an on-site reconnaissance of the property was conducted. The site reconnaissance was conducted in order to determine the current use of the plan area and the potential for soil and/or possible groundwater contamination based on aboveground visual observation.

As part of the previous Valley Trails Specific Plan EIR, a site reconnaissance survey was conducted in December 2003 to observe site conditions in the project site vicinity and to determine the presence or absence of hazardous materials and conditions within the project site. The 2003 site survey was

conducted on foot and included observations of the site, the periphery of the site, and parcels of land within and adjacent to the proposed right-of-way to determine if conditions indicated the presence of hazardous materials and/or conditions. Findings of the survey were photo-documented. A limited site characterization was conducted to determine if potential pesticide use at the site had included organochlorine pesticides, which are persistent in the environment. The 2003 site survey noted the presence of the former landfill and the potential for encountering underground methane.

The subject property is currently vacant. The site contains unpaved roads and remnants of residential landscaping, and is currently used for limited off-highway vehicle and equestrian purposes. During the 2013 site reconnaissance conducted by Golden State Land & Tree Assessment, evidence was found on site indicating the release of waste oil as well as dumped construction, automotive, and household waste debris, along with evidence of a possible underground storage tank (UST) system and monitoring wells. Figure 4, *Site Survey*, within Appendix C shows the location of the significant observations found during the site survey.

Hazardous Materials Database Results

On Site

The subject property is listed in four environmental databases, including the DTSC Site Mitigation and Brownfields Reuse Program's (EnviroStor) database, which lists sites that are contaminated or earmarked for further investigation. The DTSC had initiated a preliminary environmental assessment work plan due to the extensive past agricultural usage of the property and, in 2008, the subject property status was deemed inactive. The project site was also identified in the Leaking Underground Storage Tank (LUST) database and the School Property Evaluation Program (SCH) database. The site was granted closure under the LUST database in 1994 after a leaky underground storage tank containing diesel fuel was removed and the site remediated. Finally, the site was also identified in the Statewide Environmental Evaluation and Planning System (SWEEPS) UST database and was listed as a closed case after remediation activities were completed, also in 1994 near the time when the Regional Water Quality Control Board (RWQCB), Santa Ana Region issued Waste Discharge Requirements and a revised Monitoring and Reporting Program under Order 94-17 for the former Crestmore Disposal Landfill (Tetra Tech 2013).

Former Crestmore Disposal Landfill

The former Crestmore Disposal landfill, classified as a Class III disposal facility, is southeast of the intersection of Maple Avenue and Jurupa Avenue and was owned and operated by San Bernardino County between 1955 and 1966. It is estimated that non-hazardous residential, commercial, inert, and demolition wastes were disposed of at the landfill. The Crestmore Disposal landfill was a limestone quarry known as Little Hill Quarry prior to being used as a refuse disposal site. The former Crestmore Disposal landfill footprint is east of and partially contained within the footprint of proposed Building 7 within Parcel 7 at its easternmost extent, as shown in Figure 4.2.7-1. According to Appendix C, it is estimated that there are 133,500 cubic yards of refuse in place. Currently, the site is undergoing monitoring activities under a Corrective Action Program as required by the RWQCB, and the western portion of the landfill is proposed for the Kessler Park expansion by the County of San Bernardino Special Parks District (Tetra Tech 2013). Should monitoring indicate concentrations of methane or other volatile gases above regulatory limits, the County will be required to undertake corrective actions to protect properties in the vicinity of the former landfill.

Off-site Properties

Forty-five off-site properties were identified within the comprehensive database search results (Appendix C). A specific search radius for each database was conducted in conformance with ASTM Standard E 1527-05 plus an additional 0.5 mile measured at the center of the project site.

One site was identified in the Resource Conservation and Recovery Act (RCRA) at a distance of 0.33 mile east of the project site; Another site involving an oil spill was located in the Emergency Response Notification (ERNS) database approximately 0.34 mile northeast of the project site, which collects information on reported releases of oil and hazardous substances. The oil spill occurred on site in 1993 and was remediated (date unknown). A third site was found in the State and Tribal Landfill and/or Solid Waste Disposal Sites Lists involving the former Crestmore Disposal landfill on a portion of the site; see further discussion below. Two additional sites were identified in the LUST database; both were sites 0.31 mile to the east of the proposed project location. One site was also found in the Local Lists of Landfill/Solid Waste Disposal Sites, and nineteen others were found in the Clandestine Drug Lab database. Finally, 20 sites were identified in registered storage tank lists. These sites were in either the Facility Inventory Database, which contains a historical listing of active and inactive UST locations; the Hazardous Substance Storage Container Database, which is a historical listing of UST sites; or the SWEEPS UST database.

Agricultural Activities

The project site has historically been used for agriculture dating as far back as 1953 to as recent as 2005. As such, pesticides and herbicides have most likely been applied at the site, and pesticides, herbicides, and associated metals may be present in near-surface soils at residual concentrations. Agricultural chemicals in use today are applied in diluted concentrations and, when used properly, degrade relatively quickly; however, older pesticides can linger in the soil for many years. A Limited Site Characterization was performed during the preparation of the Valley Trails Specific Plan Environmental Impact Report (EIR) for the project site to determine the existence of hazardous substances on the site, including the formerly used organochlorine pesticides within the project area's soils. The results of testing indicated no organochlorine pesticides present in surficial soils, and further sampling was deemed unnecessary.

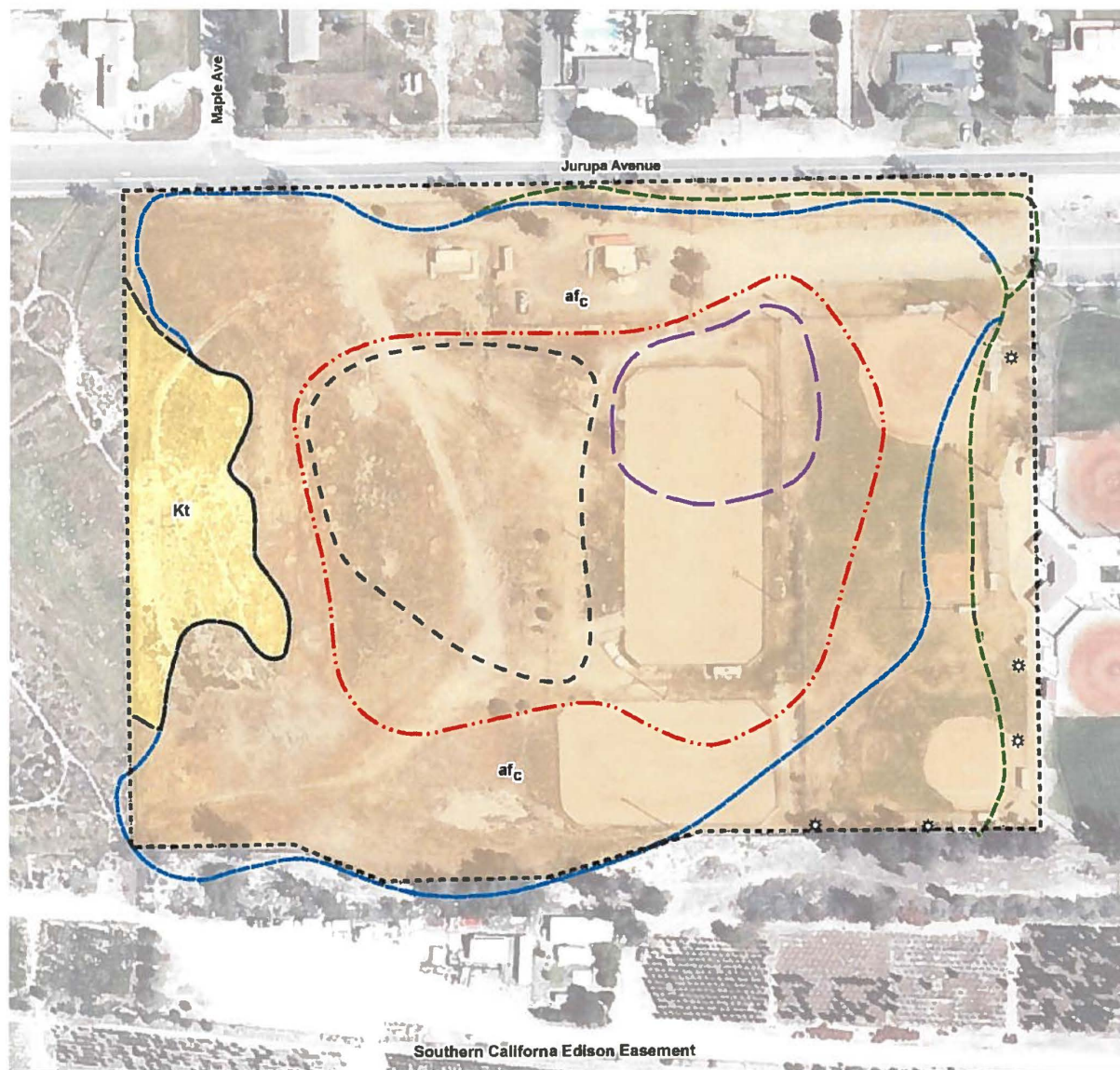
Proximity to Schools

There are no existing schools within 0.25 mile of the project site; however, there are two schools that are approximately 0.3 mile away. Walter Zimmerman Elementary School is to the northeast of the project area, and Ruth O. Harris Middle School is to the northwest. Crestmore Elementary is the next closest school, and is approximately 0.45 mile east of the project area. Bloomington High School and Sycamore Hills Elementary School are both approximately 0.7 mile from the project area, to the north and northwest, respectively.

Proximity to Airports and Airstrips

The proposed project is not within an airport land use plan or within 2 miles of a public airport or public use airport. The nearest aviation facilities are the Flabob Airport in Riverside County, approximately 3 miles to the south, the Rialto Municipal Airport, approximately 5.5 miles to the north, and the Riverside Municipal Airport, approximately 5.8 miles to the south. The San Bernardino International Airport is approximately 9.5 miles to the northeast of the project site. Ontario International Airport is approximately 9.5 miles west of the project area. Fontana is within

K:\Irvine\GIS\Projects\City of Fontana\00920_11\map\doc\Fig4_2_7_1 FormerCrestmore Landfill.mxd Date: 1/10/2014: 24991



LEGEND

- ☆ Light standard locations
- Geologic Contact
- - - Estimated Site Limits
- - - Estimated Deepest Refuse Cell Limits
- - - Estimated Main Refuse Cell Limits
- - - Estimated Conductivity Cell Limits
- - - Estimated Maximum Limit of Refuse (1995)
- - - Estimated Fill Limit and Refuse (2009)

- af_c Artificial fill - Landfill cover material
- Kt Tonalite (Cretaceous) - Relatively uniform medium-to-coarse-grained equigranular gray biotite-hornblende tonalite. Contains widespread and locally abundant dark inclusions.

Notes: Boundaries adapted from KFM Geoscience, January 2011.
Light standard locations based on David Evans Electrical Site Plan
D. Morton 2003
Preliminary Geologic Map of the Fontana 7.5 Quadrangle

ESRI April 2009 aerial photograph.

Source: Tetra Tech



Figure 4.2.7-1
Location of Former Crestmore Landfill
West Valley Logistics Center Specific Plan EIR

the flight path of Ontario International Airport and is one of the identified affected agencies of the Los Angeles/Ontario International Airport Land Use Compatibility Plan. As the nearest aviation facility, Flabob Airport in Riverside County, is 3 miles from the project site, the proposed project site is not within any Airport Influence Areas, airport safety areas, or Accident Potential Zones (Riverside County 2013).

Wildfires

According to the California Department of Forestry and Fire Protection (CAL FIRE) Fire and Resource Assessment Program's Draft Fire Hazard Severity Zones in Local Responsibility Area (LRA) Southwest San Bernardino County, the project is not located within a Very High Fire Hazard Severity Zone (CAL FIRE 2008). Although this is the case, the CAL FIRE Fire Hazard Severity Zone in the State Responsibility Area (SRA) map for Western Riverside County classifies the area just south of the proposed project as being a *high* and *very high* fire hazard severity zone. Additionally, the project site is in a Fire Safety Area 3 (FS-3) Fire Safety Overlay District, as defined by the San Bernardino County Development Code.

Fire Hazards

The project site is in an FS-3 Fire Safety Overlay District, which is defined by the San Bernardino County Development Code (2004). Refer to Section 3.5.3, *Regulatory Setting*, below for FS-3 Overlay District requirements. FS-3 includes areas within the mountains and the valley foothills and with moderate to steep terrain and moderate to heavy fuel loading contributing to high fire hazard conditions (Ordinance No. 3918 Section 85.020215(a), adopted April 19, 2004). Fire Station 77 in the City of Fontana would be the closest fire station to the project. It is approximately 1.2 miles to the northwest of the project area (Fontana Fire District 2013).

Regulatory Setting

Federal

EPA, the Occupational Safety and Health Administration (OSHA), and the U.S. Department of Transportation (DOT) are federal agencies that regulate hazardous materials. These regulations are primarily contained in CFR Titles 10, 29, 40 and 49. In particular, CFR Title 49 governs the manufacture of packaging and transport containers, packing and repacking, and labeling and marking of hazardous material transport. The key hazardous materials laws and regulating agencies that apply to the proposed project are described below.

U.S. Environmental Protection Agency

EPA was established in 1970 to consolidate a variety of federal research, monitoring, standard-setting, and enforcement activities into one agency to ensure environmental protection. EPA's mission is to protect human health and safeguard the natural environment (i.e., air, water, land) upon which life depends. EPA works to develop and enforce regulations that implement environmental laws enacted by Congress. The agency is responsible for researching and setting national standards for a variety of environmental programs and delegates the responsibility for using permits and monitoring and enforcing compliance to states and tribes. Where national standards are not met, EPA can issue sanctions and take other steps to help states and tribes reach desired levels of environmental quality. EPA is the principal federal agency responsible for implementation and enforcement of federal hazardous materials regulations. However, in most

cases, state and local environmental regulatory agencies are responsible for the enforcement of environmental laws and regulations established at the federal level. Refer to the discussion below regarding the County of San Bernardino in the local agencies section.

Federal Toxic Substances Control Act/Resource Conservation and Recovery Act/Hazardous and Solid Waste Act

The Federal Toxic Substances Control Act (1976) and the Resource Conservation and Recovery Act (RCRA) of 1976 established an EPA-administered program to regulate the generation, transport, treatment, storage, and disposal of hazardous waste. The RCRA was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the “cradle to grave” system of regulating hazardous wastes.

Comprehensive Environmental Response, Compensation, and Liability Act/Superfund Amendments and Reauthorization Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as “Superfund,” was enacted by Congress on December 11, 1980. This law (42 USC 103) provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites, provides for liability of persons responsible for releases of hazardous waste at these sites, and establishes a trust fund to provide for cleanup when no responsible party can be identified. CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP (40 CFR 300) provides the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, and/or contaminants. The NCP also established the National Priorities List. CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) on October 17, 1986.

Clean Water Act/Spill Prevention, Control, and Countermeasure Rule

The Clean Water Act (CWA) (33 USC 1251 et seq., formerly the Federal Water Pollution Control Act of 1972) was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of waters of the United States. As part of the CWA, EPA oversees and enforces the Oil Pollution Prevention regulation contained in 40 CFR 112, which is often referred to as the Spill Prevention, Control, and Countermeasure (SPCC) rule because it requires facilities to prepare, amend, and implement SPCC plans. A facility is subject to SPCC regulations if a single oil storage tank has a capacity greater than 660 gallons, the total aboveground oil storage capacity exceeds 1,320 gallons, or the underground oil storage capacity exceeds 42,000 gallons and, because of its location, the facility could reasonably be expected to discharge oil into or upon navigable waters of the United States.

Other Regulations

Other federal regulations overseen by EPA relevant to hazardous materials and environmental contamination include 40 CFR 1(D) (Water Programs) and 40 CFR 1(I) (Solid Wastes). Furthermore, 40 CFR 1(D)(116) sets forth a determination of the reportable quantity for each substance that has been designated as hazardous; 40 CFR 1(D)(117) applies to quantities of designated substances equal to or greater than the reportable quantities that may be discharged into waters of the United States. These regulations designate hazardous substances under the Federal Water Pollution Control Act, determine the reportable quantity for each substance designated as hazardous, and establish

quantities of designated substances equal to or greater than the reportable quantities that may be discharged into waters of the United States.

Occupational Safety and Health Administration

OSHA's mission is to ensure the safety and health of American workers by setting and enforcing standards; providing training, outreach, and education; establishing partnerships; and encouraging continual improvement in workplace safety and health. OSHA's staff establishes and enforces protective standards and reaches out to employers and employees through technical assistance and consultation programs. OSHA standards are listed in 29 CFR 1910, CFR Chapter 29, Sections 1910 (General Industry) and 1026 (Construction), promulgates regulations for the preparation of Health and Safety Plans, which identify potential hazards associated with a proposed land use and may provide appropriate mitigation measures, as required.

U.S. Department of Transportation

The Pipeline and Hazardous Materials Safety Administration (PHMSA) within DOT is responsible for regulating and ensuring the safe and secure movement of hazardous materials to industry and consumers by all modes of transportation, including pipelines. PHMSA's Office of Hazardous Materials Safety develops regulations and standards for the classifying, handling, and packaging of over one million daily shipments of hazardous materials within the U.S. in order to minimize threats to life, property, or the environment due to hazardous materials-related incidents. Relevant regulations include the Code of Federal Regulations (Title 49 CFR Parts 100–185) and Federal Hazmat Transportation Law, which is a guide that summarizes federal hazardous materials transportation laws, including regulatory authorities, scope, and enforcement procedures.

State

Hazardous Materials Disclosure Program

Hazardous materials handling, use, and disposal are extensively legislated by the federal, state, and city governments. Both the federal government (Code of Federal Regulations, EPA, SARA, and Title III) and the State of California (California State Health and Safety Code, Division 20, Chapter 6.95, Sections 25500–25520; California Code of Regulations, Title 19, Chapter 2, Sub-Chapter 3, Article 4, Sections 2729–2734) require all businesses that handle more than a specified amount of hazardous materials or extremely hazardous materials, termed a *reporting quantity*, to submit a business plan to its local Certified Unified Program Agency (CUPA). The CUPA with responsibility for the City of Fontana is the San Bernardino County Fire Department—Hazardous Materials Division.

In 1986, Congress passed the SARA. Title III of this legislation requires that each community establish a Local Emergency Planning Committee. These committees are responsible for developing emergency plans that outline steps to prepare for and respond to chemical emergencies in those communities.

Several California statutes require the emergency notification of a hazardous chemical release. These include Health and Safety Code Sections 25270.7, 25270.8, and 25507; Vehicle Code Section 23112.5; Public Utilities Code Section 7673; Government Code Sections 51018 and 8670.25.5(a); Water Code Sections 13271 and 13272; and California Labor Code Section 6409.1(b)10. The Safe Drinking Water and Toxic Enforcement Act of 1986, better known as Proposition 65, and Section 9030 of the California Labor Code also have specific reporting requirements.

Hazardous Materials Release Response Plans and Inventory Act of 1985

The Hazardous Materials Release Response Plans and Inventory Act, also known as the Business Plan Act, requires businesses that use hazardous materials to prepare a plan that describes their facilities, inventories, emergency response plans, and training programs. Hazardous materials are defined as unsafe raw or unused materials that are part of a process or manufacturing step and are not considered hazardous waste. Health concerns pertaining to the release of hazardous materials, however, are similar to those pertaining to hazardous waste.

Hazardous Waste Control Act

The Hazardous Waste Control Act created the State Hazardous Waste Management Program, which is similar to but more stringent than the federal RCRA program. The act is implemented by regulations contained in Title 26 of the California Code of Regulations (CCR), which describe the following aspects of the requirements for the proper management of hazardous waste:

- Identification and classification
- Generation and transportation
- Design and permitting of recycling, treatment, storage, and disposal facilities
- Treatment standards
- Operation of facilities and staff training
- Closure of facilities and liability requirements

These regulations list more than 800 materials that may be hazardous and establish criteria for identifying, packaging, and disposing of such waste. Under the Hazardous Waste Control Act and Title 26, the generator of hazardous waste must complete a manifest that accompanies the waste from generator to transporter to the ultimate disposal location. Copies of the manifest must be filed with the DTSC.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

Senate Bill 1082 (1993) created the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program), which requires the administrative consolidation of six hazardous materials and waste programs (Program Elements) under one agency, a CUPA. The Program Elements consolidated under the Unified Program are as follows:

- Hazardous Waste Generator and Onsite Hazardous Waste Treatment Programs (i.e., Tiered Permitting)
- Aboveground Petroleum Storage Tank SPCC
- Hazardous Materials Release Response Plans and Inventory Program (i.e., Hazardous Materials Disclosure or "Community Right to Know")
- California Accidental Release Prevention Program
- UST Program
- Uniform Fire Code Plans and Inventory Requirements

The Unified Program is intended to provide relief to businesses that comply with the overlapping and sometimes conflicting requirements of formerly independently managed programs. The Unified Program is implemented at the local government level by CUPAs, or the San Bernardino County Fire Department—Hazardous Materials Division for the City of Fontana.

California Environmental Protection Agency

The California Environmental Protection Agency (Cal/EPA) was created in 1991. It unified California's environmental authority in a single cabinet-level agency and brought the California Air Resources Board, the State Water Resources Control Board (SWRCB), the Central Valley RWQCB, the California Department of Resources Recycling and Recovery, DTSC, the California Office of Environmental Health Hazard Assessment, and the Department of Pesticide Regulation under one agency. These agencies were placed within the Cal/EPA umbrella for the protection of human health and the environment to ensure the coordinated deployment of state resources.

California Department of Toxic Substance Control

DTSC, a department of Cal/EPA, is the primary agency in California for regulating hazardous waste, cleaning up existing contamination, and finding ways to reduce the amount of hazardous waste produced in California. DTSC regulates hazardous waste primarily under the authority of the federal RCRA and the California Health and Safety Code (primarily Division 20, Chapters 6.5 through 10.6, and Title 22, Division 4.5). Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

United States Code (USC) 65962.5 (commonly referred to as the Cortese List) includes DTSC-listed hazardous waste facilities and sites, Department of Health Services lists of contaminated drinking water wells, sites listed by the SWRCB as having UST leaks or a discharge of hazardous wastes or materials into the water or groundwater, and lists from local regulatory agencies of sites with a known migration of hazardous waste/material.

California Office of Emergency Services

To protect public health and safety as well as the environment, the California Office of Emergency Services (OES) is responsible for establishing and managing statewide standards for business and area plans related to the handling and release, or threatened release, of hazardous materials. OES requires basic information regarding hazardous materials handled, used, stored, or disposed of (including location, type, quantity, and health risks) to be available to firefighters, public safety officers, and regulatory agencies. Typically, this information should be included in business plans to prevent or mitigate impacts on the environment or the health and safety of individuals from the release, or threatened release, of these materials into the workplace and environment. These regulations are covered under Chapter 6.95 of the California Health and Safety Code, Article 1, Hazardous Materials Release Response and Inventory Program (Sections 25500 to 25520), and Article 2, Hazardous Materials Management (Sections 25531 to 25543.3).

Title 19 of the CCR (Public Safety; Division 2; Office of Emergency Services; Chapter 4; Hazardous Material Release Reporting, Inventory, and Response Plans; Article 4 [Minimum Standards for Business Plans]) establishes minimum statewide standards for hazardous materials business plans. These plans must include the following: (1) a hazardous material inventory in accordance with Sections 2729.2 to 2729.7; (2) emergency response plans and procedures in accordance with Section 2731; and (3) training program information in accordance with Section 2732. Each business

would prepare a hazardous materials business plan if that business uses, handles, or stores a hazardous material or an extremely hazardous material in quantities greater than or equal to the following:

- 500 pounds of a solid substance
- 55 gallons of a liquid
- 200 cubic feet of compressed gas
- A hazardous compressed gas in any amount
- Hazardous waste in any quantity

California Emergency Services Act

The California Emergency Services Act, Section 8568, states that “the State Emergency Plan shall be in effect in each political subdivision of the State, and the governing body of each political subdivision shall take such action as may be necessary to carry out the provision thereof.” The act provides the basic authorities for conducting emergency operations following the proclamations of emergencies by the governor or appropriate local authority, such as a city manager.

Pursuant to the Emergency Services Act, the State has developed an emergency response plan to coordinate emergency response services provided by federal, state, and local government agencies and private persons for hazardous materials and waste incidents. Response to hazardous materials incidents is one part of this plan. The plan is administered by OES, which coordinates the responses of other agencies including EPA, California Highway Patrol, California Department of Fish and Wildlife, RWQCBs, and local fire departments (California Code Section 8550).

Fire Protection and Disclosure

Assembly Bill 337 (the Bates Bill, adopted September 29, 1992) is used to identify very high fire hazard severity zones (VHFHSZs) in LRAs. Government Code Section 51178 specifies that the Director of the California Department of Forestry (CDF), in cooperation with local fire authorities, shall identify areas that are VHFHSZs in LRAs, based on consistent statewide criteria and the expected severity of fire hazard.

SRAs include all lands, regardless of ownership, except for cities and federal lands. Although the State has financial responsibility for SRAs, it is not the State’s responsibility to provide fire protection services to any building or structure within a wildland area unless CDF has entered into a cooperative agreement with a local agency for those purposes, pursuant to Public Resources Code Section 4142.

Wildland areas require disclosure for real estate transactions. Specifically, Assembly Bill 6 (AB 6) requires that both types of fire hazard areas (SRAs and VHFHSZs) be disclosed in real estate transactions. Civil Code Section 1103(c)(6) also requires real estate sellers to inform prospective buyers whether or not a property is located within a wildland area that could contain substantial fire risks and hazards. Applicable regulations include Public Resources Code Section 4290, requiring minimum statewide fire safety standards, and Public Resources Code Sections 4291 through 4299, which require property owners in fire-prone areas to conduct maintenance in order to reduce the fire danger.

Local

City of Fontana General Plan

The purpose of the City of Fontana General Plan Safety Element is to improve the safety of the community, and in the process make it more sustainable and prosperous. Goals and policies address “a variety of natural and man-made hazards and provides goals and policies aimed at reducing the risk associated with these hazards.” Refer to Section 4.2.9, *Land Use and Planning*, for a discussion of goals and policies from the Safety Element of the General Plan.

City of Fontana Code

Article I. Section 11-2

Any new development or improvement of real property within the limits of the city shall be subject to the imposition of fees for capital improvements necessary to provide fire protection services.

Article II. Section 11-26

Notwithstanding any provision to the contrary in this code, whether printed herein or adopted by reference, automatic fire sprinkler systems shall be installed and maintained in all new construction as follows:

- (1) All buildings, structures, or parts thereof, hereafter constructed, erected or moved onto a property, regardless of the existence of separation walls as outlined in chapter 5 of the Uniform Building Code.
- (2) When there is a change of use or occupancy of a building or structure which exceeds 5,000 square feet in gross floor area and which would place the building or structure in a different division of the same group of occupancy or in a different group of occupancies.
- (3) All plans specifications and calculations shall be submitted for review and approval to the fire department prior to the issuance of a building permit.

Note. The installation of automatic fire sprinkler systems are subject to the exceptions in section 11-28. (Ord. No. 1167, Section 13, 11-7-95)

Section 30-189 (12)

A fuel modification zone shall be required in areas threatened by fire hazard.

County of San Bernardino General Plan

The purpose of the Safety Element of the County of San Bernardino is to reduce the potential risk of death, injuries, property damage, and economic and social dislocation resulting from fires and other hazards. Protecting the health, safety, and welfare of the community is a fundamental responsibility of the County of San Bernardino. The safety policies and regulations of the County of San Bernardino have been included in the evaluation of environmental impacts of the proposed project.

County of San Bernardino Development Code

The project is within County Fire Safety Overlay District FS-3, which is defined by Section 80.020215(c) of the San Bernardino County Development Code (County of San Bernardino 2004) as:

- Fire Safety Area 3 (FS3). Fire Safety Area 3 includes lands just to the south of the mountain FS1 area. These lands are primarily within the wildland-urban interface of the Valley Region and consist of varying terrain from relatively flat to steeply sloping hillside areas. Present and future development within FS3 is exposed to the impacts of wildland fires and other natural hazards primarily due to its proximity to FS1. These areas are subject to Santa Ana wind conditions which have the potential of dramatically spreading wildland fires during extreme fire behavior conditions.

Other FS-3 district standards that are applicable to the proposed project include 80.020210, General Standards, and 85.020230, Building Standards within FS-3 areas. Additionally, Section 30-301.6(g) of the City Zoning and Development Code defers to the County Fire Department for guidance on specific design requirements for new development within the City.

County of San Bernardino Division of Environmental Health Services

The County of San Bernardino Division of Environmental Health Services is responsible for the prevention of illness and injury through a balance of evaluation, collaboration, enforcement, and inspection related to environmental health and the environment. Some of the County's programs serve the entire county, while others are city-specific. The Water, Wastewater, and Land Use program ensures that environmental health considerations—such as water, waste disposal, noise, vectors, and protection of natural resources—are included in development projects.

Emergency Response Program County Hazardous Materials Division

The Hazardous Materials Division of the San Bernardino County Fire Department is designated by the State Secretary for Environmental Protection as the CUPA for the County of San Bernardino in order to focus the management of specific environmental programs at the local government level. The CUPA is charged with the responsibility of conducting compliance inspections for over 7,000 regulated facilities in San Bernardino County. These facilities handle hazardous material, generate or treat hazardous waste, and/or operate a UST. As a part of its responsibilities as the CUPA, the San Bernardino County Fire Department manages six hazardous material and hazardous waste programs. The CUPA program is designed to consolidate, coordinate, and uniformly and consistently administer permits, inspection activities, and enforcement activities throughout San Bernardino County.

In 1984, a regional Hazardous Materials Emergency Response Team was formed in San Bernardino County. The team was started through a joint effort of the San Bernardino County Fire Chiefs Association, the San Bernardino County Department of Environmental Health Services (DEHS), and the County Communications Center. The agreement called for vehicles, equipment, and training to be provided by DEHS and/or state grants, while the participating fire jurisdictions would make in-kind contributions of personnel. From 1984 to the present, the team has grown to over 100 personnel, all trained to the State Fire Marshal-approved Hazardous Material Specialist level, and nineteen equipped response vehicles, three of which were provided in whole or in part by cities or districts.

County Office of Emergency Services

The County of San Bernardino Office of Emergency Services (County OES) is a functional division of the San Bernardino County Fire Department and is responsible for disaster planning and emergency services coordination throughout the county. County OES ensures coordination of disaster response

and recovery efforts through its day-to-day program management and during an incident or disaster. County OES staff also manages and operates the Emergency Operations Center (EOC), which serves as the primary coordination point for disasters and major emergencies.

In the event of a disaster or an incident requiring complex coordination, responders report to the San Bernardino County Operational Area EOC. The 100-plus responders are available 24 hours a day, 7 days a week, and have been trained to perform specific functions designated under the Standardized Emergency Management System to coordinate the emergency management of disasters. The office is also responsible for the countywide Emergency Management Plan, which identifies hazards; response, roles, and responsibilities; and other key activities of government during a disaster.

San Bernardino County Fire Department: Valley Division

The Valley Division of the San Bernardino County Fire Department encompasses the western half of the San Bernardino valley and serves the City of Fontana. Due to the cooperation of many entities, specifically individual cities within the valley area, this requires numerous mutual aid agreements between the County Fire Department and local cities to ensure the best possible service to the public.

The Valley Division is served by 13 fire stations with total of more than 100 highly trained personnel. These firefighters provide services ranging from traditional firefighting and rescue techniques to hazardous materials response, paramedic response, and, most recently, terrorism response. The Valley Division is equipped to handle any emergency with well-trained personnel responding on the appropriate fire apparatus.

Division of Fire Prevention

The fire department requires preapproval of the plans for all new buildings and for changes to existing buildings. The fire department reviews these plans to help ensure that the fire code is being followed and to prevent unnecessary hazards. As buildings are being constructed or modified, fire department personnel inspect the construction to make sure the work is done according to the plans that were approved. Buildings are inspected on a regular basis by fire department personnel to make sure the buildings are safe. The types of buildings inspected are businesses, factories, restaurants, churches, schools, senior citizen housing, and other buildings that could pose significant risks to its occupants or the public.

Impact Analysis

Methodology

The following information resources were relied upon in the evaluation of potential for the proposed project to result in impacts involving hazards or hazardous materials: Phase I ESA prepared by Golden State Land and Tree Assessment and the current government database searches contained within (Appendix C); scope of the proposed project; results of background and site research; and review of applicable regulations.

The project was evaluated utilizing the safety policies and regulations from the City of Fontana Zoning, Development Code, and General Plan. As the proposed project may also potentially affect or be affected by safety and emergency response conditions within and adjacent to unincorporated San

Bernardino County areas, the safety policies and regulations of San Bernardino County have been included in the evaluation of environmental impacts of the proposed project.

Thresholds of Significance

Criteria for determining the significance of impacts related to hazards and hazardous materials are based upon criteria contained in Appendix G of the State CEQA Guidelines. The proposed project could have a significant impact on the environment if it would:

- HAZ-1** Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- HAZ-2** 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.
- HAZ-3** Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- HAZ-4** 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 create a significant hazard to the public or the environment.
- HAZ-5** For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the project would result in a safety hazard for people residing or working in the project area.
- HAZ-6** For a project within the vicinity of a private airstrip, the project would result in a safety hazard for people residing or working in the project area.
- HAZ-7** Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- HAZ-8** Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Project Design Features

The following hazards and hazardous materials-related project design features, which include regulatory requirements and standard requirements, would prevent or reduce potentially significant impacts.

Regulatory Requirements

RR-HM-1: Conduct Asbestos and Lead-Based Paint Removal if Required. Assessment of remnant construction debris to confirm the absence of asbestos and lead-based paint in remnant construction debris shall be conducted by a lead-based paint and asbestos licensed contractor in accordance with Title 17, Division 1, Chapter 8 of the California Code of Regulations (CCR). Should this assessment determine that lead-based paint and/or asbestos are present, the following actions shall be implemented for identified structures.

- A health and safety plan shall be developed by a certified industrial hygienist for potential lead-based paint and asbestos risks present during demolition of remnant construction debris determined to have either asbestos or lead-based paint present. The health and safety plan shall then be implemented by a licensed contractor. Both the federal Occupational Safety and Health Administration (OSHA) and the California Division of Occupational Safety and Health (Cal/OSHA) regulate worker exposure during construction activities that affect lead-based paint. The Interim Final Rule found in 29 Code of Federal Regulations (CFR), Part 1926.62 covers construction work in which employees may be exposed to lead during such activities as demolition, removal, surface preparation for repainting, renovation, cleanup, and routine maintenance. The OSHA-specified method of compliance includes respiratory protection, protective clothing, housekeeping, hygiene facilities, medical surveillance, and training. No minimum level of lead is specified to activate the provisions of this regulation.
- Should lead-based paint be determined to be present in remnant construction debris, a lead-based paint abatement plan containing, but not limited to, the following elements shall be implemented:
 - Develop an abatement specification approved by an Interim-Certified or Certified Project Designer;
 - Acquire necessary approvals from the San Bernardino County Environmental Health Department for specifications or commencement of abatement activities;
 - Contain all work areas to prohibit off-site migration of paint chip debris;
 - Remove all peeling and stratified lead-based paint on debris surfaces to the degree necessary to safely and properly complete demolition activities according to recommendations of the survey. The demolition contractor shall be responsible for the proper containment and disposal of intact lead-based paint on all material to be cut and/or removed during the demolition;
 - Provide on-site air monitoring during all abatement activities and background monitoring to ensure no contamination of work areas or adjacent properties;
 - Clean up and/or HEPA vacuum paint chips;
 - Collect, segregate, and profile waste for disposal determination; and
 - Provide appropriate disposal of all waste.
- Should asbestos be determined to be present in remnant construction debris, asbestos abatement shall be conducted prior to removal of remnant construction debris.
 - Prior to demolition of construction debris containing asbestos, contractors licensed to conduct asbestos abatement work must be retained, and the South Coast Air Quality Management District (SCAQMD) must be notified 10 days prior to initiating construction and demolition activities.
 - Asbestos shall be disposed of at a licensed disposal facility. Section 19827.5 of the California Health and Safety Code, adopted January 1, 1991, requires that local agencies not issue demolition or alteration permits until an applicant has demonstrated compliance with notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos.

- SCAQMD is vested by the California legislature with authority to regulate airborne pollutants, including asbestos, through both inspection and law enforcement, and is to be notified 10 days in advance of any proposed abatement work or removal of debris determined to contain asbestos. Notification shall include:
 - The names and addresses of operations and persons responsible;
 - A description and location of the debris to be removed including any available information on age and prior use, and the approximate amount of friable asbestos; scheduled start and completion dates of abatement; nature of planned work and methods to be employed;
 - Procedures to be employed to meet SCAQMD requirements; and
 - The name and location of the waste disposal site to be used.
- Furthermore, the local office of Cal/OSHA must be notified of asbestos abatement activities.
- Asbestos abatement contractors must follow state regulations contained in 8 CCR 1529 and 8 CCR 341.6 through 341.14 where there is asbestos-related work involving 100 square feet or more of asbestos-containing material.
- Asbestos removal contractors must be certified as such by the Contractors Licensing Board of the State of California. The owner of the property where abatement is to occur must have a Hazardous Waste Generator Number assigned by and registered with the Office of the California Department of Health Services in Sacramento.
- The contractor and hauler of the material are required to file a Hazardous Waste Manifest that details the hauling of the material from the site and the disposal of it. Pursuant to California law, the City of Fontana shall not issue the required permit until the applicant has complied with the notice requirements described above.

RR-HM-2: Prepare a Hazardous Materials Construction Management Plan for Accidental Spills. Prior to the City's approval of any final grading plans, the applicant and project contractors will submit a Hazardous Materials Construction Management Plan to ensure that appropriate remedial actions are taken in case of accidental spill. The plan will specify the following actions to address accidental spill situations, as needed:

- If contaminated soil and/or groundwater are encountered during project construction, work will be halted in the area, and the type and extent of the contamination will be identified. A qualified professional, in consultation with the appropriate federal, state, and/or local regulatory agencies, will then develop an appropriate method to remediate the contamination. If necessary, a remediation plan in conjunction with continued project construction will be implemented.
- Hazardous or contaminated materials may only be removed from the project site in accordance with the following provisions:
 - All work is to be completed in accordance with the following regulations and requirements:
 - Chapter 6.5, Division 20, California Health and Safety Code
 - California Administration Code, Title 22, relating to Handling, Storage and Treatment of Hazardous Materials

- The Uniform Building Code, 1997 edition
- 2001 California Building Code
- All hazardous materials will be disposed of at an approved disposal site and will only be hauled by a current California-registered hazardous waste hauler using correct manifesting procedures and vehicles displaying a current Certificate of Compliance. The contractor will identify, by name and address, the site where toxic substances are to be taken for disposal.
- In case of accidental spill, County of San Bernardino Fire Department will provide oversight in site cleanup and site remediation and will verify that all appropriate remedial actions were undertaken within the project site.
- Prior to issuance of a building or grading permit for any parcel within the project site, a Soil and Groundwater Management Plan (SGMP) shall be prepared by a qualified environmental engineer, reviewed and approved by the Department of Toxic Substances Control and the Regional Water Quality Control Board and implemented by the project applicant. The SGMP shall include a requirement for development and implementation of site-specific safety plans to be prepared prior to commencement of construction consistent with OSHA Safety and Health Standards 29 CFR 1910.120 as well as management of groundwater produced through temporary dewatering activities.

Such site-specific safety plans shall include necessary training, operating and emergency response procedures, and reporting requirements to regulate all activities that bring workers in contact with potentially contaminated soil or groundwater, landfill gas, or leachate to ensure worker safety and avoid impacts on the environment. Furthermore, the SGMP shall include protocols for any areas of the site that require excavation and relocation of refuse material (e.g., building foundations and utility infrastructure) in accordance with the Title 27 of the CCR.

RR-HM-3: Abandon Any Identified Wells in Accordance with County Requirements. If wells are encountered during earth-disturbing activities, and if the applicant decides to abandon any wells found on site, such abandonment will be conducted in accordance with current County of San Bernardino regulatory requirements. This condition will be included on project construction plan specifications.

Standard Requirements

SR-HM-1: Contact Underground Services Alert. Prior to earth-disturbing activities, the contractor will contact Underground Services Alert to identify the locations and depths of all buried utility facilities not previously identified in construction plans. For all areas identified with buried facilities, the contractor will either:

- Avoid excavating in such areas beyond a depth of less than 2 feet from the existing buried facility; or
- Coordinate a plan of facility realignment with a city engineer and appropriate utility company representatives.

This condition will be included on project construction plan specifications.

SR-HM-2: Require Construction Equipment Spark Arresters. Project contractors will be required to equip any construction equipment that normally includes a spark arrester with an arrester in good working order pursuant to manufacturers' recommendations. Spark arrestors will be

maintained in working order during the period of construction. Subject equipment includes, but is not limited to, heavy equipment (e.g., earthmovers, graders), mowers, and chainsaws. This requirement will be included on project construction plan specifications.

SR-HM-3: Prepare a Fuel Modification Zone Management Plan. In accordance with Section 30-189(12), Article V, Division 7, of the City Zoning and Development Code (Subdivision and site plan design), and in accordance with Action 20, Goal 4, of the City General Plan Safety Element, a fuel modification zone will be required in areas threatened by fire hazard. Prior to approval of any Tentative Parcel Map(s), the applicant or construction contractor will prepare a fuel modification zone management plan for the Jurupa Hills area of the proposed project site to be reviewed and approved by the City of Fontana. The fuel modification zone management plan will include:

- Planting and maintenance of fire-retardant vegetation species implemented in accordance with Policy 3 and Action 21, Goal 4, of the City General Plan Safety Element;
- Firebreaks (areas void of vegetation and flammable structures) implemented in accordance with Public Resources Code Section 4290 minimum statewide fire safety standards; and
- Implementation of fencing in accordance with Section 80.020210(f) of the San Bernardino County Code, to prevent litter (accumulation of ignitable fuels) or vandalism of the fuel modification zone.

Impacts and Mitigation

Impact HAZ-1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials

Construction

Proposed project construction would involve routine transport, use, and disposal of hazardous materials such as solvents, paints, oils, grease, and caulking. Such transport, use, and disposal must be compliant with applicable regulations such as the RCRA, DOT hazardous materials regulations, and local CUPA regulations. Although small amounts of solvents, paints, oils, grease, and caulking would be transported, used, and disposed of during the construction phase, these materials are typically used in construction projects and would not represent the transport, use, and disposal of acutely hazardous materials.

As specified in **Regulatory Requirement RR-HM-2**, the applicant and construction contractor would be required to prepare a Hazardous Materials Construction Management Plan to ensure that appropriate remedial actions are taken in the event of accidental spill of hazardous materials on the project site or contaminated soils are discovered or caused during construction. In addition, the proposed project includes soils testing and remediation planning as necessary (see **Mitigation Measure HAZ-1** provided in Impact HAZ-2 below), which would determine whether any contaminants are currently on site and implement remedial actions to remove the contamination prior to construction work. Therefore, with adherence to **Regulatory Requirement RR-HM-2**, the proposed project would not be expected to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during project construction activities.

Operation

The proposed project would consist of the development of approximately 212 acres of Light Industrial land use, specifically for warehousing, and 72 acres of Open Space designated land uses. The proposed project would use hazardous chemicals typical for light industrial uses. These chemicals could include common materials such as toners, paints, lubricants, kitchen and restroom cleaners, refrigerants associated with building mechanical and heating, ventilation, and air conditioning (HVAC) systems, and other maintenance materials. Industrial uses could also include the storage, handling, transport, and disposal of hazardous materials that would be subject to regulatory requirements that are designed to minimize the potential for adverse effects on the public and environmental resources. Grounds and landscape maintenance within the project site would also use a wide variety of commercial products formulated with hazardous materials, including fuels, cleaners and degreasers, solvents, paints, lubricants, adhesives, sealers, and pesticides/herbicides. These common consumer products would be used for the same purposes as in any industrial setting. For industrial uses, existing regulatory requirements include appropriate training of employees in the use, storage, and disposal of the hazardous materials and wastes they are expected to encounter in the workplace. Uses of such materials are considered common, and it would not be likely for such materials to be stored or used in quantities that are considered harmful.

Consequently, no significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous waste during construction or operation of the proposed project is anticipated. Compliance with hazardous waste handling regulations is mandatory for light industrial business employees and other site occupants; therefore, operational impacts through the routine transport, use, or disposal of hazardous materials would be less than significant.

Regulatory Requirement

The applicant shall implement the following regulatory requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **RR-HM-2:** Prepare a Hazardous Materials Construction Management Plan for Accidental Spills.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant with implementation of **Regulatory Requirement RR-HM-2**.

Impact HAZ-2. 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

Construction

As described under Impact HAZ-1, typical construction-related hazardous materials would be used during construction of the proposed project, including gasoline, oil, other vehicle-related fluids, paints, solvents, and metals. It is possible that any of these substances could be released during construction activities. However, compliance with federal, state, and local regulations, in combination with construction best management practices (BMPs) implemented from a Storm Water Pollution Prevention Plan (as described in Section 4.2.8, *Hydrology and Water Quality*, and

specified in **Regulatory Requirements RR-HW-1** and **RR-HW-4**) and **Mitigation Measure HAZ-2**, would ensure that all hazardous materials are used, stored, and disposed of properly, which would minimize potential impacts related to a hazardous materials release during construction activities. Furthermore, any accidental spills of materials considered hazardous would be confined immediately, removed, and disposed of in accordance with all applicable safety regulations and disposal methods.

Subsurface structures, including irrigation lines, groundwater wells, septic systems, and underground utilities, are anticipated to exist within the proposed project area. Accidental contact with or exposure to these unknown buried service facilities triggered during land disturbance activities associated with project construction is considered a potential hazard to construction personnel and any other members of the public nearby, including residences and travelers on roadways in the vicinity. Potential results of accidental contact or exposure can include deleterious reactions involving equipment accidents, hazardous materials release, explosions, or electrocution. Also and as mentioned in the Phase I Environmental Site Assessment (Appendix C), it is possible that pockets of contamination exist in the form of unauthorized dumping on the site of used oil, construction materials, automotive and household waste, and debris. Historical use of the property also suggests that development of the proposed project could encounter previously undocumented areas of contamination in the form of historic pesticide deposits from previous agricultural use of the site. As such, construction activities related to the proposed project may encounter the aforementioned contaminants during grading, excavation, installation of support structures for new buildings, or other activities. In addition to residual soil toxicity as a potential impact, demolition/construction debris found throughout the site could contain asbestos-embedded materials or lead-based paint (Appendix C). These conditions on the project site should be analyzed for asbestos-containing materials by a specialist prior to removal. As such, construction activities could result in potentially significant hazardous waste and materials and hazards impacts on construction personnel. Adherence to **Regulatory Requirements RR-HM-1**, **RR-HM-2**, and **RR-HM-3** as well as **Standard Requirements SR-HM-1** and **SR-HM-2** would be required. **Mitigation Measures HAZ-1**, involving a site contamination investigation/testing and performance of remedial action planning as necessary, and **HAZ-2**, stated below, would also be required to reduce the potential impact from hazardous materials accidents.

As stated previously, the former Crestmore Disposal landfill footprint is partially contained within the location of proposed Building 7 within Parcel 7 at its easternmost extent. Currently, the site is undergoing monitoring activities under a Corrective Action Program as required by the RWQCB. Landfill gas, if left unattended (i.e., not mitigated), can migrate well beyond the landfill footprint. If not mitigated, vapors from the landfill could enter non-residential work space and create unsafe working conditions. Methane, in particular, can create a hazard when it migrates and concentrates under a structure, where it can be explosive in the right concentration if it encounters an ignition source. The potential exists for methane gas to be found in the former landfill and, due to the proximity of the former landfill to the project site, the introduction of construction workers and the proposed development employees and visitors to potential methane gas hazards would be a significant impact.

Also, according to the findings from the Phase I ESA contained in Appendix C, the accidental release of other gases besides methane (e.g., volatile organic compounds, carbon dioxide) is considered a potential hazard due to the proposed project's proximity to the former Crestmore Disposal landfill. According to the Phase I ESA, the former landfill was a Class III landfill and was permitted to accept residential and demolition wastes, commercial refuse, and non-decomposable inert solids. As

mentioned previously, it is estimated that the former landfill has 133,500 cubic yards of refuse in place. Hazards related to the former landfill could be triggered through land disturbance activities during construction of the project. This potential for the exposure of neighboring residents and construction personnel to the accidental release of gases during construction activities is considered significant.

Monitoring and control (i.e., correctional measures if necessary) of methane gas and other hazardous gases from the former landfill, including gases that may have encroached onto the WVLCSP project site, is the responsibility of the landfill operator, the County of San Bernardino (the majority of the site is in use as a regional park, Kessler Park). A corrective action program is already being implemented by the County to contain methane and other volatile gases. If methane and/or other volatile gases are determined to have encroached onto the project site from the former landfill, the project applicant shall implement protective measures on-site as specified in **Mitigation Measure HAZ-1**. Therefore, implementation of **Mitigation Measure HAZ-1** would be required to reduce this potential impact to less-than-significant levels through implementation of the testing and remedial actions contained therein.

Operation

The proposed project would include development of approximately 212 acres for Light Industrial land uses, which could result in the use of solvents, cleaning agents, paints, pesticides, diesel, petroleum fuels, propane, antifreeze, used oil, batteries, and aerosol cans of hazardous materials during operation. These hazardous material products are generally used in small amounts, and any spills that may occur are limited in scope and spill area and would be cleaned up soon after they occur. Additionally, it is expected that all hazardous materials would be handled in accordance with all applicable rules and regulations. Therefore, operation of the proposed project would result in a less-than-significant impact related to hazards to the public or to the environment through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials.

Regulatory Requirements and Standard RequirementsThe applicant shall implement the following regulatory requirements and standard requirements, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **RR-HM-1:** Conduct Asbestos and Lead-Based Paint Removal if Required.
- **RR-HM-2:** Prepare a Hazardous Materials Construction Management Plan for Accidental Spills.
- **RR-HM-3:** Abandon Any Identified Wells in Accordance with County Requirements.
- **SR-HM-1:** Contact Underground Services Alert.
- **SR-HM-2:** Require Construction Equipment Spark Arresters.

As previously noted, San Bernardino is undertaking implementation of a Corrective Action Plan for the former Crestmore Landfill. Should hazardous gases generated by the adjacent site of the former landfill be determined to exceed regulatory limits, the County would be required to implement appropriate measures to protect properties in proximity to the closed former landfill.

Mitigation Measures

Mitigation Measure HAZ-1: Phase II Environmental Site Assessment. Prior to design review submittal for the first building within the WVLCSP site, a Phase II ESA will be prepared for any

portions of the project area in which there is evidence of previous contamination, as identified in the Phase I ESA. The Phase II ESA will be submitted to the City Director of Community Development and the County Division of Environmental Health for review and approval. The Phase II ESA will include, but not be limited to, the following:

- A scope of work for preparation of a Health and Safety Plan that specifies pre-field-activity marking of boring locations and obtaining utility clearance, and field activities, such as identifying appropriate sampling procedures, health and safety measures, chemical testing methods, and quality assurance/quality control procedures in accordance with the ASTM Standard.
- Necessary permits for well installation and/or boring advancement.
- A Soil Sampling and Analysis Plan in accordance with the scope of work.
- Laboratory analyses conducted by a State-certified laboratory.
- Disposal processes, including transport by a State-certified hazardous material hauler to a State-certified disposal or recycling facility licensed to accept and treat hazardous waste.
- An asbestos-containing materials survey for analysis of demolition/construction debris located on site.

The Phase II ESA must determine the environmental quality of the site and verify whether or not any portions of the project site are contaminated. The applicant and project contractors shall be required to follow the recommendations and specific measures included in the Phase II ESA, specifically if contamination exists on site, and follow measures for site remediation in accordance with the DTSC. If any hazardous materials are discovered, a plan for their proper removal shall be prepared in accordance with applicable requirements of Cal/OSHA and the County of San Bernardino Environmental Health Services.

Prior to site construction, the applicant shall undertake the following actions in accordance with the performance standards provided herein to ensure safe conditions of the site.

Soils Testing. As part of the Final Geotechnical and Soils Study for the proposed specific plan (refer to **Mitigation Measure GEO-1**), soils testing shall be undertaken to confirm the findings of previous studies for the Valley Trails Specific Plan EIR indicating an absence of contamination from previous pesticide use on site, as well as to confirm the absence of asbestos and lead-based paint in the remnant construction debris on site. The soils testing shall include applicable testing procedures pursuant to the directives of, and subject to review by, the County Division of Environmental Health.

Site Remediation. Should any hazardous materials be determined present on the project site, site remediation shall be undertaken to address such hazards, subject to the regulatory authority of the DTSC, RWQCB, and County Division of Environmental Health, to achieve risk-based cleanup standards¹ of an acceptable excess cancer risk of 1×10^{-5} or as otherwise established by EPA, DTSC,

¹ Regulatory agencies have historically used conservative standard-based criteria (i.e., drinking water standards) or required cleanups to background levels, often assumed to be pristine environments, which can sometimes lead to costly cleanup requirements. There has recently been a trend to use site-specific, risk-based cleanup goals instead of standard-based or background levels. Rather than pre-determining specific contaminant levels to be applied to every site regardless of the risks involved in exposure of the public to contaminants, risk-based cleanup goals involve application of performance standards (e.g., acceptable cancer risk) to site-specific conditions based on actual health

or County Division of Environmental Health for proposed industrial uses on site. Remedial actions may include, but not be limited to, the following. Final remediation technologies will be determined in a final Remediation Action Plan/Feasibility Study and could be adaptively managed such that the remedial action objectives for the specific land uses being approved within the project site are achieved.

- **Soil Excavation.** Targeted excavation of contaminated soil with on-site reuse or off-site disposal will be provided. Excavation strategies that may be employed on site include:
 - Targeted Excavation with Off-site Disposal. With this technology, heavily contaminated soil is excavated and transported by truck or rail to a permitted off-site treatment and disposal facility. Pretreatment may be required at the disposal facility prior to disposal.
 - Targeted Excavation with On-site Treatment. With this technology, heavily contaminated soil is excavated and stockpiled on site for treatment and subsequent reuse on site. Potential treatment technologies include:
 - Plasma arc centrifugal treatment technology, which uses heat generated by a plasma arc to melt the inorganic portion of waste material while destroying the organic portion, creating an inert slag that can be reused on site;
 - Smoldering treatment technology, a new technology to remediate oil in the subsurface, either in situ or above-ground in treatment chambers following excavation that uses smoldering combustion (the type of combustion that turns charcoal into ash in a barbecue grill) to quickly and efficiently destroy contaminants, and bioremediation that uses naturally occurring microorganisms to degrade organic contaminants in soil.
 - Targeted Excavation with On-site Extraction. With this technology, moderately contaminated soil is excavated and placed in areas that will be covered by soil, concrete slabs, or other structures that prevent contact with the soil.

Installation of Sub-slab Vapor Barriers. To minimize potential vapor intrusion into proposed new buildings within 1,000 feet of the waste footprint, sub-slab vapor barriers shall be required if methane testing conducted prior to issuance of building permits indicates the presence of methane or other volatile gases.

Additional Air Pollutant and Greenhouse Gas (GHG) Emissions Analysis. The air quality and GHG analyses undertaken for the proposed WVLCSP are based on the proposed project site grading plan, which is intended to achieve an on-site balance of cut and fill. Should site remediation and/or soil excavation be required as part of implementation of this measure, additional analyses of the air quality and GHG emissions associated with such site remediation and/or soil excavation will be required. While this measure sets performance standards for safety in relation to hazardous materials, such air quality and GHG analyses cannot be undertaken at this time because the actual need for remediation and specific methods to accomplish site remediation, as well as the amount of any additional grading activity to be undertaken as part of site remediation, would be determined as part of a Phase II ESA undertaken prior to approval of design review.

and environmental risk posed by contaminants in the ground or water. As a result, land uses where risks to public health are higher (e.g., residential) would have more stringent clean-up requirements than would less sensitive uses (e.g., industrial), given the same level of cancer risk (City of Brisbane 2013).

Mitigation Measure HAZ-2: Engineering Controls and Best Management Practices during Construction. During construction, the contractor will employ use of engineering controls and best management practices to minimize human exposure to potential contaminants. Engineering controls and construction best management practices specified on project construction plans for review and approval by the City Department of Community Development will include, but not be limited to, the following.

- Contractor employees working on site will be certified in the Occupational Safety and Health Administration's 40-hour Hazardous Waste Operations and Emergency Response training.
- The contractor will monitor areas around the construction site for fugitive vapor emissions with appropriate field screening instrumentation.
- The contractor will water/mist soil as it is being excavated and loaded onto transportation trucks.
- The contractor will place any stockpiled soil in areas shielded from prevailing winds.
- The contractor will cover the bottom of excavated areas with sheeting when work is not being performed.

Residual Impacts

Impacts would be less than significant with adherence to **Regulatory Requirements RR-HM-1** through **RR-HM-3**, **Standard Requirements SR-HM-1** and **SR-HM-2**, and implementation of **Mitigation Measures HAZ-1** and **HAZ-2**.

Impact HAZ-3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school

As mentioned previously, there are no existing schools within 0.25 mile of the project site. Two schools, Walter Zimmerman Elementary School to the northeast and Ruth O. Harris Middle School to the northwest, are the closest schools to the project site. They are both approximately 0.3 mile away.

Although the construction of the proposed project would involve hazardous materials typical of a construction project (as discussed above under Impact HAZ-1), it is expected that the proposed project would be operated in compliance with federal, state, and local regulations described under *Regulatory Setting* above. Additionally, any potential construction-related hazardous releases or emissions would be from commonly used materials such as fossil fuels, solvents, and paints and would not include substances listed in 40 CFR 355 Appendix A: "Extremely Hazardous Substances and Their Threshold Planning Quantities." Any such spills would be localized and immediately contained and cleaned (refer to **Regulatory Requirement RR-HM-2**). Therefore, construction of the proposed project would not affect land uses 0.3 mile away, including Walter Zimmerman Elementary School and Ruth O. Harris Middle School.

As discussed under Impact HAZ-1, the proposed project would use hazardous chemicals common in other light industrial settings, and existing regulatory requirements include appropriate training of employees in the use, storage, and disposal of the hazardous materials and wastes they are expected to encounter in the workplace. The use of non-acutely hazardous chemicals in relatively small quantities and concentrations is anticipated, and it is expected that all hazardous materials would be handled in accordance with all applicable rules and regulations. Therefore, implementation of the

proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of a school, and no impact is expected.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HAZ-4. 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 create a significant hazard to the public or the environment

Portions of the existing project site were found in several environmental databases during completion of the Phase I ESA. The project property was listed in four environmental databases, including the DTSC's EnviroStor database along with the LUST, SWEEPS UST, and SCH databases. Research indicated that the site was under evaluation by the DTSC in regards to its past agricultural use, and was granted "inactive" status in 2008. The project site was granted closure under the LUST and SWEEPS UST databases in 1994. The LUST and SWEEPS UST entries were in relation to the Rancho De Santa Fe property, which reported a diesel leak that affected soil on site. Also, as stated in Impact HAZ-2, the accidental release of other gases besides methane (e.g., volatile organic compounds, carbon dioxide) is considered a potential hazard due to the proposed project's proximity to the former Crestmore Disposal landfill. With adherence to **Regulatory Requirements RR-HM-1 through RR-HM-3, Standard Requirements SR-HM-1 and SR-HM-2**, and implementation of **Mitigation Measures HAZ-1 and HAZ-2** for the remediation of any residual hazardous material from the site prior to or during construction, the proposed project would not create any significant impacts associated with being included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

Regulatory Requirements and Standard Requirements

The applicant shall implement the following regulatory requirements and standard requirements, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **RR-HM-1:** Conduct Asbestos and Lead-Based Paint Removal if Required.
- **RR-HM-2:** Prepare a Hazardous Materials Construction Management Plan for Accidental Spills.
- **RR-HM-3:** Abandon Any Identified Well in Accordance with County Requirements.
- **SR-HM-1:** Contact Underground Services Alert.
- **SR-HM-2:** Require Construction Equipment Spark Arresters.

Mitigation Measures

Implement **Mitigation Measure HAZ-1** and **Mitigation Measure HAZ-2**.

Residual Impacts

Impacts would be less than significant.

Impact HAZ-5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the project would result in a safety hazard for people residing or working in the project area

The project site is not within an airport land use plan or within 2 miles of a public airport or public use airport. The closest airport is the Flabob Airport in Riverside County, which is approximately 3 miles south of the project site. Also, the proposed project site is not located within any Airport Influence Areas, airport safety areas, or Accident Potential Zones. Therefore, the project would not result in any safety hazard for people residing or working in the project area.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impact.

Impact HAZ-6. For a project within the vicinity of a private airstrip, the project would result in a safety hazard for people residing or working in the project area

The project site is not within the vicinity of a private airstrip. The closest airports described in Impact HAZ-5 are in excess of 3 miles from the project site. Therefore, the proposed project would not result in an airstrip-related safety hazard for people residing or working in the project area.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impact.

Impact HAZ-7. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan

No impacts on emergency evacuation or response plans during project operations would be expected, as the roadways would be improved to allow for adequate access through and to the project site as required by City Fire Department standards.

During construction activities, the project has potential to impair and/or interfere with emergency response access in the vicinity of the project site due to possible lane closures, detours, and construction-related traffic along Armstrong Road, Locust Avenue, Jurupa Avenue, Alder Avenue, 11th Street, and 7th Street. During project construction, a Construction Management Plan (**Mitigation Measure TRA-1a** in Section 4.2.14, *Transportation and Traffic*) would be implemented to minimize obstruction, which would help to ensure continued emergency access to the project site and nearby properties. The plan would include construction truck marshaling to prevent construction traffic congestion to and from the project site; however, impacts related to the impairment of emergency response could be significant at times where access is limited during construction. Therefore, implementation of **Mitigation Measure TRA-1a** would be required.

Mitigation Measures

Implement **Mitigation Measure TRA-1a**, as described in Section 4.2.14, *Transportation and Traffic*.

Residual Impacts

Impacts would be less than significant with implementation of **Mitigation Measure TRA-1a**.

Impact HAZ-8. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands

According to the CAL FIRE Fire and Resource Assessment Program's Draft Fire Hazard Severity Zones in LRA Southwest San Bernardino County, the project is not located within a very high fire hazard severity zone (CAL FIRE 2008). However, the project site is in the FS-3 Fire Safety Overlay District per the County of San Bernardino, and the area just south of the proposed project site is designated as a *high* and *very high* fire hazard severity zone.

In accordance with Section 30-189(12), Article V, Division 7, of the City Zoning and Development Code (Subdivision and site plan design), and in accordance with Action 20, Goal 4, of the City General Plan Safety Element, a fuel modification zone management plan would be created for the proposed project, as provided in **Standard Requirement SR-HM-3**. The fuel modification zone management plan would include details regarding planting and maintenance of fire-retardant vegetation species, firebreaks, and fencing.

Although project area topography varies on site, fire suppression capability may be considered adequate due to the availability of access roads, existing firebreaks, and water accessibility. The proposed project would include circulation improvements to enhance the functional efficiency of the South Fontana circulation system to ensure safe, efficient vehicular travel and access, including emergency response throughout the project area. Additionally, the proposed project would comply with applicable state, County, and City regulations, codes, and policies for fire-hazard reduction and protection. Because the project would introduce new development into an area adjacent to *high* and *very high* fire hazard severity zones, the potential for exposure of people and structures to wildland fires is considered a potentially significant impact. Therefore, adherence to **Standard Requirements SR-HM-2** and **SR-HM-3** and implementation of **Mitigation Measure HAZ-3** would be required to reduce impacts.

Standard Requirements

The applicant shall implement the following standard requirements, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **SR-HM-2:** Require Construction Equipment Spark Arresters.
- **SR-HM-3:** Prepare a Fuel Modification Zone Management Plan.

Mitigation Measures

Mitigation Measure HAZ-3: Clear Materials that Could Serve as Fire Fuel from Construction Areas. Prior to ground clearing, grading, and other ground-disturbing construction activities, contractors will clear areas of dry vegetation or other potential fire fuels on or near staging areas, welding areas, or any other areas on which equipment will be operated. The City will require contractors to maintain areas subject to construction activities clear of combustible natural materials to the extent feasible to maintain firebreaks and minimize the availability of fire fuels. Proposed staging areas to be cleared will be identified with the assistance of a qualified biologist to avoid conflicts with policies to preserve protected habitat areas. Staging and clearing will not be

permitted in protected habitat areas. This requirement will be included on project construction plan specifications and reviewed for approval by the City Fire Department prior to issuance of grading permits.

Residual Impacts

Impacts would be less than significant with implementation of **Standard Requirements SR-HM-2** and **SR-HM-3** and **Mitigation Measure HAZ-3**.

4.2.8 Hydrology and Water Quality

Introduction

This section describes the regulatory and environmental setting for hydrology and water quality for the 291.31 acres within the southeastern edge of the City of Fontana contained within the West Valley Logistics Center Specific Plan (WVLCSP) project site. It also describes impacts on hydrology and water quality that would result from implementation of the WVLCSP. Potential impacts resulting from implementing the proposed WVLCSP project were analyzed by comparing existing conditions to conditions during construction and/or operation and maintenance of the project. This section describes the direct and indirect, short- and long-term impacts related to surface hydrology, flood hazards, groundwater recharge, and surface and groundwater quality.

The Existing Conditions and Impact Analysis sections below are based largely on the *Water Distribution Analysis for the West Valley Logistics Center, Fontana, CA*. (2013a), *Storm Water Quality Management Plan (SWQMP) for the West Valley Logistics Center, South of Jurupa Avenue/Between Alder and Locust Avenue, Fontana, CA* (2013b), and the *Preliminary Hydrology & Detention Calculations for the West Valley Logistics Center, Locust Avenue and Jurupa Avenue, Fontana, CA* (2013c), prepared by Thienes Engineering, Inc. for the proposed project. All three reports are included in their entirety in Appendix J. Information for the impact analysis of water supply for the proposed project is from the *Water Supply Assessment for the West Valley Logistics Center*, prepared by the West Valley Water District (November 2013), also contained in Appendix J of this Recirculated EIR.

Terminology

- **Low Impact Development (LID).** LID is a type of building design that promotes the incorporation of stormwater management features into the project's design to better manage stormwater and to maintain a site's predevelopment runoff rates and volumes. Design elements typically include, among other things, the use of vegetated swales and retention basins and the minimizing of impermeable surfaces, as well as the use of small-scale, natural drainage features to slow, clean, infiltrate, and capture rainfall.
- **Hydromodification.** Any activity that increases the velocity and volume (flow rate), and often the timing, of runoff, such as development of impervious surfaces, vegetation removal, dredging/filling, or other alterations to natural land contours for the purposes of new development.
- **100-year flood.** The 100-year flood is a flood that has a 1% chance of being equaled or exceeded in any single year, and can occur in subsequent years.
- **Best management practices (BMPs).** Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices that prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control project and/or construction runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Existing Conditions

Climate, Precipitation, and Topography

The WVLCSF project site is located within a region of Mediterranean climate or semi-arid climate, with warm, sunny, dry summers and cool, rainy, mild winters. Average annual precipitation ranges from 12 inches per year in the coastal plain to 18 inches per year in the inland alluvial valleys, reaching 40 inches or more in the San Bernardino Mountains (Appendix C). Most of the precipitation occurs between November and March in the form of rain, with variable amounts of snow in the higher elevations. This results in higher surface water flows in the spring and early summer and lower flows during the dry season. Winter and spring floods generated by storms are not uncommon in wet years. Similarly, during the dry season, infrequent summer storms can cause flash floods in local streams.

Elevations range from approximately 1,000 feet to 1,240 feet from east to west on the project site. A small natural hillside area is just west of the project site, which gains approximately 700 feet in elevation. The project site's southern block occupies a pass between peaks of the Jurupa Hills that serves as a miniature divide conveying water northeast and southwest, respectively.

Hydrology Water Supply

The majority of the City of Fontana receives its water supply from the Fontana Water Company, which draws approximately 85% of its water supply from groundwater drawn from 38 wells operating in the Chino Basin, the Lytle Basin, Rialto/Colton Sub-basin, and another unnamed basin (City of Fontana 2010). However, as described in more detail in Section 4.2.15, *Utilities and Service Systems*, the WVLCSF project area is within Zones 2 and 3 of the West Valley Water District (WVWD) (Appendix J; Thienes Engineering 2013a); the WVWD has multiple water supply sources. Water supplies are pumped from five separate groundwater basins and from two separate surface water sources (Lytle Creek and State Water Project sources).

Surface Hydrology

The WVLCSF project area is within the Santa Ana River Watershed and is part of the Santa Ana River basin (Figure 4.2.8-1). The Santa Ana watershed falls between Riverside, San Bernardino, and Orange Counties. The Santa Ana River flows from 69 miles from its headwaters in the San Bernardino and San Gabriel Mountains generally southwest to its mouth near Newport Beach into the Pacific Ocean. The river is broken up into several reaches by the California Water Service Company to define specific hydrologic units. The project area is primarily within the Riverside (801.27) and Chino (801.21) Hydrologic Subareas of the Middle Santa Ana River Hydraulic Area, which include Santa Ana River Reach 4 (14 miles): Mission Boulevard in Riverside to San Jacinto Fault in San Bernardino, and Santa Ana River Reach 3 (26 miles): Prado Dam to Mission Boulevard in Riverside. The Santa Ana River runs south of the City, while Lytle Creek, the main tributary to the Santa Ana River in this area, runs east and northeast of the City. San Sevaine Canyon runs in a southerly direction along the northwestern-most portion of the City, while water in Duncan Canyon flows to the east-southeast toward the southern flank of the San Gabriel Mountains. There is limited surface water runoff within the City, primarily from canyon drainages in the northern sphere and from surface drainages flowing north from the Jurupa Hills.

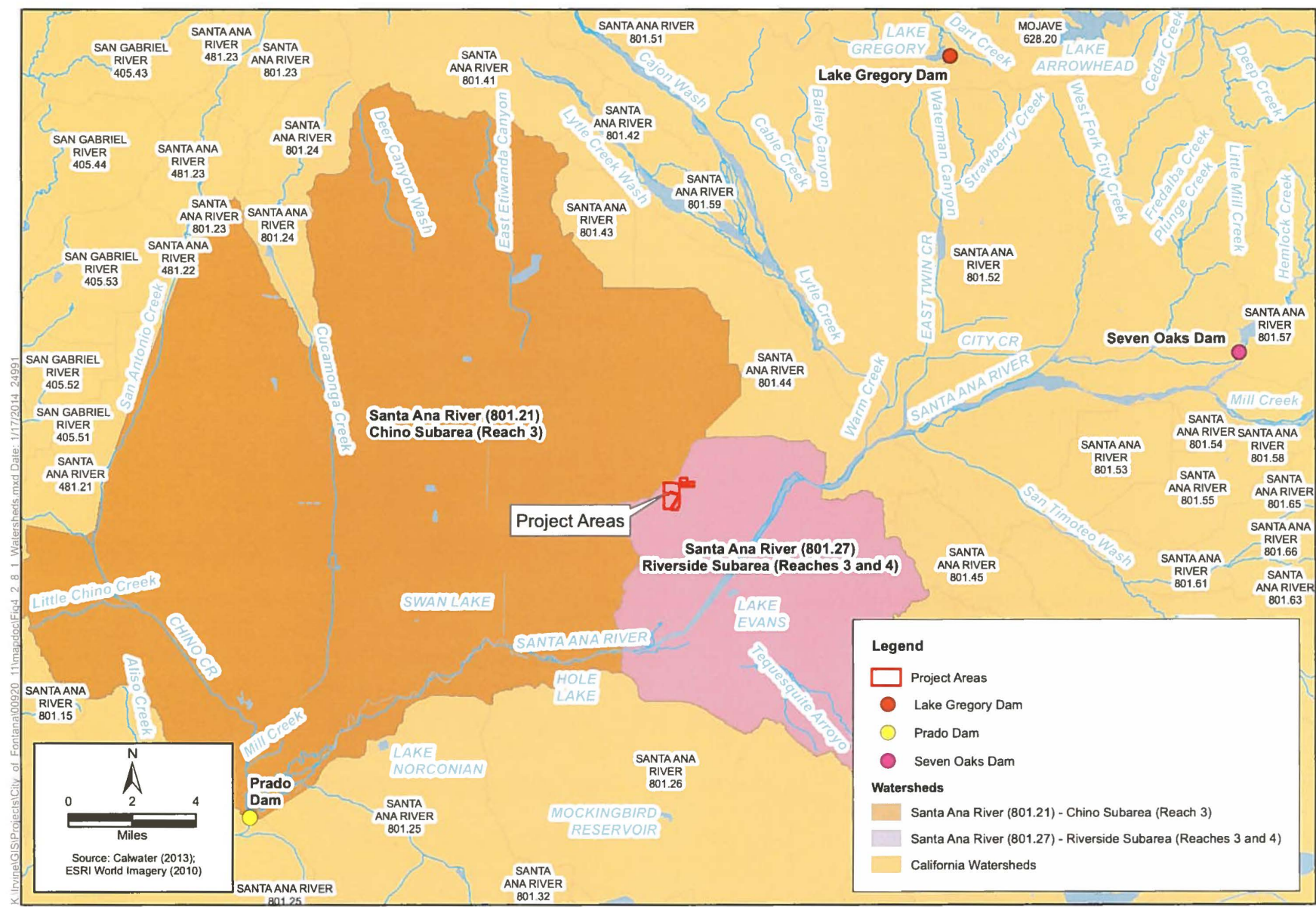


Figure 4.2.8-1
Watersheds and Surface Waters within the Project Vicinity
West Valley Logistics Center Specific Plan EIR

Due to the varied topography of the area, drainage patterns vary throughout the site. As described in Section 4.2.3, *Biological Resources*, three ephemeral drainages and one wetland exist within the study area, all of which are considered to be isolated and do not drain into other surface waters within the watershed (i.e., Santa Ana River and its tributaries). The majority of the site exhibits gentle slopes and a general increase in elevation from the eastern to western boundaries, resulting in drainage to the southeasterly direction via local drainages approximately 3 miles to the Santa Ana River. Existing runoff flows on site from the natural hillside areas adjacent to the property (westerly of the project site) to Locust Avenue (Appendix J: Thienes Engineering 2013b). Off-site runoff is also tributary to the project site from a natural hillside east of Armstrong Road. Overall, existing condition flow drains to Locust Avenue where it generally ponds at 9th, 10th, and 11th streets. A portion of existing condition flow drains to an existing detention basin at the northeastern corner of Locust Avenue and 11th, as shown in Figure 3-2, *Conceptual Site Plan*. The southeastern portion of the project area drains northwesterly toward Armstrong Road where it reaches a drainage that flows northeasterly (Appendix J: Thienes Engineering 2013c).

Flood Risks and Flood Protection

Flood control facilities for Fontana are provided by the City of Fontana and the San Bernardino County Flood Control District, as described in Section 4.2.15, *Utilities and Service Systems*. The WVLCSP project is not within the 100-year year floodplain. However, it is located in Zone X, as identified by the Federal Emergency Management Agency (FEMA), indicating that it is a minimal flood hazard area and outside the 500-year floodplain (FEMA 2013), as shown on Figure 4.2.8-2.

Flood control is provided on the project site via a large existing stormwater basin in the northeastern corner of the project site with a 100-year storm peak flow rate of 916 cubic feet per second (cfs), as shown in Table 4.2.8-1.

Table 4.2.8-1. Existing Stormwater Basin Hydrological Design Capacities

Drainage Area (acre)	100-Year Peak Flow Rate (cubic feet per second)	Time of concentration (minutes)
455.8	915.7	18.4

There is no major dam upstream from the City of Fontana; therefore, the City is currently not susceptible to dam inundation (City of Fontana 2003). There are three dams within a 20-mile radius of the project site. Lake Gregory Dam is approximately 15 miles northeast of the project site near Crestline, and Seven Oaks Dam is approximately 17 miles east of the project site in San Bernardino County; both are within Reach 4 of the Santa Ana River. Prado Dam is approximately 17 miles southwest of the project site within Reach 3 of the Santa Ana River. However, these dams are far from the project site, and inundation of the project site during a dam failure is unlikely.

Groundwater Hydrology

The project site is in the South Coast Watershed within the Chino Sub Basin of the Upper Santa Ana Valley Groundwater Basin. The aquifer beneath the site is part of the Chino Groundwater Basin, and the groundwater level in the vicinity is approximately 575 feet above mean sea level. The watershed that contains the site is bordered by Tamarind Avenue to the west and the ridge line adjacent to Larch Avenue to the east. The project site has a significant amount of topographic relief along the western foothills to lower levels adjacent to Locust Avenue and consists of relatively flat contours

bordered by hilly terrain on the west, with the existing site drainage generally sheet flowing in an easterly direction. Presently, this area drains to a borrow pit that is northeast of the intersection between El Rivino Road and Cedar Avenue. The borrow pit currently functions as a retention basin.

As stated previously, the majority of the City is within the Chino Basin of the Upper Santa Ana Valley Groundwater Basin. However, the WVLCSP project site is primarily within the northwestern portion the Riverside-Arlington Subbasin in the Upper Santa Ana Valley Groundwater Subbasin, as shown in Figure 4.2.8-3. The Riverside-Arlington subbasin is bound by impermeable rocks of Box Springs Mountains to the southeast, Arlington Mountain to the south, La Sierra Heights and Mount Rubidoux to the northwest, and the Jurupa Hills to the north. Less impermeable divides include the northeastern boundary formed by the Rialto-Colton Fault and a northern boundary of a groundwater divide beneath the community of Bloomington (DWR 2004).

Sources of groundwater recharge for the Riverside-Arlington Subbasin include percolation from the Santa Ana River, underflow past the Rialto-Colton Fault, intermittent underflow from the Chino Subbasin, return irrigation flow, and deep percolation of precipitation and local mountain runoff (DWR 2004).

Water Quality

Surface Water Quality

The 2008 Update of the 1995 Santa Ana River Water Quality Control Plan (Basin Plan) specifies beneficial uses that apply to water bodies within the surrounding area downstream of the project site, as shown in Table 4.2.8-2 (Santa Ana RWQCB 2008)¹. As previously described, the project area is within Santa Ana River Reaches 3 and 4.

Table 4.2.8-2. Designated Beneficial Uses for Surface Water Bodies within Santa Ana River Reaches 3 and 4

Water Body	Designated Beneficial Uses
Santa Ana River (Reach 3: Prado Dam to Mission Blvd. in Riverside)	AGR (Agricultural supply); GWR (Groundwater recharge); REC1 (Water Contact Recreation); REC2 (Non-contact Water Recreation); WARM (Warm Freshwater Habitat); WILD (Wildlife Habitat); RARE (Rare, Threatened or Endangered Species)
Santa Ana River (Reach 4: Mission Blvd. in Riverside to San Jacinto Fault in San Bernardino)	GWR (Groundwater recharge); REC1 (Water Contact Recreation); REC2 (Non-contact Water Recreation); WARM (Warm Freshwater Habitat); WILD (Wildlife Habitat)
Source: Santa Ana RWQCB 2008	

The State of California adopts water quality standards to protect beneficial uses of waters of the state as required by Section 303(d) of the Clean Water Act (CWA) and the Porter-Cologne Act (see *Regulatory Setting*, below). Section 303(d) of the CWA established the total maximum daily load (TMDL) process to guide the application of state water quality standards. In order to identify candidate water bodies for TMDL analysis, a list of water quality-limited segments was generated

¹ Minor, nonsubstantive editorial corrections were made to Chapter 4 in June 2011. (http://www.swrcb.ca.gov/rwqcb8/water_issues/programs/basin_plan/index.shtml, from California Environmental Protection Agency Santa Ana Regional Water Quality Control Board).

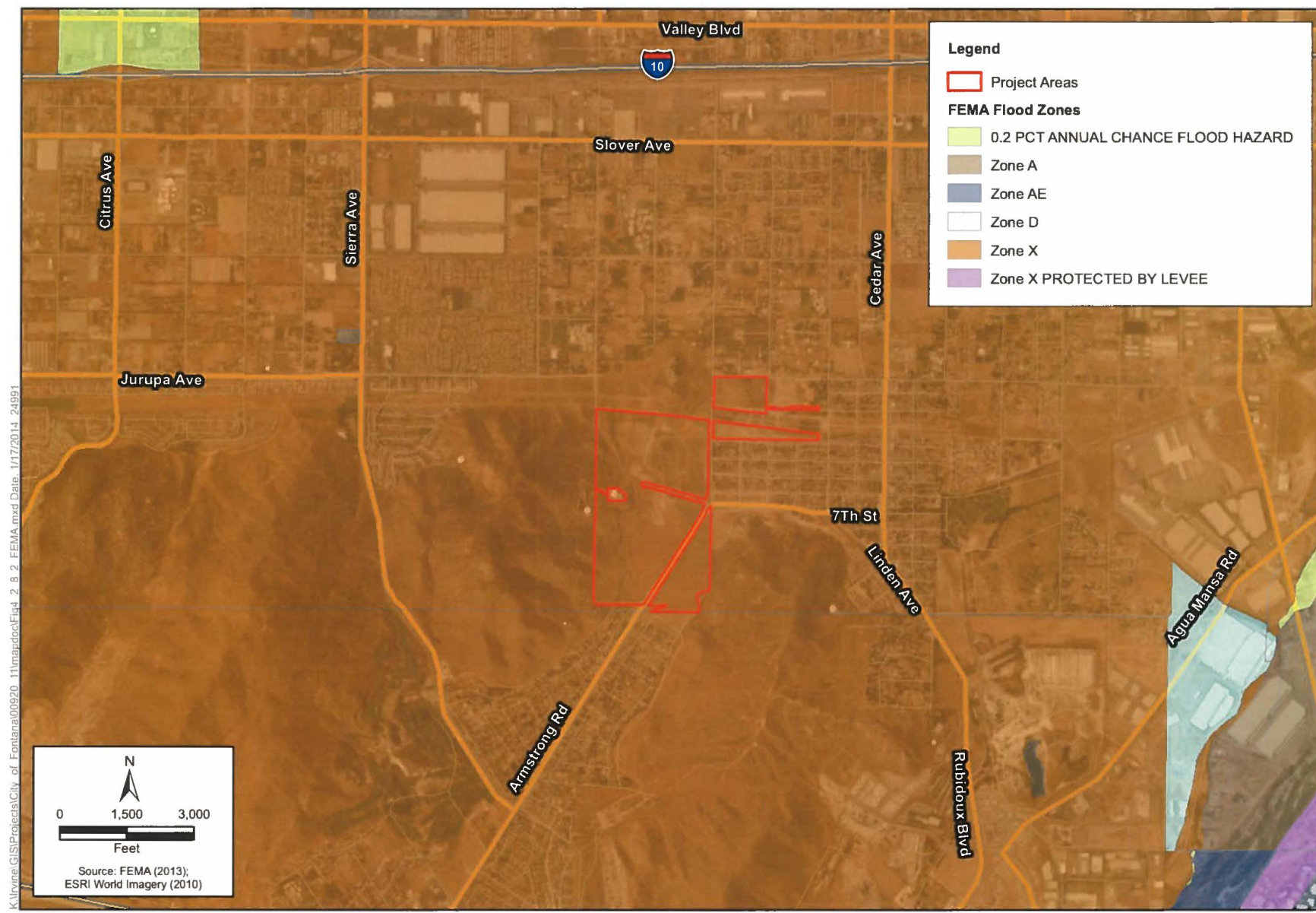


Figure 4.2.8-2
FEMA Flood Zones within the Project Vicinity
West Valley Logistics Center Specific Plan EIR



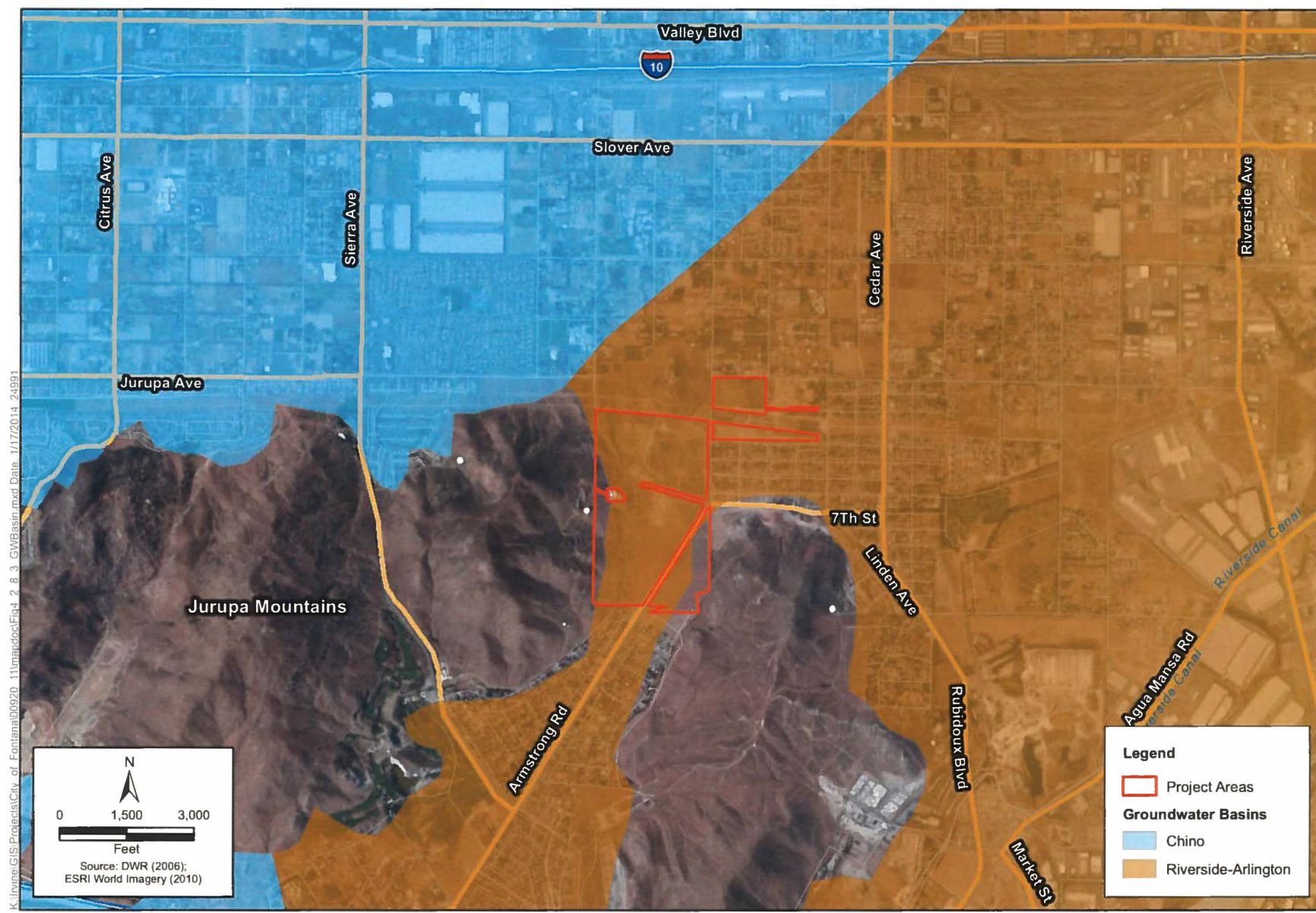


Figure 4.2.8-3
Groundwater Basins within the Project Vicinity
West Valley Logistics Center Specific Plan EIR

by the California State Water Resources Control Board (SWRCB). The 303(d)-listed impairments for the project and surrounding area are shown in Table 4.2.8-3 and are based on the 2010 California Integrated Report (SWRCB 2011).

Table 4.2.8-3. Overview of Water Quality Impairments within Santa Ana River Reaches 3 and 4

Water Body	Listed Impairments Per 2006 303(d) List	Potential Sources	EPA TMDL Completion
Santa Ana River (Reach 3: Prado Dam to Mission Blvd. in Riverside)	Copper	Source Unknown	Est. 2021
	Lead	Source Unknown	Est. 2021
	Pathogens	Dairies	2007
Santa Ana River (Reach 4: Mission Blvd. in Riverside to San Jacinto Fault in San Bernardino)	Pathogens	Nonpoint Source	Est. 2019
Sources: SWRCB 2011.			

Table 4.2.8-4 describes water quality objectives for surface waters in the project area and surrounding area downstream of the project site (Santa Ana RWQCB 2008).

Table 4.2.8-4. Surface Water Quality Objectives within Santa Ana River Reaches 3 and 4

Water Body	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Sodium (mg/L)	Chloride (mg/L)	Total Inorganic Nitrogen (mg/L)	Sulfate (mg/L)	Chemical Oxygen Demand (mg/L)
Santa Ana River (Reach 3: Prado Dam to Mission Blvd. in Riverside)	700	350	110	140	10 ^a	150	30
Santa Ana River (Reach 4: Mission Blvd. in Riverside to San Jacinto Fault in San Bernardino)	550	--	--	--	10	--	30
^a Total nitrogen, filtered sample mg/L = milligrams per liter Source: SWRCB 2011.							

The Santa Ana River Basin Plan also provides several general narrative and numerical water quality objectives for inland surface waters. If the constituents are the same as those noted for a specific water body, as identified for the Santa Ana River in Table 4.2.8-4, the Santa Ana River Basin Plan states that the water body-specific objective takes precedence. Surface water objectives that apply to the project (excluding those specific to MUN [Municipal and Domestic water supply] beneficial uses) have been set for the following constituents: algae, un-ionized ammonia, coliform bacteria, boron, chemical oxygen demand, chloride, residual chlorine, color, total dissolved solids, total filterable residue, floatables, fluoride, hardness (as calcium carbonate), total inorganic nitrogen, metals, total inorganic nitrogen, oil and grease, dissolved oxygen, pH, sodium, suspended and settleable solids, sulfate, sulfides, surfactants, taste and odor, temperature, toxic substances, and turbidity.

Groundwater Quality

According to the California Department of Water Resources Groundwater Bulletin 118 (DWR 2004), much of the water within the Riverside-Arlington Subbasin is characterized by calcium sulfate to calcium sodium bicarbonate sulfate water types because of marine sedimentary rock in the watersheds. Water sampled from 46 public supply wells has an average total dissolved solids (TDS) content of 463 milligrams per liter (mg/L) with a range of 210 to 889 mg/L. TDS content ranges from 320 to 756 mg/L (DWR 2004). In addition, sampling of public drinking water wells within the subbasin indicates groundwater in several wells exceeded the maximum contaminant levels for radiological constituents, nitrates, and pesticides (DWR 2004).

According to a 2010 WVWD customer service report, some wells may contain perchlorate, but perchlorate-contaminated wells are not in use. However, some drinking water supplies do contain nitrate concentrations of 45 mg/L (City of Fontana 2010). These results represent the water quality at the sample location and do not necessarily indicate the water quality delivered to the consumer.

Designated beneficial uses identified for the Riverside-Arlington Subbasin are (Santa Ana RWQCB 2008):

- MUN (Municipal and Domestic water supply);
- AGR (Agricultural supply);
- IND (Industrial service supply); and
- PROC (Industrial process supply).

Groundwater objectives consist primarily of narrative objectives combined with a limited number of numerical objectives. The primary groundwater objective is the maintenance of existing high quality groundwater. Groundwater objectives specific to Santa Ana River Reaches 3 and 4 are specified in the Santa Ana River Basin Plan (Santa Ana RWQCB 2008). At a minimum, groundwater shall not contain concentrations of bacteria, chemical constituents, radioactivity, or substances producing taste and odor in excess of the objectives described previously in Table 4.2.8-4 unless naturally occurring background concentrations are greater. Under existing law, the Santa Ana Regional Water Quality Control Board (RWQCB) regulates waste discharges to land that could affect water quality, including both groundwater and surface water quality. Waste discharges that reach groundwater are regulated to protect both groundwater and any surface water in continuity with groundwater.

There are no water quality objectives set specifically for the Riverside-Arlington Subbasin. However, the Santa Ana River Basin Plan provides several general narrative and numerical water quality objectives for groundwater within the subbasin. If the constituents are the same as those noted for a specific water body, as identified for the Santa Ana River, then the water body-specific objective takes precedence. Groundwater objectives that apply to the project (including MUN [Municipal and Domestic water supply] as a beneficial use) have been set for: arsenic, coliform bacteria, barium, boron, chloride, color, cyanide, TDS, total filterable residue, fluoride, hardness (as calcium carbonate), metals, Methylene Blue-Activated Substances, nitrate, oil and grease, pH, radioactivity, sodium, sulfate, taste and odor, and toxic substances.

Regulatory Setting

The following section defines the regulatory environment associated with water quality at the federal, state, and local levels. The primary federal law regulating water quality is the federal CWA.

The U.S. Environmental Protection Agency (EPA) has delegated to the SWRCB and its nine RWQCBs the enforcement of the CWA in California. All project activities need to be in compliance with, at a minimum, the CWA, the Porter-Cologne Act (California Water Code), and the Santa Ana Basin Plan.

Federal

Federal regulations related to water quality, hydrology, and groundwater resources that apply to the implementation of the proposed project are summarized below.

Clean Water Act

Several sections of the CWA pertain to regulating impacts on waters of the United States. The following CWA sections pertain to the project. The term “waters of the United States” has broad meaning and essentially refers to all surface waters such as all navigable waters and their tributaries, all interstate waters and their tributaries, all wetlands adjacent to these waters, and all impoundments of these waters. EPA is the overarching authority protecting the quality of waters of the United States. However, SWRCB regulates waters of the United States under CWA Sections 303, 401, and 402 and the U.S. Army Corps of Engineers (USACE) has jurisdiction over waters of the United States under CWA Section 404.

Section 303—Impaired Waters

The State of California adopts water quality standards to protect beneficial uses of waters of the state as required by Section 303(d) of the CWA and the Porter-Cologne Act. Section 303(d) of the CWA established the TMDL process to guide the application of state water quality standards (see the discussion of state water quality standards below). In order to identify candidate water bodies for TMDL analysis, a list of water quality-limited segments was generated by SWRCB. These stream or river segments are impaired by the presence of pollutants, such as sediment, and are more sensitive to disturbance because of this impairment.

In addition to the impaired water body list required by CWA Section 303(d), CWA section 305(b) requires states to develop a report assessing statewide surface water quality. Both CWA requirements are being addressed through the development of a 303(d)/305(b) Integrated Report, which will address both an update to the 303(d) list and a 305(b) assessment of statewide water quality. SWRCB developed a statewide 2010 California Integrated Report based on the Integrated Reports from each of the nine RWQCBs. The 2010 California Integrated Report was approved by SWRCB on August 4, 2010, and by EPA on November 12, 2010. A 2012 California Integrated Report with 303(d) listings is currently in development.

Section 402—National Pollutant Discharge Elimination System

The 1972 amendments to the federal Water Pollution Control Act established the National Pollutant Discharge Elimination System (NPDES) permit program to control discharges of pollutants from point-source discharges, or discharges that one can point to as a known source of pollutants. NPDES is the primary federal program that regulates point-source and non-point-source discharges to waters of the United States.

The 1987 amendments to the CWA created a new section of the CWA devoted to stormwater permitting (Section 402). EPA has granted the State of California primacy in administering and

enforcing the provisions of the CWA and NPDES within state boundaries. NPDES permits are issued by one of the nine geographically separated RWQCBs in California.

State

This section describes the primary state regulations related to hydrology and water quality that are applicable to the proposed WVLCSP project.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Act is established and implemented by SWRCB and nine RWQCBs. SWRCB is the primary state agency responsible for protecting the quality of the state's surface and groundwater supplies, or "waters of the state." Waters of the state are defined more broadly than "waters of the United States" as any surface water or groundwater, including saline waters, within the boundaries of the state. This includes waters in both natural and artificial channels. It also includes all surface waters that are not waters of the United States or non-jurisdictional wetlands, which are essentially distinguished by whether they are navigable or not. If waters are not navigable, then they are considered to be isolated and therefore only fall under the jurisdiction of the Porter-Cologne Act and not the CWA. The RWQCBs are responsible for implementing CWA Sections 401, 402, and 303(d) mentioned above and described in more detail below.

The Porter-Cologne Act authorizes SWRCB to draft state policies regarding water quality. The act requires projects that are discharging, or proposing to discharge, wastes that could affect the quality of the state's water to file a Report of Waste Discharge with the appropriate RWQCB. The Porter-Cologne Act also requires that SWRCB or an RWQCB to adopt basin plans for the protection of water quality. Basin plans are updated and reviewed every 3 years and provide the technical basis for determining Waste Discharge Requirements (WDRs), taking enforcement actions, and evaluating clean water grant proposals. A basin plan must include the following sections (Santa Ana RWQCB 2011).

- A statement of beneficial water uses that the RWQCB will protect.
- Water quality objectives needed to protect the designated beneficial water uses.
- Strategies and time schedules for achieving the water quality objectives.

The WVLCSP project area lies within the jurisdiction of the Santa Ana RWQCB. Beneficial uses and water quality objectives for the project are described in the *Existing Conditions* section above.

NPDES General Construction Stormwater Permit

The General NPDES Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ) (Construction General Permit) regulates stormwater discharges for construction activities CWA Section 402. Dischargers whose projects disturb 1 or more acres of soil, or whose projects disturb less than 1 acre but are part of a larger common plan of development that in total disturbs 1 or more acres, are required to obtain coverage under the Construction General Permit. The Construction General Permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP must list BMPs that the discharger will use to protect stormwater runoff and document the placement and maintenance of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants, to be implemented in case of a BMP

failure; and a monitoring plan for turbidity and pH for projects that meet defined risk criteria (SWRCB 2011). The requirements of the SWPPP are based on the construction design specifications detailed in the final design plans of a project and the hydrology and geology of the site expected to be encountered during construction. The City of Fontana requires proof of coverage under the Construction General Permit prior to building/grading permit issuance. The SWPPP is submitted to SWRCB, and a copy is kept at the job site, where it is updated during different phases of construction. The SWPPP must be available for inspection and review upon request.

NPDES General Municipal Stormwater Permit

CWA Section 402 mandates permits for municipal stormwater discharges, which are regulated under the NPDES General Permit for Municipal Separate Storm Sewer Systems (MS4) (MS4 Permit). Phase I MS4 regulations cover municipalities with populations greater than 100,000, certain industrial processes, or construction activities disturbing an area of 5 acres or more. Phase II (Small MS4) regulations require that stormwater management plans be developed by municipalities with populations smaller than 100,000 and construction activities disturbing 1 or more acres of land area.

MS4 permits require that cities and counties develop and implement programs and measures to reduce the discharge of pollutants in stormwater discharges to the maximum extent possible, including management practices, control techniques, system design and engineering methods, and other measures as appropriate. As part of permit compliance, these permit holders have created stormwater management plans for their respective locations. These plans outline the requirements for municipal operations, industrial and commercial businesses, construction sites, and planning and land development. These requirements may include multiple measures to control pollutants in stormwater discharge. During implementation of specific projects under the program, project applicants will be required to follow the guidance contained in the stormwater management plans as defined by the permit holder in that location.

SWRCB is advancing LID in California as a means of complying with municipal stormwater permits. LID incorporates site design, including among other things the use of vegetated swales and retention basins and minimizing impermeable surfaces, to manage stormwater to maintain a site's predevelopment runoff rates and volumes.

The City of Fontana is a co-permittee covered under the NPDES Permit and WDRs for the San Bernardino County Flood Control District, the County of San Bernardino, and the Incorporated Cities of San Bernardino County within the Santa Ana Region Area-Wide Urban Storm Water Runoff Management Program (San Bernardino County MS4 Permit) (NPDES NO. CAS618036). The San Bernardino County MS4 Permit was last issued on January 29, 2010 (Order No. R8-2010-0036). More information on the San Bernardino County and the City's Stormwater Program is provided in the local regulatory section below.

California Department of Pesticides Regulation

California Department of Pesticides Regulation (DPR) is the lead agency for regulating the registration, sales, and use of pesticides in California. It is required by law to protect the environment, including surface waters, from adverse effects of pesticides by prohibiting, regulating, or controlling the uses of such pesticides. DPR has both a Surface Water and Groundwater Protection Program that addresses sources of pesticide residues in surface waters and has preventive and response components that reduce the presence of pesticides in surface and

groundwater. The preventive component includes local outreach to promotion of management practices that reduce pesticide runoff and prevent continued movement to groundwater in contaminated areas. In order to promote cooperation to protect water quality from the adverse effects of pesticides, DPR and SWRCB signed a Management Agency Agreement (MAA). The MAA, and its companion document, "The California Pesticide Management Plan for Water Quality," are intended to coordinate interaction, facilitate communication, promote problem solving, and ultimately ensure the protection of water quality.

Local

This section describes local requirements related to hydrology and water quality that are applicable to the proposed WVLCSP project. Local requirements presented are primarily those at the County and local level.

San Bernardino County Stormwater Program

The County of San Bernardino established a SWPPP in 1990 to comply with the San Bernardino County MS4 NPDES permit (NPDES No. CAS618036; Order No. R8-2010-0036). The City of Fontana is one of 16 cities that, along with the County of San Bernardino and the San Bernardino County Flood Control District, jointly submitted an NPDES application for the area-wide stormwater permit program. The current permit, the third issued to the co-permittees, requires each co-permittee to implement an Urban Runoff Program. The Program provides online resources on how to protect stormwater and contacts of permittees involved in the program for more information.

The County requires the development of a Water Quality Management Plan (WQMP) for specific projects, defined as Category Projects. There are eight Permit-specified categories (Category Projects): (1) significant redevelopment projects that create 5,000 square feet or more of impervious surface; (2) home subdivisions of 10 units or more; (3) industrial/commercial developments of 100,000 square feet or more; (4) automotive repair shops; (5) restaurants of 5,000 square feet or more; (6) hillside developments of 10,000 square feet or more; (7) developments of 2,500 square feet of impervious surface or more adjacent to or discharging directly into environmentally sensitive areas; or (8) parking lots of 5,000 square feet or more. In addition, Non-Category Projects that have a precise plan of development (e.g., all commercial or industrial projects, residential projects with fewer than 10 dwelling units, and all other land development projects with potential for significant adverse water quality impacts) or subdivision are also required to prepare a WQMP. The County published a WQMP template (approved by the Santa Ana RWQCB on April 30, 2004, and updated on June 9, 2005) to guide the Permittees that have land-use planning and development authority, in the development and implementation of a program to minimize the detrimental effects of urbanization on the beneficial uses of receiving waters, including effects caused by increased pollutant loads and changes in hydrology.

A Technical Guidance Document for Water Quality Management Plan(s) was recently drafted by the County of San Bernardino as an update to the template based on the 2010 MS4 Permit requirements (County of San Bernardino 2013). Category Projects within the City are required to develop and implement WQMPs to reduce pollutants, maintain stream habitat, and reduce downstream erosion from all new development and significant redevelopment projects that fall into one of the categories of priority projects.

The MS4 Permit also requires all new development and significant redevelopment projects covered by this Order to incorporate LID BMPs to the maximum extent practicable. The County of San

Bernardino and the City of Fontana adopted development standards to minimize the detrimental effects of development projects on receiving waters through implementation of site designs that reduce runoff and pollutant transport. This is accomplished by minimizing impervious surfaces and maximizing on-site infiltration. Additionally, source-control BMPs, on-site structural treatment control BMPs, and/or participation in regional or watershed-based structural treatment control BMPs are to be used as long-term post-construction measures. The goal of these methods is to create a project in which pre-construction runoff volumes do not exceed post-construction runoff volumes.

City of Fontana Municipal Storm Water Management Plan

The City, as a co-permittee to the county-wide MS4 NPDES permit, implements a Municipal Storm Water Management Plan that provides for discharge regulation, inspections, and public education, controls over new development and redevelopment, and specification of site and construction site maintenance practices (City of Fontana 2003). The County-wide permit covers the City of Fontana, and therefore the City implements the same requirements as part of the MS4 Permit.

San Bernardino County Hydrology Manual

The Hydrology Manual was developed in 1986 to provide guidelines for hydrologic modeling methods to estimate runoff, discharges, and volumes for developing project hydrology studies to be used in the preparation of hydrology studies within the County.

City of Fontana General Plan and Municipal Code

On October 21, 2003, the City of Fontana adopted its most recent General Plan. The City of Fontana General Plan (City of Fontana 2003) Open Space and Conservation Element and the Public Facilities, Services, and Infrastructure Element sections contain a number of goals and policies related to drainage and water quality relevant to the proposed project.

Chapter 23, Article IX of the City's Municipal Code regulates the discharge of pollutants into storm drains so as to protect and enhance the water quality of watercourses, water bodies, groundwater, and wetlands in a manner consistent with federal, state, and local laws and regulations, and to implement the requirements of the County-wide MS4 Permit. The code includes requirements relating to prohibited discharges, discharge exceptions, illicit connections to the storm drain system, alterations to the storm drain system, prevention of illegal discharges, mandated BMPs, spill containment, notification of accidental discharge, and regulations for construction and industrial dischargers.

Impact Analysis

Methodology

Potential impacts resulting from implementing the proposed WVLCSP project were analyzed by comparing existing conditions, as described in Chapter 2, *Environmental Setting*, to conditions during construction and/or operation and maintenance of the project. The qualitative analysis assesses the direct and indirect, short- and long-term impacts related to surface hydrology, flood hazards, groundwater recharge, and surface and groundwater quality as described below.

Surface Water Hydrology: The surface water hydrology impact analysis set forth in Impacts HYD-3 and HYD-4 (below) considered potential changes in the physical characteristics of water bodies, impervious surfaces, and drainage patterns throughout the project area as a result of project implementation.

Flood Hazards: The impact analysis for flood risk was not conducted because the project is not within a FEMA-designated 100-year flood zone and therefore there is a very limited risk of flooding on the project site. A qualitative discussion is provided.

Groundwater Recharge: Impacts to groundwater recharge were assessed by comparing existing sources of recharge versus recharge capabilities following project implementation. Recharge is determined by the ability of water to infiltrate into the soil.

Surface and Groundwater Quality: Impacts of the proposed project on surface water and groundwater quality were analyzed using existing information on existing water quality conditions (i.e., 303(d) listed water bodies), and potential existing sources of water contaminants generated by project operation and maintenance activities, such as parking lot use, facilities maintenance, trash, and storage of hazardous materials. These conditions were then compared to conditions under the proposed project for potential project-related sources of water contaminants generated or inadvertently released during project construction (e.g., sediments, fuel, oil, concrete) and project operation. The potential for water quality objectives to be exceeded and beneficial uses to be compromised as a result of the proposed project (which would constitute a significant impact) is also considered.

Informing the analysis contained in this section is a project-specific Hydrology Study (Appendix J), which was conducted by Thienes Engineering in April 2013. Preliminary hydrology and detention calculations were prepared for the proposed WVLCSP based on the methods described in the County Hydrology Manual.

The proposed project is a new development project that would create 10,000 square feet or more of impervious surface and 5,000 square feet or more of parking lots exposed to stormwater. Therefore, it is considered a Category Project under the county-wide MS4 Permit and it is required that a WQMP be prepared for the City. A project-wide storm water quality management plan (SWQMP) was already prepared (Appendix J: Thienes Engineering 2013b) and has been reviewed for this analysis.

Thresholds of Significance

Criteria for determining the significance of impacts related to hydrology and water quality are based upon criteria contained in Appendix G of the State CEQA Guidelines. The proposed project would be considered to have a significant impact on the environment if it would result in any of the following:

HYD-1 Violate any water quality standards or waste discharge requirements.

HYD-2 Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).

- HYD-3** Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.
- HYD-4** Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.
- HYD-5** 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.
- HYD-6** Otherwise substantially degrade water quality.
- HYD-7** Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.
- HYD-8** Place within a 100-year flood hazard area structures which would impede or redirect flood flows.
- HYD-9** Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.
- HYD-10** Inundation by seiche, tsunami, or mudflow.

Project Design Features

The following hydrology and water quality-related project design features, which include regulatory requirements and a standard requirement, would prevent or reduce potentially significant environmental impacts.

Regulatory Requirements

RR-HW-1: Prepare and Implement a Stormwater Pollution Prevention Plan (SWPPP). A SWPPP will be developed by a qualified engineer or erosion control specialist in accordance with Santa Ana Regional Water Quality Control Board (RWQCB requirements for National Pollutant Discharge Elimination System (NPDES) compliance and implemented prior to the issuance of any grading permit before construction. The SWPPP will be kept on site during construction activity and will be made available upon request to representatives of the Santa Ana RWQCB.

The SWPPP will detail how the sediment and erosion control practices, referred to as Best Management Practices (BMPs), will be implemented. Possible BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater and other nonpoint-source runoff. Measures range from source control, such as reduced surface disturbance, to treatment of polluted runoff, such as detention or retention basins. BMPs to be implemented as part of the stormwater management program and general permit may include, but are not limited to, the following measures.

- Temporary erosion control measures (such as silt fences, stacked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, watering of bare soils, and temporary revegetation or other ground cover) will be employed to control erosion from disturbed areas.

- Drainage facilities in downstream off-site areas will be protected from sediment using BMPs acceptable to the Santa Ana RWQCB.
- All construction activities will cease during high wind (winds exceeding 25 miles per hour) and rain storm events.
- Grass or other vegetative cover will be established on the construction site as soon as possible after disturbance. No disturbed surfaces will be left without erosion control measures in place during the wet season.
- Maintenance of all erosion control measures, including the clearing of excess debris, throughout all construction phases will be performed to the satisfaction of the City engineer.

RR-HW-2: Submit a Final Stormwater Quality Management Plan (SWQMP) for City Approval.

An SWQMP based on final design for each phase of the WVLCSF will be submitted to the Fontana Director of Engineering for approval prior to issuance of grading permits. The SWQMP will provide project-specific site design, source control, and treatment control BMPs including Low Impact Development to be incorporated into final design. The BMPs will be required to be properly designed and maintained to target pollutants of concern in accordance with the City's Municipal Storm Water Management Plan and the County Municipal Separate Storm Sewer System (MS4) Permit.

RR-HW-3: Comply with City of Fontana Municipal Code Chapter 23, Article IX, General Construction Permit and the City's Stormwater Management Plan. This chapter of the Municipal Code addresses preventing discharge of pollutants into storm drains. The purpose of the code is to: (a) protect and enhance the water quality of watercourses, water bodies, groundwater, and wetlands in a manner consistent with federal, state, and local laws and regulations, and (b) to implement the requirements of the County-wide MS4 Permit and the City's Municipal Storm Water Management Plan site construction and maintenance requirements for new development. The proposed project drainage and water quality management plans would be reviewed by the City for compliance with the City's Construction General Permit.

RR-HW-4: Include Best Management Practices for Water Quality Management. Site design BMPs will be included in the project-wide SWQMP submitted to the City and approved prior to the issuance of a grading permit (see **Regulatory Requirement RR-HW-2**). The BMPs, which include Low Impact Development standards, will include, but not be limited to, the following:

- Maximize permeable areas (pervious open space) of the site by reducing the amount of pavement, decreasing the project's footprint, or by utilizing alternative paving materials in select areas.
- Drain rooftops into pervious, landscaped swales prior to discharge of overflow into storm drain.
- Construct streets, sidewalks, and parking lot aisles to the minimum width necessary.
- Construct walkways, parking stalls, overflow parking lots, and other low-traffic areas with open-jointed paving materials.
- Use pervious drainage channels (rock or grass lines systems) for conveying parking lot runoff into storm drain overflows.
- Use perforated pipe, gravel infiltration pits, and drywells for low-flow infiltration following treatment by an acceptable method.

- Construct on-site vegetated ponding areas and landscaped swales (not mounded) that drain within 72 hours to prevent the development of vector-breeding areas.
- Provide curb cutouts, curb cores, or concrete mow strips and wheel stops to allow stormwater runoff to flow into landscaped swales.
- Where soil conditions are suitable, construct vegetated infiltration trenches in paved parking lot areas to infiltrate and filter stormwater runoff.

Standard Requirement

SR-G-1: Develop and Implement an Erosion Control Plan. The applicant or developer will prepare and submit to the City Department of Engineering for approval 30 days prior to construction an Erosion Control Plan. (Note: The Erosion Control Plan may be part of the same document as the Stormwater Pollution Prevention Plan.) The Erosion Control Plan will identify the locations of all soil-disturbing activities (including but not limited to sites involving new development or roadways), the locations of all drainage structures that will be directly affected by soil-disturbing activities, and the locations and types of all Best Management Practices (BMPs) that will be installed. The plan will also include a proposed schedule for the implementation and maintenance of erosion control measures and a description of the erosion control practices, including appropriate design details. As part of the plan, the construction contractor will maintain a logbook of the erosion-prevention effectiveness of the BMPs, as well as a description of any post-storm modifications to those BMPs.

Impacts and Mitigation

This section describes potential impacts on hydrology and water quality that could result from construction and operation as a result of the proposed WVLCSP and the mitigation measures identified to address those impacts. Construction and operation of the WVLCSP may affect the existing water quality conditions of the hydrological features within the project vicinity. The proposed WVLCSP project has been designed to adhere to the City's General Plan goals, policies, and municipal code requirements related to water quality. The Specific Plan includes the applicable regulatory requirements for water quality management and drainage design discussed above.

Impact HYD-1: Violate any water quality standards or waste discharge requirements

Construction

Construction activities associated with the future development of the WVLCSP could create short-term surface water quality impacts resulting from the potential discharge/release of sediment loads that exceed water quality objectives or chemical spills into water bodies if proper minimization measures are not implemented. Surface runoff from the project site is routed to the existing storm drain system and nearby channels, which ultimately discharge into a stormwater detention basin or the Middle Santa Ana River. Construction of the proposed project would include excavation, grading, and paving. These activities would result in temporary disturbance and exposure of surface soils, which could cause erosion, and the mobilization of sediment and associated pollutants in the runoff. In addition, stockpiling of soil, asphalt, and debris would occur during demolition and excavation activities. If not stored properly, these stockpiles would be exposed to runoff, which could enter storm drains and violate water quality standards in water courses in the vicinity of the project site. Pollutants from the project site could include asphalt materials, sediment from grading activities,

and contaminants associated with construction materials, construction waste, vehicles, and equipment used during construction. Once released, hazardous substances could be transported to nearby surface waterways and/or groundwater in stormwater runoff, wash water, and dust control water, potentially reducing the quality of the receiving waters.

Since the land disturbance with implementation of the WVLCSPP project would be approximately 212 acres (Planning Area 1), a Construction General Permit (required for projects over 1 acre) would be required. The proposed project would comply with the Construction General Permit, local stormwater ordinances, and other related water quality requirements discussed in the *Regulatory Setting* and *Project Design Features* sections above. The project would be required to prepare and implement a project SWPPP in accordance with the General Construction Permit (see **Regulatory Requirement RR-HW-1**) to meet local stormwater management requirements for construction activities. The SWPPP would be prepared by a qualified engineer or erosion control specialist prior to the issuance of any grading permit before construction. The SWPPP would be kept on site during construction activity and made available upon request to representatives of the RWQCB. The SWPPP would include details of how the sediment and erosion control practices, referred to as BMPs, would be implemented, maintained, and monitored for effectiveness. Potential BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater and other nonpoint-source runoff during construction activities. Measures would range from source control, such as reduced surface disturbance, to treatment of polluted runoff, such as detention or retention basins as proposed for Lot A of the WVLCSPP. BMPs to be implemented as part of the stormwater management program and general permit may include, but would not be limited to, the following:

- Temporary erosion control measures (such as silt fences, stacked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, watering of bare soils, and temporary revegetation or other ground cover) will be employed to control erosion from disturbed areas.
- Drainage facilities in downstream off-site areas will be protected from sediment using BMPs acceptable to the Santa Ana RWQCB.
- All construction activities will cease during high wind (winds exceeding 25 miles per hour) and rain storm events.
- Grass or other vegetative cover will be established on the construction site as soon as possible after disturbance. No disturbed surfaces will be left without erosion control measures in place during the wet season.
- Maintenance of all erosion control measures, including the clearing of excess debris, throughout all construction phases will be performed to the satisfaction of the City engineer.

With implementation of the project SWPPP (**Regulatory Requirement RR-HW-1**) and associated compliance with the General Construction Permit and local stormwater ordinances (**Regulatory Requirements RR-HW-2 through RR-HW-3** and **Standard Requirement SR-G-1**), potential water quality impacts from construction activities would be less than significant.

Operation

Implementation and build out of the proposed WVLCSPP could also result in water quality impacts during project operation and maintenance activities. Runoff from on-site parking, loading, and truck maneuvering could affect water quality by transporting trash, oil, grease, gasoline, and diesel fuel to

storm drains. Potential impacts on water quality could occur from the various constituents typically associated with roadway runoff flowing into the area stormwater drainage systems. These constituents may include:

- Particulates from pavement wear and vehicles;
- Metals, such as zinc, lead, iron, copper, cadmium, chromium, nickel, and manganese;
- Gasoline, diesel fuel, greases, and lubricating oils from automobiles and trucks;
- Tire and break lining wear;
- Polycyclic aromatic hydrocarbon, which is created as a combustion by-product of gasoline and other fossil fuels; and
- Trash discarded from vehicles and along the roadside.

The implementation of citywide maintenance strategies such as street sweeping programs is an effective method in improving the quality of urban runoff. Street sweeping vacuums collect particles of dust and suspended solids often found in public parking lots and roads that often end up in runoff.

Once- or twice-monthly street sweeping is widely recognized as an effective BMP for reducing the amount of pollutants (sediment, litter, and excessive green waste) on street surfaces that may affect stormwater. The City of Fontana provides weekly street sweeping in industrially zoned areas. San Bernardino County also maintains regular street sweeping services. Street sweeping services in Jurupa Valley are provided through Burrtec Waste Industries and Waste Management. Armstrong Road/Valley Way is swept twice monthly. Because streets are already being swept on a regular (at least monthly) basis, the addition of project-related traffic would not add to the needed frequency of street sweeping.

Operation and maintenance activities may also include the use of pesticides, fuels to power equipment and vehicles, fertilizers, paints, and cleaners. In addition, urban runoff commonly contains a variety of water pollutants, including elevated levels of pathogens, sediment, trash, fertilizers, pesticides, heavy metals, and petroleum products. Stormwater can carry these pollutants through storm drain systems and ultimately to receiving waters (i.e., rivers, streams, lakes, bays, and the ocean). This polluted runoff can result in exceeding the water quality standards for the receiving waters, as established by the Santa Ana RWQCB in their Basin Plan. Also, the project would be required to comply with DPR regulations for pesticide use. To minimize these effects during project operation and maintenance activities, the project contractor or applicant would implement BMPs, such as secondary containment for storage of hazardous materials, proper disposal techniques for associated wastes, and good housekeeping measures to minimize trash and other contaminants from being collected in runoff and transported to waterways.

Project-wide SWQMPs are required for new development projects that create 10,000 square feet or more of new impervious surface and 5,000 square feet or more of parking lot area exposed to stormwater. Therefore, a project-wide SWQMP was prepared and submitted to the City for approval (Appendix J: Thienes Engineering 2013b). Site design BMPs for water quality management include LID measures as discussed previously. The SWQMP addresses potential project operation and maintenance impacts. The SWQMP describes the pollutants of concern (POCs) that are either expected to be present, or have the potential of being present, at the project site:

- Heavy Metals (vehicles)

- Organic Compounds (landscaping)
- Trash and Debris
- Oil and Grease (vehicles)
- Bacterial Indicators
- Nutrients (landscaping)
- Pesticides (landscaping)
- Sediments (landscaping)
- Oxygen Demanding Substances (landscaping)

As shown in Table 4.2.8-3, the Santa Ana River is impaired for bacteria (pathogens) and heavy metals (copper and lead); therefore, these are the primary POCs. However, water quality objectives have been identified for other constituents that are also addressed in the SWQMP. As previously described, surface water and groundwater quality objectives have been set by the Santa Ana RWQCB for sediment (total dissolved solids), as well as several constituents associated with landscaping (sodium, chloride, nitrogen, sulfate). As discussed in *Existing Conditions*, general surface water and groundwater quality objectives have also identified other constituents that apply to the list of POCs.

As described in Section 3.4.4 of Chapter 3, *Project Description*, all drainage volumes minus pre-development flows would be retained and held in on-site stormwater basins, and therefore would not be released into the storm drain system. Stormwater runoff produced by the project would be collected by a storm drain system consisting of a series of stormwater basins and pipes that drain to the existing stormwater basin. The majority of the drainage would be retained in an existing basin (Lot A), located north of 11th Street, to which the project would provide upgrades. The remaining drainage would be retained in smaller basins adjacent to proposed buildings. The new stormwater basins would be designed as both retention and water quality basins and would capture sediment and other contaminants that are collected in surface runoff. There are, at a minimum, four proposed water quality detention basins within the project area.

Detention basins are designed such that the lower elevations serve dual flood control/water quality purposes. The required water quality volume (based on calculations from the SWQMP) would be stored at the bottom of the basin for infiltration. Once this elevation is achieved, runoff can then discharge from the basin. The higher elevations of the basin would be used to reduce post-construction peak flow rates to pre-construction levels. For Building 4, water quality standards would be achieved within the Building 4 site (via underground storage), not in Basin "B." (Appendix J: Thienes Engineering 2013c).

The project also includes pervious areas that would help collect runoff from the site, including such areas as the landscaping adjacent to the public streets and approximately 55 acres of preserved open space at the Jurupa Hills area on the west side of the project site. These vegetated areas would serve as biotreatment areas that would be designed to treat runoff by filtering raw runoff through the soil media in the treatment area and trap particulate pollutants (suspended solids and trace metals) and promote infiltration. These post-construction stormwater quality minimization measures would be maintained with the implementation of **Standard Requirement SR-G-1, Regulatory Requirements RR-HW-1, RR-HW-3, and RR-HW-4, and Mitigation Measure HYD-1**, below, to ensure effectiveness.

Compliance with development standards as part of the San Bernardino Area Stormwater Program and the City of Fontana stormwater program, as well as implementation of post-construction stormwater measures would reduce water quality impacts during project operation to less-than-significant levels.

Regulatory Requirements and Standard Requirement

The applicant shall implement the following regulatory requirements and standard requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **RR-HW-1:** Prepare and Implement a Stormwater Pollution Prevention Plan.
- **RR-HW-2:** Submit a Final Stormwater Quality Management Plan for City Approval.
- **RR-HW-3:** Comply with City of Fontana Municipal Code Chapter 23, Article IX, General Construction Permit and the City's Municipal Storm Water Management Plan.
- **RR-HW-4:** Include Best Management Practices for Water Quality Management.
- **SR-G-1:** Develop and Implement an Erosion Control Plan.

Mitigation Measures

Mitigation Measure HYD-1: Maintain Stormwater Detention Basins and Biotreatment Areas during Project Operation. Final selection of BMPs will be subject to approval by the Santa Ana RWQCB. The City will review the list and description of the long-term BMPs and ascertain whether the physical effects of those features are addressed within the project Final EIR, or whether additional environmental analysis would be required. The City and/or its contractors will inspect the project following construction to ensure that all identified BMPs have been properly installed. The applicant or applicant's designee will prepare and implement a regular maintenance and monitoring schedule to ensure that these BMPs function properly throughout project operations. The maintenance and monitoring schedule will be submitted to the City for review and approval prior to implementation by the applicant. The City may require additional BMPs to be designed and implemented if those originally constructed do not achieve performance standards in accordance with the City's Municipal Stormwater Management Plan. The City would notify contractors immediately if there is a noncompliance issue, and appropriate actions would be taken by the City and the contractors to ensure immediate compliance.

Project operations and maintenance activities would primarily entail maintenance of stormwater basins and biotreatment areas, landscaping, and periodic parking and external building maintenance. Stormwater basin and biotreatment area maintenance would be performed routinely to prevent sediment buildup and clogging in order to ensure optimal pollutant removal efficiency. Maintenance activities would include the following, which would be done periodically;

- Remove obstructions, debris, and trash and dispose of properly.
- Inspect to ensure proper drainage between storms and within 5 days following rainfall.
- Inspect inlets for channels, soil exposure, or other evidence of erosion.
- Remove obstructions and sediment.

- Maintain vegetation via pruning and weeding, and treat with preventative and low-toxicity methods.
- Check that mulch is maintained at an appropriate depth and replenish as necessary.

Residual Impacts

With implementation of **Regulatory Requirements RR-HW-1, RR-HW-2, RR-HW-3, and RR-HW-4, Standard Requirement SR-G-1, and Mitigation Measure HYD-1**, impacts would be less than significant.

Impact HYD-2: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)

Construction

As previously noted, the groundwater level in the vicinity is approximately 575 feet above mean sea level. The lowest elevations on site are slightly below 1,000 feet above mean sea level. Therefore, it is not likely that dewatering would be required during construction activities. Should dewatering be needed during construction for activities such as excavation for building structures (i.e., footings for one- to two-story tilt-up precast concrete structures) and utilities, such dewatering would occur on a one-time basis during construction and would not result in a loss of quantities of water that would deplete groundwater supplies. The project would comply with groundwater dewatering requirements of the Santa Ana RWQCB. Therefore, due to the implementation of dewatering requirements and the short-term nature of the potential dewatering activities, impacts to groundwater supplies and recharge from construction activities would be less than significant.

Operation

Implementation of the proposed project would not substantially deplete groundwater supplies or substantially interfere with groundwater recharge because it would not increase groundwater demand or decrease groundwater recharge areas. Refer also to the analysis in Section 4.2.15, *Utilities and Service Systems*, for discussion of water demand and supply for the proposed project and standard requirements presented by West Valley Water District, the authoring agency of the Water Supply Assessment for the proposed project (Appendix J). In addition, natural groundwater recharge of the Riverside-Arlington subbasin occurs from infiltration of water from the Santa Ana River and percolation of precipitation that falls directly on the ground surface. Because implementation of the project would provide for pervious surface area through biotreatment areas, such as landscaping adjacent to the public streets and large areas of preserved open space, impacts related to the loss of groundwater recharge potential at the project site would be reduced. Therefore, the project's impact on groundwater supplies and recharge would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HYD-3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site

The project would not dramatically alter existing drainage patterns in such a manner which would result in substantial erosion or siltation on or off site. As described previously, existing drainage generally flows northeasterly to Locust Avenue, and either flows into an existing detention basin at 11th Street in Lot A or ponds at 9th, 10th, and 11th streets. The project includes an existing stormwater detention basin to treat and limit runoff from the proposed development, along with new stormwater basins (up to five are currently shown in Tentative Parcel Map 19156) that would be designed as both retention and water quality basins and would capture sediment and other contaminants that are collected in surface runoff. In addition, erosion and sediment control measures would be implemented as part of the SWPPP during construction and the SWQMP during operations and maintenance activities to minimize on-or off-site erosion or siltation, as described in Impact HYD-1. Therefore, impacts on drainage patterns and resultant erosion or siltation would be less than significant. The implementation of Standard Requirement SR-G-1, Regulatory Requirements RR-HW-1, RR-HW-2, RR-HW-3, and RR-HW-4, and Mitigation Measure HYD-1 would further ensure that significant impacts resulting from the changes in drainage patterns would not occur.

Regulatory Requirements and Standard Requirement

The applicant shall implement the following regulatory requirements and standard requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **RR-HW-1:** Prepare and Implement a Stormwater Pollution Prevention Plan.
- **RR-HW-2:** Submit a Final Stormwater Quality Management Plan for City Approval.
- **RR-HW-3:** Comply with City of Fontana Municipal Code Chapter 23, Article IX, General Construction Permit and the City's Stormwater Management Plan.
- **RR-HW-4:** Include Best Management Practices for Water Quality Management.
- **SR-G-1:** Develop and Implement an Erosion Control Plan.

Mitigation Measures

Implement **Mitigation Measure HYD-1**.

Residual Impacts

With implementation of **Regulatory Requirements RR-HW-1, RR-HW-2, RR-HW-3, and RR-HW-4, Standard Requirement SR-G-1, and Mitigation Measure HYD-1**, impacts would be less than significant.

Impact HYD-4: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site

The project site is not within a 100-year flood hazard zone. However, it is within a minimal to moderate flood hazard area (100- to 500-year or above) and the project would involve 10,000 square feet or more of impervious surface and 5,000 square feet or more of parking lots exposed to stormwater. Therefore, based on the San Bernardino County Flood Control Manual, flood control measures would be incorporated as part of the project. The proposed development would utilize water quality/detention basins to treat and limit runoff from the proposed development to less than existing conditions (Appendix J: Thienes Engineering 2013c), as initially described in Impact HYD-1. These stormwater basins serve as flood control facilities and water quality/detention basins. Flood design capacities and associated drainage areas of the new stormwater basins are shown in Table 4.2.8-5 below.

Table 4.2.8-5. Proposed Stormwater Basin Hydrological Design Capacities

Basin Designation	Proposed Facility Drainages	Drainage Area (acre)	100-Year Peak Flow Rate into Basin (cfs)
"A"	Buildings 5 and 6	40.4	95.0
"B"	Buildings 3 and 4	59.6	151.9
"C"	Buildings 1 and 2	76.2	213.5
"D"	Building 7	20.2	45.0
	Total	152.3	388.6

According to the draft SWQMP, all runoff from Buildings 1 through 6 and off-site areas ultimately drain to a proposed public storm drain system on Locust Avenue (see Section 4.2-15, *Utilities and Service Systems*, for more information). This storm drain would discharge runoff into an existing detention basin (Table 4.2.8-1) at the northeastern corner of the project area (at 11th and Locust Avenue). Runoff from the proposed building at the southeastern corner of Jurupa Avenue and Locust Avenue (Building 7) would be conveyed to a proposed water quality/detention basin (Basin "D") at the southeastern corner of the site. Discharge from the basin would be to historic drainage areas for the existing site (Appendix J). Hillside areas west of Buildings 2 through 4 and east of Building 5 would remain natural, resulting in no increase in runoff, and would therefore not require detention to reduce peak flows back to pre-construction conditions.

Detention sizing for San Bernardino County requires that 100-year peak flow rates be reduced to 90% of the 25-year peak flow rate for existing conditions. Under the 25-year existing conditions, areas of proposed improvements are part of a natural hillside area that generates approximately 458 cfs of runoff for a total area of 454.3 acres. This is an average of about 1.0 cfs/acre. Areas of proposed commercial development would be reduced to less than 90% of this rate, or about 0.90 cfs/acre, while off-site areas would remain the same as existing conditions. (Appendix J: Thienes Engineering 2013c). Table 4.2.8-6 summarizes inflow/outflow and volume for each basin.

Table 4.2.8-6. Proposed vs. Existing Inflow/Outflow Volumes of Proposed Detention Basins

Basin Designation	Proposed Discharge from Basin (cfs)	Existing Condition Peak Flow Rate (cfs)*	Difference (cfs)
"A"	22.9	36.4	-13.5
"B"	61.3	53.6	+7.7
"C"	53.9	68.6	-14.7
"D"	16.3	16.7	-0.4

Notes:

*peak flow rate basin on tributary area x 0.90 cfs/acre.

Source: Appendix J.

As stated above in Table 4.2.8-6, the detention basins would reduce 100-year flow from proposed improvements to less than 90% of the existing 25-year conditions. Therefore, the project would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site. The detention basins would be maintained to ensure maximum effectiveness, as described in Mitigation Measure HYD-1. Therefore, with implementation of the proposed detention basins, Standard Requirement SR-G-1, Regulatory Requirements RR-HW-1, RR-HW-2, and RR-HW-3, and Mitigation Measure HYD-1, impacts related to drainage patterns and flooding would be less than significant.

Regulatory Requirements and Standard Requirement

The applicant shall implement the following regulatory requirements and standard requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **RR-HW-1:** Prepare and Implement a Stormwater Pollution Prevention Plan.
- **RR-HW-2:** Submit a Final Stormwater Quality Management Plan for City Approval.
- **RR-HW-3:** Comply with City of Fontana Municipal Code Chapter 23, Article IX, General Construction Permit and the City's Stormwater Management Plan.
- **SR-G-1:** Develop and Implement an Erosion Control Plan.

Mitigation Measures

Implement **Mitigation Measure HYD-1**.

Residual Impacts

With implementation of **Regulatory Requirements RR-HW-1, RR-HW-2, and RR-HW-3, Standard Requirement SR-G-1, and Mitigation Measure HYD-1**, impacts would be less than significant.

Impact HYD-5: Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff

As described in Impact HYD-1, all project stormwater and runoff drainage would be retained and held in on-site stormwater basins, and therefore would not be released into the storm drain system. Stormwater drainage is discussed in more detail in Section 4.2.15, *Utilities and Service Systems*.

Potential additional sources of polluted runoff during construction and operation would be addressed as part of Impact HYD-1. Therefore, impacts related to stormwater capacity and polluted runoff would be less than significant with implementation of **Regulatory Requirements RR-HW-1** through **RR-HW-3**, **Standard Requirement SR-G-1**, and **Mitigation Measure HYD-1**.

Regulatory Requirements and Standard Requirement

The applicant shall implement the following regulatory requirements and standard requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **RR-HW-1:** Prepare and Implement a Stormwater Pollution Prevention Plan.
- **RR-HW-2:** Submit a Final Stormwater Quality Management Plan for City Approval.
- **RR-HW-3:** Comply with City of Fontana Municipal Code Chapter 23, Article IX, General Construction Permit and the City's Stormwater Management Plan.
- **SR-G-1:** Develop and Implement an Erosion Control Plan.

Mitigation Measures

Implement **Mitigation Measure HYD-1**.

Residual Impacts

With implementation of mitigation measures and standard requirements, impacts would be less than significant.

Impact HYD-6: Otherwise substantially degrade water quality

Potential water quality impacts are discussed previously in Impact HYD-1. No other anticipated potential water quality impacts would occur as part of this project. Therefore, impacts that would otherwise substantially degrade water quality would be less than significant with implementation of Regulatory Requirements RR-HW-1, RR-HW-2, RR-HW-3, and RR-HW-4, Standard Requirement SR-G-1, and Mitigation Measure HYD-1.

Regulatory Requirements and Standard Requirement

- The applicant shall implement the following regulatory requirements and standard requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.**RR-HW-1:** Prepare and Implement a Stormwater Pollution Prevention Plan.
- **RR-HW-2:** Submit a Final Stormwater Quality Management Plan for City Approval.
- **RR-HW-3:** Comply with City of Fontana Municipal Code Chapter 23, Article IX, General Construction Permit and the City's Municipal Storm Water Management Plan.
- **RR-HW-4:** Include Best Management Practices for Water Quality Management.
- **SR-G-1:** Develop and Implement an Erosion Control Plan.

Mitigation Measures

Implement **Mitigation Measure HYD-1.**

Residual Impacts

With implementation of **Regulatory Requirements RR-HW-1, RR-HW-2, RR-HW-3, and RR-HW-4, Standard Requirement SR-G-1, and Mitigation Measure HYD-1**, impacts would be less than significant.

Impact HYD-7: Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map

The project involves construction of industrial buildings, and no residential buildings are proposed as part of the project. As the proposed project would not involve housing within any designated flood zone, no impacts would occur. Potential impacts pertaining to flooding are addressed in Impact HYD-4.

Mitigation Measures

No mitigation would be required.

Residual Impacts

There would be no impacts related to placement of housing within flood hazard areas.

Impact HYD-8: Place within a 100-year flood hazard area structures which would impede or redirect flood flows

As stated in Chapter 2, *Environmental Setting*, the proposed WVLCSP project site is not within a 100-year floodplain; it is located in Zone X, a minimal flood hazard area, and outside the 500-year floodplain as identified by FEMA. As no structures would be placed within the 100-year flood zone, no impacts resulting from flood hazards would occur.

Mitigation Measures

No mitigation measures would be required.

Residual Impacts

There would be no impacts related to flooding within a 100-year flood zone.

Impact HYD-9: Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam

As stated in the *Existing Conditions* section, there is no major dam upstream from the City of Fontana, therefore; the City is currently not susceptible to dam inundation. Lake Gregory Dam is approximately 15 miles northeast of the project site near Crestline, and Seven Oaks Dam is approximately 17 miles east of the project site in San Bernardino County; both are within Reach 4 of the Santa Ana River. However, due to the long distance and the mountainous topography between the dams and the project site, it is unlikely that the project site is within their inundation area should

a dam failure occur. The project site is approximately 17 miles northeast (upstream) of the Prado Dam on the Santa Ana River. If the dam should fail, the majority of water would likely flow downstream to areas within Orange County and urban and agricultural areas of the Santa Ana Coastal Plain. Therefore, a failure of the Prado Dam would likely not reach the project site. Therefore, there would be no impact related to flooding as a result of a potential levee or dam failure within the project area.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

Impact HYD-10: Inundation by seiche, tsunami, or mudflow

The proposed project site is over 43 miles away from the Pacific Ocean and is generally considered too distant to be subject to a tsunami. As such, project impacts related to tsunamis would not occur. Due to this distance from the shoreline, any seiche activity in the ocean would not impact the project area, and impacts related to seiche inundation would not occur.

Also, the project would not contribute to inundation by mudflow. Mudflows or mudslides occur on steep slopes during high rain events. However, the project site is relatively flat in areas where development is proposed to disturb the land; therefore, no mudflows would occur on site. The natural hillside areas adjacent to the property (westerly of the project site) gain approximately 700 feet in elevation, and no evidence of landslides or deep-seated slope instability has been found (see Section 4.2-5, *Geology and Soils*, for more information). The project area is not within an earthquake-induced landslide zone or a flood zone. As a result, the proposed project would not have the potential to contribute to inundation by a mudflow. No impact would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

4.2.9 Land Use and Planning

Introduction

This section evaluates the impacts of the West Valley Logistics Center Specific Plan (WVLCSP) on land use and planning within the project vicinity. A discussion of existing built and planned land use conditions within the project site and surrounding areas is provided below. This section also includes an analysis of potential impacts resulting from a conflict with any applicable plans or physically dividing an established community. Also, a consistency analysis with City of Fontana General Plan goals and policies is included.

Terminology

- **Existing Land Use.** Existing land uses are the current uses observed for a specific site.
- **General Plan.** The City of Fontana General Plan (City of Fontana 2003) is the core policy and land use planning document for the City and provides basic guidance to community decision-makers.
- **Planned Land Use.** Planned land uses refer to the City's General Plan and Zoning designations for a specific site.
- **Sphere of Influence (SOI).** The SOI is the designated area adjacent to but outside of the City's legal boundaries anticipated for future annexation or incorporation into the City limits.
- **Zoning.** Zoning designations are applied by the City of Fontana Zoning and Development Code (City of Fontana 2013a), which is intended to implement the land uses applied by the General Plan and establish use restrictions and minimum standards for development.

Existing Conditions

The discussion of existing land use and planning conditions in this section considers both built and planned land uses in the project area. Existing built land use conditions reflect the physical conditions at the project site and surrounding areas, and planned land use conditions describe anticipated land use development according to applicable planning documents.

Regional Land Use Setting

The project site is at the southeastern border of the City of Fontana, within a valley adjacent to the Jurupa Hills in southwestern Fontana. The City of Fontana is in the southwestern, valley region of San Bernardino County. Neighboring areas include the San Bernardino National Forest and the San Gabriel Mountains to the north, the Cities of Rialto and San Bernardino and community of Bloomington (in unincorporated San Bernardino County) to the east, the City of Jurupa Valley in Riverside County to the south, and the Cities of Ontario and Rancho Cucamonga (both within San Bernardino County) to the west. San Bernardino County is in the eastern portion of the Los Angeles metropolitan area; along with Riverside County, it forms the region commonly referred to as the "Inland Empire."

Built Land Uses

The City of Fontana is considered a bedroom community and commercial hub because of the large number of residential land uses and its proximity to a number of state and local highways, including State Route (SR) 210, SR-60, and Interstates 10, and 15 (I-10 and I-15, respectively). Warehousing and distribution centers are concentrated in the City's southern half, adjacent to the I-10 corridor, which serves as the primary transportation thoroughfare in the area. Other heavy industrial land uses are found around the former Kaiser Steel mill (a portion of which continues to operate as California Steel Industries), located along the I-10 corridor between Valley Boulevard and Slover Avenue. The Auto Club (formerly California) Speedway, a regional attraction, was developed on a portion of the former Kaiser Steel mill south of Foothill Boulevard and west of Cherry Avenue. Residential planned community developments and planned industrial uses make up the majority of the existing developed areas between Jurupa Avenue and the City's southern boundary, which is near the project site. Plans for future development here include more non-residential development to take advantage of the area's proximity to the I-10 corridor for goods movement.

Planned Land Uses

The City of Fontana has land use authority within its incorporated City limits but not within the SOI area. Fontana's SOI area includes unincorporated areas of San Bernardino County adjacent to the City limits. Fontana's SOI area is mostly between I-10 and Jurupa Avenue, between the cities of Rancho Cucamonga and Fontana; however, a small SOI area is located between the City's northern boundary and the San Bernardino National Forest as well as east of Alder Avenue and north of San Bernardino Avenue.

The City of Fontana encompasses about 42.4 square miles within the City limits and about 10 square miles within the SOI area, for a total planning area of about 52.4 square miles (City of Fontana 2008). Within the City limits and SOI area, residential and non-residential land uses each make up about half of the planned land uses. Non-residential land use designations include community and general commercial, light and general industrial, and regional mixed uses. As of 2012, about 18% of the planning area was vacant and encompassed more than 6,000 acres. Most of the vacant areas are north of SR-210 in northern Fontana (City of Fontana 2012).

Local Land Use Setting

Landforms at and around the project site can be characterized as gently sloping flatlands that taper off from the eastern end of the Jurupa Hills. The southern half of the site includes vacant fields with ruderal native and nonnative grasses and forbs. Vegetated moderate to steep slopes are found on the west side. Armstrong Road travels in a northeast/southwest direction and bisects the southeastern corner of the site. Existing features on the northern half of the site include disturbed, partially vegetated graded dirt areas and two abandoned quarries; vegetated moderate to steep slopes are found in the southwestern portion of the site. The central portion of the site includes private and non-motorized off-road vehicle trails and illegal trash dumping. There are two water reservoirs just outside of the project site on the moderate to steep slopes of the Jurupa Hills to the west. There is a third reservoir west of the other two, beyond the western boundary of the project site.

Built Land Uses

The project site is south of Jurupa Avenue on either side of Locust Avenue and Armstrong Road, and is surrounded by a mixture of open space and residential land uses within the City of Jurupa Valley in Riverside County and the community of Bloomington in unincorporated San Bernardino County. Bloomington and the City of Jurupa Valley (east and south of the proposed project, respectively) consist mainly of lower density single-family residential development but also medium- to high-density residential and some commercial and industrial development near I-10. These areas are connected to the City of Fontana and the greater Inland Empire by I-10 and SR-60.

Near the project site, undeveloped areas include the Jurupa Hills (in Fontana) along the entire western boundary, a Southern California Edison (SCE) utility corridor along most of the northern boundary, and vacant/undeveloped areas east of the project site and south of 7th Street. Residential land uses near the project include mostly single-family residential developments east of Locust Avenue (between 7th and 11th Streets in Bloomington) and south of the project site (in the City of Jurupa Valley). Some rural residential development is found north of Jurupa Avenue.

Planned Land Uses

Planned land use and zoning requirements within Fontana are guided by the City's General Plan and Zoning and Development Code, respectively. In May 2007, Fontana approved the Valley Trails Specific Plan, which adopted the following planned land uses on the site: Residential Planned Community (R-PC; 3.0–6.4 dwelling units/acre), Multi-Family Residential (R-MF), Medium-Density Residential (R-M; 5.1–7.6 dwelling units/acre), Public Facilities (P-PF), and Recreational Facilities (P-R). Similarly, zoning designations for the project site were amended to Specific Plan (SP). Use restrictions on the project site are specified in the Valley Trails Specific Plan to allow for residential and public uses. The General Plan and zoning designations applied by the Valley Trails Specific Plan continue to apply to the project site.

Regulatory Setting

The project site is within the City limits of Fontana and, as such, land use and planning compliance is subject to the City's General Plan and Zoning and Development Code. These documents are long-range land use planning tools that serve as a blueprint for development within Fontana. Other organizations that guide development and make recommendations regarding discretionary actions in the region, but do not maintain authority over the proposed project, include the Southern California Association of Governments (SCAG) and its subregional constituent, the San Bernardino Associated Governments (SANBAG). These agencies coordinate development on a regional scale by planning for an appropriate balance between jobs, housing, growth, and overall development trends, as well as planning for appropriate transportation systems to serve existing and future land uses. Consistency with these agencies' planning documents is analyzed below under Impact LU-2.

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) is a comprehensive, multi-jurisdictional plan that focuses on the conservation of species and their associated habitats in western Riverside County south of the project site. The project site is not within the Western Riverside County MSHCP area or any other adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan area. However, the site is adjacent to the Jurupa Area Plan of the Riverside County General Plan and the Western Riverside County MSHCP, which border the southern project

boundary. A brief analysis related to adjacency issues is provided under Impact LU-3. Potentially applicable planning programs overseen by regional and local agencies are discussed below.

Regional

Southern California Association of Governments

SCAG is the largest metropolitan planning organization (MPO) in the United States. It functions as the MPO for 191 cities and more than 18 million residents within six counties (Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial Counties). As the designated MPO, SCAG is mandated by the federal and state government to prepare plans for regional transportation and air quality conformity. The most recent plan adopted by SCAG is the 2012–2035 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS), which was adopted on April 4, 2012, and amended on June 6, 2013. The RTP/SCS integrates transportation planning with economic planning and sustainability and aims to comply with state air quality goals, such as Senate Bill 375. With respect to transportation infrastructure, SCAG anticipates, in the RTP/SCS, that the six-county region will have to accommodate four million additional people by 2035 while also meeting the greenhouse gas emissions-reduction targets set by the California Air Resources Board. SCAG is empowered by state law to assess regional housing needs, with a specific allocation for each of the region's counties and cities. In addition, SCAG has taken on the role of planning for regional growth management.

SCAG also publishes the Regional Comprehensive Plan and Guide (RCPG), which is meant to encourage cities within the region to undertake the development of consistent, region-wide planning policies. The most recent RCPG, approved in 2008, was developed in cooperation with numerous agencies, including sub-regions of Southern California, county transportation commissions, the California Department of Transportation (Caltrans), the Metropolitan Water District, the California Energy Commission, the Bureau of Land Management of the Department of the Interior, the South Coast Air Quality Management District, the Ventura Air Pollution Control District, and other parties, both public and private. The RCPG contains core policies intended to provide local governments a base by which they can help ensure consistent planning throughout the region. However, because SCAG is not a regulatory body, compliance with the RCPG, while encouraged and often followed, is not mandatory.

The SCAG RCPG has been reviewed, and the applicable goals and policies that guide growth in the region have been applied to the proposed project. An analysis of the project's consistency with the SCAG RCPG is provided later in this section in Table 4.2.9-3. The evaluation of the proposed project in relation to the policies (which do not constitute mandates for local development) below is intended to provide direction for WVLCSP implementation.

The Land Use and Housing section of the RCPG establishes the following regional goal and policies:

- Successfully integrate land and transportation planning and achieve land use and housing sustainability by:
 - Focusing growth in existing and emerging centers and along major transportation corridors.
 - Creating significant areas of mixed-use development and walkable “people-scaled” communities.
 - Providing new housing opportunities, with building types and locations that respond to the region's changing demographics.

- Targeting growth in housing, employment, and commercial development within walking distance of existing and planned transit stations.
- Injecting new life into under-used areas by creating vibrant new business districts, redeveloping old buildings, and building new businesses and housing on vacant lots.
- Preserving existing, stable, single-family neighborhoods.
- Protecting important open space, environmentally sensitive areas, and agricultural lands from development.

Local

Fontana General Plan

The General Plan contains a statement of the community's vision and provides a roadmap regarding how to achieve that vision. Pursuant to California state guidelines, the General Plan contains seven required elements (land use, circulation, housing, open space, conservation, safety, and noise). It also includes five optional elements (air quality, community design, economic development, parks and recreation, and public facilities, services, and infrastructure). Each element contains specific goals and policies to guide future development. In addition to the overall vision for the City, the General Plan designates areas for specific types of land uses to provide consistent and compatible land use patterns that protect the health and welfare of the community.

General Plan Goals and Policies

The following General Plan goals and policies are relevant to the proposed project. An analysis of the project's consistency with these applicable goals and policies is provided in the *Impacts and Mitigation* section below.

Land Use Element (Chapter 3)

- **Goal 1:** Land use in our community is balanced between residential, commercial, industrial, open space, and recreational land uses that are developed to high standards of quality and provide diverse economic, social, and cultural opportunities for our citizens and those who wish to invest here.
 - Policy 1: Development shall be consistent with our land use plan and contribute to the maintenance of an economic base that provides high-quality jobs for those who choose to both live and work in Fontana.
 - Policy 3: New planned communities in our City shall be developed to high standards for site design and landscaping and shall incorporate and/or be linked with amenities such as community facilities, schools, parks, and other forms of open space.
- **Goal 2:** Quality of life in our community is supported by development that avoids negative impacts on residents and businesses and is compatible with, and enhances, our natural and built environment.
 - Policy 1: New development with potentially adverse impacts on existing neighborhoods or residents such as noise, traffic, emissions and stormwater runoff, shall be located and designed so that quality of life and safety in existing neighborhoods are preserved.

- Policy 2: Regionally beneficial land uses such as transportation corridors, flood control systems, utility corridors, and recreational corridors shall be sensitively integrated into our community.
- Policy 4: Hillside development and development adjacent to natural areas at northern and southern edges of the City shall be designed to preserve natural features and habitat.

Circulation Element (Chapter 4)

- **Goal 1:** A balanced transportation system for Fontana is provided that meets the mobility needs of current and future residents and ensures the safe and efficient movements of vehicles, people, and goods throughout the City.
 - Policy 1: Plan for the provision of a variety of street classifications specifically designed to serve the various traffic needs in the area, including major highways, primary highways, secondary highways, collector streets, industrial collectors, and local streets.
 - Policy 3: Design each arterial and its terminal facilities, including parking, with sufficient capacity to accommodate anticipated traffic based on intensity of projected and planned land use in the City and the region.
 - Policy 4: Regulate the intensity of land uses to keep traffic on any arterial in balance with roadway capacity by requiring traffic studies to identify local roadway and intersection improvements necessary to mitigate their traffic impacts.
 - Policy 5: Locate new development and their access points in such a way that traffic is not encouraged to utilize local residential streets and alleys for access to the development and its parking.
 - Policy 12: All streets and intersections designed after the adoption of the general plan will be planned to function at level of service (LOS) C or better, wherever possible. Improvements to existing streets will be designed to LOS C standards whenever feasible.
- **Goal 3:** A circulation system is provided that reduces conflicts between commercial trucking, private/public transportation, and land uses.
 - Policy 3: Develop appropriate protection measures along truck routes to minimize noise impacts on sensitive land uses, including but not limited to residences, hospitals, schools, parks, daycare facilities, libraries, and similar uses.

Housing Element (Chapter 5)

- **Goal 5.1:** A wide range of housing units by location, type of unit, and price are provided in our City to meet the existing and future needs of Fontana residents.

Community Design Element (Chapter 6)

- **Goal 2:** We preserve and use our open spaces as recreational amenities, visual boundaries, and view corridors.
 - Policy 3: The City's open space network shall be designed to integrate both the built and natural environment.
 - Policy 4: Preservation of open space near the periphery of City boundaries provides important visual contrast to the built environment.

- **Goal 5.1:** Existing and new development reflects extensive use of high-quality, contemporary design, incorporating unifying, community-wide design elements.
 - Policy 3: View fencing and distinctively articulated masonry walls are preferred to long stretches of block walls adjoining residential areas.
- **Goal 6:** Conflict and spillover effects at the interface of differing land uses are minimized with appropriate design standards.
 - Policy 1: Specialized design standards and regulations shall be applied to those areas where conflicting land uses meet.

Economic Development Element (Chapter 7)

- **Goal 2:** Fontana's industrial/manufacturing employment base is expanding and diversified.
 - Policy 3: More diversified and employee-rich businesses should be sought in the City to augment its already established presence as a major transportation and distribution hub.

Public Services Element (Chapter 8)

- **Goal 2:** Our law enforcement and fire protection services meet our population's public safety needs and contribute to a sense of safety and high quality of life in our community.
 - Policy 8: Adequate fire and police response times shall be maintained in the City.
 - Policy 9: An "ISO" fire rating of class 3 shall continue to be maintained in the City.
 - Policy 10: Ensure that new fire stations shall be built in areas of new development so that response times are not eroded.
- **Goal 5:** Careful planning ensures the timely, logical, and cost-effective development of infrastructure facilities in our City.
 - Policy 1: Development and supporting infrastructure shall be phased so that contemporary infrastructure is available concurrent with the occupancy of development projects.
 - Policy 2: Development should be approved in a pattern that avoids the need to extend infrastructure excessive distances to provide service and support.
 - Policy 3: Infrastructure installation shall be coordinated within public rights-of-way so that multiple disruptions are avoided.
- **Goal 10:** Our City uses the latest in communication technology to conveniently link homes, businesses, schools, and public facilities to a dynamic community Intranet.
 - Policy 4: "Smart" home design, equipped with sensors for efficient heating and cooling, supports "green building" concepts of energy efficiency and should be encouraged by the City when approving new development.

Open Space and Conservation Element (Chapter 9)

- **Goal 1.1:** Preserve Natural Open Space in the San Gabriel Mountains and Jurupa Hills.
 - Policy 1: Support preservation of the open space along the San Gabriel Mountains and Jurupa Hills for natural habitat, scientific inquiry, passive recreation, and scenic values.
- **Goal 1.2:** Conserve natural habitat and protect rare, threatened, and endangered species.

- Policy 1: Encourage the preservation of natural habitat in conjunction with private or public development projects.
- Policy 3: Apply local CEQA [California Environmental Quality Act] procedures to identify potential impacts on rare, threatened, and endangered species.
- **Goal 2.1**: Provide public access to allow joint recreational use of utility corridors, wherever feasible.
 - Policy 1: Link multi-use utility corridors to other elements of the local and regional parks and trails systems, wherever feasible.
- **Goal 3.2**: Protect water resources in the planning area from urban runoff and other potential pollution sources.
 - Policy 1: Promote the use of structural and nonstructural water quality best management practices (BMPs) and land planning and project-level site planning.
- **Goal 4.1**: The City will encourage and support the preservation, rehabilitation, and/or restoration of historical and archaeological resources within the City boundaries and its SOI.
 - Policy 2: The City will consider the identification of cultural resources an integral part of the planning process.

Parks, Recreation and Trails Element (Chapter 10)

- **Goal 2.1**: Provide public access to and allow joint recreational use of utility corridors, wherever feasible.
 - Policy 1: Link multi-use utility corridors to other elements of the local and regional parks and trails systems, wherever feasible.
- **Goal 2.2**: Expand the open space and conservation system, where feasible, to include private and public lands that offer multi-use open space and cultural opportunities.
 - Policy 1: Link multi-use utility corridors to other elements of the local and regional parks and trails systems, wherever feasible.
- **Goal 2**: Adequate parks, recreation facilities, and after-school programs are provided in newly developed areas of our City.
 - Policy 2: Newly developed parks should be connected, wherever practical, to the existing and future bicycle and recreational trail system.
- **Goal 3**: Our parks will be safe and well maintained.
 - Policy 1: Parks shall be designed in accordance with contemporary safety standards and "CPTED" (Crime Prevention Through Environmental Design) principles.
- **Goal 1**: There is extensive use of non-motorized transportation, such as bicycles, equestrian, and pedestrian activity, throughout our City for recreation, access to community facilities, and even local commuting.
 - Policy 2: All new developments on designated routes shall provide bicycle and pedestrian routes linked to adjacent facilities.
- **Goal 5**: Our system of bikeways and trails is benefited by efficient use of utility easements, flood-control easements, and railroad rights-of-way.

Safety Element (Chapter 11)

- **Goal 1:** Injury and loss of life, property damage, and other impacts caused by seismic shaking, fault rupture, ground failure, earthquake-induced landslides, and other earthquake-induced ground deformation are minimized in our City.
 - Policy 3: The City shall strive to ensure that the design of new structures and the performance of existing structures address the appropriate earthquake hazards.
- **Goal 2:** The risk to life or limb and property damage resulting from geologic hazards is minimized in our City.
 - Policy 1: The City shall take actions to minimize grading and otherwise changing the natural topography while protecting public safety and reducing the potential for property damage as a result of geologic hazards.
- **Goal 3:** Injury, loss of life, property damage, and economic and social disruption caused by flood and inundation hazards are minimized in our City.
 - Policy 1: The City shall discourage new development in flood hazard areas and implement mitigation measures to reduce the hazard to existing developments that are located within the 100- and 500-year flood zones.
- **Goal 4:** Threats to public and private property from urban and wildland fire hazards are reduced in our City.
 - Policy 1: The City shall require residential, commercial, and industrial structures to implement fire hazard-reducing designs and features.
 - Policy 2: The City shall ensure to the extent possible that fire services, such as fire equipment, infrastructure, and response times, are adequate for all sections of the city.
 - Policy 3: The City shall require all new development in areas with a high fire hazard to provide fire retardant landscaping and project designs that reduce their fire hazard. The City shall take measures to reduce the risk of fire at the Wildland Urban Interface.
- **Goal 5:** The potential for hazardous contamination is reduced in our City.
 - Policy 1: The City shall strive to reduce the potential for residents, workers, and visitors to Fontana from being exposed to hazardous materials and wastes.

Noise Element (Chapter 12)

- **Goal 1:** Our City protects its sensitive land uses from excessive noise through diligent planning.
 - Policy 6: The State of California Office of Planning and Research General Plan Guidelines shall be followed with respect to acoustical study requirements.
 - Policy 7: Noise spillover or encroachment from commercial, industrial, and educational land uses shall be minimized in adjoining residential neighborhoods or noise-sensitive uses.
- **Goal 2:** Our City has a diverse and efficiently operated ground transportation system that generates the minimum feasible noise on its residents.
 - Policy 2: On-road trucking activities shall be regulated in the City to ensure noise impacts are minimized.

- Policy 5: Development that generates increased traffic and subsequent increases in the ambient noise level adjacent to noise-sensitive land uses shall provide appropriate mitigation measures.
- Policy 6: Noise mitigation practices shall be employed when designing all future streets and highways and when improvements occur along existing highway segments. These mitigation measures will emphasize the establishment of natural buffers or setbacks between the arterial roadways and adjoining noise-sensitive areas.
- **Goal 3**: Our City's residents are protected from the negative effects of "spill over" noise in our community.
 - Policy 1: Residential land uses and areas identified as noise sensitive shall be protected from excessive noise from non-transportation sources, including industrial, commercial, and residential activities and equipment.
 - Policy 3: Industrial uses shall not exceed commercial or residential stationary-source noise standards at the most proximate land uses, as appropriate. (Industrial noise may spill over to proximate industrial uses so long as the combined noise does not exceed the appropriate industrial standards.)
 - Policy 4: Non-transportation noise shall be considered in land use planning decisions.
 - Policy 5: Construction shall be performed as quietly as feasible when performed in proximity to residential or other noise-sensitive land uses.

Air Quality Element (Chapter 13)

- **Goal 2**: Our City has a diverse and efficiently operated ground transportation system that generates the minimum feasible pollutants.
 - Policy 1: The City shall seek to integrate land use and transportation planning to the maximum extent practical.
 - Policy 6: Developers in our community shall work to reduce vehicle trips and total vehicle miles traveled in projects that are approved here.
 - Policy 14: Heavy trucks shall be discouraged from excessive idling both at the roadside and during unloading/loading operations.
- **Goal 3**: Stationary air pollution sources shall comply with applicable air district rules and control measures.
 - Policy 10: Any project that exceeds allowable emissions, as established by SCAQMD, shall mitigate its anticipated emissions to the extent reasonably feasible.
- **Goal 4**: The minimum practicable particulate emissions are released in our City from construction and operation of roads and buildings.
 - Policy 1: Particulate emissions from roads, parking lots, construction sites, and agricultural lands shall be kept at the minimum feasible level.

General Plan Land Use Designations

The Land Use Element of the City of Fontana General Plan designates various locations where certain types of development should be situated. It is designed to ensure that sufficient land will be available for commercial, industrial, residential, and public uses to meet the needs of the growing community, enhance community character, preserve important natural resources, and ensure the

provision of adequate public services. The land use categories reflect current zoning, which is depicted on the current zoning map for Fontana (City of Fontana 2013b) and discussed below. Current land use designations applicable to the project area include Residential Planned Community (R-PC; 3.0–6.4 dwelling units/acre), Multi-Family Residential (R-MF), Medium-Density Residential (R-M; 5.1–7.6 dwelling units/acre), Public Facilities (P-PF), and Recreational Facilities (P-R). The current General Plan land use designations and zoning established for the site, as well as surrounding properties, are identified in Table 4.2.9-1.

Table 4.2.9-1. Existing On-Site and Surrounding Property Zoning and Land Use Designations

Location	City of Fontana		San Bernardino County – Bloomington	City of Jurupa Valley (Jurupa Area Plan – Riverside County)	
	Land Use	Zoning	Land Use/Zoning*	Land Use	Zoning
Planning Area 1					
Parcels 1 through 6 and 8	P-PF, P-R, R-M, R-MF, R-PC	SP¹	--	--	--
<i>Surrounding Areas</i>					
North	P-UC R-PC	R-PC ^{1, 2}	--	--	--
East	R-PC	R-PC ¹	RS RL-20	--	--
South	--	--	--	LDR MHDR	A-1 SP
West	R-PC P-PF	R-PC P-PF ¹	--	--	--
Planning Area 2					
Parcels 7 and 9	P-R	SP, R-PC	--	--	--
<i>Surrounding Areas</i>					
North	--	--	RS-1, IN	--	--
East	R-PC	R-PC	RS, IN	--	--
South	P-UC	R-PC ²	--	--	--
West	R-PC	R-PC ¹	--	--	--
Planning Area 3					
Detention Basin Area (Lot A)	P-PF	SP	--	--	--
<i>Surrounding Areas</i>					
North	P-UC	R-PC ²	--	--	--
East	--	--	RS	--	--
South	--	--	RS	--	--
West	R-PC, P-R	SP ¹	--	--	--

Legend:

Fontana Land Use/Zoning:

Residential

R-PC = Residential Planned Community

R-MF = Residential Multi-Family

R-M = Medium-Density Residential

SP = Specific Plan

Public

P-PF = Public Facilities

P-R = Recreational Facilities

P-UC = Public Utility Corridors

Overlay Zones

¹ Hillside

² Public Utility Corridor

Location	City of Fontana		San Bernardino County – Bloomington	City of Jurupa Valley (Jurupa Area Plan – Riverside County)	
	Land Use	Zoning	Land Use/Zoning*	Land Use	Zoning
San Bernardino County Land Use/Zoning:			Jurupa Valley (Riverside County) Land Use/Zoning:		
* = Land use and zoning is combined.			LDR = Low-Density Residential		
RS = Single Residential (1 unit/0.25 acre)			MHDR = Medium High-Density Residential		
RS-1 = Single Residential (1 unit/acre)			A-1 = Light Agriculture		
RL-20 = Rural Living			SP = Specific Plan		
IN = Institutional					
Sources: City of Fontana 2003; County of Riverside 2013; County of San Bernardino 2013.					

Fontana Zoning and Development Code

The Fontana Zoning and Development Code establishes regulations for land development to implement the land use designations applied by the City's General Plan. The code further specifies permitted actions and uses within a zone, development standards such as height and setback requirements, and required permits for specific actions. The project site is currently zoned SP, which means that development and use regulations on the project site are subject to a specific plan, in this case the existing adopted Valley Trails Specific Plan, which permits residential, commercial, recreational, and school uses at the project site. The site also has two existing overlays, the Public Utility Corridor Overlay (P-UC) and the Hillside Overlay (HO), which include the following requirements:

- **Public Utility Corridor (P-UC) Overlay.** Per Division 7, Section 30-301.5, of the City's Zoning and Development Code, development within this zone must have an adequate buffer from adjacent development, and any use permitted shall be subject to a conditional use permit.
- **Hillside Overlay.** Per Division 7, Section 30-301.5, of the City's Zoning and Development Code, development within this zone must address issues related to earth-movement activities (i.e., grading, slope manufacturing, landscaping) to minimize adverse effects on natural landforms associated with soil erosion, dust control, water runoff, construction emissions, and biological resources. Hillside protection policies within the Hillside Overlay include restricting development in steep areas, limiting earth movement, contouring manufactured slopes to resemble natural conditions, and restricting manufactured slope and retaining wall heights. Specifically, any development within this district on a slope of 10 percent or greater shall require a hillside development permit (HDP) approved by the community development director or the planning commission.

Fontana Grading Ordinance

Rules and regulations pertaining to earth resources and grading are set forth in Section 17.04.010 of the City of Fontana Municipal Code. The rules and regulations are intended to implement the goals and objectives of the City of Fontana General Plan and control excavation, grading, and earthwork, including fills and embankments. The municipal code also establishes the administrative procedures for grading plan approval, issuance of grading permits, and site inspections. It also establishes penalties for unauthorized grading activity. The purpose of this section of the code is to protect life, limb, property, public welfare, and the physical environment by regulating grading on private property. It also regulates hillside and arroyo grading in a manner that minimizes adverse effects on natural landforms (e.g., effects related to soil erosion, dust, runoff, construction equipment emissions).

Bloomington Community Plan (San Bernardino County)

The Bloomington Community Plan (County of San Bernardino 2007a) provides guidance for future land use and development within the Bloomington community and builds upon the County of San Bernardino General Plan (County of San Bernardino 2007b). The majority of the community is designated for single-family residential development, followed by institutional and industrial land use designations. The project site is not within Bloomington; however, the southern part of the South Bloomington community is adjacent to the project site. This area is characterized as residential; however, the community plan includes an "Additional Agricultural Overlay" in the south-central portion of the area in an attempt to preserve the rural character and the agricultural uses that occurred historically in the community. This overlay includes rural standards for development and limitations on adjacent land use to ensure compatibility. The project site is not adjacent to areas designated with the agricultural overlay. The nearest area designated within the agricultural overlay is along Appaloosa Lane, north of Paso Fino Street, east of the project site.

Jurupa Area Plan (City of Jurupa Valley within Riverside County)

The City of Jurupa Valley was incorporated in July 2011, and has adopted the Riverside County General Plan. The City is currently in the process of preparing its own General Plan to replace the Riverside County General Plan (Laurie Lovrett pers. comm.). Land uses within Jurupa Valley continue to be designated per the Jurupa Area Plan (County of Riverside 2003a), which is part of the Riverside County General Plan (County of Riverside 2003b). A comprehensive update to the General Plan is currently underway (as of September 2014).

About half of Jurupa Valley's land use designations as shown in the Jurupa Area Plan are categorized as "Community Development Foundation Component," which includes residential, commercial, industrial, office, public facility, and mixed-use areas. The rest of the community is designated for low-density residential (23%), open space (22%), and rural and agricultural (5%) uses. The project site is not within the City of Jurupa Valley or the Jurupa Area Plan; however, the southern portion of the project site borders Jurupa Valley and is adjacent to and north of Jurupa Valley's residential land use designations, as shown in Table 4.2.9-1 above.

Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County MSHCP encompasses approximately 1.26 million acres (1,966 square miles) and covers a diverse landscape, from urban centers to undeveloped foothills and montane forests, all of which are under multiple jurisdictions. The overall goal of the plan is to maintain biological and ecological diversity within the rapidly urbanizing region. The MSHCP allows Riverside County and associated cities, and potentially adjacent cities, including the City of Fontana, to better control local land use decisions and maintain a strong economic climate in the region while addressing the requirements of the state and federal Endangered Species Acts.

The MSHCP serves as a habitat conservation plan for lands within Riverside County, pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act, as well as a natural community conservation plan under the Natural Community Conservation Plan Act of 2001. The MSHCP is used to allow participating jurisdictions to authorize take of plant and wildlife species under the authority of the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife in exchange for the assembly and management of a coordinated MSHCP area.

The project site is not within an adopted habitat conservation plan or natural community conservation plan area; however, the site is directly adjacent to the Western Riverside County MSHCP. Potential impacts on sensitive wildlife habitats within the project site and immediately south of the site as well as the potential to interfere with the movement of any native resident or migratory wildlife species or established native resident or migratory wildlife corridors (within the Western Riverside County MSHCP criteria areas) are evaluated in Section 4.2.3, *Biological Resources* (see LU-3 below).

Impact Analysis

Methodology

The analysis of land use and planning impacts involves a qualitative discussion of the proposed land use changes compared with existing site conditions and applicable planning documents. Potential land use and planning impacts are evaluated in the context of the site and surrounding community. The impact analysis below evaluates any potential for changes to the existing community as a result of physical development of the site.

An evaluation of consistency with applicable land use and planning documents, including any habitat or natural community conservation plans, is also provided.

Thresholds of Significance

Criteria for determining the significance of impacts related to land use and planning are based on criteria contained in Appendix G of the State CEQA Guidelines. The proposed project could have a significant impact on the environment if it would result in any of the following:

- LU-1** Physically divide an established community.
- LU-2** Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.
- LU-3** Conflict with any applicable habitat conservation plan or natural community conservation plan.

Impacts and Mitigation

Impact LU-1. Physically divide an established community

The proposed project would facilitate the development of several undeveloped parcels with industrial warehouse uses. As part of implementation of the WVLCSP, the project would also require improvements to local roadway connections to surrounding communities. The area is currently characterized by open space, steep hillsides, roadways, utility easements, and single-family residential development. The WVLCSP project would involve either construction of roadways within the project site's boundaries or improvements to local existing roadways. Therefore, development of the proposed WVLCSP would not reduce the connectivity between areas of a community such that persons are physically separated from other areas of the existing community, and would not disturb or divide the existing layout of the community.

The project would include mobility improvements to facilitate connectivity with the surrounding communities of Jurupa Valley and Bloomington. The project would also be compatible with existing commercial and industrial development near the I-10 corridor, about 1 mile north of the project site.

Access to the adjacent City of Jurupa Valley and the community of Bloomington would continue to be provided by Armstrong Road, which runs through the proposed project site before becoming Locust Avenue. Armstrong Road would be improved with a right-of-way width of 92 feet under the proposed project with a 68-foot-wide curb-to-curb roadway section, a 3- to 6-foot-wide buffer or planter strip on each side of the street, and a painted median, which would improve mobility for pedestrians, bicyclists, and vehicles in the community. Similarly, vehicular, bicycle, and pedestrian access through Parcels 1 through 3 would be improved with the extension of Alder Avenue. Under the proposed project, Alder Avenue would extend from the intersection at Armstrong Road to the project site and terminate south of Parcel 2. Other proposed roadway modifications along Locust Avenue and Jurupa Street would be similar to the Armstrong Road improvements (i.e., sidewalks, planter strips, painted medians) and enhance local connectivity and improve physical connections to surrounding areas through an improved circulation system (see Section 3.4.3, *Circulation Improvements*).

Direct connectivity with areas west of the project site would remain unavailable because of steep terrain associated with the Jurupa Hills. Portions of the Jurupa Hills occur on the project site and continue for about 5 miles to the west. These steep areas within the project site (Parcel 8) would be preserved as open space under the proposed WVLCSP, and connections west of the project site would continue to be unavailable, similar to existing conditions.

The proposed industrial warehouse project in a vacant area of the City, with the inclusion of circulation improvements that would facilitate connectivity and accessibility to adjacent communities and transportation corridors, would not result in the physical division of an established community. No impacts would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

Impact LU-2. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect

Approval of the proposed project would require two general plan amendments and a zoning change for the proposed development described in the WVLCSP to comply with the City's regulatory processes and achieve consistency with the applicable land use plans, policies, and regulations established by the City of Fontana (e.g., the City's General Plan and Zoning and Development Code). Specifically, the project would replace the existing residential land use designations and zoning requirements of the adopted Valley Trails Specific Plan with light industrial (I-L) and open space uses (OS-PF and OS-NA) per the proposed WVLCSP. Project-related actions would also require a second general plan amendment to amend the planned alignment for Alder Avenue in the City's Circulation Element. The planned alignment for Alder Avenue would terminate south of Parcel 2

instead of bisecting the project site and connecting Jurupa Avenue to Locust Avenue. Project approval would also replace the existing Valley Trails Specific Plan and incorporate Parcel 9 within the proposed WVLCSP.

Per the City's Zoning and Development Code, Section 30-62(a)(2), a specific plan is intended "to implement the goals and objectives of the general plan." As such, a consistency analysis is presented below in Table 4.2.9-2. It presents a side-by-side comparison of applicable general plan goals and policies and shows how the project would implement the City's General Plan if the proposed specific plan, general plan amendments, and zoning change were to be approved. Table 4.2.9-3 also includes a consistency analysis for SCAG regional policies. Because the proposed project would not result in an inconsistency with the General Plan and Zoning or Development Code, no significant impact would occur, and no mitigation measures would be necessary.

Table 4.2.9-2. Land Use and Planning Consistency Analysis

Goals and Policies	Consistency Analysis	Finding
City of Fontana General Plan – Goals and Policies		
Land Use Element		
Goal 1: Land Use in our community is balanced between residential, commercial, industrial, open space, and recreational land uses that are developed to high standards of quality and provide diverse economic, social, and cultural opportunities for our citizens and those who wish to invest here.	The proposed project includes a land use plan that would provide for diverse opportunities for residents, employers, and the City as a whole, consistent with this goal. The proposed land use plan would balance industrial warehouse development, public facility, and open space uses on site to allow for a high-quality and state-of-the-art industrial center. The WVLCSP also includes the preservation of biological resources and stormwater storage on site. Further, the site's proximity to residential areas would improve the jobs/housing balance and promote long-term economic health by creating new job opportunities for Fontana's citizens and attracting new investment opportunities.	Consistent
Policy 1: Development shall be consistent with our land use plan and contribute to the maintenance of an economic base that provides high quality jobs for those who choose to both live and work in Fontana.	Approval of the proposed project would allow for the development of an industrial warehouse facility, consistent with the Light Industrial (I-L) and Open Space (OS) land uses designated in the land use plan. Because of the site's location near the residential communities of Fontana, Jurupa Valley, and Bloomington, the proposed project would contribute to the maintenance of an economic base that provides high-quality jobs for residents and employees of the area within Fontana.	Consistent

Goals and Policies	Consistency Analysis	Finding
City of Fontana General Plan – Goals and Policies		
Policy 3: New planned communities in our City shall be developed to high standards for site design and landscaping and shall incorporate and/or be linked with amenities such as community facilities, schools, parks and other forms of open space.	The proposed WVLCSP includes design goals and guidelines to develop an attractive and high-quality warehouse center that would coexist with surrounding residential areas. Consistent with this policy, the proposed land use plan also includes designated open spaces on the site that would be linked with other open spaces in the Jurupa Hills to the west, including a section of the Jurupa Hills Trail and the Riverside County Trails and Bikeway System.	Consistent
Goal 2: Quality of life in our community is supported by development that avoids negative impacts on residents and businesses and is compatible with, and enhances, our natural and built environment.	Development per the WVLCSP is designed to accommodate natural features and sensitive habitat on the project site. It would preserve sensitive natural areas in passive open space and be generally consistent with this goal. As described in Section 4.2.14, because timing for implementation of roadway and freeway mainline improvements is not known, significant unavoidable traffic impacts would result after implementation of Mitigation Measures TRA-1b through TRA-1d . Other air quality and noise impacts would also be significant and unavoidable, although compliance with applicable regulations and implementation of project-specific mitigation measures would reduce project-related impacts to the extent feasible. Moreover, the proposed landscaping and circulation enhancements along a private street (old Alder Avenue), Locust Avenue, Armstrong Road, and Jurupa Avenue would improve mobility and the aesthetics of the street network to avoid many negative impacts on residents, consistent with this goal.	Consistent
Policy 1: New development with potentially adverse impacts on existing neighborhoods or residents such as noise, traffic, emissions and storm water runoff, shall be located and designed so that quality of life and safety in existing neighborhoods are preserved.	Adverse impacts on existing neighborhoods as a result of new development per the proposed WVLCSP are discussed for biological resources, cultural resources, noise, traffic, air quality, greenhouse gas emissions, and hydrology and water quality in various sections of this Draft Environmental Impact Report (EIR). Potentially significant impacts related to traffic safety would be mitigated by Mitigation Measure TRA-1a during project construction. Traffic impacts on local intersections would be reduced with installation of roadway improvements and payment of traffic impact fees per Mitigation Measures TRA-1b through TRA-1d to preserve the quality of life and safety in existing neighborhoods. Stormwater and drainage would be retained on site and held in stormwater basins to avoid any adverse impacts on the surrounding neighborhoods. Although the project would result	Consistent

Goals and Policies	Consistency Analysis	Finding
City of Fontana General Plan – Goals and Policies		
Policy 2: Regionally beneficial land uses such as transportation corridors, flood control systems, utility corridors, and recreational corridors shall be sensitively integrated into our community.	in significant unavoidable noise, traffic, and air quality impacts, compliance with applicable regulations and implementation of project-specific mitigation measures would reduce project-related impacts to the extent feasible. Development per the proposed WVLCSP would integrate transportation corridors, stormwater drainage and flood control systems, utility corridors, and recreational corridors with the surrounding community, consistent with this policy. As part of the project, community roadways would be improved both on and off site with right-of-way improvements, including landscaping, street widening, and sidewalk improvements. Internal roadways would be integrated to the existing street network via several driveways along Armstrong Road and Locust Avenue. Flood control systems would be developed on site with detention basins that would collect on-site drainage and be maintained by the City. The existing SCE utility corridor between Parcel 7 and Lot A east of Locust Avenue would not be affected by the proposed project, and existing recreational amenities, including the SCE Easement Trail and the Jurupa Hills Trail, would be integrated into the proposed development plan for the WVLCSP.	Consistent
Policy 4: Hillside development and development adjacent to natural areas at northern and southern edges of the City shall be designed to preserve natural features and habitat.	The project site includes a portion of the Jurupa Hills at the southern edge of the City. No hillside development is identified in the proposed WVLCSP, and natural areas would be designed as open space to preserve natural features and habitat, consistent with this policy.	Consistent
Circulation Element		
Goal 1: A balanced transportation system for Fontana is provided that meets the mobility needs of current and future residents and ensures the safe and efficient movements of vehicles, people and goods throughout the City.	The City's Circulation Element identifies the mobility needs for future Fontana residents and ensures the safe and efficient movements of vehicles, people, and goods. The proposed transportation improvements identified in the WVLCSP would improve the base right-of-way of Locust Avenue, Armstrong Road, Jurupa Avenue and a new private street (old Alder Avenue), consistent with their general plan designations in the Circulation Element. As such, the proposed project would achieve this goal and no inconsistencies would result.	Consistent
Policy 1: Plan for the provision of a variety of street classifications specifically designed to serve the various traffic needs in the area, including major highways, primary highways, secondary highways,	Consistent with the street classifications per the City's Circulation Element, a new private street (old Alder Avenue) would be improved as a Modified Secondary Highway, Locust Avenue and Armstrong Road would be improved as Modified Primary Highways, and Jurupa Avenue would be	Consistent

Goals and Policies	Consistency Analysis	Finding
City of Fontana General Plan – Goals and Policies		
collector streets, industrial collectors, and local streets.	improved as a Primary Highway along the project frontage. No inconsistencies would occur as a result of project implementation, with the exception of Alder Avenue, which would no longer extend from Jurupa Avenue through the project site, in accordance with the general plan. Following the general plan amendment to change the proposed alignment, no inconsistencies would result.	
Policy 3: Design each arterial and its terminal facilities, including parking, with sufficient capacity to accommodate anticipated traffic based on intensity of projected and planned land use in the City and the region.	The project would comply with City codes related to parking, and the adequacy of on-site parking would be verified as part of Site Plans and Design Review approval. Also see Circulation Element, Goal 1, Policy 1, above regarding roadway improvements.	Consistent
Policy 4: Regulate the intensity of land uses to keep traffic on any arterial in balance with roadway capacity by requiring traffic studies to identify local roadway and intersection improvements necessary to mitigate their traffic impacts.	A traffic study (Appendix L) has been prepared to analyze the proposed land uses and development scenario detailed in the WVLCSP. The study identifies local intersection improvements at Armstrong Road/Sierra Avenue, Alder Avenue/Slover Avenue, Locust Avenue/Santa Ana Avenue, Locust Avenue/Jurupa Avenue, and the Cedar Avenue/I-10 westbound ramps that would be necessary to mitigate traffic impacts, consistent with this policy.	Consistent
Policy 5: Locate new development and their access points in such a way that traffic is not encouraged to utilize local residential streets and alleys for access to the development and its parking.	The proposed WVLCSP incorporates driveway channelization and truck route designations, and it establishes a Transportation Management Association (TMA) to ensure that local residential streets and alleys are not used by tenants of the proposed industrial warehouse development (see Section 3.4.3, <i>Circulation Improvements</i>).	Consistent
Policy 12: All streets and intersections designed after the adoption of the General Plan will be planned to function at level of service (LOS) C or better, wherever possible. Improvements to existing streets will be designed to LOS C standards whenever feasible.	As discussed in Section 4.2.14, <i>Transportation and Traffic</i> , implementation of Mitigation Measures TRA-1c and TRA-1d as part of the ongoing implementation of San Bernardino County's Nexus Study program would provide funding to construct improvements needed to achieve desired levels of service within San Bernardino County, while implementation of Riverside County's existing Transportation Uniform Mitigation Fee Program would fund improvements in Riverside County. The proposed project would be required to install project frontage circulation improvements for circulation facilities affected by the project to improve street function. With improvements, the levels of service in the City would not be deficient for the Existing Plus Project scenario.	Consistent

Goals and Policies	Consistency Analysis	Finding
City of Fontana General Plan – Goals and Policies		
Goal 3: A circulation system is provided that reduces conflicts between commercial trucking, private/public transportation, and land uses.	The proposed project would involve specific plan requirements including driveway channelization and truck route designations to reduce or avoid conflicts between commercial trucking and the surrounding land uses. Also, a TMA would be established with the intent of minimizing truck-trip impacts and ensuring that trucks use authorized routes.	Consistent
Policy 3: Develop appropriate protection measures along truck routes to minimize noise impacts to sensitive land uses including but not limited to residences, hospitals, schools, parks, daycare facilities, libraries, and similar uses.	The proposed project would incorporate driveway channelization, truck route designation, and other methods, including a TMA to guide project traffic to the regional transportation network and away from residential streets. Additionally, as stated in Section 4.2.10, <i>Noise</i> , the proposed truck haul routes would not be near any identified sensitive land uses.	Consistent
Housing Element		
Goal 5.1: A wide range of housing units by location, type of unit, and price are provided in our City to meet the existing and future needs of Fontana residents.	One of the objectives of the project involves replacing the Valley Trails Specific Plan designation on the site with the WVLCSP to facilitate an industrial warehouse use in southeast Fontana in place of a residential planned community. As such, the project would remove the potential to construct up to 1,154 dwelling units, and no new housing is proposed. However, the availability of a variety of existing housing types throughout the City is sufficient to accommodate the demand for a mix of housing types.	Consistent
Community Design Element		
Goal 2: We preserve and use our open spaces as recreational amenities, visual boundaries, and view corridors.	The land use plan for the proposed WVLCSP designates approximately 55 acres for open space as OS-NA and would preserve this area in its natural condition. The OS-PF designation would encompass approximately 15 acres and would allow parks and other recreational uses. A section of the Jurupa Hills Trail would be maintained within the proposed open space area, and the connection to the Riverside County Trails and Bikeway System would be maintained. The project would maintain the existing trail in the SCE utility corridor for recreational use, consistent with this goal.	Consistent
Policy 3: The City's open space network shall be designed to integrate both the built and natural environment.	The proposed WVLCSP involves industrial warehouse development and the preservation of open space uses on site. Existing recreational and open space areas adjacent to the project site, such as the Jurupa Hills Trail and the existing trail within the SCE utility corridor, would be preserved and integrated into the overall project design, consistent with this policy.	Consistent

Goals and Policies	Consistency Analysis	Finding
City of Fontana General Plan – Goals and Policies		
Policy 4: Preservation of open space near the periphery of City boundaries provides important visual contrast to the built environment.	See discussions of Community Design Element, Goal 2 and Policy 3, above. Also, the entirety of Parcel 8 would be preserved as part of the WVLCSP.	Consistent
Goal 5.1: Existing and new development reflects extensive use of high-quality, contemporary design, incorporating unifying, community-wide design elements.	As stated in Chapter 3, <i>Project Description</i> , one of the objectives of the proposed project is to develop design guidelines that achieve a high-quality, cohesive design character for development of the WVLCSP; create a desirable asset to the community; and enhance the project's overall value.	Consistent
Policy 3: View fencing and distinctively articulated masonry walls are preferred to long stretches of block walls adjoining residential areas.	See discussion of Community Design Element Goal 5.1, above. The WVLCSP would provide for physical barriers such as screen walls and berms and would include regulations to reduce noise, visual, and light and glare impacts. Perimeter and retaining walls would be included where needed and be made of poured-in-place concrete, similar and complementary to the materials used for the buildings, with accents of decorative stone or colored concrete to enhance the visual appearance. Further, the project would include sign standards and wall sign standards to achieve a visually attractive development to be reviewed and be verified as part of the Design Review approval.	Consistent
Goal 6: Conflict and spillover effects at the interface of differing land uses are minimized with appropriate design standards.	Development per the proposed WVLCSP would introduce an industrial park development near existing residential areas. Design requirements in the WVLCSP set forth standards and guidelines to minimize any conflicts or spillover effects by requiring driveways to have clearly visible entrances and parking and loading areas to be screened appropriately. Other landscape, streetscape, and hardscape design standards are included in the proposed WVLCSP to relate development of the area to the surrounding residential areas.	Consistent
Policy 1: Specialized design standards and regulations shall be applied to those areas where conflicting land uses meet.	See discussions of Community Design Element Goal 2, Policy 3 and Policy 4; Goal 5.1, Policy 3; and Goal 6 above.	Consistent
Economic Development		
Goal 2: Fontana's industrial/manufacturing employment base is expanding and diversified.	The proposed WVLCSP would expand and further diversify Fontana's industrial/manufacturing employment base with a plan to develop a high-quality industrial warehouse development.	Consistent
Policy 3: More diversified and employee-rich businesses should be sought in the City to augment its already established presence as a	Industrial uses within the WVLCSP would be subject to the zoning requirements of the Light Industrial (I-L) designation, which do not permit heavy manufacturing or processing of raw	Consistent

Goals and Policies	Consistency Analysis	Finding
City of Fontana General Plan – Goals and Policies		
major transportation and distribution hub.	materials but do promote uses related to warehousing, business parks, research and technology centers, services and repair, retail, offices, light manufacturing, and distribution. Because of the site's proximity to major transportation corridors, including I-10 and SR-60, the proposed project would contribute to the diversification of employee-rich businesses in the City and enhance the City's identity as a major transportation and distribution center.	
Public Services Element		
Goal 2: Our law enforcement and fire protection services meet our population's public safety needs and contribute to a sense of safety and high quality of life in our community.	With the incorporation of Specific Plan Requirement SP-PS-2 related to police protection and fire services, along with Standard Requirements SR-HM-3 and Mitigation Measure HAZ-3 , impacts would be reduced.	Consistent
Policy 8: Adequate fire and police response times shall be maintained in the City.	Potential impacts identified at the project site are a result of existing understaffed conditions of the Fontana Police Department (FPD) and the project's distance to the police station. As the applicant does not have control over staffing within FPD, the applicant can attempt to mitigate existing and potential impacts only through physical design measures and project design features. Potential impacts related to service response as a result of project implementation would be mitigated to less-than-significant levels by compliance with FPD's standard building specifications and the project design features provided to improve safety through design. These measures would help reduce the amount of service calls by the City's emergency staff to the site. Also see Public Services Element, Goal 2, above.	Consistent
Policy 9: An "ISO" fire rating of class 3 shall continue to be maintained in the City.	The ISO, which rates fire department staffing, equipment, communications systems, and water systems, currently rates the Fontana Fire Protection District (FFPD) as Class 4. The City has a goal to achieve a rating of Class 3. The project would implement mitigation measures and project design features to improve site safety and reduce the amount of service calls handled by the fire department to the site.	Consistent
Policy 10: Ensure that new fire stations shall be built in areas of new development so that response times are not eroded.	FFPD plans to relocate Station 77 farther from the project site. There currently is no plan to locate a fire station closer to the project. However, the project would be designed to improve safety for the purposes of reducing the number of service calls to the site. Further, the applicant has no control over the location or relocation of City-maintained fire stations.	Consistent

Goals and Policies	Consistency Analysis	Finding
City of Fontana General Plan – Goals and Policies		
Policy 4: “Smart” home design, equipped with sensors for efficient heating and cooling, supports “green building” concepts of energy efficiency and should be encouraged by the City when approving new development.	The WVLCSP would develop an industrial warehouse center that provides for technological innovation in building design with regard to lighting, heating and cooling, materials re-use, and water and energy conservation. The applicant also plans to design buildings to be LEED-compliant for all buildings by incorporating LEED elements (e.g., sustainable site selection, use of sustainable materials and resources, energy- and water-efficient design elements) and other sustainable and energy-efficient elements.	Consistent
Goal 5: Careful planning ensures the timely, logical, and cost-effective development of infrastructure facilities in our City.	Infrastructure facility upgrades, including roadway, intersection, and utility improvements, would be phased appropriately over multiple phases as discussed in the WVLCSP to ensure timely, logical, and cost-effective development of infrastructure in Fontana.	Consistent
Policy 1: Development and supporting infrastructure shall be phased so that contemporary infrastructure is available concurrent with the occupancy of development projects.	Implementation of the WVLCSP would occur over multiple phases and involve the implementation of improvements necessary to support occupancy as specific development projects are completed on site.	Consistent
Policy 2: Development should be approved in a pattern that avoids the need to extend infrastructure excessive distances to provide service and support.	Approval of the proposed project would not result in development patterns requiring excessive extensions of services due to the project’s proximity to existing development. Water, sewer, electricity, gas, and other utility service connections are available at or near the project site and would not result in the need to extend infrastructure excessive distances to provide service and support.	Consistent
Policy 3: Infrastructure installation shall be coordinated within public rights-of-way so that multiple disruptions are avoided.	Water and sewer infrastructure would be coordinated and installed within public rights-of-way or within the project site to avoid multiple disruptions to services.	Consistent
Open Space and Conservation Element		
Goal 1.1: Preserve Natural Open Space in the San Gabriel Mountains and Jurupa Hills.	The WVLCSP identifies approximately 55 acres of natural hillside open space along the eastern edge of the Jurupa Hills, consistent with this goal.	Consistent
Policy 1: Support preservation of the open space along the San Gabriel Mountains and Jurupa Hills for natural habitat, scientific inquiry, passive recreation, and scenic values.	The approximately 55 acres of natural hillside open space in the WVLCSP would preserve open space along the Jurupa Hills for natural habitat, scientific inquiry, passive recreation, and scenic values.	Consistent
Goal 1.2: Conserve Natural Habitat and Protect Rare, Threatened, and Endangered Species.	Natural habitats and species within the proposed natural hillside open space would promote the conservation of rare, threatened, and endangered species, consistent with this goal.	Consistent

Goals and Policies	Consistency Analysis	Finding
City of Fontana General Plan – Goals and Policies		
Policy 1: Encourage the preservation of natural habitat in conjunction with private or public development projects.	The land use plan for the WVLCSPP includes the preservation of approximately 55 acres of natural habitat in conjunction with a private warehouse development, consistent with this policy.	Consistent
Policy 3: Apply local CEQA procedures to identify potential impacts to rare, threatened, and endangered species.	A biological resources technical report and an analysis of potential impacts have been completed as part of the CEQA process to identify any potential impacts on rare, threatened, and endangered species. See Section 4.2.3, <i>Biological Resources</i> , for a full description of potential impacts on species.	Consistent
Goal 2.1: Provide public access to allow joint recreational use of utility corridors, wherever feasible.	An existing recreational trail occurs within the SCE utility corridor on the proposed project site. Project implementation would not restrict or otherwise discourage continued use of this trail for recreation, consistent with this goal.	Consistent
Policy 1: Link multi-use utility corridors to other elements of the local and regional parks and trails systems wherever feasible.	See discussion of Open Space and Conservation Element Goal 2.1, above.	Consistent
Goal 3.2: Protect water resources in the planning area from urban runoff and other potential pollution sources.	Drainage within the WVLCSPP would be retained on site and would protect water resources in the area from urban runoff and other pollution.	Consistent
Policy 1: Promote the use of structural and nonstructural water quality best management practices (BMPs) and land planning and project-level site planning.	Water quality would be addressed through site design and the incorporation of BMPs and project design features. The proposed WVLCSPP specifies site design measures such as minimization of impervious surfaces, on-site infiltration, and BMPs involving structural treatment control.	Consistent
Goal 4.1: The City will encourage and support the preservation, rehabilitation, and/or restoration of historical and archaeological resources within the City boundaries and its SOL.	The preservation, rehabilitation, and restoration of any historical and archaeological resources within the project site are addressed in the Cultural Resources Assessment prepared for the project. See Section 4.2.4, <i>Cultural Resources</i> , for a full discussion of available resources, project impacts, and proposed mitigation measures.	Consistent
Policy 2: The City will consider the identification of cultural resources an integral part of the planning process.	Consistent with this policy, the City of Fontana required the preparation of a Cultural Resources Assessment for the proposed project as an integral part of the planning process.	Consistent
Recreation Element		
Goal 2.1: Provide public access to and allow joint recreational use of utility corridors, wherever feasible.	A portion of the Jurupa Hills Trail, a regional trail, traverses the southern half of the western border of the project site. Additionally, the SCE utility corridor, which bounds the project site to the north, also serves as an existing trail. No alteration to the existing SCE Easement Trail or the Jurupa Hills Trail would occur under the proposed project.	Consistent

Goals and Policies	Consistency Analysis	Finding
City of Fontana General Plan – Goals and Policies		
Policy 1: Link multi-use utility corridors to other elements of the local and regional parks and trails systems wherever feasible.	See discussion of Recreation Element Goal 2.1, above.	Consistent
Goal 2.2: Expand the open space and conservation system, where feasible, to include private and public lands that offer multi-use open space and cultural opportunities.	The project proposes 14.93 acres developed as a detention basin with recreational uses allowed and approximately 55 acres retained in natural hillside open space.	Consistent
Policy 1: Link multi-use utility corridors to other elements of the local and regional parks and trails systems wherever feasible.	See discussion of Recreation Element Goal 2.1, above.	Consistent
Goal 2: Adequate parks, recreation facilities and after-school programs are provided in newly developed areas of our City.	No City parks are proposed as part of the WVLCSPP, and the project would remove park space that was designated within the Valley Trails Specific Plan. However, no residential development is proposed that would generate demand for parks and recreation. In addition, the proposed development agreement for WVLCSPP includes a \$6 million development impact fee that the City can use for parks to serve its residential neighborhoods. The project would also include construction of sidewalks along Locust Avenue, Armstrong Road, Jurupa Avenue, and a private street (old Alder Avenue) to facilitate pedestrian and bicycle transportation throughout the specific plan area.	Consistent
Policy 2: Newly developed parks should be connected, wherever practical, to the existing and future bicycle and recreational trail system.	See Recreation Element Goal 2 discussion, above. Any facility that would connect to the City's recreational system would be designed to be consistent with safety principles.	Consistent
Goal 3: Our parks will be safe and well maintained.	See discussions of Recreation Element Goal 2 and Policy 2, above.	Consistent
Policy 1: Parks shall be designed in accordance with contemporary safety standards and "CPTED" (Crime Prevention Through Environmental Design) principles.	See discussions of Recreation Element Goal 2 and Policy 2, above.	Consistent
Goal 1: There is extensive use of non-motorized transportation, such as bicycles, equestrian, and pedestrian activity, throughout our City for recreation, access to community facilities, and even local commuting.	See Recreation Element Goal 2 discussion, above. The project would not prevent the movement of non-motorized transportation sources through the project site.	Consistent

Goals and Policies	Consistency Analysis	Finding
City of Fontana General Plan – Goals and Policies		
Policy 2: All new developments on designated routes shall provide bicycle and pedestrian routes linked to adjacent facilities.	A portion of the Jurupa Hills Trail, a regional trail, traverses the southern half of the western border of the project site. Additionally, the SCE utility corridor, which bounds the project site to the north, also serves as an existing trail. No alteration to the existing SCE Easement Trail or the Jurupa Hills Trail would occur under the proposed project, and use of the trails would continue under implementation of the WVLCSF.	Consistent
Goal 5: Our system of bikeways and trails is benefited by efficient use of utility easements, flood-control easements and railroad rights-of-way.	See Recreation Element Goal 1, Policy 2, above. Implementation of the proposed project would not alter the existing SCE Easement Trail or the Jurupa Hills Trail, and use of the trails would continue under the proposed project.	Consistent
Safety Element		
Goal 1: Injury and loss of life, property damage, and other impacts caused by seismic shaking, fault rupture, ground failure, earthquake induced landslides, and other earthquake-induced ground deformation are minimized in our City.	The implementation of proper seismic design specifications and techniques would allow structures to withstand intense groundshaking without collapse. Design of the proposed structures would conform to current codes and specifications that support protection and stability against seismic events. The seismic design would be based on the most current California Building Code. The project would result in impacts that would be less than significant. Moreover, implementation of Regulatory Requirement RR-G-1 would further reduce impacts. See Section 4.2.5, <i>Geology and Soils</i> , for further discussion of impacts related to geology and soils and applicable.	Consistent
Goal 2: The risk to life or limb, and property damage resulting from geologic hazards is minimized in our City.	See Safety Element Goal 1 discussion, above.	Consistent
Policy 1: The City shall take actions to minimize grading and otherwise changing the natural topography, while protecting public safety and reducing the potential for property damage as a result of geologic hazards.	Grading and excavation activities and the removal of vegetation cover associated with project construction would increase the potential for temporary or sporadic erosion and sedimentation events to occur. Construction activities also have potential to induce soil compaction and wind erosion conditions that would result in substantial soil erosion and/or loss of topsoil. This is a potentially significant impact and would require implementation of project design features. Implementation of Regulatory Requirement RR-HW-1 , Standard Requirement SR-G-1 , and Mitigation Measures GEO-1 , GEO-2 , and HYD-1 would result in less-than-significant impacts.	Consistent

Goals and Policies	Consistency Analysis	Finding
City of Fontana General Plan – Goals and Policies		
Goal 3: Injury, loss of life, property damage, and economic and social disruption caused by flood and inundation hazards are minimized in our City.	Detention basins would be constructed on the project site to retain excess stormwater in the event of a flood. The project would improve the site's ability to minimize flooding hazards.	Consistent
Policy 1: The City shall discourage new development in flood hazard areas and implement mitigation measures to reduce the hazard to existing developments that are located within the 100- and 500-year flood zones.	The site is not mapped within a 100-year or 500-year flood zone, and no development within these flood zones would occur with the project.	Consistent
Goal 4: Threats to public and private property from urban and wildland fire hazards are reduced in our City.	To reduce wildfire impacts, the project would require implementation of Standard Requirements SR-HM-2 and CA-HM-3 , and Mitigation Measure HAZ-3 . See Section 4.2.7, <i>Hazards and Hazardous Materials</i> , for further discussion of wildland fire impacts.	Consistent
Policy 1: The City shall require residential, commercial, and industrial structures to implement fire hazard-reducing designs and features.	Project design features would reduce impacts related to fire services by requiring new development to incorporate fire safety design measures.	Consistent
Policy 2: The City shall ensure to the extent possible that fire services, such as fire equipment, infrastructure, and response times are adequate for all sections of the city.	See discussions for Public Services Element Goal 2, Policy 8 and Policy 9, above.	Consistent
Policy 3: The City shall require all new development in areas with a high fire hazard to provide fire retardant landscaping and project design to reduce their fire hazard, and the City shall take measures to reduce the risk of fire at the Wildland Urban Interface.	The WVLCSP would be developed in accordance with the Uniform Fire Code and the Municipal Fire Code for new construction in fire hazard areas. Also see discussions for Public Services Element Goal 2, Policy 8 and Policy 9, above.	Consistent
Goal 5: The potential for hazardous contamination is reduced in our City.	No significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous waste during construction or operation of the project is anticipated. Impacts would be less than significant. Construction activities could result in a potentially significant impact for construction personnel, and implementation of Regulatory Requirements RR-HM-1 through RR-HM-3 and Mitigation Measures HAZ-1 and HAZ-2 would be required to reduce impacts to less-than-significant levels. See Section 4.2.7, <i>Hazards and Hazardous Materials</i> , for further discussion.	Consistent

Goals and Policies	Consistency Analysis	Finding
City of Fontana General Plan – Goals and Policies		
Policy 1: The City shall strive to reduce the potential for residents, workers, and visitors to Fontana to being exposed to hazardous materials and wastes.	See discussion of Safety Element Goal 5, above.	Consistent
Noise Element		
Goal 1: Our City protects its sensitive land uses from excessive noise through diligent planning.	The proposed project would result a significant noise impact on noise-sensitive land uses, including residential uses within the community of Bloomington. Noise minimization measures are included to minimize noise spillover onto adjoining residential neighborhoods, consistent with this goal. Project design features would be required to reduce impacts and protect sensitive residential land uses adjacent to the project. Although the project would result in significant unavoidable noise impacts, compliance with applicable regulations and implementation of project-specific mitigation measures would reduce project-related noise to the extent feasible. See Section 4.2.10, <i>Noise</i> , for further discussion.	Consistent
Policy 6: The State of California Office of Planning and Research General Plan Guidelines shall be followed with respect to acoustical study requirements.	Table 4.2.10-1 lists definitions of acoustical terms, Table 4.2.10-2 shows common sound levels and their noise sources, and Table 4.2.10-3 shows land use compatibility for exterior community noise, as recommended by the California Department of Health Services, Office of Noise Control. As stated Section 4.2.10, <i>Noise</i> , the Office of Noise Control provides assistance to local communities when developing local noise control programs and works with the Office of Planning and Research to provide guidance for the preparation of the required noise elements in city and county general plans, pursuant to Government Code Section 65302(f). A noise study was prepared for the project utilizing established guidance.	Consistent
Policy 7: Noise spillover or encroachment from commercial, industrial, and educational land uses shall be minimized into adjoining residential neighborhoods or noise-sensitive uses.	See discussion of Noise Element Goal 1, above.	Consistent
Goal 2: Our City has a diverse and efficiently operated ground transportation system that generates the minimum feasible noise on its residents.	Residential areas in proximity to the proposed project may experience excessive noise from ground transportation but not from industrial equipment associated with the WVL CSP. With the incorporation of noise mitigation measures and project design features, noise impacts would be reduced to the extent feasible. See Section 4.2.10, <i>Noise</i> , for more information.	Consistent

Goals and Policies	Consistency Analysis	Finding
City of Fontana General Plan – Goals and Policies		
Policy 2: On-road trucking activities shall be regulated in the City to ensure noise impacts are minimized.	Because the proposed industrial warehouse project is not considered noise sensitive and would be exposed to traffic noise levels below 70 A-weighted decibels (dBA) community noise equivalent level (CNEL), no significant traffic noise impacts on on-site uses would occur due to on-road truck activities; therefore, no mitigation measures are required. Project design features requiring implementation of truck idling restrictions and Mitigation Measures NOI-1 through NOI-3 are identified to reduce operational truck-related noise and noise near sensitive land uses further. Also, a TMA would be established with the intent of minimizing truck-trip impacts and ensuring that trucks use authorized routes.	Consistent
Policy 5: Development that generates increased traffic and subsequent increases in the ambient noise level adjacent to noise-sensitive land uses shall provide appropriate mitigation measures.	Table 4.2.10-12 of this EIR shows that, with inclusion of the proposed project under existing conditions, the noise level would exceed the threshold for residential land uses of 65 dBA CNEL along two roadway segments (Locust Avenue between 11 th Street and 7 th Street and between Jurupa Avenue and 11 th Street). However, no sensitive receptors exist on Locust Avenue between Jurupa Avenue and 11 th Street, and no impacts would occur in this location. Development of the proposed project would cause the segment from 7 th and 11 th Streets, which is adjacent to residential uses within the community of Bloomington, to exceed the threshold during the existing and opening year timeframe as well. The location at the new private street (old Alder Avenue) would not exceed the threshold until the future 2035 timeframe. Although the project would result in significant unavoidable noise impacts, compliance with applicable regulations and implementation of project-specific mitigation measures and project design features would reduce project-related noise to the extent feasible.	Consistent
Policy 6: Noise mitigation practices shall be employed when designing all future streets and highways, and when improvements occur along existing highway segments. These mitigation measures will emphasize the establishment of natural buffers or setbacks between the arterial roadways and adjoining noise-sensitive areas.	See discussion of Noise Element Goal 1, above.	Consistent

Goals and Policies	Consistency Analysis	Finding
City of Fontana General Plan – Goals and Policies		
Goal 3: Our City's residents are protected from the negative effects of "spill over" noise in our community.	See discussion of Noise Element Goal 1, above. Negative effects of spillover noise are also addressed in Section 4.2.10, <i>Noise</i> , and mitigation measures and project design features would be implemented during construction and long-term operation of the project to ensure that negative effects associated with noise are reduced in the community.	Consistent
Policy 1: Residential land uses and areas identified as noise sensitive shall be protected from excessive noise from non-transportation sources including industrial, commercial, and residential activities and equipment.	Residential areas in proximity to the proposed project would be protected from excessive noise from industrial equipment associated with the proposed WVLCSP with the incorporation of noise mitigation measures and project design features and proper shielding. See Section 4.2.10, <i>Noise</i> , for more information.	Consistent
Policy 3: Industrial uses shall not exceed commercial or residential stationary-source noise standards at the most proximate land uses, as appropriate. (Industrial noise may spill over to proximate industrial uses so long as the combined noise does not exceed the appropriate industrial standards.)	Compliance with applicable noise standards is discussed in detail in Section 4.2.10, <i>Noise</i> . Construction and long-term on-site and off-site mitigation measures and project design features are identified and would be required as conditions of project approval to ensure that operations at the WVLCSP do not exceed residential stationary-source noise standards at neighboring residential uses.	Consistent
Policy 4: Non-transportation noise shall be considered in land use planning decisions.	See discussion for Noise Element Goal 3 and Policy 3, above.	Consistent
Policy 5: Construction shall be performed as quietly as feasible when performed in proximity to residential or other noise sensitive land uses.	As discussed in Section 4.2.10, <i>Noise</i> , mitigation measures and project design features would require construction activities to reduce noise impacts on nearby sensitive receptors to the extent feasible by operating all equipment consistently with manufactures' standards, placing stationary equipment away from sensitive receptors, and utilizing staging areas that allow for the most distance between noise sources and sensitive receptors.	Consistent

Goals and Policies	Consistency Analysis	Finding
City of Fontana General Plan – Goals and Policies		
Air Quality Element		
Goal 2: Our City has a diverse and efficiently operated ground transportation system that generates the minimum feasible pollutants.	Several improvements to the City's transportation system are included as part of the proposed project, including the curb-to-curb roadway enhancements, buffers or planter strips, and median improvements along Locust Avenue, Armstrong Road, Jurupa Avenue, and a new private street (old Alder Avenue). Proposed improvements would also involve sidewalks along Jurupa Avenue. Other project mitigation measures and project design features, such as restrictions on idling and restrictions on available truck routes in residential areas (per the TMA), would serve to reduce the generation of pollutants and improve the efficiency of the City's ground transportation system, consistent with this goal.	Consistent
Policy 1: The City shall seek to integrate land use and transportation planning to the maximum extent practical.	Several project-specific requirements in the form of project design features and mitigation measures are related to land use and transportation planning to reduce conflicts associated with truck trips and idling noise. As such, the proposed project considers the integration of land use and transportation planning to the maximum extent practical.	Consistent
Policy 6: Developers in our community shall work to reduce vehicle trips and total vehicle miles traveled in projects that are approved here.	The proposed project would entail development of an industrial warehouse center near major transportation facilities, including I-10 and SR-60, which would promote the reduction of vehicle trips and total miles traveled for the project-related truck trips.	Consistent
Policy 14: Heavy trucks shall be discouraged from excessive idling both at the roadside and during unloading/loading operations.	Project operations would be restricted from excessive idling to comply with noise standards and reduce air pollutant emissions. See the discussion of air quality and noise impacts in Sections 4.2.2 and 4.2.10, respectively, including Mitigation Measure AQ-10 , which is also pursuant to Title 13 of the California Code of Regulations, Section 2485, which restricts all diesel trucks from idling in excess of 5 minutes. Also, a TMA would be established with the intent of minimizing truck-trip impacts.	Consistent
Goal 3: Stationary air pollution sources shall comply with applicable air district rules and control measures.	Stationary air pollution sources would comply with South Coast Air Quality Management District (SCAQMD) control measures, including using low-emission water heaters and treating windows for energy-efficient conservation, consistent with this goal.	Consistent

Goals and Policies	Consistency Analysis	Finding
City of Fontana General Plan – Goals and Policies		
Policy 10: Any project that exceeds allowable emissions, as established by the SCAQMD, shall mitigate its anticipated emissions to the extent reasonably feasible.	As discussed in Section 4.2.1, <i>Air Quality</i> , Regulatory Requirements RR-AQ-1 through RR-AQ-6 and Mitigation Measures AQ-1 through AQ-14 would be implemented during construction and operation to reduce emissions, consistent with this policy. Although the project would result in significant unavoidable air quality emission impacts, compliance with applicable regulations and implementation of project-specific mitigation measures would reduce project-related emissions to the extent feasible.	Consistent
Goal 4: The minimum practicable particulate emissions are released in our City from construction and operation of roads and buildings.	Regulatory Requirements RR-AQ-1 through RR-AQ-6 and Mitigation Measures AQ-1 through AQ-11 have been identified to reduce particulate emissions to the minimum practicable, consistent with this goal.	Consistent
Policy 1: Particulate emissions from roads, parking lots, construction sites and agricultural lands shall be kept at the minimum feasible level.	Regulatory Requirements RR-AQ-1 through RR-AQ-3 and Mitigation Measures AQ-1 through AQ-10 have been identified to reduce particulate emissions to the minimum practicable, consistent with this policy.	Consistent

Table 4.2.9-3. SCAG Land Use and Planning Consistency Analysis

Goals and Policies	Consistency Analysis	Finding
SCAG RCPG		
Land Use and Housing		
Focusing growth in existing and emerging centers and along major transportation corridors.	One of the objectives of the project involves replacing the Valley Trails Specific Plan designation on the site with the WVLCSP to facilitate an industrial warehouse use in southeast Fontana in place of a residential planned community. As such, the project would remove the potential to construct up to 1,154 dwelling units, and no new housing is proposed. However, the availability of a variety of existing housing types throughout the City is sufficient to accommodate the demand for a mix of housing types. The proposed WVLCSP would expand Fontana's industrial employment base near Fontana's industrial center and close to major regional transportation corridors (I-10, SR-60, I-15, and I-215).	Consistent

Goals and Policies	Consistency Analysis	Finding
SCAG RCPG		
Creating significant areas of mixed-use development and walkable “people-scaled” communities.	No housing would be developed under the proposed project. The proposed WVLCSP would expand and further diversify Fontana’s industrial employment base with a plan to develop a high-quality industrial warehouse center. Additionally, an existing recreational trail occurs within the SCE utility corridor on the proposed project site. Project implementation would not restrict or otherwise discourage continued use of this trail for recreation, consistent with this goal.	Consistent
Providing new housing opportunities, with building types and locations that respond to the region’s changing demographics.	See response to the first SCAG policy.	Consistent
Targeting growth in housing, employment, and commercial development within walking distance of existing and planned transit stations.	During project construction and operations, future employees may utilize the existing mass transit system; however, no conflicts are anticipated to occur as a result of project operations.	Consistent
Injecting new life into under-used areas by creating vibrant new business districts, redeveloping old buildings, and building new businesses and housing on vacant lots.	No housing would be developed under the proposed project. The proposed WVLCSP would expand and further diversify Fontana’s industrial employment base with a plan to develop a high-quality industrial warehouse center. Industrial uses within the WVLCSP would be subject to the zoning requirements of the Light Industrial (I-L) designation, which promote employee-intensive uses related to business parks, research and technology centers, offices, warehousing, manufacturing, and distribution. Because of the site’s proximity to major transportation corridors, including I-10 and SR-60, the proposed project would contribute to the diversification of employee-rich businesses in the City and Fontana’s presence as a major transportation and distribution center.	Consistent
Preserving existing, stable, single-family neighborhoods.	See response to the first SCAG policy. Also, the project would require mitigation to reduce impacts to sensitive residential land uses adjacent to the project.	Consistent
Protecting important open space, environmentally sensitive areas, and agricultural lands from development.	The WVLCSP identifies approximately 55 acres of natural hillside open space along the eastern edge of the Jurupa Hills, consistent with this goal. Additionally, an existing recreational trail occurs within the SCE utility corridor on the proposed project site. Project implementation would not restrict or otherwise discourage continued use of this trail for recreation.	Consistent

With adoption of the proposed general plan amendment, the proposed WVLCSP would be consistent with the Fontana General Plan and other applicable plans adopted for the purpose of avoiding or mitigating an environmental effect.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

Impact LU-3. Conflict with any applicable habitat conservation plan or natural community conservation plan

As stated previously in Section 4.3.2, *Biological Resources*, the project site is not subject to any state, local, or regional habitat conservation plan or natural community preservation plan; however, the project is located adjacent to and directly north of the Western Riverside MSHCP's northern boundary. Because the project would involve modifications to existing undeveloped land uses located adjacent to the plan boundaries, the project has the potential to result in indirect impacts on species and sensitive habitats protected by the MSHCP within the Jurupa Area Plan. Proposed mitigation measures would reduce some potential impacts on these species. A greater discussion of the biological conditions on the project site is provided in Section 4.3.2, *Biological Resources*.

Mitigation Measures

Implement **Mitigation Measures BIO-4** through **BIO-6** provided in Section 4.3.2, *Biological Resources*.

Residual Impacts

Impacts would be less than significant.

4.2.10 Noise

This section evaluates the impacts of the proposed West Valley Logistics Center Specific Plan (WVLCSP) project related to noise and vibration. The technical information within this section is based on the *Noise Impact Analysis, West Valley Logistics Center* that was prepared for the proposed project by LSA Associates Inc. in February 2014 and is included in this EIR as Appendix K. Specifically, the Noise Impact Analysis examined the short-term and long-term noise impacts on and adjacent to the project site for all applicable standards in place by the City of Fontana and the County of San Bernardino and evaluated the effectiveness of noise control measures incorporated as part of the project design.

Noise and Vibration Terminology

Sound intensity is measured through the A-weighted scale to correct for the relative frequency response of the human ear. That is, an A-weighted noise level de-emphasizes low and very high frequencies of sound similar to the human ear's de-emphasis of these frequencies. Unlike linear units, such as inches or pounds, decibels (dB) are measured on a logarithmic scale representing points on a sharply rising curve.

The decibel system of measuring sound gives a rough connection between the physical intensity of sound and its perceived loudness to the human ear. A sound as soft as human breathing is about 10 times greater than 0 dB, and a 10-dB increase in sound level is perceived by the human ear as only a doubling of the loudness of the sound. The decibel scale increases as the square of the change, representing the sound-pressure energy. For example, 10 dB are 10 times more intense than 1 dB, 20 dB are 100 times more intense, and 30 dB are 1,000 times more intense. Therefore, 30 dB represent 1,000 times as much acoustic energy as 1 dB. Ambient sounds generally range from 30 A-weighted decibels (dBA) (very quiet) to 100 dBA (very loud). An increase of 10 dB is also perceived as a doubling of loudness. Therefore, 70 dB is perceived as being twice as loud as 60 dB.

All sound levels in this report are A-weighted, unless reported otherwise.

Table 4.2.10-1 lists definitions of acoustical terms, Table 4.2.10-2 shows common sound levels and their noise sources, and Table 4.2.10-3 shows land use compatibility for exterior community noise, as recommended by the California Department of Health, Office of Noise Control.

Table 4.2.10-1. Definitions of Acoustical Terms

Term	Definition
Decibel (dB)	A unit of noise level that denotes the ratio between two quantities that are proportional to power; the number of decibels is 10 times the logarithm (to the base 10) of this ratio.
Frequency (in Hertz [Hz])	Of a function periodic in time; the number of times that the quantity repeats itself in 1 second (i.e., number of cycles per second).
A-Weighted sound level (dBA)	The sound level obtained by use of A-weighting. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
L_{02} , L_{08} , L_{50} , L_{90}	The fast A-weighted noise levels that are equaled or exceeded by a fluctuating sound level 2%, 8%, 50%, and 90% of a stated time period.

Term	Definition
Equivalent continuous noise level (L_{eq})	The level of a steady sound that, in a stated time period and at a stated location, has the same A-weighted sound energy as the time-varying sound.
Community noise equivalent level (CNEL)	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 5 dB to sound levels occurring in the evening from 7:00 p.m. to 10:00 p.m. and after the addition of 10 dB to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
Day/Night noise level (L_{dn})	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 10 dB to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
L_{max} , L_{min}	The maximum and minimum A-weighted sound levels measured on a sound level meter during a designated time interval using fast-time averaging.
Ambient noise level	The all-encompassing noise associated with a given environment at a specified time; usually a composite of sound from many sources from many directions, near and far; no particular sound is dominant.
Intrusive	The noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, time of occurrence, tonal or informational content, and the prevailing ambient noise level.

Source: *Handbook of Acoustical Measurement and Noise Control*, 199,1 as cited in Appendix K.

Table 4.2.10-2. Common Sound Levels and Their Noise Sources

Noise Source	A-Weighted Sound Level in Decibels	Noise Environments	Subjective Evaluations
Near jet engine	140	Deafening	128 times as loud
Civil defense siren	130	Threshold of Pain	64 times as loud
Hard rock band	120	Threshold of Feeling	32 times as loud
Accelerating motorcycle a few feet away	110	Very Loud	16 times as loud
Pile driver; noisy urban street/heavy city traffic	100	Very Loud	8 times as loud
Ambulance siren; food blender	95	Very Loud	—
Garbage disposal	90	Very Loud	4 times as loud
Freight cars; living room music	85	Loud	—
Pneumatic drill; vacuum cleaner	80	Loud	2 times as loud
Busy restaurant	75	Moderately Loud	—
Near freeway auto traffic	70	Moderately Loud	Reference Level
Average office	60	Quiet	½ as loud
Suburban street	55	Quiet	—
Light traffic; soft radio music in apartment	50	Quiet	¼ as loud
Large transformer	45	Quiet	—
Average residence without stereo playing	40	Faint	⅛ as loud
Soft whisper	30	Faint	—

Noise Source	A-Weighted Sound Level in Decibels	Noise Environments	Subjective Evaluations
Rustling leaves	20	Very Faint	—
Human breathing	10	Very Faint	Threshold of Hearing
—	0	Very Faint	—

Source: Appendix K.

Table 4.2.10-3. Land Use Compatibility for Exterior Community Noise

Land Use Category	Noise Range (L_{dn} or CNEL), dB			
	I	II	III	IV
Passively used open spaces	50	50–55	55–70	70+
Auditoriums, concert halls, amphitheaters	45–50	50–65	65–70	70+
Residential, low-density single-family, duplex, mobile homes	50–55	55–70	70–75	75+
Residential multifamily	50–60	60–70	70–75	75+
Transient lodging, motels, hotels	50–60	60–70	70–80	80+
Schools, libraries, churches, hospitals, nursing homes	50–60	60–70	70–80	80+
Actively used open spaces, playgrounds, neighborhood parks	50–67	–	67–73	73+
Golf courses, riding stables, water recreation, cemeteries	50–70	–	70–80	80+
Office buildings, business commercial and professional	50–67	67–75	75+	–
Industrial, manufacturing, utilities, agriculture	50–70	70–75	75+	–

Noise Range I—Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Noise Range II—Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made, and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Noise Range III—Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Noise Range IV—Clearly Unacceptable: New construction or development should generally not be undertaken.

CNEL = Community Noise Equivalent Level

dB = decibels

L_{dn} = day-night average noise level

L_{max} = maximum noise level

Source: California Department of Health, Office of Noise Control, 1976, as cited in Appendix K.

Vibration

Groundborne vibration is a small, rapidly fluctuating motion transmitted through the ground. The strength of groundborne vibration diminishes (or attenuates) fairly rapidly over distance. Some soil types transmit vibration quite efficiently; other types (primarily sandy soils) do not. There are several basic measurement units commonly used to describe the intensity of ground vibration. The descriptors used by the Federal Transit Administration (FTA) are peak particle velocity (PPV), in

units of inches per second, and the velocity decibel (VdB). The calculation to determine PPV at a given distance is:

$$PPV_{\text{distance}} = PPV_{\text{ref}} * (25/D)^{1.5}$$

where

PPV_{distance} = the peak particle velocity in inches/second of the equipment adjusted for distance.

PPV_{ref} = the reference vibration level in inches/second at 25 feet.

D = the distance from the equipment to the receiver.

The velocity parameter (instead of acceleration or displacement) best correlates with human perception of vibration. Therefore, the response of humans, buildings, and sensitive equipment to vibration is described in this section in terms of the root-mean square (RMS) velocity level in VdB units relative to 1 micro-inch per second. As a point of reference, the average person can just barely perceive vibration velocity levels below 70 VdB (typically in the vertical direction). The calculation to determine vibration level at a given distance is:

$$L_v(D) = L_v(25 \text{ feet}) - 30 * \log(D/25)$$

where

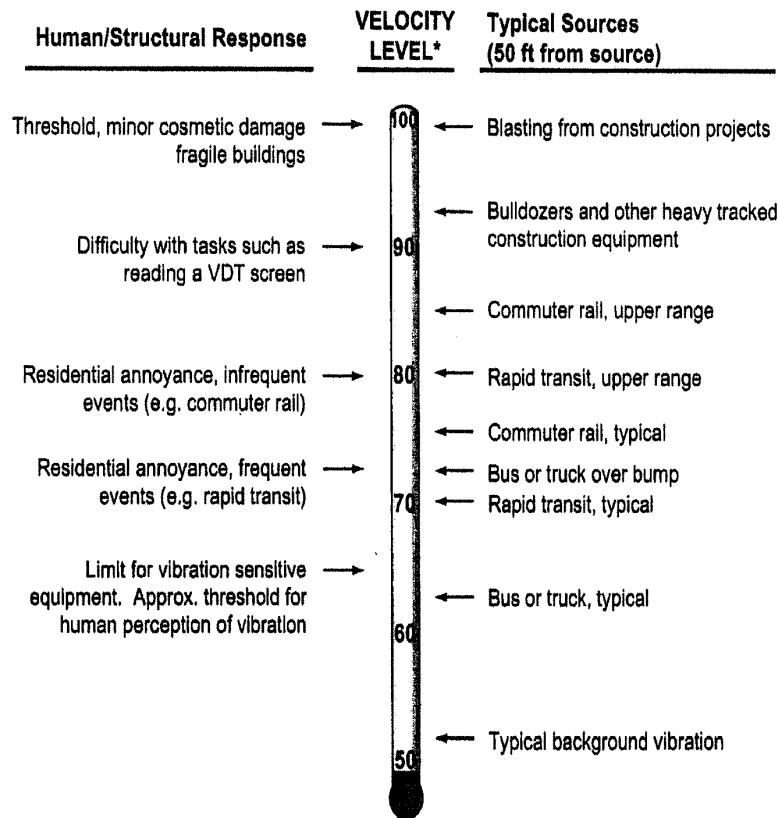
$L_v(D)$ = the vibration level at the receiver.

$L_v(25 \text{ feet})$ = the reference source vibration level.

D = the distance from the vibration activity to the receiver.

A comparison of common groundborne vibration levels is shown on Figure 4.2.10-1. Typical background vibration levels are between 50 and 60 VdB, whereas the levels for minor cosmetic damage to fragile buildings or blasting are generally in the range of 100 VdB.

Figure 4.2.10-1. Common Groundborne Vibration Levels



* RMS Vibration Velocity Level in VdB relative to 10^{-6} inches/second

Source: FTA 2006.

Vibration Sensitive Land Uses

The FTA *Transit Noise and Vibration Impact Assessment*, prepared in 2006, is a guide for designating the criteria for acceptable groundborne vibration. The following vibration categories are from that report (FTA 2006).

- Vibration Category 1 – High Sensitivity:** Category 1 includes buildings where vibration would interfere with internal operations, including levels that may be well below those associated with human annoyance. Concert halls and other special-use facilities are covered separately in Table 8-2, which is included at the end of Appendix F of the *Transit Noise and Vibration Impact Assessment*. Typical land uses covered by Category 1 are vibration-sensitive research and manufacturing, hospitals with vibration-sensitive equipment, and university research operations. The degree of sensitivity to vibration will depend on the specific equipment affected by the vibration. Equipment such as electron microscopes and high resolution lithographic equipment can be very sensitive to vibration, and even normal optical microscopes will sometimes be difficult to use when vibration is well below the human annoyance level. Manufacturing of computer chips is another example of a vibration-sensitive process.

The vibration limits for Category 1 are based on acceptable vibration for moderately vibration-sensitive equipment such as optical microscopes and electron microscopes with vibration isolation systems. Defining limits for equipment that is even more sensitive requires a detailed review of the specific equipment involved. This type of review is usually performed during the detailed analysis associated with the final design phase and not as part of the environmental impact assessment. Mitigation of vibration that affects sensitive equipment typically involves modification of the equipment mounting system or relocation of the equipment rather than applying vibration control measures to the transit project.

Note that this category does not include most computer installations or telephone switching systems. Although their owners often are very concerned about the potential for groundborne vibration to interrupt operations, it is rare for computer or other electronic equipment to be particularly sensitive to vibration. Most such equipment is designed to operate in typical building environments where the equipment may experience occasional shock from bumping and continuous background vibration caused by other equipment.

- **Vibration Category 2 – Residential:** This category covers all residential land uses and any buildings where people sleep, such as hotels and hospitals. No differentiation is made between different types of residential areas, primarily because groundborne vibration and noise are experienced indoors and building occupants have practically no means to reduce their exposure. Even in a noisy urban area, the bedrooms often will be quiet in buildings that have effective noise insulation and tightly closed windows. Moreover, street traffic often abates at night. Hence, an occupant of a bedroom in a noisy urban area is likely to be just as exposed to groundborne noise and vibration as someone in a quiet suburban area.
- **Vibration Category 3 – Institutional:** Vibration Category 3 includes schools, churches, other institutions, and quiet offices that do not have vibration-sensitive equipment, but still have the potential for activity interference. Although it is generally appropriate to include office buildings in this category, it is not appropriate to include all buildings that have any office space. For example, most industrial buildings have office space, but it is not intended that buildings primarily for industrial use be included in this category.

Existing Conditions

Existing Sensitive Land Uses in the Project Area

Sensitive receptors include residences, schools, hospitals, and similar uses sensitive to noise. The closest existing residential uses are approximately 150 feet from the project's eastern boundary across Locust Avenue and 250 feet from the project's southern boundary. There are residential uses to the north approximately 1,000 feet from the project's northern boundary. These land uses would be exposed to noise generated during construction and operation of the project and are considered noise-sensitive. Additionally, there are six schools near the project site that are also considered noise-sensitive:

- Bloomington High School at 10750 Laurel Street, 0.7 mile north of the project site
- Crestmore Elementary School at 18870 Jurupa Avenue, 0.5 mile east of the project site
- Ruth O. Harris Middle School at 11150 Alder Avenue, 0.3 mile west of the project site
- Sycamore Hills Elementary School at 11036 Mahogany Drive, 0.7 mile west of the project site

- Sunnyslope Elementary School at 7050 38th Street, 1.8 miles south of the project site
- Walter Zimmerman Elementary School at 11050 Linden Avenue, 0.3 mile north of the project site

St. Charles Catholic Church at 11342 Spruce Avenue and Mt. Rubidoux Convalescent Hospital at 6401 33rd Street are in the surrounding area but are far enough away that they would not be exposed to construction noise or any on-site operational noise. Figure 4.2.2-1 in Section 4.2.2, *Air Quality*, shows these sensitive receptors relative to the proposed project site. The proposed truck haul routes are not near any of these sensitive land uses.

Existing Ambient Noise Environment

The primary existing noise sources in the project area are transportation facilities. Traffic on Locust Avenue, Armstrong Road, and other local streets is the main contributor to the ambient noise levels in the project vicinity. Other noise sources include commercial and private aircraft flying overhead and wildlife, such as birds.

Existing Traffic Noise

Table 4.2.10-4 lists the existing (2012) traffic noise levels on roadways in the project vicinity. These noise levels represent the worst-case scenario, which assumes that no shielding is provided between traffic and the locations where the noise contours are drawn. Table 4.2.10-4 indicates that the existing traffic noise levels in the project vicinity are moderate to high along roadway segments adjacent to the project site, with the 70 dBA CNEL contour line extending to 246 feet from the roadway centerline along Sierra Avenue and the 70 dBA CNEL contour lines extending to 150 feet from the roadway centerline along Armstrong Road. Along Locust Avenue, the 70 dBA CNEL contour is mostly confined within the roadway right-of-way, with the 65 dBA CNEL noise contour extending to 121 feet from the roadway centerline. The specific assumptions used in developing these noise levels and the model printouts are provided in Appendix K.

Table 4.2.10-4. Existing Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (feet)	Centerline to 65 CNEL (feet)	Centerline to 60 CNEL (feet)	CNEL (dBA) 50 feet from Centerline of Outermost Lane
Slover Ave. west of Sierra Ave.	12,900	126	263	563	72.9
Slover Ave. between Sierra Ave. and Locust Ave.	15,000	121	256	549	73.4
Slover Ave. between Locust Ave. and Cedar Ave.	7,400	< 50	100	215	68.8
Slover Ave. east of Cedar Ave.	4,100	< 50	68	145	66.2
Jurupa Ave. west of Sierra Ave.	13,200	68	147	316	71.3
Jurupa Ave. between Sierra Ave. and Alder Ave.	3,800	< 50	64	138	65.9
Jurupa Ave. between Locust Ave. and Cedar Ave.	1,900	< 50	< 50	87	62.9
Jurupa Ave. east of Cedar Ave.	3,300	< 50	59	126	65.3

Roadway Segment	ADT	Centerline to 70 CNEL (feet)	Centerline to 65 CNEL (feet)	Centerline to 60 CNEL (feet)	CNEL (dBA) 50 feet from Centerline of Outermost Lane
11th St. east of Locust Ave.	880	< 50	< 50	52	59.6
7th St. between Locust Ave. and Cedar Ave.	1,900	< 50	< 50	87	62.9
Sierra Ave. north of Slover Ave.	36,700	246	525	1,129	77.4
Sierra Ave. between Slover Ave. and Jurupa Ave.	22,100	177	375	805	75.2
Sierra Ave. between Jurupa Ave. and Armstrong Rd.	17,100	131	279	599	74.0
Sierra Ave. south of Armstrong Rd.	1,200	< 50	< 50	105	62.4
Alder Ave. north of Jurupa Ave.	260	< 50	< 50	< 50	54.3
Alder Ave. south of Jurupa Ave.	70	< 50	< 50	< 50	48.6
Locust Ave. between Slover Ave. and Jurupa Ave.	3,800	< 50	64	138	65.9
Locust Ave. between Jurupa Ave. and 11th St.	3,700	< 50	63	136	65.8
Locust Ave. between 11th St. and 7th St.	3,200	< 50	57	123	65.2
Locust Ave./Armstrong Rd. between 7th St. Sierra Ave.	4,700	60	120	254	68.4
Armstrong Rd. south of Sierra Ave.	20,900	149	318	684	74.9
Cedar Ave. north of Slover Ave.	18,500	138	294	631	74.3
Cedar Ave. between Slover Ave. and Jurupa Ave.	18,000	136	288	620	74.2
Cedar Ave. between Jurupa Ave. and 7th St.	17,500	133	283	608	74.1
Cedar Ave./Rubidoux Blvd. between 7th St. and Market St.	15,500	123	261	561	73.6
Rubidoux Blvd. south of Market St.	13,300	112	236	507	72.9
Market St. east of Rubidoux Blvd.	13,500	113	239	512	73.0

Note: Assumed truck traffic would be 20% of total project traffic, based on the Fontana Truck Trip Generation Study, August 2003. Traffic noise within 50 feet of the roadway centerline should be evaluated with site-specific information.

ADT = average daily traffic

CNEL = Community Noise Equivalent Level

dBA = A-weighted decibels

Source: Appendix K.

Airports and Associated Aircraft

Fontana is within the flight path of Ontario International Airport, which is 9.5 miles west of the project site. Aircraft activity within the flight path is a contributor to noise in the project area. However, the November 2005 Air Impact Area noise contour map for Ontario International Airport indicates that noise levels generated by aircraft are well below the 65-dB CNEL contour at the project site. The project site is approximately 6.5 miles from the nearest edge of the 65-dB CNEL noise contour.

Additionally, Fontana is overflowed by operations associated with the Rialto Municipal Airport approximately 5.5 miles northeast of the project site in the City of Rialto. Fontana is occasionally overflowed by aircraft using Riverside Municipal and Flabob airports 5.8 miles and 3 miles away, respectively, from airports within Riverside County south of the City. Noise contours of 60 CNEL or above for Ontario International Airport, Rialto Municipal Airport, San Bernardino International Airport, Riverside Municipal Airport, and Flabob Airport do not extend to areas near the project site.

Vibration

The project site is vacant and undeveloped, and does not include any sources of vibration. The nearby existing vibration-related environment is a semi-rural environment. Existing vibration sources are limited to passenger vehicles and periodic delivery trucks accessing the local roadways.

Regulatory Setting

Federal

Noise Control Act of 1972

The Noise Control Act of 1972 (42 USC 4910) was the first comprehensive statement of national noise policy. It declared that "it is the policy of the U.S. to promote an environment for all Americans free from noise that jeopardizes their health or welfare."

State

California Noise Control Act

At the state level, the California Noise Control Act was enacted in 1973 (Health and Safety Code Section 46010 et seq.). Under this act, the Office of Noise Control in the Department of Health Services provides assistance to local communities developing local noise control programs and works with the Office of Planning and Research to provide guidance for the preparation of the required noise elements in city and county general plans, pursuant to Government Code Section 65302(f). In preparing the noise element, a city or county must identify local noise sources and analyze and quantify to the extent practicable current and projected noise levels for various sources, including highways and freeways; passenger and freight railroad operations; ground rapid transit systems; commercial, general, and military aviation and airport operations; and other ground stationary noise sources. Noise level contours must be mapped for these sources, using either the CNEL¹ or L_{dn},² and used as a guide in land use decisions to minimize the exposure of community

¹ CNEL adds a 5-dBA "penalty" for the evening hours between 7:00 p.m. and 10:00 p.m. in addition to a 10-dBA penalty between the hours of 10:00 p.m. and 7:00 a.m. CNEL is generally only used in California.

residents to excessive noise. Airports are subject to the noise requirements set by the Federal Aviation Administration and noise standards under the California Code of Regulations (CCR), Title 21, Section 5000.

The State of California has established land use compatibility criteria that provide guidance on the compatibility of different types of land uses based upon the existing community noise level. These guidelines are often adopted by city and county agencies for land use planning purposes.

At the state level, vibrations limits have not been set.

Local

City of Fontana Noise Standards

Noise Element of the General Plan. The Noise Element of the General Plan contains noise standards for mobile noise sources. These standards address the impacts of noise from adjacent roadways and airports. The City specifies outdoor and indoor noise limits for residential uses, places of worship, educational facilities, hospitals, hotels/motels, and commercial and other land uses. For industrial business park uses related to warehousing or manufacturing (within the Commercial category), the City's interior noise standard is 65 dBA CNEL; no established exterior standard is applicable. The noise standard for exterior living areas is 65 dBA CNEL. The indoor noise standard is 45 dBA CNEL, which is consistent with the standard in the California Noise Insulation Standard. (City of Fontana 2003.)

Municipal Code. The City's Municipal Code limits the hours of construction to between 7:00 a.m. and 6:00 p.m. on weekdays and between 8:00 a.m. and 5:00 p.m. on Saturdays; no construction is to be conducted on Sundays or federal holidays.

Because the City has not adopted any noise level standards for stationary sources for California Environmental Quality Act (CEQA) review purposes, the County of San Bernardino's noise standards are included below and used in the noise impact analysis.

County of San Bernardino Noise Standards

Noise Element of the General Plan. The County of San Bernardino adopted a Noise Element in its General Plan (first adopted in 1989; last version adopted in 2007 and amended in 2013). The purpose of the Noise Element is to limit the exposure of the community to excessive noise levels. 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. 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." The County has adopted Goal N 1 from the Noise Element, as follows (County of San Bernardino 2013a):

² L_{dn} is a 24-hour day and night A-weighted noise exposure level that accounts for the greater sensitivity of most people to nighttime noise by weighting noise levels at night ("penalizing" nighttime noises). Noise between 10:00 p.m. and 7:00 a.m. is weighted (penalized) by adding 10 dB to take into account the greater annoyance of nighttime noises. Consistent with FTA requirements, the noise impact analysis considers noise impacts in terms of L_{dn} .

Goal N 1. The County will abate and avoid excessive noise exposures through noise mitigation measures incorporated into the design of new noise-generating and new noise-sensitive land uses, while protecting areas within the County where the present noise environment is within acceptable limits.

The County has adopted specific policies to accomplish this goal of the Noise Element, including the following policies summarized below:

- Areas within the County will be designated as “noise-impacted” if exposed to existing or projected future exterior noise levels from mobile or stationary sources exceeding the standards listed in Chapter 83.01 of the Development Code (see Tables 4.2.10-5 through 4.2.10-8).
- When industrial, commercial, or other land uses, including locally regulated noise sources, are proposed for areas containing noise-sensitive land uses, noise levels generated by the proposed use will not exceed the performance standards of Table N-2 within outdoor activity areas. The County will require preparation of an acoustical analysis prior to approval of the proposed development during the environmental review process so that noise mitigation is an integral part of the project design. The County will employ procedures to ensure that requirements imposed pursuant to the finding of an acoustical analysis are implemented as part of the project review and building permit processes.
- The County will enforce the State Noise Insulation Standards (CCR, Title 24) and Chapter 35 of the Uniform Building Code (UBC).
- The County will limit truck traffic in residential and commercial areas to designated truck routes; limit construction, delivery, and through-truck traffic to designated routes; and distribute maps of approved truck routes to County traffic officers.
- The County will enforce the hourly noise-level performance standards for stationary and other locally regulated sources, such as industrial, recreational, and construction activities, as well as mechanical and electrical equipment.

Table 4.2.10-5. Interior/Exterior Noise Level Standards – Mobile Noise Sources

Categories	Land Use	L _{dn} or CNEL, dBA	
		Interior Standard ¹	Exterior Standard ²
Residential	Single-family and multifamily, duplex, mobile homes	45	60 ³
Commercial	Hotel, motel, transient lodging	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	Hospital, nursing home, school, classroom, church, library	45	65
Open Space	Park	N/A	65

Source: County of San Bernardino Noise Element 2013a.

¹ Indoor environment excluding: bathrooms, kitchens, toilets, and corridors.

² Outdoor environment limited to: private yard of single-family dwellings, multifamily private patios or balconies, mobile home parks, hospital/office building patios, park picnic areas, school playgrounds, hotel and motel recreation areas.

³ An exterior noise level of up to 65 dBA L_{dn} (or CNEL) will 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 dBA L_{dn} (or CNEL) with windows and doors closed. Requiring that windows and doors remain closed to achieve an acceptable interior noise level will necessitate the use of air conditioning or mechanical ventilation.

CNEL = Community Noise Equivalent Level

dBA = A-weighted decibels

L_{dn} = day-night average noise level

N/A = not applicable

Table 4.2.10-6. Maximum Exterior Noise Limits, L_N (dBA)

Receiving Land Use	Time Period	L ₅₀	L ₂₅	L ₈	L ₂	L _{max}
Residential (single-family and multifamily)	Day: 7:00 a.m.–10:00 p.m.	55	60	65	70	75
	Night: 10:00 p.m.–7:00 a.m.	45	50	55	60	65

Source: County of San Bernardino Development Code 2013b.

dBA = A-weighted decibels

L₂ = the noise level exceeded 2% of the time during a stated period.

L₈ = the noise level exceeded 8% of the time during a stated period.

L₂₅ = the noise level exceeded 25% of the time during a stated period.

L₅₀ = the noise level representing the median noise level; half the time the noise level exceeds this level and half the time it is less than this level.

L_{max} = maximum noise level.

L_N = percentile noise exceedance level.

Table 4.2.10-7. Noise Standards for Stationary Noise Sources

Affected Land Uses (Receiving Noise)	7:00 a.m. to 10:00 p.m. (L_{eq})	10:00 p.m. to 7:00 a.m. (L_{eq})
Residential	55 dBA	45 dBA
Professional services	55 dBA	55 dBA
Other commercial	60 dBA	60 dBA
Industrial	70 dBA	70 dBA
Source: County of San Bernardino Development Code 2013b.		
dBA = A-weighted decibels		
L_{eq} = equivalent continuous sound level		

Table 4.2.10-8. Noise Standards for Other Structures

Typical Uses	12-Hour Equivalent Sound Level (Interior) in dBA L_{dn}
Educational, institutions, libraries, meeting facilities, etc.	45
General office, reception, etc.	50
Retail stores, restaurants, etc.	55
Other areas for manufacturing, assembly, testing, warehousing, etc.	65
Source: County of San Bernardino Development Code 2013b.	
dBA = A-weighted decibels	
L_{dn} = day/night noise level	

County of San Bernardino 2007 Development Code

The County's Development Code, Section 83.01.080, sets noise standards for stationary noise sources as shown in Table 4.2.10-7.

Maximum Exterior Noise Limits. Section 83.01.080 of the County Development Code limits exterior noise attributable to stationary noise sources at residential properties to 55 dBA from 7:00 a.m. to 10:00 p.m. and 45 dBA from 10:00 p.m. to 7:00 a.m. It is unlawful for any person to create noise at noise-sensitive land uses that causes the sound level to exceed the following:

- The noise standard for a cumulative period of more than 30 minutes in any hour.
- The noise standard plus 5 dBA for a cumulative period of more than 15 minutes in any hour.
- The noise standard plus 10 dBA for a cumulative period of more than 5 minutes in any hour.
- The noise standard plus 15 dBA for a cumulative period of more than 1 minute in any hour.
- The noise standard plus 20 dBA for any period of time.

Noise standards for adjacent mobile noise sources is regulated by the County's Development Code, Section 83.01, has noise standards similar to those identified in Table 4.2.10-5. In addition, Table 4.2.10-8 lists noise standards for other structures that require these structures to be sound, attenuated against the combined input of all present and projected exterior noise to not exceed the criteria.

In addition, the County's requirements include that the average of the maximum levels on the loudest of intrusive sounds occurring during a 24-hour period is not to exceed 65 dBA interior.

Impact Analysis

Methodology

The Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used to evaluate existing traffic-related noise conditions along Locust Avenue, Armstrong Road, and other roadways in the project vicinity. This model requires various parameters, including traffic volumes, vehicle mix, vehicle speed, and roadway geometry to compute typical equivalent noise levels during daytime, evening, and nighttime hours. The resulting noise levels were weighted and summed over 24-hour periods to determine the CNEL values.

Evaluation of noise impacts associated with the project included the following steps.

- Determine the short-term construction noise impacts on off-site sensitive land uses.
- Determine the long-term traffic noise impacts on off-site noise-sensitive uses.
- Determine the long-term traffic impacts on on-site uses.
- Determine the long-term operational noise impacts on off-site sensitive uses.
- Determine the required mitigation measures to reduce significant short-term and long-term noise impacts.

A noise level change of 3 dBA or less is generally considered to be below the threshold of perception, and anything above can be considered an impact. The noise impact analysis used County noise standards, including the County's Noise Element of the General Plan and Development Code noise control ordinance, as thresholds against which potential noise impacts were evaluated. However, the City's construction standard was utilized in this analysis.

Thresholds of Significance

Criteria for determining the significance of impacts related to noise are based on criteria contained in Appendix G of the State CEQA Guidelines. The proposed project could have a significant impact on the environment if it would result in the following.

- NOI-1** Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- NOI-2** Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.
- NOI-3** A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- NOI-4** A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.
- NOI-5** For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, exposure of people residing or working in the project area to excessive noise levels.

- NOI-6** For a project within the vicinity of a private airstrip, exposure of people residing or working in the project area to excessive noise levels.

Project Design Features

The following noise-related project design features, which include specific plan requirements, regulatory requirements, and standard requirements, would prevent or reduce potentially significant environmental impacts.

Specific Plan Requirements

SP-GG-4: Provide Electrical Loading Docks. Electrical outlets will be provided in loading dock areas to provide power for trucks when refrigeration is needed. This allows trucks with refrigerated cargo to keep their cargo cool without using their engines, minimizing idling time to reduce air emissions and use of fuel on site.

Regulatory Requirements

RR-N-1: Comply with the Construction Noise Municipal Code Exemption. The City's Municipal Code limits the hours of construction to between 7:00 a.m. and 6:00 p.m. on weekdays and between 8:00 a.m. and 5:00 p.m. on Saturdays; no construction is to be conducted on Sundays or federal holidays.

Standard Requirements

SR-N-1: Ensure Proper Operation and Maintenance of Construction Equipment. During all site excavation and grading, the construction contractors will equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.

SR-N-2: Ensure Proper Placement of Stationary Construction Equipment during Construction. The construction contractor will place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site.

SR-N-3: Stage Construction Equipment Away from Noise-Sensitive Receptors. The construction contractor will locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction activities.

Impacts and Mitigation

Impact NOI-1. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies

Construction Noise

During construction of the WVLCSP, construction-related noise levels would be higher than existing ambient noise levels in the project area, specifically at sensitive receptors in the general vicinity of the project site. The closest residences in the project area are approximately 150 feet east of the project site. Figure 4.2.2-1 in Section 4.2.2, *Air Quality*, shows the location of residences near the project site.

Construction of the proposed project would require the use of scrapers, dozers, and trucks. Based on the Suggested Maximum Sound Level for Analysis at 50 feet (dBA) column in Table 4.2.10-9, the maximum noise level generated by scrapers is assumed to be 87 dBA L_{max} at 50 feet. The maximum noise level generated by dozers is approximately 85 dBA L_{max} at 50 feet. The maximum noise level generated by trucks is approximately 86 dBA L_{max} at 50 feet. Combined together with these activities occurring at the same time, active construction would result in approximately 91 dBA L_{max} at a distance of 50 feet.

Table 4.2.10-9. Typical Maximum Construction Equipment Noise Levels (L_{max})

Type of Equipment	Range of Maximum Sound Level Measured at 50 feet (dBA)	Suggested Maximum Sound Level for Analysis at 50 feet (dBA)
Scrapers	83-91	87
Dozers	77-90	85
Trucks	81-87	86

dBA = A-weighted decibels

L_{max} = maximum instantaneous noise level

Source: *Noise Control for Buildings and Manufacturing Plants*, Bolt, Beranek, & Newman 1987, as cited in Appendix K.

The residences 150 feet to the east of the proposed project site would be subject to short-term construction noise reaching 81 dBA L_{max} near the southern boundary of the project site. The next closest residences are located 250 feet south of the project site and would be subject to short-term noise reaching 77 dBA L_{max} generated by construction activities in the southern portion of the project site. The residences 1,000 feet north of the project site would be subject to short-term noise reaching 65 dBA L_{max} generated by construction activities in the northern portion of the project site. While these noise levels would likely represent a substantial increase over the existing ambient noise level, construction is exempted by the City's municipal code provided that it occur between the hours of 7:00 a.m. and 6:00 p.m. on weekdays, between 8:00 a.m. and 5:00 p.m. on Saturdays, and at no time on Sundays and federal holidays, as provided in **Regulatory Requirement RR-N-1**. Furthermore, to reduce noise exposure to nearby residences to the greatest extent practicable, the proposed project would adhere to the conditions and requirements listed in Section 3.6 in Chapter 3, *Project Description*, related to the municipal code's requirement for activity restrictions as well as the operation and location of construction equipment (**Standard Requirements SR-N-1** through **SR-N-3**) and **Mitigation Measure AQ-7**. Therefore, this impact would be less than significant.

Operational Noise

Potential long-term noise impacts would be associated with stationary sources on the project site and on- and off-site traffic activities.

Condensers and Fans

The buildings proposed for the project would include rooftop condenser fans and exhaust fans. As shown in Table 4.2.10-10, each condenser fan would generate a source sound power level of 99 dBA and each exhaust fan would generate a source sound power level of 95 dBA.

Table 4.2.10-10. Predicted Sound Levels from Condenser and Exhaust Fans at Residences to the East

Sound Source	Number of Units	Sound Power Level per Unit (dBA)	Sound Pressure Level at 450 feet from the Closest Sensitive Receptor with No Shielding (dBA L_{eq})
Trane Rooftop Compressor and Condenser Fan	6	99	56
UBG Upblast Exhaust Fan	8	95	53
dBA = A-weighted decibels			
L_{eq} = equivalent continuous sound level			

It is estimated that there would be eight upblast exhaust fans and six condenser fans on Building 1 (on the northwestern corner of Armstrong Road/Locust Avenue and Alder Avenue). It is assumed that these exhaust fans and condenser fans would be spread out over the roof of the building at varying distances from adjacent residences to the east. Analysis of condenser fans and/or exhaust fans was conducted using the distance from the dock doors to closest sensitive receptors to simplify the process. As shown in Table 4.2.10-10, noise levels from the condensers and fans would be 56 and 53 dBA L_{eq} , respectively, at a distance of 450 feet. Cumulative noise levels from the six condensers and eight fans would be 58 dBA at a distance of 450 feet. Based on the source to receiver geometry (the condenser and fans being located on the building's roof), the rooftop edges would provide, on average, 13 dBA of noise reduction. This would reduce noise levels from the condensers and fans to 45 dBA L_{eq} . The County's standard for stationary noise sources states that stationary noise sources cannot exceed 55 dBA L_{eq} between 7:00 a.m. and 10:00 p.m. and 45 dBA L_{eq} between 10:00 p.m. and 7:00 a.m. for 30 minutes in any 1 hour. As fans and condensers would not exceed this threshold especially during off-peak hours when the equipment is generally not in full use due to less demand, impacts would be less than significant.

Loading and Unloading Docks

The proposed project would facilitate development of up to seven new buildings where loading and unloading activities would take place. Building 7 at the southeastern corner of Locust Avenue and Jurupa Avenue would be the nearest building to existing sensitive receptors north of Jurupa Avenue; however, Building 1's bay of loading and unloading docks would be the closest to sensitive receptors (450 feet to the east of the proposed project site across Locust Avenue between 8th and 11th Streets, the location of existing residences within the County).

Table 4.2.10-11 shows noise levels from on-site diesel trucks at the closest sensitive receptors to the proposed project site.

Table 4.2.10-11. Predicted Sound Levels from Diesel Trucks at Nearby Residences

Sound Source	Number of Units	Sound Power Level Per Unit (dBA)	Sound Pressure Level at the Closest Sensitive Receptor with No Shielding (dBA L_{eq})
East			
Diesel Truck Idling (Building 1)	36	96	61
South			
Diesel Truck Idling (Building 3)	44	96	46
Diesel Truck Idling (Building 4)	16	96	57
North*			
Diesel Truck Idling (Building 1)	68	96	52
Diesel Truck Idling (Building 2)	54	96	51

* Topographic changes between the project site and residences to the northwest would provide 8 dBA in noise attenuation, reducing the project site noise to 43 dBA or lower. Also, with shielding by Building 2, there would be 15 dBA in noise attenuation for Building 1 loading docks only.

dBA = A-weighted decibels

L_{eq} = equivalent continuous sound level

Loading and unloading of trucks at Building 1 would take place at multiple loading docks along the length of the building. The noise analysis assumed that a maximum of 36 trucks would be loading or unloading at any one time on the east side of Building 1.³ Appendix K references a sound power level of 99 dBA for an idling diesel truck. Table 4.2.10-11 shows that noise levels from on-site diesel truck operations at Building 1 would be 61 dBA L_{eq} at the closest sensitive receptor to the east of the proposed project site.

The loading and unloading docks of Buildings 1 and 2 would also be closest to receptors to the north of the proposed project site. These docks are 1,650 feet and 1,500 feet south of receptors, respectively. Loading and unloading of trucks at Buildings 1 and 2 would take place at multiple loading docks along the length of the building. The noise analysis assumed that a maximum of 68 trucks at Building 1 and 54 trucks at Building 2 could be loading or unloading at any one time. Table 4.2.10-11 shows that noise levels from on-site diesel truck operations at Buildings 1 and 2 would be 52 and 51 dBA L_{eq} , respectively, at the closest sensitive receptor to the north of the proposed project site. Combined noise levels for these two noise sources would be 55 dBA L_{eq} . The proposed Buildings 1 and 2 would provide 15 dB worth of shielding to receptors located to the north of the buildings with topographic changes and shielding from other buildings. Therefore, noise levels could be expected to be 43 dBA L_{eq} .

The noise analysis evaluated proposed project impacts taking into account construction of a screen wall made of cement or concrete masonry units (CMU) along the eastern project boundary adjacent to Building 1, with two rolling gates that can be opened and closed during truck operations at night to shield the openings for truck entrances. Figure 4.2.10-2 shows the locations of sound barriers in relation to proposed building locations. Since the majority of the dock doors and loading/unloading area would be blocked by this 14-foot-high screen wall that would provide a minimum of 14 dBA in noise reduction, the projected truck operational noise would be reduced to 47 dBA L_{eq} or lower. Therefore, no daytime restriction on truck loading/unloading operations would be required with

³ The total number of proposed loading docks is 72. Thirty-six of these loading docks would be on the west side of the building, which would effectively shield noise from idling trucks at the closest sensitive receiver.

the implementation of the 14-foot-high screen wall on the east side of Building 1 provided as **Mitigation Measure NOI-1**. In addition, the project would adhere to **Mitigation Measure AQ-10**, which requires trucks to be turned off when not in use and to not idle for more than 5 minutes; and **Specific Plan Requirement SP-GG-4**, which provides electrical outlets in loading dock areas to provide power for trucks when refrigeration is needed. This allows trucks with refrigerated cargo to keep their cargo cool without using their engines. However, nighttime truck operations would still potentially exceed the 45 dBA L_{eq} nighttime noise standard; therefore, restrictions such as limiting the nighttime operations on the east side of Building 1 to 20 trucks would be required to reduce impacts, provided as **Mitigation Measure NOI-2**. However, impacts would remain significant.

The project proposes to construct a screen wall along the western project boundary adjacent to Building 2, with a wrap-around portion on the north side to cover the parking area on the west side of the building. Per the requirements in **Mitigation Measure NOI-1**, this screen wall would further reduce truck operational noise from the west side of Building 2 for residences to the northwest of the project side and impacts would be less than significant.

The loading and unloading docks in the bays of Buildings 3 and 4 would be closest to receptors to the south of the proposed project site.⁴ These docks are 1,050 feet and 450 feet north of receptors, respectively. Loading and unloading of trucks at Buildings 3 and 4 would take place at multiple loading docks along the length of the building. The noise analysis assumed that a maximum of 16 trucks at Building 4 and 44 trucks at Building 3 would be loading or unloading at any one time. Table 4.2.10-11 shows that noise levels from on-site diesel truck operations at Building 3 and 4 would be 46 and 57 dBA L_{eq} , respectively, at the closest sensitive receptor to the south of the proposed project site. Combined noise levels for these two noise sources would be 57 dBA L_{eq} .⁵

The noise analysis evaluated proposed project impacts taking into account construction of a screen wall made of cement or CMU along the south/east side of Building 4. Since there would be little or no break in the screen walls proposed at these locations for residences to the south and southeast of the project site, screen walls 12 feet in height would provide 12 dBA or more in noise attenuation for these residences. The projected truck operational noise at the residences to the southeast of the project site would be reduced to 45 dBA L_{eq} or lower. This noise level is lower than the daytime and nighttime noise standards for residential uses. Therefore, no restrictions on truck operations for dock doors on the east/south side of Building 4 would be required, with the implementation of the 12-foot-high screen walls along the south/east side of the building provided as **Mitigation Measure NOI-1**.

Overall, noise levels of this magnitude would not exceed the City and County maximum exterior noise standards of 75 dBA L_{max} between 7:00 a.m. and 10:00 p.m. and 65 dBA L_{max} between 10:00 p.m. and 7:00 a.m. However, loading and unloading could continue for more than 30 minutes in any 1 hour and result in unwanted noise to nearby sensitive receptors. Loading and unloading of trucks would be required to comply with the residential noise standard of 55 dBA L_{50} between 7:00 a.m. and 10:00 p.m. and 45 dBA L_{50} between 10:00 p.m. and 7:00 a.m.;⁶ even though **Mitigation**

⁴ All loading and unloading activities would occur on the north side of Building 5. Therefore, Building 5 would effectively shield activities at both Buildings 5 and 6.

⁵ Noise sources of equal intensity only increase the noise level by 3 dB because noise is measured on a logarithmic scale. Therefore, a noise source that is 10 dB less than another noise source will have no noticeable effect on the overall noise level.

⁶ 55 dBA L_{50} and 45 dBA L_{50} are the standards that cannot be exceeded during a cumulative of 30 minutes during any single hour. The standard requires that the noise level be below these thresholds for 50.1% of any single hour.

Measure AQ-10 and **Specific Plan Requirement SP-GHG-4** would be implemented, mitigation would be required to reduce impacts to less-than-significant levels. However, nighttime truck operations on the east side of Building 1 could still potentially exceed the 45 dBA L_{eq} nighttime noise standard to adjacent residential receptors even with implementation of **Mitigation Measures NOI-1** and **NOI-2**. Therefore, operational noise impacts on receptors east of the project nearest Building 1 would remain significant and unavoidable.

Parking Lot Noise

Proposed parking facilities are located along the four sides of the proposed buildings. Representative parking activities, such as employees conversing and doors slamming, would generate approximately 60 to 70 dBA L_{max} at 50 feet intermittently. The nearest residential home to the east is approximately 250 feet from the edge of the parking lot along Locust Avenue, and the residences to the south of the project site are at least 300 feet from that edge of the parking lot. With the noise attenuation from the distance divergence, noise in the parking lot would be attenuated to below 60 dBA L_{max} . Therefore, neither the residence to the east nor the residences to the south are anticipated to experience a significant noise issue with respect to on-site parking lot activity.

Operational Traffic Noise

Off-site Traffic Noise. Roadway segments analyzed in the noise study suggest that project-related traffic associated with the proposed project would result in a small increase in noise levels (less than 1.0 dBA) along most roadway segments within the project vicinity. However, the following roadway segments would experience more substantial increases in noise levels.

- Jurupa Avenue between Locust Avenue and Cedar Avenue
- Alder Avenue north of Jurupa Avenue
- Locust Avenue between Jurupa Avenue and 11th Street
- Locust Avenue between 11th Street and 7th Street

All other roadways would have no noticeable effect.

A noise level change of 3 dBA or less is generally considered to be below the threshold of perception. Table 4.2.10-12 shows noise along the four roadway segments listed above that would experience noticeable increases.

Table 4.2.10-12. Predicted Exterior Existing, Opening Year, and Future Traffic Noise Levels with and without the Project

	Jurupa Ave. between Locust Ave. and Cedar Ave.	Alder Ave. North of Jurupa Ave.	Locust Ave. between Jurupa Ave. and 11 th St.	Locust Avenue between 11 th St. and 7 th St.
Existing				
Modeled existing noise level at a distance of 50 feet (dBA CNEL)	63	54	66	65
Does the existing noise level currently exceed the City's 65 dBA CNEL threshold?	No	No	Yes	Yes
Modeled existing plus project noise level at a distance of 50 feet (dBA CNEL)	67	57	69	69
Difference	4	3	3	4
Modeled Opening Year (2014)				
Modeled opening year (2014) without project noise level at a distance of 50 feet (dBA CNEL)	64	57	66	66
Modeled opening year (2014) plus project noise level at a distance of 50 Feet (dBA CNEL)	67	59	70	69
Difference	3	2	4	3
Modeled Future (2035)				
Modeled future (2035) without project noise level at a distance of 50 feet (dBA CNEL)	68	65	70	69
Modeled future (2035) plus project noise level at a distance of 50 feet (dBA CNEL)	70	66	73	72
Difference	2	1	3	3
CNEL = Community Equivalent Noise Level dBA = A-weighted decibels				

A review of the project alignment shows that sensitive receptors exist within 50 feet of the centerline of the roadway segments listed above, with the exception of the segment between Locust Avenue between Jurupa Avenue and 11th Street.

Table 4.2.10-12 shows that noise at sensitive receptors within 50 feet of the centerline along Alder Avenue north of Jurupa Avenue would not exceed the 65-dBA CNEL noise level at the existing and opening year conditions but would reach 65 dBA CNEL noise levels in the future without project conditions. Noise levels of this nature would meet the 65-dBA CNEL threshold in the City's General Plan.

According to the existing plus project modeling, sensitive receptors within 50 feet of the centerline would experience a noise increase of:

- 3 dB (up to 57 dBA CNEL) along Alder Avenue.
- 3 dB (up to 66 dBA CNEL) along Locust Avenue between 11th Street and 7th Street.
- 4 dB (up to 67 dBA CNEL) along Jurupa Avenue between Locust Avenue and Cedar Avenue.

In the Modeled Opening Year (2014), sensitive receptors within 50 feet of the centerline would experience a noise increase of:

- 2 dB (up to 59 dBA CNEL) along Alder Avenue.
- 3 dB (up to 70 dBA CNEL) along Locust Avenue between 11th Street and 7th Street.
- 3 dB (up to 67 dBA CNEL) along Jurupa Avenue between Locust Avenue and Cedar Avenue.

In the Modeled Future (2035), sensitive receptors within 50 feet of the centerline would experience a noise increase of:

- 1 dB (up to 66 dBA CNEL) along Alder Avenue.
- 4 dB (up to 73 dBA CNEL) along Locust Avenue between 11th Street and 7th Street.
- 2 dB (up to 70 dBA CNEL) along Jurupa Avenue between Locust Avenue and Cedar Avenue.

Table 4.2.10-12 shows that with inclusion of the proposed project under existing conditions, the noise level would exceed the City's threshold for residential land uses of 65 dBA CNEL along two roadway segments (Locust Avenue between 11th Street and 7th Street and between Jurupa Avenue and 11th Street). However, no residences exist on Locust Avenue between Jurupa Avenue and 11th Street, and no impacts would occur in this location. Inclusion of the proposed project would cause the Jurupa Avenue segment to exceed the threshold during the existing and opening year timeframe as well. Alder Avenue would exceed the threshold in the future 2035 timeframe. Therefore, the proposed project would result in a significant noise impact, and **Mitigation Measure NOI-3** would be required to reduce impacts. If a noise barrier is not feasible or practical (due to driveway access or other reasons) for any noise-sensitive land uses along the two roadway segments listed above, then the project's impacts would remain significant and unavoidable.

On-site Traffic Noise Impacts. Because the proposed industrial project with buildout of the WVLCSP is not considered noise sensitive and would be exposed to traffic noise levels below 70 dBA CNEL, no significant traffic noise impacts on on-site uses would occur; therefore, no mitigation measures are required.

Specific Plan Requirement, Regulatory Requirements, and Standard Requirements

The applicant shall implement the following specific plan requirement, regulatory requirements, and standard requirements, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **SP-GG-4:** Provide Electrical Loading Docks.
- **RR-N-1:** Comply with the Construction Noise Municipal Code Exemption.
- **SR-N-1:** Ensure Proper Operation and Maintenance of Construction Equipment.
- **SR-N-2:** Ensure Proper Placement of Stationary Construction Equipment During Construction.

- **SR-N-3: Stage Construction Equipment Away from Noise-Sensitive Receptors.**

Mitigation Measures

Implement **Mitigation Measures AQ-7 and AQ-10.**

Mitigation Measure NOI-1: Installation of Sound Barriers On Site. The applicant shall construct a screen wall/noise barrier near Buildings 1, 2, 3, 4 and 7, as shown in Figure 4.2.10-2, to shield noise from adjacent sensitive receptors, including along Locust Avenue and near sensitive receptors within the City of Jurupa Valley to the south and the County of San Bernardino to the east. A screen wall would be constructed from cement or concrete masonry units (CMU) along the eastern project boundary adjacent to Building 1, with two rolling gates that can be opened and closed during truck operations at night to shield the openings for truck entrances. A screen wall would also be constructed along the western project boundary adjacent to Building 2, with a wrap-around portion on the north side to cover the parking area on the west side of the building. If constructed, this screen wall would further reduce truck operational noise from the west side of Building 2 for residences to the northwest of the project side. Additionally, a screen wall would be constructed along the south/east side of Building 4. Noise barriers will be installed with noise attenuating qualities and will have a minimum height of 12 feet above the grade.

Mitigation Measure NOI-2: Truck Idling. To reduce potential noise impacts related to truck idling during project operations, the project operator shall ensure through contract provisions and parking lot signage that the maximum number of trucks idling on the east side of Building 1 shall be limited to 20 trucks during nighttime hours between 10:00 p.m. and 7:00 a.m. Contract provisions shall be submitted to the City of Fontana Community Development Department and signs in the parking lot adjacent to Building 1 noting the restriction shall be installed in accordance with City requirements prior to issuance of a certificate of occupancy.

Mitigation Measure NOI-3: Installation of Sound Barriers Off Site. Prior to operation of the project and issuance of a certificate of occupancy for the any adjacent building, a noise barrier with a minimum height of 6 feet will be installed along the residential property line for the following off-site areas with residential property owner approval and coordination for installation:

- Along Locust Avenue between 11th Street and 7th Street, and
- Along Jurupa Avenue between Locust Avenue and Cedar Avenue.

Residual Impacts

Construction impacts would be less than significant with implementation of **Specific Plan Requirement SP-GG-4, Regulatory Requirement RR-N-1, Standard Requirements SR-N-1** through **SR-N-3**, and **Mitigation Measure AQ-7**. Operational impacts associated with idling trucks would be significant, and implementation of **Mitigation Measures AQ-10, NOI-1** and **NOI-2** would reduce noise impacts to less-than-significant levels with the exception of one location: residences on the east side of Locust Street in the County of San Bernardino. Also, at some locations along the affected roadway segments of Jurupa Avenue and Locust Street, construction of off-site noise barriers adjacent to residential uses would be required to reduce impacts; however, installation may not be feasible due to access constraints, such as driveway access. Therefore, even with the implementation of **Mitigation Measure NOI-3**, impacts associated with project-related traffic would be significant and unavoidable.

Impact NOI-2. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels

Construction of the proposed project would result in temporary vibration from use of heavy equipment and machinery. The FTA has compiled typical vibration levels generated by construction equipment, which are commonly used as a reference for construction vibration level analysis. The vibration levels produced by construction equipment are outlined in Table 4.2.10-13.

Table 4.2.10-13. Typical Vibration Levels for Construction Equipment

Equipment	Approximate peak particle velocity at 25 feet (inches/second)	Approximate peak particle velocity at 100 feet (inches/second)
Large bulldozer	0.089	0.01
Loaded trucks	0.076	0.01

Source: FTA 2006.

Notes:

Peak particle velocity measured at 25 feet unless noted otherwise.

Root mean square amplitude ground velocity in decibels (VdB) referenced to 1 micro-inch/second.

Vibration levels from construction equipment attenuate at a rate of $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$ as referenced above. Groundborne vibration typically decreases rapidly with distance. Based on the FTA data (Table 4.2.10-13), vibration velocities from typical heavy construction equipment operation that would be used during project construction range from 0.076 to 0.089 inch per second PPV at 25 feet from the source of activity. The closest construction equipment adjacent to sensitive receptors would be 100 feet from the source activity (receptors on the east side of Locust Avenue); from this distance, construction PPV would be approximately 0.01 inch per second.

Because neither the state nor local municipalities maintain regulatory standards for vibration sources, potential structural damage and human annoyance associated with vibration from construction activities were evaluated against California Department of Transportation vibration limits (Table 4.2.10-14).

Table 4.2.10-14. Response of People and Effects on Structures from Continuous Vibration

Peak Particle Velocity (in/sec)	Human Response	Effect on Structures
0.006-0.019	Threshold of perception; possibility of intrusion.	Vibrations unlikely to cause damage of any type.
0.08	Vibrations readily perceptible.	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected.
0.10	Level at which continuous vibrations begin to annoy people.	Virtually no risk of "architectural" damage to normal buildings.

Peak Particle Velocity (in/sec)	Human Response	Effect on Structures
0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibration).	Threshold at which there is a risk of "architectural" damage to normal dwelling-houses with plastered walls and ceilings; special types of finish such as lining of walls, flexible ceiling treatment, etc. would minimize "architectural" damage.
0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges.	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage.

Source: California Department of Transportation 2004.

Based on the levels of vibration produced during construction of the proposed project, vibration levels would be under the threshold of perception and would not cause damage to structures in the area. Because the predicted vibration levels from project construction would be at or below the threshold of perception, impacts from groundborne vibration or groundborne noise would be less than significant.

Operational impacts related to vibration would also occur from loaded trucks accessing the site on local roadways. Because the rubber tires and suspension systems of trucks and other on-road vehicles provide vibration isolation, it is unusual for on-road vehicles to cause groundborne vibration problems. When on-road vehicles cause effects such as rattling of windows, the source of such vibration is typically airborne noise. Groundborne vibrations are mostly associated with passenger vehicles and trucks encountering poor roadway conditions such as potholes, bumps, expansion joints, or other discontinuities in the road surface. Smoothing the bump or filling the pothole will usually solve the problem.

Sensitive receptors would be located along the proposed truck routes and could be within 50 feet of the loaded trucks. Vibration levels from loaded trucks would be approximately 0.076 PPV at a distance of 25 feet. Vibration levels would attenuate to 0.03 PPV at a distance of 50 feet. Vibration levels of this magnitude would be at or just above the level of human perception and would not cause damage to structures in the area. Because the predicted vibration levels from project operations would be at or below the threshold of perception, exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels would not occur and impacts from groundborne vibration or groundborne noise would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact NOI-3. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project

As discussed in Impact NOI-1, potential long-term noise impacts would be associated with stationary sources on the project site and traffic activities.

Truck Idling and Loading/Unloading

As referenced above, operations associated with loading and unloading docks would raise the noise levels at sensitive receptors to the north, east, and south of the proposed project site. Receptors to the east of the project site could experience noise levels as high as 61 dBA L_{eq} . Receptors to the north and south of the project site would experience noise levels as high as 50 and 57 dBA L_{eq} , respectively, as provided in Tables 4.2.10-10 and 4.2.10-11. Noise levels of this magnitude would represent an increase over the existing ambient level in the project vicinity due to the rural characteristics in the project vicinity. Impacts would be significant, and implementation of **Specific Plan Requirement SP-GG-4** and **Mitigation Measures AQ-10** and **NOI-1** through **NOI-3** would be required to reduce but not eliminate significant impacts.

Rooftop Equipment Noise

As mentioned in Impact NOI-1, implementation of the WVLCSP would include the use of rooftop condenser fans and exhaust fans. Each condenser fan would generate a source sound power level of 99 dBA, and each exhaust fan would generate a source sound power level of 95 dBA. It is estimated that there would be eight upblast exhaust fans and six condenser fans on Building 1. Based on the noise analysis conducted for the project (Appendix K), cumulative noise levels from condenser and exhaust fans would be 45 dBA L_{eq} at the closest sensitive receptors. Noise levels of this magnitude are most likely at or below the existing noise levels in the project area. Furthermore, noise levels of this magnitude are below the County's threshold of 45 dBA L_{eq} . Therefore, impacts from noise levels related to rooftop equipment would be considered less than significant. No mitigation measures would be required.

Traffic Noise Impacts

As discussed in Impact NOI-1, implementation of the proposed project would result in an increase in noise levels of 3 to 4 dBA over the existing without project noise environment, 2 to 4 dBA over the opening year without project noise environment, and 1 to 4 dBA over the future year without project noise environment (Table 4.2.10-12 above). As described previously, a noise level change of 3 dBA or less is generally considered to be barely perceptible. All of the roadways that would experience an increase at or below 3 dBA would not be considered substantially impacted by project-related traffic noise. However, two roadway segments (Jurupa Avenue between Locust and Cedar Avenues and Locust Avenue between 11th and 7th Streets) during two timeframes (existing and future 2035 timeframes) would experience a 4-dBA increase. A noise level of this magnitude would be just beyond the level of perceptibility (which is assumed to be 3 dBA) and therefore is considered to be a substantial increase. Impacts would be significant, and implementation of **Mitigation Measure NOI-3** would be required.

On-site Traffic Noise Impacts

The site currently does not contain land uses that generate noise. Because the proposed industrial project is not considered noise sensitive and would be exposed to traffic noise levels below 70 dBA

CNEL, no significant traffic noise impacts on on-site uses would occur. Therefore, no mitigation measures are required.

Specific Plan Requirement

The applicant shall implement the following specific plan requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **SP-GG-4:** Provide Electrical Loading Docks.

Mitigation Measures

Implement **Mitigation Measures AQ-10, NOI-1, and NOI-2** to reduce ambient noise levels related to truck idling during loading and unloading and **Mitigation Measure NOI-3** to reduce ambient noise levels related to increased traffic.

Residual Impacts

While the noise level associated with truck idling could still be an increase over ambient noise levels, it would not represent a substantial increase. Therefore, with inclusion of **Specific Plan Requirement SP-GG-4** and **Mitigation Measures AQ-10, NOI-1, and NOI-2**, impacts would be less than significant with the exception of one location, residences on the east side of Locust Street in the County of San Bernardino, where impacts would be significant and unavoidable.

At some locations along the impacted roadway segments, noise barriers would not be feasible due to access constraints to property (such as driveway access). Therefore, even with the implementation of **Mitigation Measure NOI-3**, impacts associated with project-related traffic would be significant and unavoidable.

Impact NOI-4. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project

Construction

As discussed in Impact NOI-1, construction-related, short-term noise levels would be higher than existing ambient noise levels in the project area but would cease once construction was complete. Receptors to the east, south, and north of the proposed project site would experience noise levels of 81 dBA L_{max} , 77 dBA L_{max} , and 65 dBA L_{max} . While these noise levels would represent a substantial increase over the existing ambient noise level, construction is exempted by the City's municipal code (identified as **Regulatory Requirement RR-N-1**) provided that it occur between the hours of 7:00 a.m. and 6:00 p.m. on weekdays and between 8:00 a.m. and 5:00 p.m. on Saturdays and at no time on Sundays and federal holidays. In addition, **Standard Requirements SR-N-1 through SR-N-3** and **Mitigation Measure AQ-7** would reduce noise related to construction. Therefore, impacts would be less than significant.

Parking Lot Activity

As discussed in Impact NOI-1, proposed parking facilities would be located along the four sides of the proposed buildings. Representative parking activities, such as employees conversing and doors slamming, would generate approximately 60 to 70 dBA L_{max} at 50 feet intermittently. The nearest residential home to the east is approximately 250 feet from the edge of the parking lot along Locust Avenue, and the residences to the south of the project site are at least 300 feet from that edge of the

parking lot. With the noise attenuation from the distance divergence, noise in the parking lot would be attenuated to below 60 dBA L_{max} . Noise levels of this magnitude are likely similar to the existing maximum noise levels in the vicinity of the project. Thus, neither the residence to the east nor the residences to the south would experience a substantial noise increase related to on-site parking lot activity. In addition, **Specific Plan Requirement SP-GG-4** would reduce noise related to loading dock activity near the parking lots. Impacts would be less than significant.

Specific Plan Requirement, Regulatory Requirements, and Standard Requirements

The applicant shall implement the following specific plan requirement, regulatory requirements, and standard requirements, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **SP-GG-4:** Provide Electrical Loading Docks.
- **RR-N-1:** Comply with the Construction Noise Municipal Code Exemption.
- **SR-N-1:** Ensure Proper Operation and Maintenance of Construction Equipment.
- **SR-N-2:** Ensure Proper Placement of Stationary Construction Equipment during Construction.
- **SR-N-3:** Stage Construction Equipment Away from Noise-Sensitive Receptors.

Mitigation Measures

Implement **Mitigation Measure AQ-7**.

Residual Impacts

Impacts would be less than significant with implementation of **Specific Plan Requirement SP-GG-4, Regulatory Requirement RR-N-1, Standard Requirements SR-N-1 through SR-N-3, and Mitigation Measure AQ-7**.

Impact NOI-5. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, exposure of people residing or working in the project area to excessive noise levels

The project site is not within the 2 miles of a public airport. The nearest aviation facilities are the Flabob Airport in Riverside County, approximately 3 miles to the south, the Rialto Municipal Airport, approximately 5.5 miles to the north, and the Riverside Municipal Airport, approximately 6 miles to the south. The San Bernardino International Airport is approximately 9.5 miles to the northeast of the project site. Ontario International Airport is approximately 13 miles west of the project site. Fontana is within the flight path of Ontario International Airport and is one of the identified affected agencies of the LA/Ontario International Airport Land Use Compatibility Plan. This plan shows that the nearest runway is 3 miles to the west of the Fontana city limits (Ontario Airport Planning 2011). However, the project site is outside the 65-dB CNEL noise contours of all local airports. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact NOI-6. For a project within the vicinity of a private airstrip, exposure of people residing or working in the project area to excessive noise levels

See discussion for Impact NOI-5 above. The project site is not near a private airstrip. As previously described, aircraft noise is part of the project area's noise environment. The nearest aviation facilities are the Flabob Airport, approximately 3 miles to the south, Rialto Municipal Airport, approximately 5.5 miles to the north, and the Riverside Municipal Airport, approximately 6 miles to the south. The City of Fontana is within the flight path of Ontario International Airport; however, it is outside the 65-dB CNEL noise contours of all local airports. As no private airstrips are located within the vicinity of the project, no significant noise impact would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.



4.2.11 Population and Housing

Introduction

This section analyzes the potential for impacts related to population and housing that could occur as a result of the proposed West Valley Logistics Center Specific Plan (WVLCSP). A summary of population and housing characteristics, which are based on existing data and documentation, of the City and region are presented.

Existing Conditions

The project site is primarily vacant and undeveloped, with two utility corridors passing through its northern and southeastern portions. The proposed project is near established residential neighborhoods in southeastern Fontana in the County of San Bernardino, and is adjacent to the City of Jurupa Valley and unincorporated areas of San Bernardino County.

Population and Housing

As of 2013, the County of San Bernardino had a population of approximately 2,076,274 individuals, with 704,540 housing units, 88,416 (12.5%) of which are vacant. Additionally, the City of Fontana had a population of approximately 200,974 individuals, with 52,452 housing units, 2,773 (5.3%) of which are vacant. (California Department of Finance 2013)

Employment

Current data for the State of California shows the state unemployment rate at 8.8% (EDD 2013a). According to the Employment Development Department, San Bernardino County has a labor force of approximately 849,100 individuals—764,100 are employed and 85,000 are unemployed. The unemployment rate for the County of San Bernardino is slightly higher than the state average, at approximately 10.0%. Moreover, the City of Fontana has a labor force of approximately 61,400 individuals—55,000 are employed and 6,400 are unemployed. The City of Fontana's unemployment rate is slightly higher than the County of San Bernardino at 10.4% (EDD 2013b).

SCAG Trends and Forecasts

The most current Southern California Association of Governments (SCAG) forecasts (Regional Transportation Plan [RTP] 2012) for the region, County of San Bernardino, and City of Fontana are shown in Table 4.2.11-1.

Table 4.2.11-1. Population, Housing, and Employment Trends and Forecasts

	2008	2020	2035
Adopted SCAG Regionwide Forecasts			
Population	17,895,000	19,663,000	22,091,000
Households	5,814,000	6,458,000	7,325,000
Employment	7,738,000	8,414,000	9,441,000
County of San Bernardino			
Population	2,016,000	2,268,000	2,750,000
Households	606,000	698,000	847,000
Employment	701,000	810,000	1,059,000
City of Fontana			
Population	193,900	222,700	259,100
Households	48,600	57,500	66,700
Employment	47,600	53,700	69,000
Source: SCAG 2012a.			

Regulatory Setting

State

California state law requires that each city adopt a general plan for future growth. This plan must include a housing element that identifies housing needs for all economic segments of the community¹ and provides opportunities for housing development to meet those needs. At the state level, the Department of Housing and Community Development (HCD) estimates the relative share of California's projected population growth that will occur in each region of the state based on Department of Finance (DOF) population projections and historic growth trends. Where there is a regional Council of Governments (COG), such as SCAG, HCD provides the regional housing need for each economic group to the COG. The COG then assigns a share of the regional housing need for each economic group to each of its cities and counties. The process of assigning shares provides cities and counties the opportunity to comment on the proposed allocations. HCD oversees the process to ensure that the COGs distribute their share of the state's projected housing need.

Cities are required to update their housing elements every 8 years. HCD maintains a schedule for these updates by region. Cities and counties in the SCAG region were required to update their housing elements for the "5th cycle" to address housing needs for the 2014 to 2021 period. For each 8-year update cycle, cities and counties are required to provide for meeting their share of regional housing needs for all economic segments of the population as reflected in the Regional Housing Needs Assessment (RHNA) allocations prepared by the regional council of governments for that update cycle. Among other things, the housing element must incorporate policies and identify an adequate inventory of properly zoned sites that will accommodate the city's share of the regional housing need for each economic segment of the community. The RHNA is not a mandate for a local

¹ These economic groups, which are defined by household income in relation to each County's median income, include Extremely Low Income (less than 30% of County median income), Very Low Income (30–50% of County median income), Low Income (50–80% of County median income), Moderate Income (80–120% of County median income), and Above Moderate Income (greater than 120% of County median income).

jurisdiction to construct the full number of housing units assigned to it; rather, the RHNA allocation process defines housing needs and the fair distribution of those needs among income groups for an 8-year planning period. The housing development “targets” identified in the RHNA obligate jurisdictions to take steps to: (1) provide an adequate amount of residential land to accommodate RHNA housing needs; (2) maintain a zoning ordinance that is permissive enough to allow the development of a variety of housing to meet the special needs of the population; (3) focus housing resources to meet the needs of very low and low income housing needs; and (4) exercise authority to remove barriers or legal constraints to the construction of affordable housing (Public Interest Law Project 2013).

Local

City of Fontana General Plan Housing Element

The City of Fontana’s General Plan Housing Element (2014) is one of the seven General Plan Elements mandated by the State of California and is the City’s official plan to provide needed housing for all segments of the population. In accordance with California’s Housing Element Law, the Housing Element includes local housing programs designed to meet the City’s “fair share” of existing and future housing needs for all income groups, as determined through the RHNA process. The City’s Housing Element provides an in-depth analysis of the City’s population, economic, and housing stock characteristics as required by state law. The Housing Element also provides a comprehensive evaluation of the City’s progress in implementing the past policy and action programs related to housing production, preservation, conservation, and rehabilitation. The Housing Element identifies goals, objectives, and action programs that address projected housing needs of present and future residents (City of Fontana 2014). The City adopted the current Housing Element on February 11, 2014 by resolution (Resolution No. 2014-005) for 2014 through 2021.

The California Government Code requires that general plans contain an integrated, consistent set of goals and policies. As such, the Housing Element is affected by development policies contained in the Land Use Element, which establishes the location, intensity, and distribution of land uses within the city.

Impact Analysis

Methodology

The potential impacts on population and housing are based on qualitative and quantitative analyses of the proposed project’s related increases in population and housing compared to planned growth estimates and population projections for the City of Fontana.

Population and employment growth associated with implementation of the proposed project would not, in and of itself, result in significant environmental impacts. However, growth could result in significant impacts by increasing demand for public utilities and services. The potential for the project to result in a secondary impact associated with increased demand for services is evaluated in Section 4.2.12, *Public Services*.

Thresholds of Significance

Criteria for determining the significance of impacts related to population and housing are based upon criteria contained in Appendix G of the California Environmental Policy Act Guidelines. The proposed project could have a significant impact on the environment if it would:

- POP-1** Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure) that could cause substantial adverse physical changes in the environment.
- POP-2** Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- POP-3** Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Impacts and Mitigation

Impact POP-1: Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure) that could cause substantial adverse physical changes in the environment

Construction

Construction of the WVLCSP would provide short-term employment opportunities. The project would be constructed over a period of approximately 2 to 4 years. The supply of general construction labor in the project vicinity is not expected to be constrained due to the 10% unemployment rates within the County and City; furthermore, the construction industry is coming out of an economic downturn, suggesting an available labor pool. Therefore, it is expected that workers within the region would be available to provide construction services for the project and would not temporarily or permanently relocate to the area for temporary work on the project. Because the existing labor pool could meet the temporary construction needs of the WVLCSP, the project would not induce substantial population growth or development through increased construction employment that could cause substantial adverse physical changes in the environment. Impacts would be less than significant.

Operation

Employment

Implementation of the project would result in long-term job opportunities in a region with a moderately high unemployment rate. Because of the many bedroom communities surrounding the City, even as the economy improves and the unemployment rate drops, the labor force within the area would likely still be available to serve the project. It is anticipated that the available workforce in the region and surrounding communities would provide a pool of employees that could adequately meet the project's employment needs without resulting in substantial in-migration of new residents to the region.

Development of the proposed WVLCSP project would create permanent jobs and thereby would contribute to a local increase in long-term employment opportunities. SCAG estimates a generation rate of one employee per 1,195 square feet of San Bernardino County warehouse space. Therefore, at buildout of the proposed project, the approximately 3,473,690-square-foot industrial business

park could provide approximately 2,907 jobs (SCAG 2001) and potentially attract up to as many as 2,936 new residents to the Fontana area (up to approximately 730 households)².

The job opportunities expected to be created by the proposed project include positions in warehouse and office management; warehouse operations, such as forklift driving and inventory management; and truck driving. Truck drivers may be employed by the company occupying the warehouse, may be self-employed, or may be employed by other companies that pick up and deliver goods from several similar warehousing centers. These types of employment opportunities are common within Southern California and the project region, and are unlikely to generate significant population migration, as further discussed below.

Even though the types of employment offered by the project would be common in the region and employees are available as evidenced by the 10% local unemployment rate, some employees may relocate to work within the Specific Plan area. Estimating the number of future employees who would choose to relocate to Fontana would be highly speculative because many factors influence personal housing location decisions (e.g., family income levels and the cost and availability of suitable housing in the local area). Although the project may result in additional demand for housing in the area, the demand is not anticipated to be substantial, and there is available housing capacity—both built and planned—in the project region. As described above, the vacancy rate for residential units within the City of Fontana is 5.3% and the vacancy rate within the County of San Bernardino is 12.5%. Therefore, operation of the project would not induce substantial population growth, and impacts would be less than significant.

Housing

The City of Fontana's RHNA-assigned allocation for new housing for the 2014–2021 planning period is 5,977 units, including extremely low income to above moderate income levels. The RHNA target number was based on projected household growth and the resultant need for construction of additional housing units allocated over the 8-year planning period. Table 4.2.11-2 provides a breakdown of units needed by income group in Fontana during this next planning cycle.

Table 4.2.11-2. 2014–2021 City of Fontana RHNA Allocations for New Housing

Income Level	Number of Units	Percentage of Total RHNA Units
Extremely Low and Very Low Income	1,442	24.0
Low Income	974	16.3
Moderate Income	1,090	18.3
Above Moderate Income	2,471	41.4
Total	5,977	100.0
Source: SCAG 2012b		

In addition, the Housing Element identifies a goal of 240 units for rehabilitation and 418 units for conservation/preservation. The Housing Element also provides specific policies and planning

² The population growth generation factor is assumed to be one-quarter (25%) of employment multiplied by 4.04 persons per household, which represents the average household size in the City of Fontana for the year 2013, based on the City of Fontana 2014 Housing Element, Table 2-9 and data from the U.S. Bureau of Census 2000 SF3, DOF Table E-3, 2013.

strategies, including 15 strategies for housing production, to achieve its housing supply for existing and future residents for the period of 2014 through 2021.

During the previous planning period (2006 to 2014), the City had an RHNA need of 5,699 residential units combined for all income levels. The City's inventory of land for the production of housing was not sufficient to achieve that total, and as of 2014, the City had an unaccommodated need for 1,866 units (City of Fontana 2014). The shortfall from the prior period, in addition to the new RHNA allocation for the City of 5,977 units provided by the SCAG, combines to a current RHNA total need of 7,843 residential units by income level. Table 4.2.11-3 below summarizes these data, as well as the vacant residential zone property capacity and planned development projects that will contribute to the City's housing needs, further discussed below.

Table 4.2.11-3. Fontana Capacity to Meet RHNA Housing Goals

	Very Low Income	Low Income	Moderate Income	Above Moderate Income	Total Units
2006–2014 Unaccommodated RHNA Need + 2014–2021 RHNA Need	2,461	1,821	1,090	2,471	7,843
Vacant Land	0	0		8,046	8,046
Westgate Specific Plan	0	0		3,910	3,910
Arboretum Specific Plan	0	0		3,526	3,526
Remaining Need	2,461	1,821	0	0	4,282

Source: City of Fontana 2014, Table B-4, Sites Summary.

The Housing Element also includes an inventory of properties in the City that would be suitable for residential development, such as vacant lots and properties that could potentially be redeveloped. The vacant parcels within the City that have Residential land use designations could potentially be developed, for a total of 8,046 units in varying income levels (City of Fontana 2014). These vacant parcels are zoned (based on density – units/acre) at moderate and above moderate income levels. In addition, two planned specific plan developments as shown in Table 4.2.11-3 would provide moderate and above moderate income level housing for 7,436 residences (3,910 plus 3,526).

The City has a calculated shortfall of 4,282 housing units in the very low and low income categories combined. In order to meet the unaccommodated need for housing in these income levels, the City plans to update and revise the General Plan and Zoning Ordinance to establish land use designations that will provide adequate properties to meet the RHNA need (current period allocation plus prior period shortfall). The housing production strategies included in the Housing Element include, among others, rezoning at least 107 acres to permit-by-right Single Family, Multi-family, rental and ownership developments into a new R-5 zoning district (minimum 16 dwelling units per acre), and a new R-4 zoning district with 925 to 39 dwelling units per acre.

As shown in Table 4.2.1-3, the City's current inventory of land for the production of housing shows a surplus of land for the development of housing to meet the needs of moderate and above moderate income level households, along with a deficit of land available for the production of housing to meet the needs of lower income households. As such, a less-than-significant impact related to housing would result.

Land Use and Densities

As noted in Chapter 3, *Project Description*, the project site is currently approved for the development of 1,154 dwelling units as part of the Valley Trails Specific Plan. Development of the proposed project would remove the project site and its 1,154 approved, but unbuilt, dwelling units from the City's inventory of land available for residential development.

HCD has established "default densities" that are considered sufficient to provide market-based incentives for the development of housing for lower income households. For jurisdictions with a population greater than 25,000 and located within a Metropolitan Statistical Area (MSA) with a population of more than 2 million, the default density is 30 dwelling units per acre (or higher). Because Fontana has a population greater than 25,000 and is within the Long Beach-Los Angeles-Ontario MSA, the default density for the City is 30 dwelling units per acre. This means that future development at densities of 30 dwelling units per acre or greater is presumed to meet the needs of lower income households, while lower densities would meet the needs of moderate and above moderate income households. Because the highest residential development densities in the Valley Trails Specific Plan are up to 12 to 16 dwelling units per acre for Medium High Density and 16 to 22 dwelling units per acre for High Density residential development, all of the dwelling units within the Valley Trails Specific Plan would be considered to be for moderate and above moderate income households. Therefore, all of the 1,154 dwelling units proposed within the Valley Trails Specific Plan would be part of the inventory of land for the production of housing for moderate and above moderate income households. As indicated in Fontana's Housing Element, there is a need for 3,556 new dwelling units for moderate and above moderate income households. The Housing Element also indicates that the City's current land inventory could accommodate development of 15,482 dwelling units. By converting the project site from proposed residential to proposed industrial development, Fontana's inventory of land for the development of housing to meet the needs of moderate and above moderate income households would be reduced from 15,482 to 14,328, still well above the City's need for development of 3,556 new dwelling units for moderate and above moderate income households. Therefore, the proposed WVLCSF project would not affect the City's ability to provide housing for all economic segments of the community.

As discussed in Section 4.2.9, *Land Use and Planning*, the proposed project would require amendments to the General Plan and Zoning Code in order to develop the industrial WVLCSF project. As included in Table 4.2.9-2, a consistency analysis of the proposed Specific Plan with the City's General Plan goals and policies concludes that the WVLCSF would be consistent with the Housing Element Goal 5.1, which states: "A wide range of housing units by location, type of unit, and price are provided in our City to meet the existing and future needs of Fontana residents." The proposed WVLCSF industrial development on the project site would not include any residential units, and would remove the potential to construct up to 1,154 dwelling units that the current zoning of the approved Valley Trails Specific Plan would have permitted (including 245 medium-density attached units and 190 high-density attached units). However, the City's housing supply strategies of implementing new, higher-density zoning districts discussed above, in addition to the current 5.4% housing vacancy rate within the City, demonstrate that the number of units listed for RHNA needs can be accommodated in the City of Fontana during the current planning cycle, and a less-than-significant impact on population growth would result.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

Impact POP-2: Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere

The project site is currently vacant and does not contain any houses or other structures. Construction activities associated with the proposed project would be largely confined to the project site and designated, undeveloped staging areas with minor amounts of off-site infrastructure improvements (e.g., within and adjacent to nearby roadways, such as Jurupa Avenue, and a proposed new sewer lift station and force main at 11th Street near Linden Avenue). Therefore, project implementation would not result in the displacement of housing that would create the need to replace housing elsewhere. No impacts would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

Impact POP-3: Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere

The project site is currently vacant and does not contain any houses, businesses, or other structures. Construction activities associated with the proposed project would be largely confined to the project site and designated, undeveloped staging areas, with only minor amounts of off-site infrastructure improvements required. Therefore, the implementation of the project would not result in the displacement of people that would create the need to replace housing elsewhere. No impacts would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

4.2.12 Public Services

Introduction

This section discusses potential impacts associated with public services and facilities (police, fire, schools, and libraries) resulting from implementation of the proposed West Valley Logistics Center Specific Plan (WVLCSP) project. For analysis of parks and recreational facilities, refer to Section 4.13, *Recreation*, of this document. For each of the public services addressed in this section, existing public services, service facilities, and levels of service are described, as well as any improvements required to serve the proposed project. Applicable specific plan requirements, standard requirements, and regulatory requirements that the proposed project would be required to adhere to are provided. In addition, feasible mitigation measures are prescribed to further reduce any significant or potentially significant impacts of the proposed project associated with public services or facilities.

Existing Conditions

The existing locations of public facilities serving the project area along with their service levels are described below. Because the proposed project area is undeveloped at this time, there is no existing demand for public services at the project site. Table 4.2.12-1 lists existing public facilities that provide services for the project area.

Table 4.2.12-1. Public Service Facilities Serving the Specific Plan Area

Facility Name	Address	Distance from Project (miles)
Fire Stations		
Fire Station #77	17459 Slover Avenue, Fontana 92337	1.2
Fire Station #76	10174 Magnolia Street, Bloomington 92316	1.5
West Riverside Fire Station #18	7545 Mission Boulevard, 92509	2.4
Rubidoux Fire Station #38	5721 Mission Boulevard, 92509	2.5
Police Stations		
Riverside County Sheriff	7477 Mission Boulevard, Jurupa Valley 92509	2.4
Fontana Police Department	17005 Upland Avenue, Fontana 92335	3.9
Schools		
Ruth O. Harris Middle School	11150 Alder Avenue, Bloomington 92316	0.3
Walter Zimmerman Elementary School	11050 Linden Avenue, Bloomington 92316	0.3
Crestmore Elementary School	18870 Jurupa Avenue, Bloomington 92316	0.5
Sycamore Hills Elementary School	11036 Mahogany Drive, Fontana 92337	0.7
Bloomington High School	10750 Laurel Avenue, Bloomington 92316	0.7
Rio Vista Continuation High School	6836 34th Street, Jurupa Valley 92509	1.6
Sunnyslope Elementary School	7050 38th Street, Jurupa Valley 92509	1.8
Mission Middle School	5961 Mustang Lane, Jurupa Valley 92509	2.0

Facility Name	Address	Distance from Project (miles)
Libraries		
Bloomington Branch Library	993 West Valley Boulevard, Suite 102, Bloomington 92316	1.7
Louis Robidoux Library	5840 Mission Boulevard, Jurupa Valley 92509	2.4
Lewis Library and Technology Center	8437 Sierra Avenue, Fontana 92335	1.7
Other Public Facilities		
Kaiser Foundation Hospital	9961 Sierra Avenue, Fontana 92335	1.9
Green Acres Memorial Garden (cemetery)	11 th Street at Cedar Avenue, Bloomington 92316	0.4
Bloomington Post Office	10191 Linden Avenue, Bloomington 92316	1.5
Mary Vagle Museum & Nature Center	11501 Cypress Avenue, Fontana 92337	1.5

Police Protection Services

The Fontana Police Department (FPD) headquarters is approximately 3.9 miles north of the project site at 17005 Upland Avenue, just east of City Hall. This facility is the sole regularly staffed police facility within Fontana. Officers also make use of two non-staffed contact stations maintained by FPD: the Southridge Contact Station at 11500 Live Oak Avenue (inside San Bernardino County Fire Station 74) and the Summit Heights Contact Station in north Fontana at 17122 Slover Avenue (in the Palm Court Shopping Center). FPD currently has no plans to develop new police stations or substations within Fontana (City of Fontana 2011; Ratcliffe pers. comm.; Ruiz pers. comm.). The nearest police station is approximately 2.4 miles southwest of the project site at 7477 Mission Boulevard in Jurupa Valley and is the office of the Riverside County Sheriff. FPD has mutual aid agreements with the San Bernardino County and Riverside County Sheriff's Departments, and with the Colton, Rialto, Ontario, and Fontana Unified School District Police Departments (Ratcliffe pers. comm.)

Through City of Fontana funding and external grants, FPD has a total of 291 budgeted positions, 197 sworn positions, and 94 non-sworn positions. Twenty-two sworn positions and nine non-sworn positions are vacant; therefore, FPD staff currently consists of 175 sworn personnel and 85 non-sworn personnel (Hench pers. comm.). FPD has a standard approved officer-to-population ratio of 1.4 sworn police officers per 1,000 residents. Currently, the City's ratio of police officers per 1,000 residents is approximately 0.89. FPD's current emergency response time across Fontana is 7.5 minutes. For alarm calls, FPD maintains a Verified Response Policy. To reduce responses to false alarms, the policy requires that security companies verify the need for a police response prior to requests for officers (Ratcliffe pers. comm. 2013).

The City has an Area Commander Program to facilitate community-oriented policing and problem solving. The proposed project is at the far southeastern corner of Area 4. For this area, FPD maintains a patrol force of two to three officers who are aided by traffic and air support personnel when needed. Equipment used by FPD in Area 4 includes patrol cars, motorcycles, and air support units such as helicopters and airplanes (Ratcliffe pers. comm.).

The City charges a development impact fee for industrial land-use construction to support police facilities and services. The fee is \$131.63 per 1,000 gross building square feet (City of Fontana 2012). New development within Fontana must comply with the FPD's Standard Building Security Specifications. New development projects must also comply with the City's Crime Prevention through Environmental Design (CPTED) Guidelines, and are reviewed on a case-by-case basis (Ratcliffe pers. comm.).

Fire Protection Services

The Fontana Fire Protection District (FFPD) provides fire protection services to the City of Fontana, including the project site. FFPD services a 52.4-square-mile area. Its facilities include seven fire stations, an administrative office, and a fire prevention office. The Insurance Services Office (ISO), which rates fire department staffing, equipment, communications systems, and water systems, currently rates FFPD as Class 4 in a 1 to 10 rating system (Class 1 is the highest rating). FFPD's mid-term goal is to achieve a Class 3 ISO rating, and its long-term goal is to achieve a Class 1 ISO rating (FFPD 2013).

Fire Station 77 responds to incidents requiring fire protection and emergency medical care within the project area. The station is approximately 1.2 miles north of the project site, at 17459 Slover Avenue. This station is currently staffed by a four-person medic-truck squad (captain, engineer, firefighter/paramedic, and firefighter) and a two-person medic squad (firefighter/paramedic and firefighter). The medic-truck squad currently makes use of a 100-foot tiller truck and the medic squad makes use of a light-duty truck with emergency medical equipment.

The secondary response station for the project area is Station 76, 1.5 miles north of the project site at 10174 Magnolia Street. This local Bloomington station is operated by the County and is not part of FFPD. In the event that Station 77 and 76 crews are occupied during an emergency in the project area, a Computer-Aided Dispatch (CAD) system notifies and sends the next nearest emergency response units to the site. In such a scenario, emergency crews from other stations in the City as well as Rialto and/or Jurupa Valley could be called to respond to emergencies in the plan area (FFPD 2013; Panos pers. comm.).

The average FFPD response time to the project area is 6 minutes (1-minute turnout time and 5-minute response time), which is within FFPD's 6-minute response time goal. It is estimated that response times to the project area will increase with implementation of FFPD's 2013 Strategic Plan. This plan is intended to implement a Medic Squad Staffing Model and improve response times to areas west of the project area. Under the plan, Station 77 may be relocated from 17459 Slover Avenue farther west, potentially in the area of Santa Ana Avenue and Juniper Avenue. Also as part of the Strategic Plan, Fire Station 77's medic truck squad will be reduced from four to three personnel (a captain, engineer/paramedic, and firefighter), and Station's 77's 100-foot tiller truck, which is essential for high-rise firefighting, will be transferred to the more centrally located Station 71. Station 78's current medic engine truck, a smaller aerial truck than the 100-foot tiller, will be transferred to Station 77 as part of the plan. The relocation of Station 77 is expected to increase emergency response times from 6 to 8 minutes throughout most of the plan area. Response times are expected to increase up to 8 minutes in most of the area east of Locust Avenue, south of Jurupa Avenue, and north of 11th Street (Parcels 7 and 9). An increase in response time to 8 minutes is also expected for the area west of Locust Avenue and south of 10th Street (Parcels 3, 4, 5, and 6) (FFPD 2013; Panos pers. comm.).

The City charges a development impact fee for industrial land-use construction to support fire protection facilities and services. The fee is \$0.10 per building square foot (City of Fontana 2012).

School Facilities

Most of Fontana's students are served by the Fontana Unified School District (FUSD); however, the project site is within the Colton Joint Unified School District (CJUSD). A total of 14 schools are within Fontana city limits. Four CJUSD schools are within the service radius of the project site: Sycamore Hills Elementary School (current enrollment 879), Walter Zimmerman Elementary School (current enrollment 777), Ruth O. Harris Middle School (current enrollment 982), and Bloomington High School (current enrollment 2,132). Sycamore Hills Elementary, Zimmerman Elementary, and Harris Middle School are all currently below capacity. Bloomington High School is at capacity (Navarro pers. comm.; CJUSD 2013a). CJUSD charges a school facilities impact fee of \$0.51 per square foot for commercial, industrial, and senior housing development within the district boundaries (CJUSD 2013b).

Parks and Recreation Facilities

For analysis of parks and recreational facilities, refer to Section 4.13, *Recreation*, of this document.

Libraries and Other Facilities

The San Bernardino County Library (SBCL) system, a network of community libraries, provides local public library service to the cities within the county and unincorporated areas. The SBCL's library resources—coupled with its joint online library in partnership with Riverside County Library, Murrieta Public Library, Moreno Valley Public Library, and College of the Desert—provides access to over 2.3 million items (City of Fontana 2011). The largest SBCL facility in Fontana is the Lewis Library and Technology Center, approximately 4 miles north of the project site at 8437 Sierra Avenue. This 93,000-square-foot facility opened in April 2008 and includes a collection of over 142,000 items, 2,003 public use computers, and a 330-seat auditorium. The SBCL branch facility nearest to the project area is the Bloomington Branch Library. This library is approximately 1.7 miles northeast of the project area at 993 West Valley Boulevard, Suite 102 (City of Fontana 2011; SBCL 2013).

The City charges a development impact fee for industrial land-use construction to support library facilities. The fee is \$42.83 per 1,000 gross building square feet (City of Fontana 2012).

Table 4.2.12-1 lists other existing public facilities that provide services for the project area, including the nearest hospital, post office, cemetery, and nature center to the project site.

Regulatory Setting

Refer to Section 4.2.7, *Hazards and Hazardous Materials*, for additional fire and emergency response regulations applicable to the proposed project.

Local

City of Fontana General Plan

The Public Facilities, Services, and Infrastructure Element of the General Plan (City of Fontana 2003) covers two major areas: (1) Public Facilities and Services and (2) Infrastructure. Public Facilities and

Services addresses those basic services typically provided by local government: police, fire protection, parks, schools, libraries, community facilities, and health and social services.

The general plan goals and policies from this element that are relevant to the provision of public services include: (1) the provision of high quality schools with adequate physical capacity; (2) law enforcement and fire protection services that meet the City's population's public safety needs; and (3) use of the latest in communication technology to link homes, businesses, schools, and public facilities to a community Intranet. In terms of law enforcement and fire protection services (Goal 2), the element provides the following policies to meet the City's public safety needs and contribute to a sense of safety and high quality of life in the community:

- Continue to work towards a ratio of 1.4 sworn police officers per 1,000 residents in the City (Policy 1).
- Adequate fire and police response times shall be maintained in the City (Policy 8).
- An ISO fire rating of class 3 shall continue to be maintained in the City (Policy 9).
- Ensure that new fire stations shall be built in areas of new development so that response times are not eroded (Policy 10).

Impact Analysis

Methodology

The potential impacts associated with the project are evaluated on a quantitative and qualitative basis through coordination with respective service agencies. Significant impacts would occur if the project would adversely affect the ability of service agencies to provide adequate service to the project area or to other existing service areas and if new facilities would be required as a result of the project, the construction of which could cause significant environmental effects. These impacts are assessed through impact significance criteria specified below.

Thresholds of Significance

Criteria for determining the significance of impacts related to public services are based on criteria contained in Appendix G of the California Environmental Quality Act Guidelines. The proposed project could have a significant impact on the environment if it would result in the following.

PUB-1 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

- Fire protection
- Police protection
- Schools
- Parks
- Other public facilities (libraries)

Project Design Features

The following public services-related project design features, which include regulatory requirements and standard requirements, would prevent or reduce potentially significant impacts. In addition to the list below, applicable regulatory requirements for fire protection conditions are provided in Section 4.2.7, *Hazards and Hazardous Materials*.

Regulatory Requirements

RR-PS-1: Pay Colton Joint Unified School District (CJUSD) Fees. Proposed commercial, industrial, and senior housing development projects, including the WVLCSF, are required to pay CJUSD school facilities impact fees of \$0.51 per square foot at the time of building permit issuance.

RR-PS-2: Pay City of Fontana Development Impact Fees for Police and Fire Services. Proposed development projects are required to pay development impact fees to support police and fire/emergency facilities and services. The fee for industrial land use development for police services is \$131.63 per 1,000 gross building square feet (City of Fontana 2012). New development must also comply with the Fontana Police Department's Standard Building Security Specifications and the City's Crime Prevention through Environmental Design Guidelines.

The development impact fee for industrial land-use construction to support fire protection facilities and services is \$0.10 per building square foot.

RR-PS-3: Pay City of Fontana Impact Fees for Library Facilities. The proposed project will pay the City's development impact fee for industrial land-use construction of \$42.83 per 1,000 gross square feet of building area to support expansion of library facilities.

Standard Requirements

SR-HM-2: Require Construction Equipment Spark Arresters. Project contractors will be required to equip any construction equipment that normally includes a spark arrester with an arrester in good working order pursuant to manufacturers' recommendations. Spark arrestors will be maintained in working order during the period of construction. Subject equipment includes, but is not limited to, heavy equipment (e.g., earthmovers, graders), mowers, and chainsaws. This requirement will be included on project construction plan specifications.

SR-HM-3: Prepare a Fuel Modification Zone Management Plan. In accordance with Section 30-189(12), Article V, Division 7, of the City Zoning and Development Code (Subdivision and site plan design), and in accordance with Action 20, Goal 4, of the City General Plan Safety Element, a fuel modification zone will be required in areas threatened by fire hazard. Prior to approval of any Tentative Parcel Map(s), the applicant or construction contractor will prepare a fuel modification zone management plan for the Jurupa Hills area of the proposed project site to be reviewed and approved by the City of Fontana. The fuel modification zone management plan will include:

- Planting and maintenance of fire-retardant vegetation species implemented in accordance with Policy 3 and Action 21, Goal 4, of the City General Plan Safety Element;
- Firebreaks (areas void of vegetation and flammable structures) implemented in accordance with Public Resources Code Section 4290 minimum statewide fire safety standards; and

- Implementation of fencing in accordance with Section 80.020210(f) of the San Bernardino County Code, to prevent litter (accumulation of ignitable fuels) or vandalism of the fuel modification zone.

Impacts and Mitigation

Impact PUB-1. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

- Fire protection
- Police protection
- Schools
- Parks (analyzed separately in the Recreation section, Section 4.2.12)
- Other public facilities (libraries)

The WVLCSP would facilitate development of up to 3,473,690 square feet of industrial warehouse use, including development of seven warehouse buildings ranging in size from 100,000 square feet to over 1,000,000 square feet each. The project also features a 14.93-acre detention basin and approximately 55.23 acres of natural hillside open space.

As stated in greater detail in Chapter 7, *Growth Inducement*, the project would support an estimated 2,907 jobs that could result in impacts to public services, as additional employment and job growth could have a growth-inducing effect. As such, the proposed project may have direct impacts on public services for on-site needs, and may also have some indirect impacts due to population migration and employment growth, as described below. Impacts on parks and other recreational facilities are analyzed separately in Section 4.2.13, *Recreation*.

Police Protection

The WVLCSP would facilitate development of the site with warehouse logistics uses that would create an additional need for police protection services beyond those required for the existing vacant project site. The project would provide emergency access and safety features, such as the inclusion of two access points into and out of each parcel, and would comply with FPD's Standard Building Security Specifications and also with the City's established crime prevention guidelines (**Mitigation Measure PS-1**). The project would pay appropriate development fees in support of police facilities and services as addressed in the City's fee schedule (**Regulatory Requirement RR-PS-2**).

The WVLCSP is in the far southeastern corner of FPD's Area Command 4. FPD considers this to be "a remote, undeveloped area of the City." According to FPD, additional personnel and equipment may be necessary to adequately serve the project as a consequence of the project's remote location in the City; however, since the City completed expansion of its central police facility in early 2014, additional or expanded facilities would not be necessary as the result of the proposed project (Police Department pers. comm. 2014).

The project would also be subject to development impact fee payments proportional to the sizes of the proposed buildings to fund future police protection facilities and equipment. The impact fees (see **Regulatory Requirement RR-PS-2**) would cover additional equipment and staffing needed to

support expansion of the City's police force, including establishment of a new patrol beat for the southeastern portion of the City, should the WVLCSP and other development in the area so require.

The project would provide emergency access and safety features and would comply with FPD's Standard Building Security Specifications and the City's established crime prevention guidelines (refer to **Mitigation Measure PS-1**). As noted above, the project would also pay required development impact fees in support of expanding services and providing equipment as set forth in the City's fee schedule¹ (refer to **Regulatory Requirement RR-PS-2**).

Impacts related to service response times would be significant; however, because of the recent expansion of Fontana's central police facility, implementation of specified development requirements as specified in **Mitigation Measure PS-1**, and the payment of required development impact fees, the proposed project would not necessitate expansion or development of new police facilities, the construction of which could cause significant environmental impacts.

Fire Protection

The WVLCSP would facilitate development of the site with industrial warehouse uses that may create a need for additional fire protection services. As stated in Section 4.2.7, *Hazards and Hazardous Materials*, the WVLCSP would be developed in accordance with applicable state, County, and City regulations, codes, and policies for fire-hazard reduction and protection, including the Uniform Fire Code and the Municipal Fire Code for construction in fire hazard areas. Additionally, buildings to be constructed as part of the WVLCSP would be equipped with emergency sprinkler systems and fire detectors. Water lines with fire-sufficient flows supplied by the West Valley Water District would be connected to fire hydrants placed in accordance with FFPD standards that are included in the WVLCSP as specified in **Mitigation Measure PS-2**.

Because the project would introduce new development into an area adjacent to *high* and *very high* fire hazard severity zones, the potential for exposure of people and structures to wildland fires would be significant, both during construction and project long-term use. For construction activities, several fire protection measures would be required: **Standard Requirements SR-HM-2** (spark arresters on construction equipment) and **SR-HM-3** (fuel modification zone management plan).

During project operations, the proposed new industrial development would cause additional demand on FFPD services to respond to calls to the site. This additional service would add service demand to Station 77. FFPD is currently able to maintain its 6-minute response time goal to the project site. For purposes of this analysis, the 6-minute response goal is the threshold for impact significance. However, in addition to the new need for service at the proposed project site, FFPD's 2013 Strategic Plan includes relocation of Fire Station 77 to an area southwest of its current location. As a result of this relocation, response times to most of the project site would increase up to an estimated 8 minutes, which exceeds FFPD's 6-minute response time goal. The increased response time would be due to crews from the relocated station having to approach the project site from a greater distance to the west (FFPD 2013; Panos pers. comm.). The absence of improved roads at the far western and northwestern portions of the project site would require crews from the relocated Station 77 to access the project site from Locust Avenue via Santa Ana Avenue.

¹ Based on the proposed 3,473,690 square feet of industrial use, police development impact fees (\$131.63 per 1,000 square feet) are estimated to be approximately \$1,771,580.

Relocation of Station 77, which is likely to cause FFPD response times to the project site to exceed 6 minutes, would be a significant impact on fire protection services for the project site and surrounding area; however, this impact would be caused by the future relocation of Station 77 and not by the proposed project. FFPD does not identify any planned additional facilities in its Strategic Plan that would maintain adequate response time to the project site following relocation of Station 77; therefore, the relocation would cause a significant impact on the existing response time to the project site and vicinity for fire and paramedic emergency services.

The proposed project would be subject to development impact fee payments on a square footage basis for the proposed buildings to fund future fire protection facilities and equipment (see **Regulatory Requirement RR-PS-2**)². It would be the responsibility of FFPD to use these fees and other available funding to maintain adequate response times to the area of the WVLCSP project site. As discussed above, relocation of Station 77 would not occur as a result of the proposed project, but as the result of long-term master planning by FFPD, which may or may not be ultimately implemented. If required by FFPD as a part of the station relocation effort, the construction of new fire facilities to serve the project area may result in the potential for additional environmental impacts elsewhere.

With implementation of **Regulatory Requirements RR-PS-2** (impact development fees for fire services) and **RR-HM-3, Standard Requirements SR-HM-2** (clear fire fuel) and **SR-HM-3** (fuel modification zone management plan), and **Mitigation Measure PS-2**, potential impacts on fire services from implementation of the WVLCSP would be less than significant.

Schools

The project would not bring a substantial influx of children and adolescents into the area that would require educational accommodations from the CJUSD system. As stated previously, the WVLCSP is not expected to generate a substantial population increase directly or indirectly (refer to Chapter 7, *Growth Inducement*). Per **Regulatory Requirement RR-PS-1**, the project will be required to pay appropriate development impact fees for industrial use as required by CJUSD, which is currently \$0.51 per square foot.

No new school facilities would be necessary as a result of the project because three of the four schools within the service area of the project are currently below capacity, the exception being Bloomington High School, which is currently at capacity. Any increases in CJUSD student population as a consequence of the project would not result in the need to construct new schools in the area. Therefore, no adverse physical changes to the environment would result from construction of such new facilities, and the project would result in a less-than-significant impact.

Libraries (Other Public Facilities)

Employees working at the warehouse facilities that would be developed as part of the WVLCSP might make use of local library facilities; estimating the precise number of employees who would use these facilities would be highly speculative. However, because the project is not expected to generate a substantial residential migration or population growth locally, it is not expected to generate a significant number of new local library users. Employees commuting from other areas who may use existing library facilities and items on occasion would not create a need for library

² Based on the proposed 3,473,690 square feet of industrial use, police development impact fees (\$0.10 per square foot) are estimated to be approximately \$347,370.

staff increases or necessitate new library facilities. Any increases in library usage as a consequence of the project would not result in the need to construct new libraries in the area. Therefore, the project would result in a less-than-significant impact. Additionally, per **Regulatory Requirement RR-PS-3**, the project would be required to pay appropriate development fees (currently \$42.83 per 1,000 gross square feet of industrial building area) as specified in the City's fee schedule.

Regulatory Requirements and Standard Requirements

The applicant shall implement the following regulatory requirements and standard requirements, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **RR PS-1:** Pay Colton Joint Unified School District Fees.
- **RR-PS-2:** Pay City of Fontana Development Impact Fees for Police and Fire Services.
- **RR PS-3:** Pay City of Fontana Impact Fees for Library Facilities.
- **SR-HM-2:** Require Construction Equipment Spark Arresters.
- **SR-HM-3:** Prepare a Fuel Modification Zone Management Plan.

Mitigation Measures

Mitigation Measure PS-1: Compliance with CPTED Measures. The WVLCSP shall comply with the City's CPTED guidelines and shall incorporate the following measures identified to minimize crime occurrences and the need for additional police protection services.

- A comprehensive security plan that includes uniformed security and video monitoring.
- A graffiti removal plan.
- The establishment of a Business Coalition/Neighborhood Watch program.
- A comprehensive traffic control plan.
- Design guidelines relative to security in semi-public and private spaces, which may include, but not be limited to, access control of buildings, secured parking facilities, walls/fences with key systems, well-illuminated public and semi-public space designed with a minimum of dead space to eliminate areas of concealment, location of toilet facilities or building entrances in high foot traffic areas, and provision of security guard patrol throughout the project site, if needed.

Mitigation Measure PS-2: Fire Protection through Implementation of Safety Design Measures.

In order to mitigate the potential inadequacy of fire protection due to travel distance from the fire station to the project site, the following measures and design considerations are incorporated into the WVLCSP to provide for adequate fire protection and meet the requirements of the FFPD:

- Adequate off-site public and on-site private fire hydrants may be required; their number and location will be determined after FFPD reviews and approves the site plan.
- Private streets and entry gates will be built to City standards to the satisfaction of the City Engineer and FFPD.
- Sprinkler systems will be required throughout each structure and will be built in accordance with the Fontana Municipal Code.

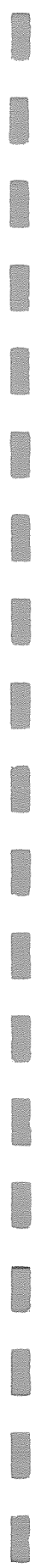
- Construction of public or private roadways in the proposed development will not exceed 15% in grade.
- Standard cut-corners will be used on all turns.
- Fire lanes and dead-ending streets will terminate in a cul-de-sac or other approved turning area.
- Secondary access will be required for Parcels 1 through 7.
- Fire lane width will comply with FFPD requirements.
- Where access for a given building requires accommodation of FFPD apparatus, minimum outside radius of the paved surface will be provided and approved by the FFPD.
- No building or portion of a building will be constructed more than 150 feet from the edge of a roadway of an improved street, access road, or designated fire lane.
- Where access for a given building requires accommodation of FFPD apparatus, overhead clearance will be maintained in compliance with FFPD requirements.
- Access for FFPD apparatus and personnel to and into all structures will be required.
- FFPD may require additional vehicular access where buildings exceed 28 feet in height.

Residual Impacts

To reduce wildfire impacts, the project would require **Standard Requirements SR-HM-2** (clear fire fuel) and **SR-HM-3** (clear fire fuel) provided in Section 4.2.7, *Hazards and Hazardous Materials*. Potential impacts related to fire and paramedic emergency service response would be mitigated to below the level of significance with compliance with FFPD's standard building specifications and **Mitigation Measures PS-1** and **PS-2**, provided previously.

Potential impacts identified at the project site are a result of existing understaffed conditions of FPD and the project's distance from the City's central police station. The applicant does not have control over staffing within FPD and is therefore being required to provide certain physical design measures (refer to **Mitigation Measure PS-1**) to reduce potential police-related service impacts. With the implementation of these measures, along with the City's completion of its central police facility expansion in early 2014, the construction of new or expanded police facilities, which could cause significant environmental impacts, would not be necessary to serve the project area. Furthermore, the project would pay required development impact fees to support the expansion of services and the purchase of new equipment as set forth in the City's fee schedule (see **Regulatory Requirement RR-PS-2**). As a result, impacts related to police services would be less than significant with **Mitigation Measure PS-1** incorporated.

Incremental demands for public services would be addressed by the payment of fees toward capital improvements (**Regulatory Requirements RR-PS-1** through **RR-PS-3**). With the incorporation of **Standard Requirements SR-HM-2** (clear fire fuel) and **SR-HM-3** (clear fire fuel) and **Mitigation Measures PS-1** and **PS-2** for fire, police, and emergency services, impacts anticipated from the proposed project related to public services would be less than significant.



4.2.13 Recreation

Introduction

This section evaluates the impacts of the proposed West Valley Logistics Center Specific Plan (WVLCSP) project on parks and recreational facilities within the project vicinity. Specifically, it describes the existing recreational setting and the regulatory framework for parks and recreation facilities, and identifies impacts that could result to such facilities with implementation of the proposed project.

Terminology

The following terms are used by the City of Fontana (City) and surrounding recreation facility management jurisdictions to identify the different types of recreation facilities within the City and surrounding area:

- **Recreation Facilities.** Include local and regional parks and any other recreational facilities operated by a public or quasi-public agency.
- **Regional Parks.** Typically consist of 40 acres or more and include a wide range of amenities to attract a range of users beyond the City.
- **Community Parks.** Typically consist of 10 to 40 acres and have a service radius of 1.5 miles; typical amenities include pools, lighted sports fields and courts, picnic facilities, play areas, restrooms, off-street parking, and service yards.
- **Neighborhood Parks.** Typically consist of 1 to 10 acres, walk- or bike-to parks that are located within the neighborhood they serve; include both active and passive designs; represent a separate property delineated by a fence; and provide amenities determined by the neighborhood, often including picnic areas, informal fields, tot lots, court games, passive green space, and off-street parking.
- **Subneighborhood Parks.** Often called mini-parks, pocket parks, or play lots; serve built-up, urbanized areas; and are often developed in conjunction with specific plans.
- **Equestrian/Hiking Trails.** Areas that are wide enough to allow two horses to pass; are a minimum of 10 feet wide with 12 feet of vertical clearance from overhanging branches.
- **Active Regional Trails.** Active trails often used by pedestrians, equestrians, and bicyclists; secondary trails link adjacent areas with primary trails (major trail routes).
- **Class 1 Bikeway.** Often referred to as a bike path; hiking/biking trails with improved surface of concrete or asphalt for the bike and an unimproved surface for jogging; minimum width for two bikes is 8 feet, one bike is 5 feet, and hikers is 4 feet.
- **Class 2 Bikeway.** Often referred to as a bike lane; for use along roadways in urban settings; minimum land width of 4 feet between the gutter or parking lane and the auto travel lane.
- **Class 3 Bikeway.** Often referred to as a bike route; connect Class 1 and 2 bikeways; usually used only for a few blocks, often in developed areas.

Existing Conditions

The City maintains over 40 parks, tot lots, and sports facilities in addition to 8 community centers (City of Fontana 2013). The community centers serve as hubs for activities, programs, educational classes, and events that are designed to meet the needs of the Fontana community.

Regional Parks

The City's Martin Tudor-Jurupa Hills Regional Park is near the southern border of the City, approximately 1 to 1.5 miles west of the project site at 11600 Sierra Avenue. This regional park covers over 1,000 acres of open space. Amenities include a water park with swim lagoon and slides, ball fields, horseshoe/bocce ball/volleyball courts, a playground, picnic tables with shelters, restrooms, trails, and the Mary Vagle Museum & Nature Center.

Regional Trails

Basic trails provide public access to open space lands and serve as an active recreational amenity; therefore, trails form an important part of San Bernardino County's overall open space plan. The City provides an integral link in the San Bernardino County Trail Master Plan (City of Fontana 2003b). In the southern portion of the City, the 7.5-mile Jurupa Hills Trail traverses the Jurupa Hills, connecting the Martin Tudor-Jurupa Hill Regional Park in San Bernardino County with the Santa Ana River Trail in Riverside County. The Jurupa Hills Trail is identified as one of Riverside County's secondary active regional trails.

A section of the Jurupa Hills Trail traverses portions of Parcels 4, 5, 6, and 8 through the southern half of the project site, where it connects with the Riverside County Trails and Bikeway System at the Riverside County boundary via a Jurupa Area community trail (County of Riverside General Plan Jurupa Area Plan, October 2011). The Southern California Edison (SCE) Easement Trail (within the SCE utility corridor), which bounds the project site to the north of Planning Areas 1 and 3, also serves as an existing trail as identified by the City of Fontana General Plan Parks, Recreation, and Trails Element.

Community Parks

The City currently has eight community parks. Village Park, at 15601 Village Drive, is closest to the project site, at approximately 2.8 miles northwest. This park includes ball fields, a barbeque area, basketball courts, a picnic shelter, picnic tables, a playground, a snack bar, and restroom facilities.

Neighborhood Parks

There are currently seven neighborhood parks in the City. Catawba Park, at 11411 Catawba Avenue, is closest to the project site, at approximately 2.3 miles northwest. The park has ball fields, tennis courts, a barbeque area, picnic tables, and restroom facilities.

Subneighborhood and Subregional Parks

The City contains nine subneighborhood parks, which are often called mini-parks or play lots. Fiesta Park, near the intersection of Jurupa Avenue and Sierra Avenue, at 17127 La Vesu Road, is closest to the project site, at approximately 0.7 mile northwest. The park has a playground and restroom

facilities. Another subneighborhood park facility, Sycamore Hills Park, is also in the area at 11075 Mayberry Street, which is approximately 1 mile northwest of the project site.

Approximately 2 miles to the southeast, the subregional Avalon Park is at the corner of Avalon Street and 24th Street in Riverside County. Also, Kessler Park, an equestrian center and park facility operated by Bloomington Recreation and Parks District, is adjacent to and east of the project site at the southwestern corner of Jurupa Avenue and Linden Avenue, specifically east of Parcel 7 and north of Parcel 9. The park facility consists of baseball fields, a skate park, a toddler play area, gazebo picnic area, and two equestrian arenas (County of San Bernardino 2013). The County of San Bernardino Special Districts Department and Bloomington Recreation and Park District intend to renovate the western portion of Kessler Park; the project is currently undergoing environmental review.

Multipurpose and Private Recreation Facilities

The City has eight community centers: four general community centers, a nature center (Mary Vagle Museum & Nature Center), a senior center, a civic auditorium, and a fitness center. Several classes are offered by the City at each of the centers, such as arts and crafts, dance, fitness and sports, senior excursions, and educational courses.

The recreational facility closest to the project site is the Mary Vagle Museum & Nature Center, which is approximately 1 to 1.5 miles to the northwest. The Jack Bulik Teen Center and the Civic Center at 16581 Filbert Avenue and 9460 Sierra Avenue, respectively, are the next closest multipurpose recreation facilities to the project site, approximately 3 miles to the north. Also, approximately 3 miles to the south, the Jensen-Alvarado Historic Ranch and Museum, at 4307 Briggs Street in Jurupa Valley, offers an 1880s living history interpretive program and museum open to the public on Saturdays.

The following private recreational facilities are located in the surrounding area:

- Oak Quarry Golf Club, at 7151 Sierra Avenue in Jurupa Valley, is approximately 1.2 miles southwest of the project site. The 18-hole course is open to the public.
- The El Rivino Country Club, at 5530 El Rivino Road in unincorporated San Bernardino County in the community of Crestmore, is approximately 1.2 miles east of the project site. The 18-hole course is open to the public.
- The Indian Hills Golf Club, at 5700 Club House Drive in Jurupa Valley, is approximately 3.5 miles southwest of the project site. The 18-hole course is open to the public.

Table 4.2.13-1 identifies parks and recreational facilities in the vicinity of the project site and their distances from the site.

Table 4.2.13-1: Parks and Recreational Facilities Located in the Surrounding Area

Facility	Type	Address	Proximity to the Project Site
Jurupa Hills Trail	Trail	--	Traverses the southern half of the project site through Parcels 4, 5, 6, and 8
The SCE Easement Trail	Trail	--	Bounds the project site north of Parcels 1 and 2 and Lot A and south of Parcel 7
Martin Tudor-Jurupa Hills Regional Park	Regional Park	11600 Sierra Avenue, Fontana	1 to 1.5 miles west of the project site
Village Park	Community Park	15601 Village Drive, Fontana	2.8 miles northwest of the project site
Catawba Park	Neighborhood Park	11411 Catawba Avenue, Fontana	2.3 miles northwest of the project site
Avalon Park	Subregional Park	Corner of Avalon Street and 24 th Street, Jurupa Valley	2 miles southeast of the project site
Kessler Park	Equestrian Center and Park Facility	Southwest corner of Jurupa Avenue and Linden Avenue, Bloomington	Adjacent to and east of the project site bordering Parcels 7 and 9
Fiesta Park	Subneighborhood Park	17127 La Vesu Road, Fontana	0.7 mile northwest of the project site
Sycamore Hills Park	Subneighborhood Park	11075 Mayberry Street, Fontana	1 mile northwest of the project site
Jensen-Alvarado Historic Ranch and Museum	Historic Ranch and Museum	4307 Briggs Street, Jurupa Valley	3 miles south of the project site
Mary Vagle Museum & Nature Center	Recreational Facility	11600 Sierra Avenue, Fontana	1 to 1.5 miles northwest of the project site
The Jack Bulik Teen Center	Recreational Facility	16581 Filbert Avenue, Fontana	3 miles north of the project site
Civic Center	Recreational Facility	9460 Sierra Avenue, Fontana	3 miles north of the project site
Oak Quarry Golf Club	Golf Club	7151 Sierra Avenue, Jurupa Valley	1.2 miles southwest of the project site
El Rivino Country Club	Country Club	5530 El Rivino Road, Crestmore	1.2 miles east of the project site
Indian Hills Golf Club	Golf Club	5700 Club House Drive, Jurupa Valley	3.5 miles southwest of the project site
Source: Park designations from the City of Fontana General Plan			

Regulatory Setting

State

State Subdivision Map Act

The State Subdivision Map Act (California Government Code Section 66400 et seq.) sets forth procedures regarding the subdivision of land and requiring dedications of land or in-lieu fees as conditions of approving a subdivision. Provisions in the Subdivision Map Act for parkland are set forth in California Government Code Section 66477, known as the Quimby Act.

Southern California Association of Governments Regional Comprehensive Plan

The 2008 Regional Comprehensive Plan (RCP) is a major advisory plan prepared by the Southern California Association of Governments (SCAG) that addresses important regional issues like housing, traffic/transportation, water, and air quality. The RCP serves as an advisory document to local agencies in the Southern California region for their information and voluntary use for preparing local plans and handling local issues of regional significance. The 2008 RCP presents a vision of how Southern California can balance resource conservation, economic vitality, and quality of life. The RCP identifies voluntary best practices to approach growth and infrastructure challenges in an integrated and comprehensive way. It also includes goals and outcomes to measure progress toward a more sustainable region.

The Open Space and Habitat chapter of the RCP establishes goals related to open space and habitat (SCAG 2008), specifically involving the provision for enhancements to the region's parks, trails, and community open space infrastructure to support aesthetic, recreational, and quality of life needs, providing the highest level of service to a growing region by creating new, and improving existing, community open space.

Local

City of Fontana General Plan

The City of Fontana General Plan calls for a park acreage standard of 5 acres per 1,000 residents: 2 acres for community parks and 3 acres for neighborhood parks for every 1,000 residents. This is 1 acre greater than the land required by the State's Quimby Act, which requires residential developers to provide land and/or fees for new parks based on a standard of 4 acres per 1,000 residents.

The Open Space and Conservation Element defines open space lands based on the definition in Section 65660 (b) of the California Government Code as "...any parcel or area of land or water which is essentially unimproved and devoted to an open space use...and which is designated as such on a local, regional or state open space plan" (City of Fontana 2003a). Within the Fontana planning area, lands that fit this definition include the following:

- Plant and animal habitat, areas maintained for ecologic and other scientific study purposes, and streams and stream banks.
- Land used for the managed production of resources, including farmland and other agricultural uses, mineral resource deposits, and groundwater recharge.

- Outdoor recreation areas, including areas of outstanding scenic, historic, and cultural value; land currently used for or particularly suited for parks and recreation; and linkages between important recreation areas, including utility easements and trails.
- Open space for public health and safety, including earthquake fault zones, unstable soil areas, flood plains, steep slopes, areas prone to wildland fire hazards, and areas required for water storage and water quality protection.

City of Fontana Development Code

Chapter 30, Article VII of the City of Fontana Development Code contains guidelines and requirements for planned industrially zoned districts. No specific requirements related to parks and recreational facilities are included in this chapter.

Parks, Trails and Recreation Master Plan

In 1999, the City of Fontana adopted the Parks, Trails and Recreation Master Plan, which documented existing facilities, noted deficiencies, and recommended additions to the system to meet current and future demand. The Master Plan served as a guiding document and provided significant input into the Parks, Recreation, and Trails Element of the General Plan. Analyses of existing facilities and service areas under the 1999 Master Plan identified four areas as underserved by park facilities. The project site is not located within an area identified as underserved.

Impact Analysis

Methodology

A review of existing recreational facilities in the project area was conducted for the project. Data sources for this section include the City of Fontana General Plan Open Space and Conservation Element; City of Fontana General Plan Parks, Recreation, and Trails Element; City Master Plan for Park Facilities, Recreation and Community Services; and the City of Fontana Community Services and Recreation Department. Impacts on recreational areas and facilities are considered significant if an increase in population anticipated to result under the proposed project would result in either the deterioration of existing recreational facilities or in increased demand that would result in the construction of such facilities.

Thresholds of Significance

Criteria for determining the significance of impacts related to recreation are based upon criteria contained in Appendix G of the California Environmental Quality Act (CEQA) Guidelines. The proposed project could have a significant impact on the environment if it would:

- REC-1** Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- REC-2** Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Project Design Features

The following recreation-related project design features, which include a specific plan requirement, would prevent or reduce potentially significant environmental impacts.

Specific Plan Requirement

SP-R-1: Verify Trail Access and Location. The following measures and design considerations are required prior to the implementation and construction of the WVLCSP:

- Final project design and grading plans shall include the confirmed alignment of the Jurupa Hills Trail within the project site boundaries.
- The WVLCSP site plans and tentative parcel map(s) would retain access to existing parks and trails in accordance with applicable guidelines and requirements in the City Municipal Code and General Plan policies. Design of the proposed project would not deteriorate the existing Jurupa Hills Trail and Southern California Edison (SCE) Easement Trail, and access shall be retained.

Impacts and Mitigation

Impact REC-1. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated

The project proposes 3,473,690 square feet of industrial warehouse development with 14.93 acres used as a detention basin and 55.23 acres retained in natural hillside open space. No residential uses would be developed under the proposed project. Typically, residential projects result in an increase in localized populations, which could increase the demand for parks and recreational facilities and programs. The City currently collects park development fees for residential projects but not for industrial projects. Therefore, no payment of park development fees would be required under the proposed project. Further, the proposed project is not anticipated to result in substantial increased use of existing parks and recreational facilities because the proposed project is not expected to substantially increase the resident population of the area.

Implementation of the proposed project would result in employment opportunities, which in turn could increase localized population during work hours. Specifically, the proposed project is anticipated to result in 2,907 jobs. Workers could travel from within the City or from the surrounding area to the project site. The majority of the new employees would be occupying the project site during normal working hours. Therefore, week-day daytime population of the project site would be higher than during evenings and weekends.

Although there would be no residents living within the project site, it is recognized that employees working within the WVLCSP could use recreational facilities and open spaces in the City during certain times of the day (e.g., lunch breaks and immediately after work). Because employees at the project site would have limited opportunities to use recreational facilities and open spaces during working hours, they would typically use parks and recreational facilities for informal activities during weekday lunch breaks and immediately before and after work. These weekday times would not represent the peak hours for park use, which occur on weekends and holidays when workers are not present. Because of the limited times available to workers for recreation, they would tend to use parks and recreational areas that are close to their places of residence, especially ball fields used for organized team sports (e.g., softball and other athletic leagues). As a result, increased employment

within the project site would not be expected to result in the use of existing parks and recreational facilities to a degree that degradation of such facilities would occur.

As presented in Table 4.2.13-1, several neighborhood, community, and regional parks, trails, and recreational facilities are located in the surrounding area, including Kessler Park directly adjacent to the project site. Because of the proximity of existing recreational facilities, workers would be able to access and use several existing parks, trails, and community centers. The Jurupa Hills Trail, a regional trail, traverses portions of proposed Parcels 4, 5, 6, and 8 through the project site. Implementation of the proposed project could result in the alteration of this trail, potentially prohibiting access. However, the alignment of this trail appears to utilize the existing utility easement (shown on Tentative Parcel Map 19156 as granted to the Southern Sierras Power Company) that defines the shared boundary between proposed Parcels 5 and 6. Therefore, no development would occur within the utility easement and the trail would not be affected by the proposed WVLCSP. The Jurupa Hills Trail alignment would be surveyed to confirm the trail's precise location and ensure no project-related development would affect the trail. **Specific Plan**

Requirement SP-R-1 would confirm the precise location of the trail and would maintain access to existing trails within the project site boundaries. If any portion of the trail is outside of the existing utility corridor between proposed Parcels 5 and 6, the trail would need to be realigned to be off private property and within the utility corridor to avoid disruption or discontinuation of trail use, which would be implemented by **Mitigation Measure REC-1**.

Additionally, the SCE Easement Trail, which bounds Parcels 1 and 2 to the north, also serves as an existing trail. Any increased use by industrial business employees of either existing trail on the project site would not cause substantial deterioration. Further discussion of aesthetic impacts involving views from the Jurupa Hills Trail and the SCE Easement Trail are provided in Section 4.2.1, *Aesthetics*.

The existing parks and trails would be maintained per City of Fontana guidelines and requirements established through the City Municipal Code and General Plan policies. Specifically, the proposed project would adhere to these goals and policies by ensuring that the design of the proposed project continues to provide access to the trails that border the site (refer to **Specific Plan Requirement SP-R-1**). Design of the proposed project would not deteriorate the design or maintenance of the existing trails, and access would continue for both the Jurupa Hills Trail and SCE Easement Trail. Adherence to City requirements, guidelines, **Specific Plan Requirement SP-R-1**, and **Mitigation Measure REC-1** would result in less-than-significant impacts.

Specific Plan Requirement

The applicant shall implement the following specific plan requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **SP-R-1:** Verify Trail Access and Location.

Mitigation Measures

Mitigation Measure REC-1: Jurupa Hills Trail Realignment Plan. Any realignment of the Jurupa Hills Trail as a result of the WVLCSP project shall be submitted by the applicant to the County of San Bernardino prior to or concurrent with review of the proposed WVLCSP Tentative Parcel Map(s). As a portion of the Jurupa Hills Trail is located within the project site, on private land and not entirely within a utility corridor or public lands, the trail shall be realigned so as to be within the utility corridor easement in the southeastern portion of the WVLCSP project site, between proposed

Parcels 5 and 6. The applicant shall also submit plans for review and approval and coordinate with utility companies regarding any change to the existing easement, specifically if any sort of development is proposed within the easement, including roadways, buildings, accessory structures, etc. For compliance, the applicant shall provide proof to the City of Fontana Community Development Department of the County's approval for the alignment shift prior to Tentative Parcel Map recordation.

Residual Impacts

Impacts would be less than significant with implementation of **Specific Plan Requirement SP-R-1** and **Mitigation Measure REC-1**.

Impact REC-2. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment

As previously mentioned, the proposed project would include 3,473,690 square feet of industrial business park development with 14.93 acres used as a detention basin and 55.23 acres retained in natural hillside open space. No City park development fees would be required under the proposed project because no residential component would be included. No park or recreational facilities would be constructed or expanded under the proposed project. Furthermore, no encumbrance to the existing SCE Easement Trail or the Jurupa Hills Trail would occur under the proposed project, and access would remain. Therefore, no adverse physical effects related to such construction or expansion would occur.

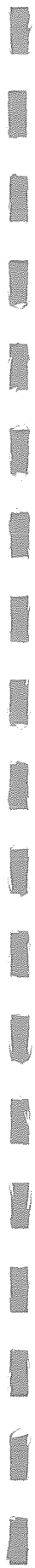
No City parks are proposed as part of the WVLCSP. However, parks and recreation would be allowed and could include facilities that accommodate passive and active uses such as athletic fields and courts, playgrounds, picnic areas, trails, or similar uses and are allowed in the OP-PF zone. The project would also include construction of sidewalks along Locust Avenue, Alder Avenue, and Armstrong Road to facilitate pedestrian and bicycle transportation throughout the Specific Plan area. As such, the proposed project would further the goals of the Open Space and Conservation Element by setting aside and dedicating open space lands that offer multi-use open space. Therefore, potential impacts related to demand for additional or expanded recreational facilities would be considered less than significant. Connectivity through the project site between off-site trail segments (existing and planned) is analyzed in Chapter 5, *Alternatives*.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.



4.2.14 Transportation and Traffic

Introduction

This section describes the existing conditions and applicable laws and regulations for transportation and traffic, followed by an analysis of the proposed West Valley Logistic Center Specific Plan (WVLCSP) project's potential to result in a significant traffic impact. The information provided in this section is summarized from the Traffic Impact Analysis (TIA) prepared for the project by LSA Associates in August 2013 and a Supplemental Traffic Analysis prepared by Translutions in August 2014 (provided in Appendix L). A brief overview of key terms within this section is provided to facilitate reader comprehension of existing and proposed traffic conditions.

Terminology

- **Average Annual Daily Traffic (AADT).** The AADT is the average traffic volume during a typical 24-hour day.
- **Cumulative Impact, Significant.** A significant *cumulative* traffic impact occurs when project traffic is added to the existing traffic, ambient growth traffic, and traffic from all other “past, present, or reasonably foreseeable future” projects and the resulting traffic causes a roadway or intersection to operate below the “acceptable” level of service.¹
- **Direct Impact, Significant.** A significant *direct* project traffic impact occurs when a pre-project intersection or roadway operates at or above the “acceptable” level of service (as defined by the applicable jurisdiction) and the addition of project traffic causes deterioration below the “acceptable” level of service.²
- **Level of Service (LOS).** The LOS represents the quality of an intersection or freeway mainline segment based on volume to capacity ratio or delay. LOS values range from LOS A (best) to LOS F (worst). See *Methodology* below for a full description of LOS and how it is used throughout this section.
- **Passenger Car Equivalent (PCE).** The PCE is a factor used to adjust heavy vehicles for an accurate evaluation of passenger car trips. PCE volumes were computed using a PCE factor of 1.5 for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for trucks with 4 or more axles. PCE volumes for freeway segments were computed using a PCE factor of 1.5 for all trucks because the impact of trucks on freeway operations is less compared to intersection operations. For more information

¹ A project's contribution to a cumulative traffic impact can be reduced to a less-than-significant level if the project either: (i) constructs the identified mitigation measure; or (ii) pays the project's fair share of the cost of the mitigation measure that will restore the level of service from below “acceptable” to “acceptable” (California Environmental Quality Act (CEQA) Guidelines Section 15130(a)(1)).

² Improvements necessary to restore the intersection back to an “acceptable” level of service need to be identified and those improvements will be incorporated to restore the level of service from below “acceptable” to “acceptable,” which will mitigate the project's impact to a less-than-significant level. When the pre-project condition is already below the “acceptable” level of service, then the project will only be responsible for mitigating its impacts to a level of service equal to or better than it was without the project. This is a standard threshold for many jurisdictions, because to require a project to mitigate an intersection that already operates below the “acceptable” level of service would force a single project to mitigate for impacts beyond those caused by the project.

on the methodologies used to derive PCE for freeway segments, please refer to the TIA in Appendix L.

- **Peak Hour.** A one-hour period between 7:00 and 9:00 AM and 4:00 and 6:00 PM that experiences the heaviest amount of traffic on a given intersection or freeway mainline segment.
- **Volume to Capacity Ratio (v/c).** The amount of existing or projected traffic in relation to the capacity of the facility.

Existing Conditions

The proposed project is located between the Interstate (I) 10 and State Route (SR) 60 freeways, west of the I-215 freeway in the southern portion of the City of Fontana. The project site is in the southeastern portion of Fontana, north of the City of Jurupa Valley and the County of Riverside and west of an unincorporated portion of San Bernardino County. Local roadways surrounding the project site include mostly two-lane facilities that serve the residential areas east and south of the project site. Access to the project area is provided by Armstrong Road, which traverses the project site from the south to the north. Locust Avenue also divides the project area and occurs along the eastern boundary of the primary development area (Buildings 1 through 6 within Parcels 1 through 6). The majority of the project site is on the western side of Locust Avenue, south of Jurupa Avenue, with a smaller area (Building 7 within Parcel 7), an existing linear utility easement (Parcel 9), and a detention basin area (Lot A) on the eastern side of Locust Avenue. The detention basin area is bounded by 11th Street to the south.

Methodology

Existing baseline traffic conditions are based on peak hour intersection turn movement counts collected by National Data and Surveying Services in February 2012. Existing freeway segment bi-directional volumes are derived from the AADT volume data published by the California Department of Transportation (Caltrans) in 2011.

Level of Service Definitions and Procedures

Roadway operations and the relationship between capacity and traffic volumes are expressed in terms of LOS, which is measured by the ratio of traffic v/c, or by the average delay experienced. Letter grades are assigned to LOS and range from A to F. LOS A represents the best operating conditions, and LOS F represents the worst. These levels recognize that operating conditions deteriorate as intersections approach capacity. A definition for each LOS is provided below in Table 4.2.14-1 and is based on the Transportation Research Board Special Report 209, Highway Capacity Manual (HCM). LOS at all intersections is calculated using the Traffix version 8.0 software, which uses the HCM 2000 methodologies. Additional analysis using Synchro software was conducted for the SR-60 interchanges at Valley Way and Rubidoux Boulevard at the request of the City of Jurupa Valley in August 2014. Level of service criteria for signalized and unsignalized intersections is shown below in Table 4.2.14-2. Saturation flow rates consistent with the San Bernardino County Congestion Management Program (CMP) guidelines for existing conditions and buildout conditions were used in the calculations of intersection capacity. In accordance with San Bernardino County CMP guidelines, any intersection at which the v/c ratio is greater than 1.0 is considered to be operating at LOS F, regardless of delay.

Level of Service Standards

LOS standards are used to evaluate the transportation impacts of long-term growth. Minimum acceptable LOS values for intersections and freeways are established by the applicable jurisdiction. The study area intersections within Fontana are subject to the City's performance standard of LOS of C or better, while Jurupa Valley and San Bernardino County maintain an LOS D or better standard for intersections. The San Bernardino County CMP sets the standard for freeway segments as LOS E or better. Freeway ramp terminus intersections are under the jurisdiction of Caltrans, and the acceptable LOS for these facilities is between LOS C and D, which correlates to an average delay of 45 seconds or less. The weighted average delay of 45 seconds is determined based on the average allowable delay of 35 and 55 seconds for LOS C and D respectively, as shown in Table 4.2.14-2. LOS standards are summarized below in Table 4.2.14-3.

Table 4.2.14-1. Level of Service Definitions

Level of Service (LOS)	Description
A	No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication. Typically, the approach appears quite open, turns are made easily, and nearly all drivers find freedom of operation.
B	This service level represents stable operation, where an occasional approach phase is fully utilized and a substantial number are approaching full use. Many drivers begin to feel restricted within platoons of vehicles.
C	This level still represents stable operating conditions. Occasionally drivers may have to wait through more than one red signal indication, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.
D	This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak period; however, enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive backups.
E	Capacity occurs at the upper end of this service level. It represents the most vehicles that any particular intersection approach can accommodate. Full utilization of every signal is seldom attained no matter how great the demand.
F	This level describes forced flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially and stoppages may occur for short or long periods of time due to congestion. In the extreme case, both speed and volume can drop to zero.
Source: Highway Capacity Manual 2000	

Table 4.2.14-2. Level of Service Criteria for Intersections

Level of Service (LOS)	Average Delay per Vehicle (seconds)	
	Unsignalized Intersection	Signalized Intersection
A	≤ 10	≤ 10
B	> 10 and ≤ 15	> 10 and ≤ 20
C	> 15 and ≤ 25	> 20 and ≤ 35
D	> 25 and ≤ 35	> 35 and ≤ 55
E	> 35 and ≤ 50	> 55 and ≤ 80
F	> 50	> 80

Source: Highway Capacity Manual 2000

Table 4.2.14-3. Level of Service Standards by Agency

Authority	LOS Standard	Circulation Facility
Caltrans	C-D/45 sec.	I-10 and SR-60 ramp intersections
City of Fontana	C	Local intersections in the City of Fontana
City of Jurupa Valley	D	Local intersections in the City of Jurupa Valley
San Bernardino County	D	Local intersections in the County of San Bernardino
San Bernardino County CMP	E	I-10 and SR-60 freeway mainline segments

Source: LSA Associates, August 2013 (Appendix L)

Study Area

The traffic study area for existing transportation and traffic conditions includes 41 intersections within the jurisdictions of the City of Fontana, the City of Jurupa Valley, and the County of San Bernardino, and Caltrans. In addition, 46 freeway mainline segments and ramp junctions are included in the study area, which are subject to Caltrans and the San Bernardino County CMP standards. The study area for the proposed project is defined according to the CMP for San Bernardino County and per discussions with City staff. The CMP includes TIA guidelines for establishing a study area and considers intersections and freeway mainlines or ramps that are anticipated to be affected as a result of project construction and/or operation.

The study area for the traffic analysis was determined based on criteria in the CMP TIA guidelines, discussion with City of Fontana staff, comments received in response to the Notice of Preparation (NOP) for the original Draft Environmental Impact Report (EIR), and comments at scoping meetings held for the proposed project. CMP guidelines require that all CMP intersections be included in the study area of a Traffic Impact Analysis when the anticipated project PCE volume equals or exceeds 50 two-way trips during either peak hour³. The CMP threshold requirement for analyzing freeway segments is 100 two-way peak hour trips. The study area limits per the CMP are not to exceed a 5-mile radius from the project site. For the WVLCSP, project-related traffic volume dropped below the

³ NOPs and invitations to project scoping meetings were extended to Caltrans, San Bernardino and Riverside Counties, and the Cities of Jurupa Valley and Riverside. Only the City of Jurupa Valley responded with a request for specific facilities to be analyzed. As a result, intersections in the City of Jurupa Valley were included in the analysis although the proposed project would add less than 50 trips to those intersections.

50-trip threshold for intersections and 100-trip threshold for freeway segments at distances less than the 5-mile limit. All CMP locations where the project is forecast to add 50 trips at intersections and 100 trips at freeway segments have thus been included in this analysis. These CMP study area requirements, which are equivalent to Riverside County's study area requirements, were applied in both San Bernardino and Riverside Counties, using the Southern California Association of Governments (SCAG) Comprehensive Transportation Plan (CTP) traffic model for identification of intersections in Riverside County. In addition, at the request of the City of Jurupa Valley, some intersections in Jurupa Valley were included in the analysis although the 50-trip threshold was not met.

Because roadway segments within the study area are generally signalized with spacing less than 2 miles, the San Bernardino County CMP does not require segment analysis and relies upon intersections. As shown on Figure 4.2.14-1, the extent of the study area generally includes Valley Boulevard and I-10 to the north, SR-60 and Mission Boulevard to the south, Sierra Avenue to the west, and Cedar Avenue and Market Street to the east.

Intersection Conditions

Of the 41 study area intersections, 19 are within the City of Fontana, seven are within San Bernardino County, three are in the City of Jurupa Valley, and 12 are under the jurisdiction of Caltrans. Figure 4.2.14-1 shows the locations of the 41 study area intersections. The acceptable LOS varies by jurisdiction⁴. As shown in Table 4.2.14-4, all of the 41 intersections within the study area currently operate at an acceptable LOS, with the exception of the following three intersections:

- Alder Avenue/Slover Avenue (AM Peak Hour)
- Cedar Avenue/I-10 Westbound Ramps (PM Peak Hour)
- Valley Way/SR-60 Westbound Ramps (AM and PM Peak Hours)

Freeway Mainline and Ramp Junction Conditions

The 46 study area freeway mainline and ramp junctions are subject to the LOS standards established by the CMP and Caltrans, respectively. Acceptable LOS for freeway mainline segments is LOS E or better, and acceptable LOS for ramp junctions is between LOS C and D, or no more than an average delay of 45 seconds. As shown in Table 4.2.14-5, 35 of the 46 study area freeway mainline segments and ramp junctions currently operate at an acceptable LOS; the following 11 are below the acceptable LOS:

- I-10 Eastbound: Sierra Avenue On-Ramp (PM Peak Hour)
- I-10 Eastbound: Sierra Avenue On-Ramp to Cedar Avenue Off-Ramp (PM Peak Hour)
- I-10 Eastbound: Cedar Avenue Off-Ramp (PM Peak Hour)
- I-10 Eastbound: Between Cedar Avenue Ramps (PM Peak Hour)

⁴ As previously noted, intersections within Fontana are subject to the City's performance standard of LOS C or better, while Jurupa Valley and San Bernardino County maintain a standard of intersections operating at LOS D or better. Freeway segments are designed to operate at LOS E or better, per the CMP standard. Freeway ramp terminus intersections are under the jurisdiction of Caltrans, and the acceptable LOS for these facilities is between LOS C and D, which correlates to an average delay of 45 seconds or less. The weighted average delay of 45 seconds is determined based on the average allowable delay of 35 and 55 seconds for LOS C and D, respectively, as shown in Table 4.2.14-2. LOS standards are summarized in Table 4.2.14-3.

- I-10 Eastbound: Cedar Avenue On-Ramp (PM Peak Hour)
- I-10 Eastbound: East of Cedar Avenue On-Ramp (PM Peak Hour)
- I-10 Westbound: Between Sierra Avenue Ramps (AM Peak Hour)
- I-10 Westbound: Cedar Avenue On-Ramp (AM Peak Hour)
- I-10 Westbound: Between Cedar Avenue Ramps (AM Peak Hour)
- I-10 Westbound: Cedar Avenue Off-Ramp (AM Peak Hour)
- I-10 Westbound: East of Cedar Avenue On-Ramp (AM Peak Hour)

Public Transportation Services

Public transportation services within the City of Fontana and near the proposed project include bus transit service (Omnitrans) and rail transportation (Metrolink service provided by the Southern California Regional Rail Authority [SCRRA]). These services are further described below.

Bus Service

Public transportation in the City of Fontana and surrounding cities and communities is served by Omnitrans, which is the regional public transportation operator in San Bernardino County. Service in the City of Fontana is typically oriented in an east-west direction and provides connections to the communities of Rialto, San Bernardino, and Colton to the east and Rancho Cucamonga, Ontario, Montclair, and Pomona to the west. A north-south connection across the I-10 freeway is located on Sierra Avenue between the Metrolink Transfer Center and Jurupa Avenue. Route 29 is the only bus route that provides service from the project vicinity to the City via the South Fontana Transfer Center. This route runs in a north-south direction on Locust Avenue between Slover Avenue and 11th Street between 7:10 AM and 6:10 PM Monday through Friday and between 8:10 AM and 6:10 PM on Saturdays. The Omnitrans service includes 12 fixed routes with two major transfer centers in the Fontana area, including the following:

- Fontana Metrolink (Sierra Avenue/Orange Way): Routes 10, 14, 15, 19, 20, 61, 66, 67, and 82
- South Fontana Transfer Center (Marygold Avenue/Sierra Avenue): Routes 19EB, 19WB, 20, 29, 61EB, 61WB, 82NB, and 82SB

Commuter Rail

Commuter rail service is provided by the SCRRA, which operates the Metrolink train service between the counties of Ventura, Los Angeles, San Bernardino, Orange, Riverside, and north San Diego. The City of Fontana is served by the San Bernardino Line, which runs east-west between the San Bernardino Station and the Los Angeles Union Station. The Fontana Station is located at Sierra Avenue/Orange Way, where Omnitrans provides connecting transit service from the Metrolink Transfer Center to locations throughout the City. The project site is about 4 miles south of the Fontana Station, and no direct bus route operates between the project and this station. Omnitrans Route 29 provides service from the study area to the Station via the South Fontana Transfer Center.

Inter-region Freight and Passenger Rail

Both the Metrolink commuter rail and freight rail service run on a rail line operated by Burlington Northern Santa Fe (BNSF), which passes east-west through the City between Arrow Boulevard and

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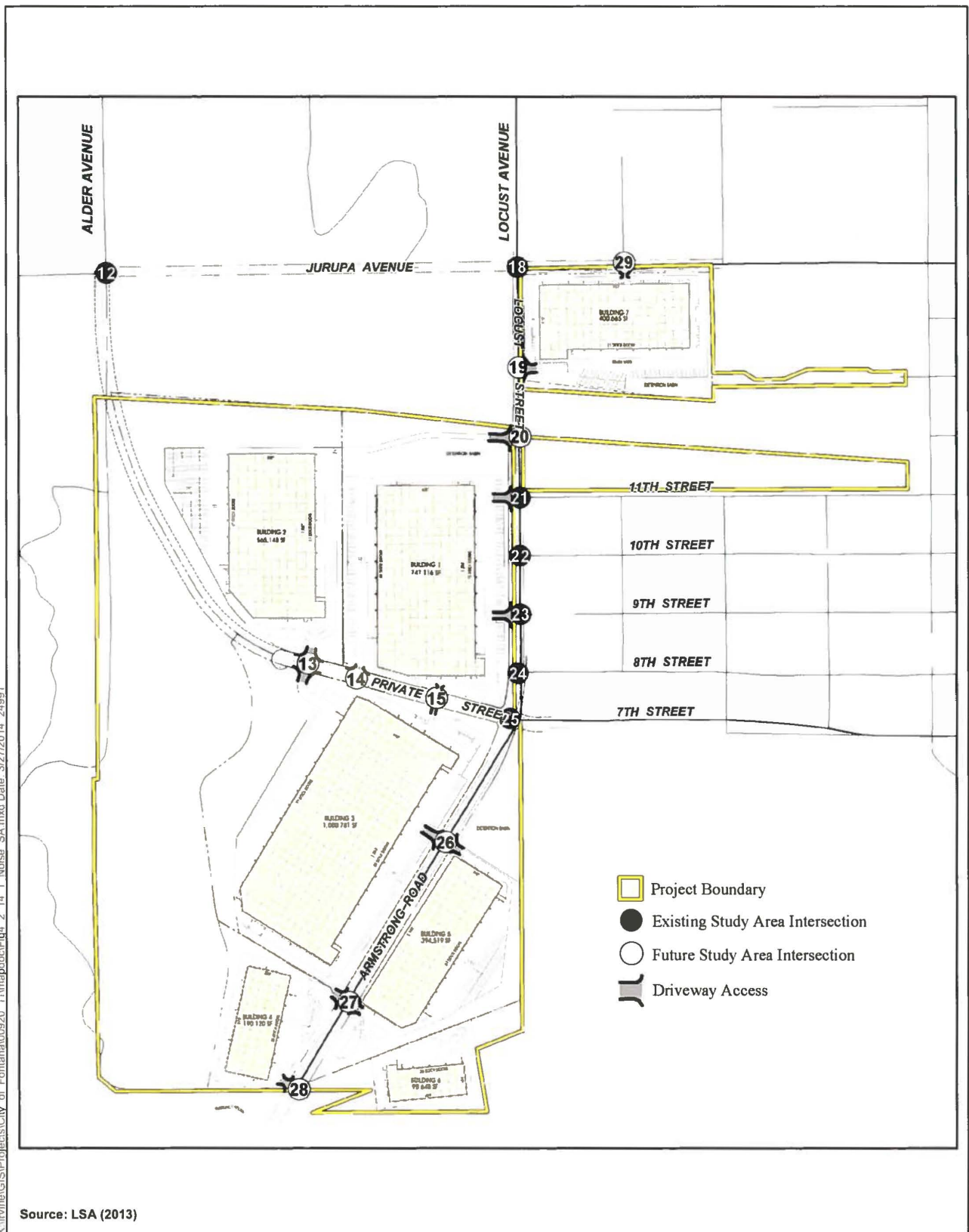


Figure 4.2.14-1
Study Area
West Valley Logistics Center Specific Plan EIR



Merrill Avenue. Amtrak service runs on the Union Pacific rail line just south of I-10, with the nearest station in the City of San Bernardino. The roadway crossings on the Union Pacific main line are all grade separated because of the proximity of the line to the freeway. All of the roadways that extend over the freeway remain elevated over the railroad tracks. Roadway crossings with the Metrolink/BNSF line are all at-grade, with the exception of the crossing at Cherry Avenue.

Airport Facilities

There are no aviation facilities within the City of Fontana. The nearest aviation facilities include Flabob Airport in Riverside County, about 3 miles to the south of the project site; the Rialto Municipal Airport, about 5.5 miles north of the project site in the City of Rialto; and the Riverside Municipal Airport, about 5.8 miles south of the project in the City of Riverside. The nearest commercial airport providing passenger service is Ontario International Airport in the City of Ontario nearly 9.5 miles west of the project site.

Pedestrian Facilities

The Jurupa Hills Trail and a Southern California Edison (SCE) Easement Trail south of Jurupa Avenue compose the regional recreational trails within the project vicinity. The recreational trail system, which combines equestrian, hiking, and Class 1 bike trails, is separated from automobile traffic and follows natural open space features, rail rights-of-way, flood control channels, and utility easements. Such trails are primarily used for recreation but can also be used to commute or to provide access to community facilities, such as the Metrolink station or schools.

Pedestrian circulation in Fontana is primarily provided via sidewalks. The project site is currently vacant, with no sidewalks within or adjacent to the site. Pedestrian access to the project site is provided by Jurupa Hills Trail and SCE Easement Trail. A section of the trail traverses the southern half of the western border of the main project site, where it connects with the Riverside County Trails and Bikeway System at the County boundary via a Jurupa Area Community Trail.

Table 4.2.14-4. Existing Intersection Level of Service

	Intersection	Control	Jurisdiction	LOS Standard	Existing Conditions					
					AM Peak Hour			PM Peak Hour		
					v/c	Delay	LOS	v/c	Delay	LOS
1	SR-60 EB Ramps/Mission Blvd	Signal	Caltrans	D/45 Sec. ¹	0.31	26.3	C	0.57	28.4	C
2	Sierra Ave/I-10 Ramps	Signal	Caltrans	D/45 Sec.	0.62	34.8	C	0.69	36.2	D
3	Sierra Ave/Slover Ave	Signal	City of Fontana	C	0.60	29.0	C	0.59	29.8	C
4	Sierra Ave/Santa Ana Ave	Signal	City of Fontana	C	0.40	23.0	C	0.42	20.5	C
5	Sierra Ave/Jurupa Ave	Signal	City of Fontana	C	0.41	27.9	C	0.43	28.3	C
6	Armstrong Rd/Sierra Ave	Signal	City of Jurupa Valley	D	0.42	24.4	C	0.40	20.7	C
7	Valley Way/SR-60 WB Off-Ramp	Signal	Caltrans	D/45 Sec.	0.93	50.3	D	0.95	46.6	D
8	Valley Way/SR-60 WB On-Ramp	TWSC	Caltrans	D/45 Sec.	0.53	2.9	A	0.49	5.4	A
9	Valley Way/SR-60 EB On-Ramp	TWSC	Caltrans	D/45 Sec.	-	0.0	A	-	0.0	A
10	Valley Way/Mission Blvd	Signal	City of Jurupa Valley	D	0.47	24.0	C	0.49	28.1	C
11	Alder Ave/Slover Ave	TWSC	County of San Bernardino	D	--	68.8	F	-	23.5	C
12	Alder Ave/Jurupa Ave	TWSC	City of Fontana	C	-	8.8	A	-	8.6	A
13	Driveway 1/7 th St	TWSC	City of Fontana	C	Future Intersection					
14	Driveway 2/7 th St	TWSC	City of Fontana	C	Future Intersection					
15	Driveway 3/7 th St	TWSC	City of Fontana	C	Future Intersection					
16	Locust Ave/Slover Ave	AWSC	County of San Bernardino	D	0.20	14.2	B	0.22	21.2	C
17	Locust Ave/Santa Ana Ave	AWSC	County of San Bernardino	D	0.84	23.1	C	0.55	12.7	B
18	Locust Ave/Jurupa Ave	TWSC	City of Fontana	C	-	10.7	B	-	10.8	B
19	Locust Ave/Driveway 4	TWSC	City of Fontana	C	Future Intersection					
20	Locust Ave/Driveway 5	TWSC	City of Fontana	C	Future Intersection					
21	Locust Ave/11 th St-Driveway 6	TWSC	City of Fontana	C	-	9.9	A	-	10.1	B
22	Locust Ave/10 th St	TWSC	City of Fontana	C	-	9.5	A	-	9.5	A
23	Locust Ave/9 th St-Driveway 7	TWSC	City of Fontana	C	-	9.3	A	-	9.7	A
24	Locust Ave/8 th St	TWSC	City of Fontana	C	-	9.2	A	-	10.0	A
25	Locust Ave-Armstrong R/7 th St	TWSC	City of Fontana	C	-	11.2	B	-	11.9	B
26	Locust Ave/Driveway 8	TWSC	City of Fontana	C	Future Intersection					

	Intersection	Control	Jurisdiction	LOS Standard	Existing Conditions					
					AM Peak Hour			PM Peak Hour		
					v/c	Delay	LOS	v/c	Delay	LOS
27	Locust Ave/Driveway 9	TWSC	City of Fontana	C				Future Intersection		
28	Locust Ave/Driveway 10	TWSC	City of Fontana	C				Future Intersection		
29	Driveway 11/Jurupa Ave	TWSC	City of Fontana	C				Future Intersection		
30	Cedar Ave/I-10 WB Ramps	Signal	Caltrans	D/45 Sec.	0.97	31.1	C	0.73	70.4	E
31	Cedar Ave/I-10 EB Ramps	Signal	Caltrans	D/45 Sec.	0.86	31.7	C	0.83	31.1	C
32	Cedar Ave/Slover Ave	Signal	County of San Bernardino	D	0.48	25.3	C	0.51	25.8	C
33	Cedar Ave/Santa Ana Ave	Signal	County of San Bernardino	D	0.45	21.2	C	0.49	20.7	C
34	Cedar Ave/Jurupa Ave	Signal	County of San Bernardino	D	0.35	17.2	B	0.41	14.5	B
35	Cedar Ave/7 th St	Signal	County of San Bernardino	D	0.30	10.8	B	0.30	11.6	B
36	Rubidoux Blvd/20 th St-Market St	Signal	City of Jurupa Valley	D	0.65	34.0	C	0.73	36.9	D
37	Rubidoux Blvd/30 th St-SR-60 WB Off Ramp	Signal	Caltrans	D/45 Sec.	0.70	34.7	C	0.90	43.1	D
38	Rubidoux Blvd/SR-60 WB On Ramp	TWSC	Caltrans	D/45 Sec.	-	14.4	B	-	16.1	C
39	Rubidoux Blvd/SR-60 EB Off Ramps-30 th St	Signal	Caltrans	D/45 Sec.	0.65	32.0	C	0.67	29.4	C
40	Market St/SR-60 WB Ramps	Signal	Caltrans	D/45 Sec.	0.45	18.7	B	0.71	24.5	C
41	Market St/SR-60 EB Ramps	Signal	Caltrans	D/45 Sec.	0.67	28.5	C	0.82	31.9	C

Source: LSA Associates, August 2013; Translutions, August 2014

¹ Acceptable LOS for Caltrans facilities is between LOS C and D, which correlates to an average delay of 45 seconds or less.

AWSC = all-way stop controlled

Caltrans = California Department of Transportation

EB = eastbound

I = Interstate

LOS = level of service

SR = State Route

TWSC = two-way stop controlled

v/c = volume to capacity ratio

WB = westbound

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Table 4.2.14-5. Existing Freeway Segment and Ramp Junction Level of Service

				Existing Conditions					
				AM Peak Hour			PM Peak Hour		
				Speed	Density	LOS	Speed	Density	LOS
Intersection	Type	Mainline Lanes							
I-10 Eastbound									
1	West of Sierra Avenue Off-Ramp	Basic	5	70.0	14.6	B	61.6	34.8	D
2	Sierra Avenue Off-Ramp	Basic	5	70.0	14.6	B	61.6	34.8	D
3	Between Sierra Avenue Ramps	Basic	4	70.0	14.0	B	55.3	42.5	E
4	Sierra Avenue On-Ramp	1 Lane On	4	61.0	20.8	C	11.0	44.0	F
5	Sierra Avenue On-Ramp to Cedar Avenue Off-Ramp	Basic	4	70.0	17.7	B	-	-	F
6	Cedar Avenue Off-Ramp	1 Lane Off	4	56.0	22.3	C	55.5	43.8	F
7	Between Cedar Avenue Ramps	Basic	4	70.0	14.8	B	-	-	F
8	Cedar Avenue On-Ramp	1 Lane On	4	61.0	17.9	B	57.0	31.7	F
9	East of Cedar Avenue On-Ramp	Basic	4	70.0	17.8	B	-	-	F
SR-60 Eastbound									
10	West of Valley Way Hook Off-Ramp	Basic	4	69.8	21.5	C	68.0	26.2	D
11	Valley Way Hook Off-Ramp	Basic	4	69.8	21.5	C	68.0	26.2	D
12	Between Valley Way Ramps	Basic	3	66.6	28.5	D	62.2	34.1	D
13	Valley Way Hook On-Ramp	1 Lane On	3	58.0	30.9	D	56.0	33.6	D
14	Valley Way Hook On-Ramp to Valley Way Slip On-Ramp	Basic	3	65.0	30.7	D	60.1	36.6	E
15	Valley Way Slip On-Ramp	1 Lane On	3	57.0	33.2	D	55.0	35.5	E
16	Valley Way Slip On-Ramp to Rubidoux Blvd Off-Ramp	Basic	3	62.7	33.5	D	57.5	39.7	E
17	Rubidoux Blvd Off-Ramp	1 Lane Off	3	56.9	25.7	C	56.0	28.1	D
18	Between Rubidoux Blvd Ramps	Basic	3	65.8	29.6	D	64.4	31.5	D
19	Rubidoux Blvd On-Ramp	1 Lane On	3	55.0	35.3	E	56.0	34.6	D
20	Rubidoux Blvd On-Ramp to Market Street Off-Ramp	Basic	3	60.6	36.0	E	60.7	35.9	E
21	Market Street Off-Ramp	1 Lane Off	3	55.8	27.4	C	55.2	27.6	C
22	Between Market Street Ramps	Basic	4	70.0	20.2	C	70.0	19.4	C
23	Market Street On-Ramp	1 Lane On	4	61.0	18.4	B	61.0	17.9	B
24	East of Market Street On-Ramp	Basic	4	69.7	22.2	C	69.9	21.2	C

				Existing Conditions					
				AM Peak Hour			PM Peak Hour		
				Speed	Density	LOS	Speed	Density	LOS
Intersection	Type	Mainline Lanes							
I-10 Westbound									
25	West of Sierra Avenue On-Ramp	Basic	5	54.6	43.3	E	70.0	19.3	C
26	Sierra Avenue On-Ramp	Basic	5	54.6	43.3	E	70.0	19.3	C
27	Between Sierra Avenue Ramps	Basic	5	-	-	F	70.0	19.6	C
28	Sierra Avenue Off-Ramp	Basic	5	57.5	39.8	E	70.0	18.4	C
29	Cedar Avenue On-Ramp to Sierra Avenue Off-Ramp	Basic	5	57.5	39.8	E	70.0	18.4	C
30	Cedar Avenue On-Ramp	1 Lane On	4	50.0	36.5	F	60.0	23.2	C
31	Between Cedar Avenue Ramps	Basic	4	-	-	F	70.0	19.9	C
32	Cedar Avenue Off-Ramp	1 Lane Off	4	56.6	44.5	F	56.0	28.0	D
33	East of Cedar Avenue Off-Ramp	Basic	4	-	-	F	69.5	22.9	C
SR-60 Westbound									
34	West of Valley Way Slip On-Ramp	Basic	4	70.0	18.7	C	70.0	17.7	B
35	Valley Way Slip On-Ramp	Basic	4	70.0	18.7	C	70.0	17.7	B
36	Between Valley Way Ramps	Basic	3	69.7	21.9	C	69.8	21.5	C
37	Valley Way Slip Off-Ramp	1 Lane Off	3	56.2	28.3	D	56.1	28.0	D
38	Rubidoux Blvd On-Ramp to Valley Way Slip Off-Ramp	Basic	3	68.2	25.9	C	68.3	25.8	C
39	Rubidoux Blvd On-Ramp	1 Lane On	3	59.0	28.7	D	59.0	28.6	D
40	Between Rubidoux Blvd Ramps	Basic	3	69.6	22.5	C	69.6	22.4	C
41	Rubidoux Blvd Off-Ramp	1 Lane Off	3	48.8	28.7	D	48.7	28.8	D
42	Market Street On-Ramp to Rubidoux Off-Ramp	Basic	3	68.5	25.4	C	68.2	25.9	C
43	Market Street On-Ramp	1 Lane On	3	50.0	28.8	D	49.0	30.3	D
44	Between Market Street Ramps	Basic	3	69.4	23.1	C	69.8	21.5	C
45	Market Street Off-Ramp	1 Lane Off	3	48.5	24.0	C	48.9	21.5	C
46	East of Market Street Off-Ramp	Basic	3	67.1	27.7	D	69.0	24.1	C

Source: LSA Associates, August 2013; Translutions, August 2014 (Appendix L)

Note: The HCM cannot conduct speed and density calculations under oversaturated conditions. In such cases, only the LOS grade is reported.

HCM = Highway Capacity Manual

LOS = level of service

I = Interstate

ST = State Route

Regulatory Setting

Traffic analysis in the State of California is guided by policies and standards set by local jurisdictions, and is guided by Caltrans at the State level. Caltrans has jurisdiction over freeway segments and ramp junctions included in the project area. The other study intersections fall under the authority of the jurisdictions in which they are located, including the City of Fontana, the City of Jurupa Valley, San Bernardino County, and Riverside County. Transportation policies adopted by these agencies that can be applied to the proposed project are discussed in the following sections.

State

California Department of Transportation (Caltrans)

Caltrans is responsible for planning, designing, building, operating, and maintaining California's transportation system and has jurisdiction over impacts that would affect State highway facilities. Traffic impacts on State highways are evaluated per the Caltrans "Guide for the Preparation of Traffic Impact Studies" (December 2002). This guide establishes uniform and consistent methods for evaluating traffic impacts as a result of discretionary actions. Caltrans facilities within the study area include 12 intersections and 46 freeway segments and ramp junctions. Caltrans establishes acceptable freeway and on- and off-ramp operations based on the Transportation Research Board's *Highway Capacity Manual 2000*.

Local

Southern California Association of Governments (SCAG)

Regional Comprehensive Plan and Guide

SCAG is the designated metropolitan planning organization for six Southern California counties (Ventura, Los Angeles, San Bernardino, Riverside, Orange, and Imperial) and has developed the Regional Comprehensive Plan and Guide (RCPG) to guide land use and transportation planning efforts to accommodate expected growth in the region through the year 2035. The RCPG is intended to be a usable reference document for local planners, business people, and other individuals whose work affects the future built environment in Southern California. The Transportation chapter of the RCPG offers an action plan for implementation of strategies in support of the policies adopted by the SCAG Regional Council.

San Bernardino Associated Governments (SANBAG)

San Bernardino Associated Governments (SANBAG) is the metropolitan planning organization for San Bernardino County responsible for countywide transportation planning. SANBAG consists of the County and cities within the County (including the City of Fontana), with policy makers consisting of mayors, councilmembers, and county supervisors. SANBAG serves as the congestion management agency for the County, and is responsible for the collection and disbursement of local sales taxes earmarked for transportation projects. SANBAG also serves as the funding agency for the County's transit systems.

Congestion Management Program (CMP)

SANBAG is the Congestion Management Agency (CMA) responsible for the creation and implementation of the San Bernardino County CMP, which was last updated in 2012. The CMP establishes LOS standards for the CMP system and identifies the need for fair share development impact fees to mitigate new development's impacts on the regional transportation facilities.

Measure I Strategic Plan and the Development Mitigation Nexus Study

The Measure I Strategic Plan, approved in 2004 and effective 2010 to 2040, allocates a half-cent sales tax throughout San Bernardino County for transportation improvements. Improvements are identified within the cities and unincorporated areas of the County, including the City of Fontana. The SANBAG Development Mitigation Nexus Study (Nexus Study), which is included as Appendix K of the SANBAG CMP, establishes a framework for local jurisdictions within San Bernardino County and development projects within those jurisdictions to fund needed regional transportation improvements within San Bernardino County. Costs may include planning, project development, design, construction, management, right-of-way, and mitigation requirements subject to the policy provisions contained in the Measure I Strategic Plan. The Nexus Study includes growth projections for jurisdictions throughout San Bernardino County, including traffic crossing jurisdictional boundaries within San Bernardino County, and other jurisdictions outside of the County (e.g., Riverside County and the Jurupa Valley area) whose traffic affects San Bernardino County in its regional growth forecasts.

Regional transportation facilities identified in the Nexus Study include freeway interchanges, railroad grade separations, and regional arterial highways. On page 10, the Nexus Study (SANBAG 2011) states,

For arterials, costs were estimated as follows:

The local jurisdiction projects and cost estimates were accepted directly and entered into a database. These included only the arterial projects on the Nexus Study Network. Unless otherwise noted, the costs include project development, engineering, right-of-way and construction costs. **In some cases, bridges, traffic signals, and other cost items are specified separately. Where these items are not separately identified, the costs are assumed to be included in the overall cost estimate for widening of each facility.** [Emphasis added.] The existing number of lanes and the number of lanes after improvement are also identified for projects where the information was available. Local jurisdictions may not include costs of improvements such as sidewalk, curb and gutter and match-up pavement along undeveloped frontages, for which developers would ordinarily be responsible. See Appendix J of the CMP for details on project cost eligibility. The costs included in the Nexus Study were reduced by the amount of federal earmarks for individual arterial projects contained in prior federal legislation or appropriations, where specifically identified, based on the development mitigation principles adopted by the SANBAG Board.

Therefore, every project identified under the Measure I Development Mitigation Nexus Study program has included operational improvements such as adding turn lanes and signal improvement at intersections.

The program relies upon local jurisdictions to implement mitigation programs by collecting fees for regional improvements; however, SANBAG does not dictate how individual jurisdictions allocate their costs for regional improvements to new development. Instead, each jurisdiction, including the City of Fontana and the County of San Bernardino, is required to develop its own schedule of fees and implementation programs (often through a capital improvements program [CIP]) that can demonstrate achievement of the contribution levels set in the Nexus Study for each jurisdiction.

The Nexus Study is based on having each jurisdiction subject to the Nexus Study fund its share of needed *regional* improvements by developing the facilities *within its own jurisdiction*. The Nexus Study does not rely on the exchange of impact fees between jurisdictions as a means of mitigating impacts of development occurring within one jurisdiction on the regional transportation facilities of another jurisdiction. As a result, there is no allocation of arterial improvement costs to jurisdictions outside the jurisdiction in which a proposed development project is located. Impacts of development throughout the region addressed in the Nexus Study are instead mitigated by requiring each jurisdiction to be responsible for needed arterial improvements within its own jurisdiction, including the share of improvements necessitated by traffic generated in other jurisdictions. Thus, as development occurs within the various jurisdictions subject to Nexus Study fees, all of the regional improvements included within the Nexus Study throughout the County will eventually be built.

Because roadway improvements are implemented by individual jurisdictions according to the pace of development within each jurisdiction, the Nexus Study does not establish a definitive timeline for the construction of the improvements being funded by Nexus Study fees. Instead, the Nexus Study provides for ongoing monitoring of level of service conditions, and establishes means for annually determining priorities for the programming and construction of improvements. The City of Fontana and other jurisdictions in San Bernardino County have approved the Nexus Study and are implementing it. Nevertheless, while the Nexus Study provides for the eventual funding and construction of all facilities subject to the Nexus Study, the specific timing for development of any specific improvements cannot be determined as part of this EIR.

The City of Fontana has created a standard program (Circulation Development Fees and a CIP) to fund and implement regional improvements within the City. As a result, SANBAG considers the City exempt from CMP traffic impact analysis requirements. Although no CMP analysis was therefore required for this project, the traffic impact analysis prepared for this project (see Appendix L) was prepared so as to comply with CMP traffic impact analysis requirements.

Circulation improvements listed in the San Bernardino County CIP and the Nexus Study in the vicinity of the project include the intersections of Alder Avenue/Slover Avenue⁵ (restriping and control measures), Locust Avenue/Santa Ana Avenue (traffic signal installation), Locust Avenue/Jurupa Avenue (all-way stop control), and Cedar Avenue/I-10 Westbound Ramps⁶ (restriping and control measures).

Western Riverside Council of Governments

Transportation Uniform Mitigation Fee Program

The Transportation Uniform Mitigation Fee (TUMF) Program is a program in western Riverside County to address cumulative impacts on the regional transportation system within Riverside County. The TUMF Program (WRCOG 2011) includes growth projections for adjacent jurisdictions (including the City of Fontana, San Bernardino County, and other jurisdictions whose traffic affects western Riverside County) in its regional growth forecasts. Participating jurisdictions within western Riverside County are responsible for collecting sufficient development fees to offset traffic impacts within their jurisdictions. Because the TUMF system provides funding for buildout of

⁵ The Alder Avenue/Slover Avenue intersection is currently operating at an unacceptable LOS F in the AM peak hour.

⁶ The Cedar Avenue/westbound I-10 ramps are currently operating at an unacceptable LOS E in the PM peak hour.

Riverside County's needed regional system improvements through funding generated by each Riverside County jurisdiction participating in the TUMF Program, there is no mechanism needed to collect additional fees as mitigation from specific development projects in adjacent jurisdictions within or outside of Riverside County as a means of mitigating impacts from future development across jurisdictional boundaries or across the county line from San Bernardino into Riverside County.

Pages F-1 and F-2 of the TUMF Appendix states:

TUMF Network Cost Assumptions

For the purpose of calculating a "fair share" fee to be applied to new development under the TUMF program, it is necessary to develop planning level estimates of the cost to complete improvements to the endorsed Regional System of Highways and Arterials to adequately accommodate future traffic growth. The planning level cost estimates were established by applying unit cost values to the proposed changes identified in the future Regional System of Highways and Arterials during the designation of the network extents. Unit cost values were developed for various eligible improvement types that all provide additional capacity needed to mitigate the cumulative regional traffic impacts of new development to facilities on the Regional System of Highways and Arterials. Eligible improvement types include:

1. Construction of additional Network roadway lanes;
2. Construction of new Network roadway segments;
3. Expansion of existing Network bridge structures;
4. Construction of new Network bridge structures;
5. Expansion of existing Network interchanges with freeways;
6. Construction of new Network interchanges with freeways;
7. Grade separation of existing Network at-grade railroad crossings;
8. Expansion of existing Network-to-Network intersections.

Because roadway improvement standards vary considerably between respective jurisdictions, a typical roadway standard for the TUMF Network was recommended by the Public Works Committee (PWC) as the basis for developing the TUMF Network cost estimate. The typical roadway standard assumes the following standard design characteristics that are consistent with the minimum requirements of the Caltrans Highway Design Manual:

- 12 foot wide asphaltic concrete roadway lanes;
- 14 foot painted median (or dual center left turn lane);
- 4 foot wide bike lanes (on the roadway);
- Curb and gutter with accompanying roadway stormwater drainage;
- 6 foot wide sidewalks.

It is recognized that the typical roadway standard is not appropriate in all potential TUMF Network locations. Where appropriate, typical design standards could be substituted with design elements such as open swale drainage and paved roadway shoulders with no curbing that would typically cost less than the implementation of the Typical Roadway Standard. Roadway improvements in excess of the Typical Roadway Standard (including, but not limited to, Portland concrete cement (PCC) roadway lanes, raised barrier medians, parking lanes, landscaping, streetlighting, aesthetic pavement treatments, separate

bicycle paths, etc.) are not eligible for TUMF funding and will be the responsibility of the local funding agency.

Unit cost estimates for the implementation of TUMF Network improvements were developed based on the unit cost to accomplish the Typical Roadway Standard. For simplicity, the roadway unit cost was assumed to provide for the full depth reconstruction (including grading) of 16 feet of new pavement per lane (to accommodate a minimum 12 foot lane and ancillary treatments).

Page F-11 of the TUMF Appendix states:

Contingency is a percent add-on factor applied to a cost estimate. Contingency is used to account for the absence of detailed design or insufficient design or other information such as subsurface or topographic information. Variable contingencies have been applied to the construction costs in this estimate depending on the nature of the specific items.

Some items will have a higher contingency than others because the potential for changes in costs is greater. The categories and percentages for contingency variables used in the 1993 RACE [Regional Arterial Cost Estimate] update have been maintained. In addition, right of way unit costs will be treated similar to the three-tier structure used in the 1993 RACE. These right of way unit costs are reflected in Chapter 3. The following contingency percent add-ons are included and are the same as those presented in the 1993 RACE.

- Removal and Demolition Work 40%
- Roadway Surface and Subsurface Work 30%
- Existing Surface Restoration 50%
- Concrete Site Work 20%
- Bridgework 30%
- Signalization 20%

In addition, Page F-33 of the TUMF Appendix states:

The cost estimate includes intersection and signal work. This unit cost should be increased by approximately 76% to account for average cost of ROW, contingency, utility relocation, etc. (Estimates may vary by as much as 30% depending on location and type of arterial).

Therefore, signals and turn lanes are included in the Nexus Study and the TUMF Program.

City of Fontana

Development Impact Fees/Capital Improvements Program

As discussed above, the City of Fontana is required to develop its own schedule of fees or other per-unit mitigation requirements that demonstrate that the development contribution levels listed in the SANBAG Nexus Study are achieved. As such, the City has adopted a development mitigation program based on the requirements established in the CMP and the Nexus Study to fund the City's contributions to regional transportation facilities identified in the Nexus Study. In addition to fees needed for regional transportation facilities, Fontana's development mitigation program also provides for construction of local or non-regional transportation improvements that were not part of the Nexus Study's regional network. These other local facilities are funded by requiring new development to pay the City's Development Impact Fee (DIF), which represents each project's fair-share contribution for both regional (Nexus Study) and additional local facilities. The City of Fontana DIF fees are collected and accounted for through the SANBAG Nexus Study Fees DIF programs

described above, resulting in new development being required to pay a single combined fee for its contribution to needed improvements to both the Nexus Study's regional facilities and Fontana's local facilities. Funding is identified and appropriated according to the list of improvements in the City of Fontana CIP, which include both the regional improvements outlined in the Nexus Study and the local facilities being funded by Fontana and other agencies. One improvement included on the City's CIP is the Armstrong Road/Locust Street resurfacing project, which was recently constructed through the project site (City of Fontana 2013). This improvement and other local facility improvements are identified in Attachment 1 of the Nexus Study and in the TIA.

San Bernardino County

San Bernardino County Regional Transportation Development Mitigation Plan (RTDM)

The San Bernardino County Regional Transportation Development Mitigation Plan (RTDM) was developed by San Bernardino County to satisfy the provisions of the Nexus Study to provide funding for local roadways within unincorporated areas. Based on the language in the Measure I program and the Nexus Study, each local jurisdiction, including the County of San Bernardino, was required to adopt a regional transportation development mitigation program prior to November 2006 to provide for funding of regional and local roadway improvements. The SANBAG Development Mitigation Nexus Study determines the fair-share contributions from new development for each local jurisdiction, and the County's RTDM provides the County's plan for funding improvements within unincorporated areas. The total development cost, or "target share amount" for which the County is responsible to generate through the RTDM, is \$249.34 million. This amount is distributed among the County's Plan Subareas based upon project lists and growth forecasts for unincorporated areas. The RTDM is intended to generate the development fair-share contribution of project costs as required by the CMP and is not intended to provide 100% funding for or construct all projects listed in the RTDM, since a portion of the funds is programmed into the Measure I program as well as federal/state funds administered by SANBAG.

Impact Analysis

Consistent with the CMP and City of Fontana requirements, the impact analysis below compares existing (2011 to 2012) weekday AM and PM peak hour conditions to existing with project conditions. Analysis of the project's contribution to cumulative impacts is also provided in this section and in Chapter 6, *Cumulative Impacts*.

Methodology

Trip Generation and Distribution

Trip generation for the proposed project was developed using trip rates for Land Use 150 (Warehousing) and Land Use 152 (High-Cube Warehouse), as contained in the Institute of Traffic Engineers' *Trip Generation, 9th Edition*. The vehicle splits from the City of Fontana's Truck Trip Generation Study were used to convert project trips into PCE trips. Trip distribution and assignment are based on selected zone model runs obtained from the SCAG CTP and through consultation with City staff and neighboring jurisdictions. Additional information on trip distribution and assignment is provided in Appendix L. A breakdown of the trip generation for each of the proposed buildings is provided in Table 4.2.14-6 and includes projections for single cars and two-, three-, and four-axle trucks. As shown, the proposed project is expected to generate a total of 8,365 PCE daily trips, with

575 PCE trips occurring during the AM peak hour and 621 PCE trips occurring during the PM peak hour. Figure 4.2.14-2A shows the trip distribution projections for single cars and Figure 4.2.14-2B shows truck trip distribution only with truck traffic routed to the local network based on direction from the City and neighboring jurisdictions. As shown in Figure 4.2.14-2B, truck trip distribution has been assigned to avoid the more sensitive residential areas within the project vicinity. For example, according to the trip assignment utilized in the TIA that was prepared in compliance with the TMA for the project, truck traffic would not be allowed to travel to and from the project site from the south via the SR-60 freeway from Valley Way or Armstrong Road.

Table 4.2.14-6. PCE Project Trip Generation

Building	AM Peak Hour			PM Peak Hour			Daily
	In	Out	Total	In	Out	Total	
Building 1	68	41	109	42	75	117	1,645
Building 2	53	28	81	34	54	88	1,245
Building 3	101	52	153	63	106	169	2,380
Building 4	53	23	76	23	56	79	885
Building 5	38	20	58	24	39	63	870
Building 6	29	11	40	13	28	41	458
Building 7	38	20	58	24	40	64	882
TOTAL	380	195	575	223	398	621	8,365

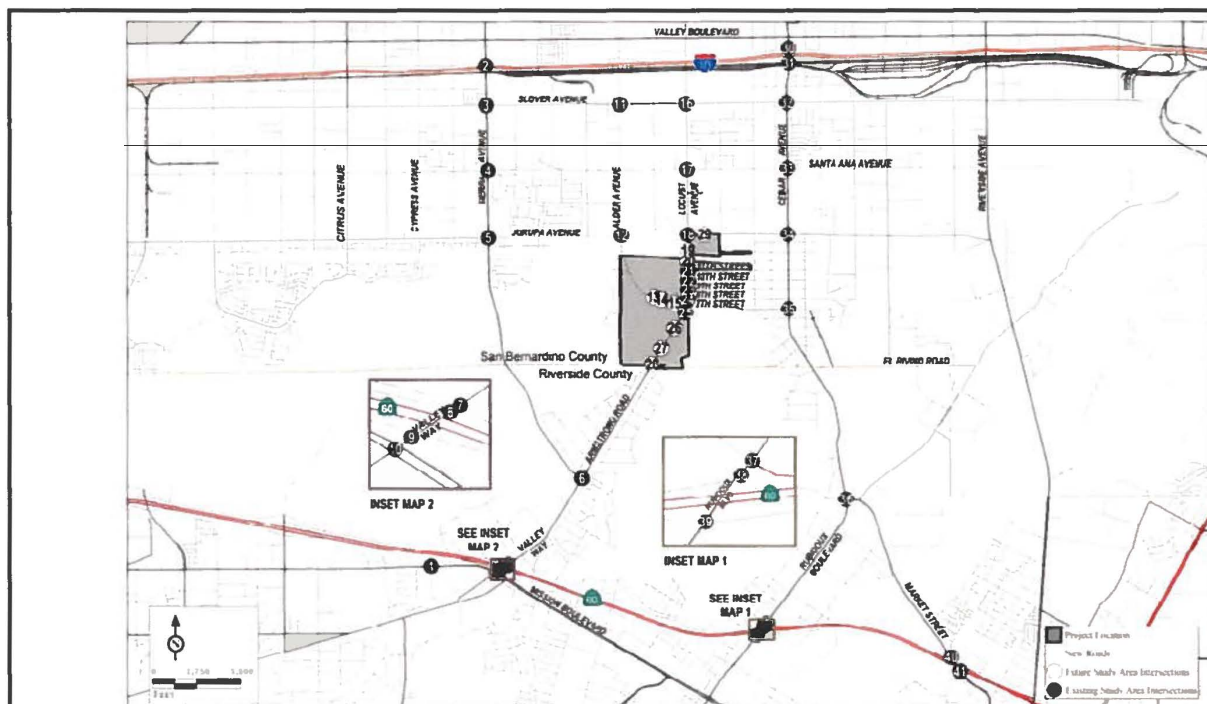
Source: LSA Associates, August 2013 (Appendix L)

Thresholds of Significance

Criteria for determining the significance of impacts related to transportation and traffic are based upon criteria contained in Appendix G of the State CEQA Guidelines. The proposed project would have a significant impact on the environment if it would:

- TRA-1** Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

Specific measures of effectiveness are used in this section to evaluate the performance of the circulation system in light of proposed project site development. To determine whether development of the proposed project would “conflict with an applicable plan, ordinance, or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit,” the EIR evaluates certain project-related impacts in terms of quantitative



<p>16 Locust Ave/Slover Ave</p>	<p>17 Locust Ave/Santa Ana Ave</p>	<p>18 Locust Ave/Jurupa Ave</p>	<p>19 Locust Ave/Dwy 4</p>	<p>20 Locust Ave/Dwy 5</p>
<p>26 Locust Ave/Dwy 8</p>	<p>27 Locust Ave/Dwy 9</p>	<p>28 Locust Ave/Dwy 10</p>	<p>29 Dwy 11/Jurupa Ave</p>	<p>30 Cedar Ave/I-10 WB Ramps</p>
<p>36 Rubidoux Blvd/20th St-Market St</p>	<p>37 Rubidoux Blvd/30th St-SR-60 WB Off Ramp</p>	<p>38 Rubidoux Blvd/SR-60 WB On Ramp</p>	<p>39 Rubidoux Blvd/SR-60 EB Off Ramps-30th St</p>	<p>40 Market St/SR-60 WB Ramps</p>

Source: LSA (2013)





16	Locust Ave/Slover Ave	17	Locust Ave/Santa Ana Ave	18	Locust Ave/Jurupa Ave	19	Locust Ave/Dwy 4	20	Locust Ave/Dwy 5
26	Locust Ave/Dwy 8	27	Locust Ave/Dwy 9	28	Locust Ave/Dwy 10	29	Dwy 11/Jurupa Ave	30	Cedar Ave/I-10 WB Ramps
36	Rubidoux Blvd/20th St-Market St	37	Rubidoux Blvd/30th St-SR-60 WB Off Ramp	38	Rubidoux Blvd/SR-60 WB On Ramp	39	Rubidoux Blvd/SR-60 EB Off Ramps-30th St	40	Market St/SR-60 WB Ramps

Source: LSA (2013)



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LOS thresholds established by the Cities of Fontana and Jurupa Valley, the County of San Bernardino, and Caltrans⁷, consistent with the broad Appendix G criteria set forth above.

- TRA-2** Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.
- TRA-3** Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
- TRA-4** Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- TRA-5** Result in inadequate emergency access.
- TRA-6** Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Project Design Features

The following transportation and traffic-related project design features, which include specific plan requirements, would prevent or reduce potentially significant impacts.

Specific Plan Requirements

SP-TR-1: Prepare a Transportation Management Association (TMA). A TMA, a member-controlled organization that provides transportation services in a particular area, will be formed by the applicant or its designee to guide project traffic to the regional transportation network and away from residential streets. The applicant or its designee will submit the TMA prior to issuance of the certificate of occupancy for the first building. The TMA will be required to:

- Create a tenant-based system and set of regulations for monitoring and providing feedback for vehicles, specifically including truck traffic, entering and exiting the development.
- Include site plans for individual buildings with driveway channelization and truck route designation.

SP-TR-2: Ensure Installation of Safety Features. Entry drives will be clearly marked by special features, including enhanced paving, landscaping features, decorative walls, and signage, to promote safety and to increase the visibility of driveway intersections.

SP-TR-3: Install Bicycle Racks. Bicycle racks will be provided at central locations on Parcels 1 through 7 (e.g., between buildings or in central parking areas) for employees who wish to bicycle.

⁷ Intersections within Fontana are evaluated in relation to the City's performance standard of LOS of C or better, while intersections within Jurupa Valley and San Bernardino County are evaluated in relation to those agencies' standard of intersections operating at LOS D or better. Freeway segments are evaluated based on the CMP standard of LOS E or better, while freeway ramp terminus intersections under Caltrans jurisdiction are evaluated based on an acceptable LOS between LOS C and D, which correlates to an average delay of 45 seconds or less. The weighted average delay of 45 seconds is determined based on the average allowable delay of 35 and 55 seconds for LOS C and D respectively, as shown in Table 4.2.14-2. LOS standards are summarized in Table 4.2.14-3.

Impacts and Mitigation

The impact analysis below includes both construction and operational impacts under each threshold. Construction plans have not yet been developed, and potential impacts during construction are addressed qualitatively. Operational impacts include an evaluation of the existing conditions plus project-related traffic that would occur once the project is constructed.

Impact TRA-1. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit

Construction

Construction activities involve the delivery of materials, construction worker trips, and the use of motorized construction equipment, all of which would affect existing circulation facilities within the project study area. Mobile construction equipment would be delivered to the project site including cranes, excavators, forklifts, graders, pavers, rollers, rubber-tired dozers, scrapers, tractors, loaders, and backhoes. The total daily amount of worker and vendor trips is estimated to be up to 200 trips during project site construction. In addition, because the project site is segmented by Armstrong Road and would require the construction of several driveways along Jurupa Avenue, Locust Street, and Armstrong Road, it is assumed that construction equipment would cross these streets and may be located within the right-of-way, resulting in lane closures or other impairments to roadway circulation. Although a quantitative analysis for construction traffic is not available for the WVLCSP because the number of daily trips would not result in sufficient peak hour trips to warrant analysis, the combination of construction-related trips and these potential lane closures can be expected to result in temporary disruptions in traffic flow and circulation. Implementation of the Construction Management Plan as discussed in **Mitigation Measure TRA-1a** would reduce this impact to a less-than-significant level by ensuring that precaution is used during construction, including detours, a flag person, and other similar safety measure to ensure that construction operations are performed in a safe and responsible manner. As such, construction of the proposed project would result in a less-than-significant impact with mitigation incorporated.

Mitigation Measures

Mitigation Measure TRA-1a: Develop and Implement a Construction Management Plan. Prior to the issuance of construction permits, the project applicant shall develop and implement a Construction Management Plan to the satisfaction of the City of Fontana Traffic Engineer that shall:

- Designate traffic control for any street closure, detour, or other disruption to traffic circulation.
- Identify the routes that construction vehicles will use for the delivery of construction materials (e.g., lumber, tiles, piping, windows) to access the site, including any needed traffic controls and detours.
- Specify the hours during which site deliveries and off-site hauling can occur and methods to mitigate construction-related impact on adjacent streets.
- Require the contractor to keep all haul routes clean and free of debris, including, but not limited to, gravel and dirt as a result of construction activities. The applicant shall clean adjacent streets,

as directed by the City Traffic Engineer (or a representative of the City Traffic Engineer) of any materials that may have been spilled, tracked, or blown onto adjacent streets or areas.

- Allow hauling or transport of oversize loads between 9:00 AM and 3:00 PM only, Monday through Friday, unless approved otherwise by the City Traffic Engineer. No hauling or transport will be allowed during nighttime hours, weekends, or federal holidays.
- Prohibit use of local streets not specifically approved by the City Traffic Engineer.
- Require haul trucks entering or exiting public streets to yield to public traffic.
- Provide a flag person at the intersection of Armstrong Road and Locust Avenue and any other intersections deemed necessary by the City Traffic Engineer to ensure that vehicle conflicts between haul trucks and all other vehicles are minimized.
- Require that if hauling operations cause any damage to existing pavement, street, curb, and/or gutter along the haul route, the applicant will be fully responsible for repairs. The repairs will be completed by the project's contractor to the satisfaction of the City Traffic Engineer.
- Require all construction-related parking and staging of vehicles to be kept out of the adjacent public roadways and instead be kept on site.
- Meet the standards established in the current California Manual on Uniform Traffic Control Devices, as well as City of Fontana requirements.
- Identify adequate access points for emergency vehicles and ensure emergency personnel would be able to identify these access points by providing a flagman, signage, or other indicator to effectively communicate emergency access during construction.

Residual Impacts

Implementation of **Mitigation Measure TRA-1a** would reduce impacts to a less-than-significant level.

Operational Impacts: Existing Plus Project

Intersections

The proposed project would result in the addition of vehicle trips during the AM and PM peak hours at intersections that are subject to the LOS performance measures established by the City of Fontana, the City of Jurupa Valley, San Bernardino County, and Caltrans within their respective jurisdictions. As shown on Table 4.2.14-7, under Existing plus Project conditions, all study area intersections would operate at an acceptable LOS, with the exception of the five intersections below, which would exceed LOS performance standards, as shown on Table 4.2.14-8.

City of Fontana

- Locust Avenue/Jurupa Avenue (AM and PM peak hours)

San Bernardino County

- Alder Avenue/Slover Avenue (AM peak hours)
- Locust Avenue/Santa Ana Avenue (AM peak hour)

Caltrans

- Valley Way/SR-60 Westbound Ramps (AM and PM Peak Hours)
- Cedar Avenue/I-10 Westbound Ramps (AM and PM peak hours)

Table 4.2.14-7. Existing + Project Intersection Level of Service (for Non-Deficient Intersections)

	Intersection	Control	Jurisdiction	LOS Standard	Existing + Project					
					AM Peak Hour			PM Peak Hour		
					v/c	Delay	LOS	v/c	Delay	LOS
1	SR-60 EB Ramps/ Mission Blvd	Signal	- Caltrans	D/45 Sec. ¹	0.33	26.5	C	0.58	28.7	C
2	Sierra Ave/ I-10 Ramps	Signal	Caltrans	D/45 Sec.	0.62	34.9	C	0.70	36.5	D
3	Sierra Ave/ Slover Ave	Signal	City of Fontana	C	0.62	29.2	C	0.59	29.8	C
4	Sierra Ave/ Santa Ana Ave	Signal	City of Fontana	C	0.40	23.1	C	0.42	20.7	C
5	Sierra Ave/ Jurupa Ave	Signal	City of Fontana	C	0.42	28.0	C	0.44	28.5	C
6	Armstrong Rd/ Sierra Ave	Signal	City of Jurupa Valley	D	0.43	24.2	C	0.43	22.3	C
8	Valley Way/SR-60 WB On-Ramp	Signal	Caltrans	D/45 Sec.	0.53	2.9	A	0.51	3.8	A
9	Valley Way/SR-60 EB On-Ramp	TWSC	Caltrans	D/45 Sec.	-	0.0	A	-	0.0	A
10	Valley Way/ Mission Blvd	Signal	City of Jurupa Valley	D	0.49	23.9	C	0.46	27.9	C
12	Alder Ave/ Jurupa Ave	TWSC	City of Fontana	C	-	8.9	A	-	8.7	A
13	Dwy 1/7 th St	TWSC	City of Fontana	C	-	9.0	A	-	9.0	A
14	Dwy 2/7 th St	TWSC	City of Fontana	C	-	9.0	A	-	9.0	A
15	Dwy 3/7 th St	TWSC	City of Fontana	C	-	9.9	A	-	9.9	A
16	Locust Ave/ Slover Ave	Signal	County of San Bernardino	D	0.21	11.9	B	0.26	21.1	C
19	Locust Ave/ Dwy 4	TWSC	City of Fontana	C	-	10.9	B	-	12.7	B
20	Locust Ave/ Dwy 5	TWSC	City of Fontana	C	-	14.3	B	-	15.1	C
21	Locust Ave/ 11 th St-Dwy 6	TWSC	City of Fontana	C	-	17.7	C	-	19.3	C
22	Locust Ave/ 10 th St	TWSC	City of Fontana	C	-	11.3	B	-	11.8	B
23	Locust Ave/ 9 th St-Dwy 7	TWSC	City of Fontana	C	-	15.1	C	-	15.9	C
24	Locust Ave/ 8 th St	TWSC	City of Fontana	C	-	10.6	B	-	12.9	B

	Intersection	Control	Jurisdiction	LOS Standard	Existing + Project					
					AM Peak Hour			PM Peak Hour		
					v/c	Delay	LOS	v/c	Delay	LOS
25	Locust Ave-Armstrong R/7 th St	TWSC	City of Fontana	C	-	16.7	C	-	21.4	C
26	Locust Ave/Dwy 8	TWSC	City of Fontana	C	-	12.9	B	-	14.7	B
27	Locust Ave/Dwy 9	TWSC	City of Fontana	C	-	12.7	B	-	14.2	B
28	Locust Ave/Dwy 10	TWSC	City of Fontana	C	-	10.6	B	-	11.3	B
29	Dwy 11/Jurupa Ave	TWSC	City of Fontana	C	-	10.9	B	-	11.0	B
31	Cedar Ave/I-10 EB Ramps	Signal	Caltrans	D/45 Sec.	0.91	34.2	C	0.86	34.2	C
32	Cedar Ave/Slover Ave	Signal	County of San Bernardino	D	0.53	24.9	C	0.54	26.0	C
33	Cedar Ave/Santa Ana Ave	Signal	County of San Bernardino	D	0.48	20.5	C	0.53	20.9	C
34	Cedar Ave/Jurupa Ave	Signal	County of San Bernardino	D	0.43	19.5	B	0.45	18.2	B
35	Cedar Ave/7 th St	Signal	County of San Bernardino	D	0.34	11.3	B	0.34	12.9	B
36	Rubidoux Blvd/20 th St-Market St	Signal	City of Jurupa Valley	D	0.72	35.5	D	0.80	40.4	D
37	Rubidoux Blvd/30 th St-SR-60 WB Off Ramp	Signal	Caltrans	D/45 Sec.	0.72	34.6	C	0.92	44.0	D
38	Rubidoux Blvd/SR-60 WB On Ramp	TWSC	Caltrans	D/45 Sec.	-	14.9	B	-	16.5	C
39	Rubidoux Blvd/SR-60 EB Off Ramps-30 th St	Signal	Caltrans	D/45 Sec.	0.67	32.5	C	0.69	30.2	C
40	Market St/SR-60 WB Ramps	Signal	Caltrans	D/45 Sec.	0.47	18.5	B	0.73	24.9	C
41	Market St/SR-60 EB Ramps	Signal	Caltrans	D/45 Sec.	0.70	29.2	C	0.85	33.5	C

Source: LSA Associates, August 2013; Translutions, August 2014 (Appendix L)

¹ Acceptable LOS for Caltrans facilities is between LOS C and D, which correlates to an average delay of 45 seconds or less.

Caltrans = California Department of Transportation

Dwy = driveway

EB = eastbound

I = Interstate

LOS = level of service

Sec. = seconds

SR = State Route

TWSC = two-way stop controlled

v/c = volume to capacity ratio

WB = westbound

Table 4.2.14-8. Existing + Project Intersection Level of Service (for Deficient Intersections)

			LOS Std.	Existing						Existing + Project						Project Change				
				AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour			AM Peak Hour		PM Peak Hour		
				v/c	Delay	LOS	v/c	Delay	LOS	v/c	Delay	LOS	v/c	Delay	LOS	v/c	Delay	LOS	v/c	Delay
7	Valley Wy/ SR-60 WB Off-ramp	Caltrans	D/45 Sec. ¹	0.93	50.3	D	0.95	46.6	D	0.94	50.3	D	0.94	45.8	D	0.01	--	--	--	--
11	Alder Ave/ Slover Ave	County of San Bernardino	D	--	68.8	F	--	23.5	C	--	>100	F	--	26.2	D	--	>31.2	--	2.7	
17	Locust Ave/ Santa Ana Ave	County of San Bernardino	D	0.84	23.1	C	0.55	12.7	B	1.07	51.8	F	0.73	18.3	C	--	--	--	--	
18	Locust Ave/ Jurupa Ave	City of Fontana	C	--	10.7	B	--	10.8	B	--	27.3	D	--	25.6	D	--	--	--	--	
30	Cedar Ave/ I-10 WB Ramps	Caltrans	D/45 Sec. ¹	0.97	31.1	C	0.73	70.4	E	1.03	38.3	F	0.77	75.7	E	0.06	39.3	0.04	5.3	

Source: LSA Associates, August 2013 (Appendix L)

¹ Acceptable LOS for Caltrans facilities is between LOS C and D, which correlates to an average delay of 45 seconds or less.

Caltrans = California Department of Transportation

I = Interstate

LOS = level of service

SR = State Route

Std. = standard

v/c = volume to capacity ratio

WB = westbound

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Intersection operations at Locust Avenue/Jurupa Avenue in the City of Fontana and at Locust Avenue/Santa Ana Avenue in San Bernardino County are acceptable under existing conditions but would degrade to an unacceptable LOS with implementation of the project. As such, both intersections would be directly impacted by project-related traffic, and impacts would be significant.

Intersection operations at Alder Avenue/Slover Avenue, Valley Way/SR-60 Westbound ramps, and Cedar Avenue/I-10 Westbound Ramps are deficient under existing conditions, as shown in Table 4.2.14-8; however, the CMP requires that mitigation measures must maintain the existing LOS for these intersections. While these intersections are deficient under existing conditions, project-related traffic would increase the v/c by 0.04 at Armstrong Road/Sierra Avenue and Cedar Avenue/I-10 WB ramps and would increase the delay at Alder Avenue/Slover Avenue by 31.2 seconds, resulting in a delay of more than 100 seconds (LOS F). While project-related traffic would contribute to the deficiencies at the Valley Way/SR-60 Westbound ramps, there would be no measurable degradation of service due to project-related traffic. Because impacts would be significant at these locations, mitigation measures, including and installation of roadway improvements and payment of fees, are required in order to improve operations at these five intersections (**Mitigation Measures TRA-1b** and **TRA-1c**).

As payment of development impact fees would fund some but not all improvements, and as funding is provided to the City of Fontana only and not to any other affected jurisdiction where improvements are required (County of San Bernardino, City of Jurupa Valley, Caltrans), it cannot be assumed that the LOS and functionality of impacted roadways would operate satisfactorily without improvements being made prior to project operations. As such, impacts would be significant and unavoidable.

Freeway Mainline and Ramp Junctions

The proposed project would result in the addition of vehicle trips during the AM and PM peak hours at freeway mainline segments and ramp junctions that are subject to the LOS performance measures established by the San Bernardino County CMP and Caltrans. As shown in Tables 4.2.14-9 and 4.2.14-10, 35 of the 46 study area freeway segments and ramp junctions would operate at an acceptable LOS, while the 11 intersections shown in Table 4.2.14-10 would exceed allowable LOS standards.

Table 4.2.14-9. Existing + Project Freeway Mainline Segment and Ramp Junction Levels of Service

				Existing + Project Conditions					
				AM Peak Hour			PM Peak Hour		
				Speed	Density	LOS	Speed	Density	LOS
Intersection/Facility	Type	Mainline Lanes							
I-10 Eastbound									
1	West of Sierra Avenue Off-Ramp	Basic	5	70.0	14.8	B	61.4	35.0	E
2	Sierra Avenue Off-Ramp	Basic	5	70.0	14.8	B	61.4	35.0	E
3	Between Sierra Avenue Ramps	Basic	4	70.0	14.1	B	55.0	42.8	E
4	Sierra Avenue On-Ramp	1 Lane On	4	61.0	20.9	C	11.0	44.1	F
5	Sierra Avenue On-Ramp to Cedar Avenue Off-Ramp	Basic	4	70.0	17.8	B	-	-	F
6	Cedar Avenue Off-Ramp	1 Lane Off	4	55.9	22.5	C	55.4	43.9	F
7	Between Cedar Avenue Ramps	Basic	4	70.0	14.8	B	-	-	F
8	Cedar Avenue On-Ramp	1 Lane On	4	61.0	18.0	B	57.0	31.6	F
9	East of Cedar Avenue On-Ramp	Basic	4	70.0	17.9	B	-	-	F
SR-60 Eastbound									
10	West of Valley Way Hook Off-Ramp	Basic	4	69.8	21.6	C	67.9	26.4	D
11	Valley Way Hook Off-Ramp	Basic	4	69.8	21.6	C	67.9	26.4	D
12	Between Valley Way Ramps	Basic	3	66.5	28.6	D	62.1	34.2	D
13	Valley Way Hook On-Ramp	1 Lane On	3	58.0	30.9	D	56.0	33.7	D
14	Valley Way Hook On-Ramp to Valley Way Slip On-Ramp	Basic	3	64.9	30.8	D	59.9	36.8	E
15	Valley Way Slip On-Ramp	1 Lane On	3	57.0	33.3	D	55.0	35.6	E
16	Valley Way Slip On-Ramp to Rubidoux Blvd Off-Ramp	Basic	3	62.6	33.7	D	57.3	39.9	E
17	Rubidoux Blvd Off-Ramp	1 Lane Off	3	56.8	25.8	C	56.0	28.2	D
18	Between Rubidoux Blvd Ramps	Basic	3	65.8	29.6	D	64.4	31.5	D
19	Rubidoux Blvd On-Ramp	1 Lane On	3	55.0	35.3	E	56.0	34.6	D

	Intersection/Facility	Type	Mainline Lanes	Existing + Project Conditions					
				AM Peak Hour			PM Peak Hour		
				Speed	Density	LOS	Speed	Density	LOS
20	Rubidoux Blvd On-Ramp to Market Street Off-Ramp	Basic	3	60.6	36.0	E	60.7	35.9	E
21	Market Street Off-Ramp	1 Lane Off	3	55.8	27.4	C	55.2	27.6	C
22	Between Market Street Ramps	Basic	4	70.0	20.2	C	70.0	19.4	C
23	Market Street On-Ramp	1 Lane On	4	61.0	18.4	B	61.0	17.9	B
24	East of Market Street On-Ramp	Basic	4	69.6	22.3	C	69.8	21.3	C
I-10 Westbound									
25	West of Sierra Avenue On-Ramp	Basic	5	54.4	43.6	E	70.0	19.5	C
26	Sierra Avenue On-Ramp	Basic	5	54.4	43.6	E	70.0	19.5	C
27	Between Sierra Avenue Ramps	Basic	5	-	-	F	70.0	19.7	C
28	Sierra Avenue Off-Ramp	Basic	5	57.3	40.0	E	70.0	18.5	C
29	Cedar Avenue On-Ramp to Sierra Avenue Off-Ramp	Basic	5	57.3	40.0	E	70.0	18.5	C
30	Cedar Avenue On-Ramp	1 Lane On	4	50.0	36.5	F	60.0	23.3	C
31	Between Cedar Avenue Ramps	Basic	4	-	-	F	70.0	19.9	C
32	Cedar Avenue Off-Ramp	1 Lane Off	4	56.5	44.7	F	55.9	28.2	D
33	East of Cedar Avenue Off-Ramp	Basic	4	-	-	F	69.4	23.0	C
SR-60 Westbound									
34	West of Valley Way Slip On-Ramp	Basic	4	70.0	18.8	C	70.0	17.8	B
35	Valley Way Slip On-Ramp	Basic	4	70.0	18.8	C	70.0	17.8	B
36	Between Valley Way Ramps	Basic	3	69.7	22.0	C	69.8	21.6	C
37	Valley Way Slip Off-Ramp	1 Lane Off	3	56.2	28.3	D	56.1	28.1	D
38	Rubidoux Blvd On-Ramp to Valley Way Slip Off-Ramp	Basic	3	68.1	26.1	D	68.2	25.9	C
39	Rubidoux Blvd On-Ramp	1 Lane On	3	59.0	28.9	D	59.0	28.7	D

	Intersection/Facility	Type	Mainline Lanes	Existing + Project Conditions					
				AM Peak Hour			PM Peak Hour		
				Speed	Density	LOS	Speed	Density	LOS
40	Between Rubidoux Blvd Ramps	Basic	3	69.6	22.5	C	69.6	22.4	C
41	Rubidoux Blvd Off-Ramp	1 Lane Off	3	48.8	28.7	D	48.7	28.8	D
42	Market Street On-Ramp to Rubidoux Off-Ramp	Basic	3	68.5	25.4	C	68.2	25.9	C
43	Market Street On-Ramp	1 Lane On	3	50.0	28.8	D	49.0	30.3	D
44	Between Market Street Ramps	Basic	3	69.4	23.1	C	69.8	21.5	C
45	Market Street Off-Ramp	1 Lane Off	3	48.5	24.1	C	48.8	21.6	C
46	East of Market Street Off-Ramp	Basic	3	67.0	27.9	D	69.0	24.2	C

Source: LSA Associates, August 2013 (Appendix L)

I = Interstate

LOS = level of service

SR = State Route

Table 4.2.14-10. Existing + Project Freeway Mainline Segment and Ramp Junction Vehicle Trips With and Without the Project (for Deficient Intersections)

			Existing				Existing + Project				Project Change				
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		
			Trips Without Project	LOS	Trips Without Project	LOS	Project Trips	LOS	Project Trips	LOS	LOS	Percent Change	LOS	Percent Change	
Intersection/ Facility	Type	Mainline Lanes													
I-10 Eastbound															
4	Sierra Avenue On-Ramp	1 Lane On	4	988	C	1,152	F	0	C	0	F	NC	NC	NC	NC
5	Sierra Avenue On-Ramp to Cedar Avenue Off-Ramp	Basic	4	4,699	B	37	F	10,076	B	24	F	NC	1%	NC	+0%
6	Cedar Avenue Off-Ramp	1 Lane Off	4	763	C	950	F	37	C	24	F	NC	5%	NC	3%
7	Between Cedar Avenue Ramps	Basic	4	3,936	B	9,127	F	0	B	0	F	NC	NC	NC	NC
8	Cedar Avenue On-Ramp	1 Lane On	4	810	B	708	F	28	B	44	F	NC	1%	NC	+0%
9	East of Cedar Avenue On-Ramp	Basic	4	4,746	B	9,835	F	28	B	44	F	NC	1%	NC	+0%
I-10 Westbound															
27	Between Sierra Avenue Ramps	Basic	5	9,906	F	0	C	5,204	F	40	C	NC	NC	NC	1%

Intersection/ Facility	Type	Mainline Lanes	Existing		Existing + Project				Project Change					
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Trips Without Project	LOS	Trips Without Project	LOS	Project Trips	LOS	Project Trips	LOS	LOS	Percent Change	LOS	Percent Change
30 Cedar Avenue On-Ramp	1 Lane On	4	1,124	F	22	C	827	F	40	C	NC	2%	NC	5%
31 Between Cedar Avenue Ramps	Basic	4	9,735	F	5,294	C	0	F	0	C	NC	NC	NC	NC
32 Cedar Avenue Off-Ramp	1 Lane Off	4	551	F	757	D	39	F	29	D	NC	7%	NC	4%
33 East of Cedar Avenue Off-Ramp	Basic	4	10,286	F	6,051	C	39	F	29	C	NC	+0%	NC	+0%

Source: LSA Associates, August 2013 (Appendix L)

¹ Acceptable LOS for Caltrans facilities is between LOS C and D, which correlates to an average delay of 45 seconds or less.

Caltrans = California Department of Transportation

I = Interstate

LOS = level of service

NC = no change

SR = State Route

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Each of the 11 freeway mainline segments and ramp junctions provided in Table 4.2.14-10 currently operate at unsatisfactory LOS under without project conditions. Based on vehicle trip projections with the project for the 11 facilities that have unsatisfactory LOS, 8 of the 11 facilities (facilities 5, 6, 8, 9, 27, 30, 32, and 33) would result in project trips that contribute to the unacceptable LOS. Therefore, the project would contribute to an increase in traffic to 8 already deficient freeway mainline segments and ramp junctions, and the project would result in a direct impact on these facilities. As the addition of project-related traffic to these freeway segments and ramp junctions would contribute to a significant increase in unacceptable LOS, mitigation would be required (**Mitigation Measure TRA-1c**) to fund needed improvements. No direct impact would result with respect to the other three facilities (facilities 4, 7, and 31) that would have no project contribution, and fees associated with **Mitigation Measure TRA-1c** would also fund future improvements. In addition, **Specific Plan Requirement SP-TR-1** would be implemented. Overall, the project's contribution to an increase in traffic to already deficient mainline segments and ramp facilities would result in a significant and adverse impact.

Specific Plan Requirement

The applicant shall implement the following specific plan requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **SP-TR-1:** Prepare a Transportation Management Association.

Mitigation Measures

Implementation of **Mitigation Measures TRA-1b** and **TRA-1c** would require construction of transportation improvements and payment of development impact fees to alleviate the project's impacts on the following intersections, freeway segments, and ramps:

City of Fontana

- Locust Avenue/Jurupa Avenue (AM and PM peak hours)
- I-10 EB: Sierra Avenue On-Ramp to Cedar Avenue Off-Ramp
- I-10 WB: Between Sierra Avenue Ramps

San Bernardino County

- Alder Avenue/Slover Avenue (AM peak hours)
- Locust Avenue/Santa Ana Avenue (AM peak hour)

City of Jurupa Valley

- Valley Way/SR-60 Westbound Ramps (AM and PM Peak Hours)

Caltrans

- Cedar Avenue/I-10 Westbound Ramps (AM and PM peak hours)
- I-10 EB: Between Cedar Avenue Ramp
- I-10 EB: Cedar Avenue On-Ramp
- I-10 EB: East of Cedar Avenue On-Ramp
- I-10 WB: Cedar Avenue On-Ramp

- I-10 WB: Cedar Avenue Off-Ramp
- I-10 WB: East of Cedar Avenue Off-Ramp

The project applicant would make fair share payments to mitigate the project's contribution to impacts on those intersections, freeway mainline segment, and ramp junctions that are currently operating at unacceptable levels of service. This is because, under *Los Angeles Unified Sch. Dist. v City of Los Angeles* (1997) 58 Cal.App4th 1019, *Communities for a Better Env't v California Resources Agency* (2002) 103 Cal.App. 4th 98, a project that results in an increase to an impact that is already in exceedance of established thresholds of significance contributes to a cumulative impact. "The CEQA Guidelines . . . recognize that when an impact is not unique to a single project, but is instead the result of cumulative conditions, the only feasible mitigation may involve adoption of . . . regulations designed to address the cumulative impact. [Furthermore] a project's contribution to a cumulative impact may be mitigated by [funding] its fair share of a mitigation measure . . . designed to alleviate [a] cumulative impact" (*Save Our Peninsula Comm. v. Monterey County Bd. of Supervisors* [2001] 87 Cal.App.4th 99, 140-141). *Save Our Peninsula* expressly considered payment of fair share fees to mitigate impacts on an intersection that the EIR found to be already operating at "substandard" levels of service (*Id.* at 136, 141).

In setting forth **Mitigation Measure TRA-1c**, Fontana explicitly recognizes that under *Tracy First v. City of Tracy*, the City is not required to mandate that the applicant make fair share payments to agencies other than the City to provide fair share payment for improvements where the agencies do not have a plan in place for such improvements. In addition, although **Mitigation Measure TRA-1b** includes requirements for fair share payments to mitigate project-related impacts within the City of Jurupa Valley and unincorporated San Bernardino County, Fontana has no jurisdiction to ensure construction of physical improvements for which fair share payment is provided. Therefore, traffic-related impacts outside of the City of Fontana are considered to be significant and unavoidable. Nevertheless, the City of Fontana recognizes that the proposed project involves the distribution of truck traffic onto roadways within Jurupa Valley and unincorporated San Bernardino County, and as a result determined that mandating fair share payment to Jurupa Valley (**Mitigation Measure TRA-1c**) would be appropriate.

Mitigation Measure TRA-1b: Construction of Transportation Improvements. Prior to the issuance of occupancy permits for the project, construction of the traffic improvements required to mitigate all direct impacts of the project within the City will be constructed. In addition to improvements called for in the proposed WVLCSP, this includes mitigation for all intersections that currently operate at an acceptable LOS, but that would operate at an unacceptable LOS with the addition of project-related traffic. Each improvement that will be provided by the applicant is listed in Table 4.2.14-11 along with the required timing for the improvement.

Table 4.2.14-11. Roadway and Intersection Improvements Required to be Installed by the Applicant

Circulation Facility	Extent of Proposed Improvement	Timing for Applicant-Installed Improvements
Jurupa Avenue	Widening between Locust Avenue and Maple Avenue along project frontage	Prior to certificate of occupancy for Building 7
Locust Avenue/Jurupa Avenue Intersection (TIA Intersection #18)	Install a traffic signal	Prior to certificate of occupancy for first building
SCE Easement Area	Widen Locust Avenue to a minimum of 28 feet of paving	Prior to certificate of occupancy for first building
Locust Avenue/Driveways 4, 5, 7, 8, 9 (TIA intersections 19, 20, 23, 26, 27)	Construct two-way left turn lane within Locust Avenue along project frontage ⁸	Prior to certificate of occupancy for first building
Locust Avenue/11 th Street-Driveway 6 (TIA Intersection #21)	Install a traffic signal	Prior to certificate of occupancy for Building 1
Locust Avenue-Armstrong Road/7 th Street (TIA Intersection #25)	Install a traffic signal	Prior to certificate of occupancy for Building 1
Private Street (Old Alder Avenue)	Install a new roadway extending northwest from the existing intersection of 7 th Street and Armstrong Road/Locust Avenue	Prior to certificate of occupancy for Building 1
Locust/Armstrong Road Widening	Full improvements from Jurupa Avenue to the San Bernardino County line along project frontage (14 feet east or west of center line not adjacent to project)	Prior to the certificate of occupancy for first building

Mitigation Measure TRA-1c: Payment of Development Impact Fees for Transportation

Improvements. Prior to the issuance of occupancy permits for a building within the WVLCSP, the applicant shall make fee payments to fund the improvements needed to mitigate the project's contribution to impacts on intersections, freeway mainline segments, and/or ramp junctions. Such fee payments will include:

- City of Fontana DIF⁹, which represents the project's required fee to mitigate impacts on both regional (Nexus Study) and additional local facilities;
- Fair share payment to the City of Jurupa Valley as mitigation for the project's contribution of traffic to the Valley Way/SR-60 interchange and the need for interchange reconstruction, which is not included in Riverside County's TUMF program¹⁰; and

⁸ Widening of Locust Avenue from two to four lanes is included in the Nexus Study program, and will be paid for with City of Fontana Development Impact Fees. Therefore, the two-way left turn lane to be constructed by the applicant represents an interim improvement.

⁹ It is currently estimated that the project applicant will be required to pay the City of Fontana development impact fees for the entire WVLCSP development in the amount of \$6,539,442. The timing of payment of the full fee will be phased as building permits are issued for construction within the WVLCSP area; however, all payments will be required to be provided by the fifth anniversary of issuance of the first building permit within the project site, regardless of whether building permits have been issued for all buildings.

- Fair share payment to San Bernardino County as mitigation for the project's fair share¹¹ to install a traffic signal at the Alder Avenue/Slover Avenue intersection.

Residual Impacts

With implementation of project design considerations and all mitigation identified for the project, including payment of fees to fund future improvements and installation of roadway improvements to improve operations at five deficient intersections and 11 deficient freeway segments and ramp junctions at the Existing Plus Project scenario (**Mitigation Measures TRA-1b**, and all improvements listed in Table 4.2.14-10, and **TRA-1c**), impacts resulting from the project would remain significant and unavoidable. The project applicant would provide physical improvements for direct impacts¹². The project applicant will also provide fair share payments as mitigation for cumulative impacts on facilities covered by the Nexus Study and Fontana's development impact fees. In addition, the project applicant would provide fair share payment as mitigation for cumulative impacts at facilities not funded by the Nexus Study or TUMF program. However, due to the uncertainty of timing for improvements for which fair share fees are to be paid and because certain impacts occur outside of Fontana and the City cannot ensure the provision of physical improvements even after the applicant provides payment of the development impact fee to Fontana and fair share cost to the other affected jurisdiction, the impact after implementation of mitigation is considered to be significant and unavoidable. The residual impacts for all deficient intersections and freeway and ramp segments with improvements are provided in Table 4.2.14-12.

¹⁰ It is currently estimated that the fair share improvement for this interchange is \$149,400 (2.49% of a \$6.0 million improvement cost).

¹¹ It is currently estimated that the fair share improvement for this improvement is \$26,040 (6.51% of the \$400,000 cost for installation of a traffic signal).

¹² See page 4.2.14-1 for a definition of a "direct impact."

Table 4.2.14-12. Residual Impacts for Intersections and Freeway/Ramp Segments with Mitigation for Existing with Project

Circulation Facility	Mitigation	Significance Conclusion
Intersection/Ramp in Fontana operating at an acceptable LOS currently but would operate at an unacceptable LOS with the project		
Locust Ave/Jurupa Ave Intersection	Mitigation Measure TRA-1b. Project to install signal at Locust Ave/Jurupa Ave	Less than Significant Impact with Mitigation
Locust Avenue/ Driveways 4, 5, 7, 8, 9 (TIA intersections 19, 20, 23, 26, 27)	Mitigation Measure TRA-1b. Project to construct two-way left turn lane within Locust Avenue along project frontage	Less than Significant Impact with Mitigation
Intersection/Ramp Outside Fontana operating at an acceptable LOS currently but would operate at an unacceptable LOS with the project		
Locust Ave/Santa Ana Ave Intersection	Mitigation Measure TRA-1c: Payment of fees to the City. Installation of signal at Locust Ave/Santa Ana Ave	Significant and Unavoidable Impact until improvement is made by the County of San Bernardino and signal is installed at Locust Ave/Santa Ana Ave.; however, the payment of fees would mitigate the project's traffic contribution but would not directly result in improvements to this facility.
Intersection/Ramp in Fontana operating at an unacceptable LOS with and without the project – project would make a cumulatively considerable contribution to a significant increase in unacceptable LOS		
I-10 EB: Sierra Avenue On-Ramp to Cedar Avenue Off-Ramp	Mitigation Measure TRA-1c: Payment of fees to Fontana for improvements in the City	Significant and Unavoidable Impact until improvement is installed by City, in cooperation with other agencies. The project to pay development impact fees to Fontana to mitigate its contribution.
I-10 WB: Between Sierra Avenue Ramps	Mitigation Measure TRA-1c: Payment of fees to Fontana for improvements in the City	Significant and Unavoidable Impact until improvement is installed by City, in cooperation with other agencies. The project to pay development impact fees to Fontana to mitigate its contribution.
Intersection/Ramp Outside Fontana operating at an unacceptable LOS with and without the project – project would contribute to a significant increase in unacceptable LOS		
Alder Ave/Slover Ave Intersection	Mitigation Measure TRA-1c: Payment of fees to the City	Significant and Unavoidable Impact until improvement is installed by another jurisdiction; however, payment of fees would mitigate the project's traffic contribution but would not directly result in improvements to this facility.
Cedar Ave/I-10 WB Ramps Intersection	Mitigation Measure TRA-1c: Payment of fees to the City	Significant and Unavoidable Impact until improvement is installed by another jurisdiction; however, payment of fees would mitigate the project's traffic contribution but would not directly result in improvements to this facility.
I-10 EB: Between Cedar Avenue Ramp	Mitigation Measure TRA-1c: Payment of fees to the City	Significant and Unavoidable Impact until improvement is installed by another jurisdiction; however, payment of fees would mitigate the project's traffic contribution but would not directly result in improvements to this facility.
I-10 EB: Cedar Avenue On-Ramp	Mitigation Measure TRA-1c: Payment of fees to the City	Significant and Unavoidable Impact until improvement is installed by another jurisdiction; however, payment of fees would mitigate the project's traffic contribution but would not directly result in improvements to this facility.

Circulation Facility	Mitigation	Significance Conclusion
I-10 EB: East of Cedar Avenue On-Ramp	Mitigation Measure TRA-1c: Payment of fees to the City	Significant and Unavoidable Impact until improvement is installed by another jurisdiction; however, payment of fees would mitigate the project's traffic contribution but would not directly result in improvements to this facility.
I-10 WB: Cedar Avenue On-Ramp	Mitigation Measure TRA-1c: Payment of fees to the City	Significant and Unavoidable Impact until improvement is installed by another jurisdiction; however, payment of fees would mitigate the project's traffic contribution but would not directly result in improvements to this facility.
I-10 WB: Cedar Avenue Off-Ramp	Mitigation Measure TRA-1c: Payment of fees to the City	Significant and Unavoidable Impact until improvement is installed by another jurisdiction; however, payment of fees would mitigate the project's traffic contribution but would not directly result in improvements to this facility.
I-10 WB: East of Cedar Avenue Off-Ramp	Mitigation Measure TRA-1c: Payment of fees to the City	Significant and Unavoidable Impact until improvement is installed by another jurisdiction; however, payment of fees would mitigate the project's traffic contribution but would not directly result in improvements to this facility.
Intersection/Ramp operating at an unacceptable LOS with and without the project – project would not contribute to an increase in unacceptable LOS		
I-10 EB: Sierra Avenue On-Ramp	Mitigation Measure TRA-1c: Payment of fees to Fontana for improvements in the City	Less than Significant Impact as no new vehicle trips would be added to this facility and the project would not contribute to the unacceptable LOS that currently exists without the project. The payment of fees would partially fund future improvements needed for this facility.
I-10 EB: Cedar Avenue Off-Ramp	Mitigation Measure TRA-1c: Payment of fees to the City	Less than Significant Impact as no new vehicle trips would be added to this facility and the project would not contribute to the unacceptable LOS that currently exists without the project. The payment of fees would partially fund future improvements needed for this facility.
I-10 WB: Between Cedar Avenue Ramps	Mitigation Measure TRA-1c: Payment of fees to the City	Less than Significant Impact as no new vehicle trips would be added to this facility and the project will not contribute to the unacceptable LOS that currently exists without the project. The payment of fees would partially fund future improvements needed for this facility.

The applicant will be required to construct the improvements listed in Table 4.2.14-11. These include traffic signals at the intersections of Locust Avenue and 11th Street, Locust Avenue/Armstrong Road and 7th Street, and Locust Avenue and Jurupa Avenue and additional turn lanes on Locust Avenue at 9th Street and 8th Street. With these improvements in place as indicated in Table 4.2.14-11, traffic generated by the project through these adjacent roadways, specifically along Alder Avenue, Locust Avenue, and Jurupa Avenue, would not result in a deficient LOS in the City of Fontana for the Existing Plus Project scenario. Further, once other improvements are installed by other jurisdictions (Jurupa Valley, County of San Bernardino, Caltrans) as specified in Table E-1 (Existing With Project (With No Sierra Avenue Access) Circulation Improvements) in Appendix L, specifically a traffic signal at Locust Avenue and Santa Ana Avenue, a traffic signal at Locus Avenue and Jurupa Avenue, and other roadway and lane improvements to Alder Ave and Slover Avenue, and

Cedar Ave/I-10 WB ramps, all affected intersections would operate at acceptable LOS, as shown in Table 4.2.14-13.

Table 4.2.14-13. Existing + Project with Improvements Intersection Level of Service

	Intersection	Control	Jurisdiction	LOS Standard	Existing + Project with Mitigation					
					AM Peak Hour			PM Peak Hour		
					v/c	Delay	LOS	v/c	Delay	LOS
11	Alder Ave/ Slover Ave	TWSC	County of San Bernardino	D	-	15.5	C	-	14.4	B
17	Locust Ave/ Santa Ana Ave	Signal	County of San Bernardino	D	0.53	17.3	C	0.46	17.0	C
18	Locust Ave/ Jurupa Ave	AWSC or Signal	City of Fontana	C	-	14.2	B	-	13.8	B

Source: Appendix L

AWSC = all-way stop controlled

LOS = level of service

TWSC = two-way stop controlled

v/c = volume to capacity ratio

As stated previously, **Mitigation Measure TRA-1c**, as part of the ongoing implementation of San Bernardino County's Development Mitigation Nexus Study program, would provide a fair share of funding for improvements on the regional transportation system within San Bernardino County as mitigation for the impacts of project-related development on that regional system. In addition, implementation of Riverside County's existing TUMF Program would provide needed regional improvements within Riverside County and the project would provide fair share funding as mitigation for impacts within the City of Jurupa Valley on facilities not funded by the TUMF program. The future improvements of specific intersection and freeway mainline and ramp junctions are included in **Mitigation Measure TRA-1c** and have been identified in the Development Mitigation Nexus Study prepared by SANBAG and the WRCOG's TUMF Program. In addition to facilities included in the Nexus and TUMF programs, project-related impacts outside of Fontana would include the Valley Way/SR-60 interchange and the Alder Avenue/Slover Avenue intersection, for which **Mitigation Measure TRA-1c** requires payment of fair share fees in addition to the Nexus and TUMF programs. Even though **Mitigation Measure TRA-1c** would require payment of development impact fees and fair share payments to reflect the project's contribution toward mitigation of impacts on facilities listed in **Mitigation Measure TRA-1c**, such fee contributions would not be sufficient to fund installation of all improvements necessary to allow the circulation system in the project vicinity to operate at acceptable LOS. Furthermore, it would be infeasible for the applicant to install or fully fund all required improvements, specifically those that address impacts on intersections 11, 17, and 30 and eight freeway segments and ramp junctions, as the applicant does not have jurisdiction over these circulation facilities, and the applicant is required to provide mitigation only for the proposed project's share of traffic impacts, rather than provide the funds to construct all facilities needed to mitigate impacts from cumulative development throughout the region. As it is feasible for the applicant to install improvements to intersection 18, the City has requested this improvement to mitigate direct project impacts on this facility. Improvements to these facilities are identified in congestion management programs, as provided in the TIA, and the

applicant would provide a fair share contribution to fund these future improvements while also installing those improvements provided previously in Table 4.2.14-11.

Although the development impact fees would be paid to the City of Fontana and fair share mitigation fees would be paid to other jurisdictions over which the City has no control, there is no certainty regarding when specific improvements would be made outside of the City limits within San Bernardino County. The timing of improvements to circulation facilities included within Riverside County's TUMF Program and for the Valley Way/SR-60 interchange is also uncertain, and there is no assurance that the improvements would be installed prior to project operation. While implementation of these congestion management programs would eventually fund and construct improvements to achieve desired levels of service at facilities outside the City limits, and because (1) the timing of such improvements is not known; and (2) jurisdictions outside of the City of Fontana need not commit to any specific timing in relation to project site development, **Mitigation Measure TRA-1b** cannot be assumed to reduce Impact TRA-1 to a level below significance. Furthermore, it would be inappropriate to require the applicant of the WVLCSP project to pay fair share contributions for its contribution to cumulative impacts on the countywide Nexus Study regional roadway system when the Nexus Study fees it must already pay are being required to mitigate the project's impacts on the same regional Nexus Study system. It would also be inappropriate to require the applicant of the WVLCSP project to install or make fair share payments for roadway improvements in Riverside County for facility improvements already funded by that County's TUMF Program, particularly since the project's location outside of Riverside County would preclude reimbursement from the TUMF Program to the project¹³. Therefore, even though San Bernardino and Riverside Counties will eventually construct such needed improvements, impacts would be considered significant and unavoidable until all improvements have been installed.

In summary, the project would result in a direct impact on seven intersections (intersections 4, 5, 7, 8, 9, 17, and 18) and contribute to a significant increase in unacceptable LOS to two intersections (intersections 11 and 30) and eight freeway segments and ramp junctions (facilities 5, 6, 8, 9, 27, 30, 32, and 33), as described in more detail in Table 4.2.14-12. Aside from improvements to intersections 4, 5, 7, 8, 9, and 18 to reduce impacts to less-than-significant levels, it would be inappropriate to require the applicant of the WVLCSP project to either construct or fully fund improvements to all other intersection and freeway or mainline facilities so that they operate at a satisfactory LOS when (1) the applicant of the WVLCSP project is already required to pay its Nexus Study fees as mitigation for its contribution to cumulative impacts, (2) other projects are already being required to pay fees into the Nexus Study program (and the TUMF program in Riverside County) as mitigation for each project's contribution to cumulative impacts, and (3) the Nexus Study program (and the TUMF program in Riverside County) is intended to fund such improvements to the regional roadway network. Therefore, compliance with congestion management programs and the provision of fees along with construction of improvements directly adjacent to the proposed project would reduce impacts. While these facilities are identified in congestion management programs, because the timing of full funding and construction of such improvements cannot be known at this time, there is not enough evidence to support a conclusion that impacts would be reduced to less-than-significant levels, and impacts would be significant and unavoidable until all improvements can be made.

¹³ Fair share payments from the proposed projects are, however, being required for contributions to cumulative impacts on facilities outside of the City of Fontana that are not part of the Nexus Study or TUMF programs.

Operational Impacts: Cumulative without Project**Methodology**

During operations, the cumulative impact analysis for transportation and traffic evaluates a long-term (2035) scenario based on a combination of the CTP and a list of cumulative projects at a traffic analysis zone. Long-term (2035) traffic volumes were developed using the CTP traffic model.

Cumulative development has added vehicle trips within the project area, and future projects in the area will continue to add vehicle trips to intersections and freeways within the study area. As discussed below, impacts related to intersection and freeway mainline and ramp junction LOS from past, present, and reasonably foreseeable future projects would be cumulatively significant in the long-term (2035) cumulative scenario at 19 intersections and 42 freeway segments and ramp junctions even without development of the proposed WVLCSP.

Intersections

A total of five intersections are currently deficient as a result of cumulative development and transportation operations would continue to degrade below acceptable levels, as shown in Table 4.2.14-14. As shown, long-term cumulative conditions would result in unacceptable intersection conditions at 19 intersections.

Table 4.2.14-14. Long-Term (2035) Intersection Level of Service without Project

	Intersection	Control	Jurisdiction	LOS Standard	Long-Term Without Project					
					AM Peak Hour			PM Peak Hour		
					v/c	Delay	LOS	v/c	Delay	LOS
1	SR-60 EB Ramps/ Mission Blvd	Signal	Caltrans	D/ 45 Sec. ¹	0.59	29.1	C	1.02	>100	F
2	Sierra Ave/ I-10 Ramps	Signal	Caltrans	D/ 45 Sec.	0.84	43.7	D	0.90	54.1	D
3	Sierra Ave/ Slover Ave	Signal	City of Fontana	C	0.87	36.1	D	0.93	39.3	D
4	Sierra Ave/ Santa Ana Ave	Signal	City of Fontana	C	0.53	25.2	C	0.75	29.5	C
5	Sierra Ave/Jurupa Ave	Signal	City of Fontana	C	0.58	26.9	C	0.80	32.0	C
6	Armstrong Rd/ Sierra Ave	Signal	City of Jurupa Valley	D	0.91	45.6	D	0.93	48.7	D
7	Valley Way/SR-60 WB Off-Ramp	Signal	Caltrans	D/ 45 Sec.	1.42	204.9	F	1.23	159.0	F
8	Valley Way/SR-60 WB On-Ramp	TWSC	Caltrans	D/ 45 Sec.	0.91	10.2	B	0.90	13.6	B
9	Valley Way/SR-60 EB On-Ramp	TWSC	Caltrans	D/ 45 Sec.	-	0.0	A	-	0.0	A
10	Valley Way/ Mission Blvd	Signal	City of Jurupa Valley	D	0.54	24.5	C	1.00	36.2	D
11	Alder Ave/ Slover Ave	TWSC	County of San Bernardino	D	-	>100	F	-	>100	F
12	Alder Ave/Jurupa Ave	TWSC	City of Fontana	C	-	8.9	A	-	10.0	A

Intersection	Control	Jurisdiction	LOS Standard	Long-Term Without Project					
				AM Peak Hour			PM Peak Hour		
				v/c	Delay	LOS	v/c	Delay	LOS
13 Dwy 1/7 th St	TWSC	City of Fontana	C	Future Intersection					
14 Dwy 2/7 th St	TWSC	City of Fontana	C	Future Intersection					
15 Dwy 3/7 th St	TWSC	City of Fontana	C	Future Intersection					
16 Locust Ave/ Slover Ave	AWSC	County of San Bernardino	D	0.24	15.1	B	0.51	25.3	C
17 Locust Ave/ Santa Ana Ave	AWSC	County of San Bernardino	D	1.54	>100	F	1.68	>100	F
18 Locust Ave/Jurupa Ave	TWSC	City of Fontana	C	-	35.7	E	-	>100	F
19 Locust Ave/Dwy 4	TWSC	City of Fontana	C	Future Intersection					
20 Locust Ave/Dwy 5	TWSC	City of Fontana	C	Future Intersection					
21 Locust Ave/ 11 th St-Dwy 6	TWSC	City of Fontana	C	-	12.3	B	-	22.0	C
22 Locust Ave/ 10 th St	TWSC	City of Fontana	C	-	11.3	B	-	15.2	C
23 Locust Ave/ 9 th St-Dwy 7	TWSC	City of Fontana	C	-	10.6	B	-	16.7	C
24 Locust Ave/ 8 th St	TWSC	City of Fontana	C	-	10.4	B	-	21.1	C
25 Locust Ave-Armstrong R/7th St	TWSC	City of Fontana	C	-	14.7	B	-	31.7	D
26 Locust Ave/Dwy 8	TWSC	City of Fontana	C	Future Intersection					
27 Locust Ave/Dwy 9	TWSC	City of Fontana	C	Future Intersection					
28 Locust Ave/Dwy 10	TWSC	City of Fontana	C	Future Intersection					
29 Dwy 11/Jurupa Ave	TWSC	City of Fontana	C	Future Intersection					
30 Cedar Ave/ I-10 WB Ramps	Signal	Caltrans	D/ 45 Sec.	1.26	73.7	F	0.93	30.3	C
31 Cedar Ave/ I-10 EB Ramps	Signal	Caltrans	D/ 45 Sec.	1.08	50.9	F	1.29	85.5	F
32 Cedar Ave/Slover Ave	Signal	County of San Bernardino	D	0.74	31.5	C	0.79	40.6	D
33 Cedar Ave/Santa Ana Ave	Signal	County of San Bernardino	D	0.51	23.1	C	0.62	25.9	C
34 Cedar Ave/ Jurupa Ave	Signal	County of San Bernardino	D	0.53	23.6	C	0.69	24.7	C

	Intersection	Control	Jurisdiction	LOS Standard	Long-Term Without Project					
					AM Peak Hour			PM Peak Hour		
					v/c	Delay	LOS	v/c	Delay	LOS
35	Cedar Ave/7 th St	Signal	County of San Bernardino	D	0.36	14.5	B	0.43	19.0	B
36	Rubidoux Blvd/20th St-Market St	Signal	City of Jurupa Valley	D	1.68	>100	F	1.69	>100	F
37	Rubidoux Blvd/30th St-SR-60 WB Off Ramp	Signal	Caltrans	D/45 Sec.	1.83	329.87	F	2.00	336.4	F
38	Rubidoux Blvd/SR-60 WB On Ramp	TWSC	Caltrans	D/45 Sec.	-	717.6	F	-	639.4	F
39	Rubidoux Blvd/SR-60 EB Off Ramps-30th St	Signal	Caltrans	D/45 Sec.	1.40	238.5	F	1.48	201.2	F
40	Market St/SR-60 WB Ramps	Signal	Caltrans	D/45 Sec.	0.63	21.8	C	0.83	27.7	C
41	Market St/SR-60 EB Ramps	Signal	Caltrans	D/45 Sec.	0.77	31.2	C	1.06	65.1	F

Source: LSA Associates, August 2013; Translutions, August 2014 (Appendix L)

¹ Acceptable LOS for Caltrans facilities is between LOS C and D, which correlates to an average delay of 45 seconds or less.

AWSC = all-way stop controlled

Sec. = seconds

Caltrans = California Department of Transportation

SR = State Route

Dwy = driveway

TWSC = two-way stop controlled

EB = eastbound

v/c = volume to capacity ratio

I = Interstate

WB = westbound

LOS = level of service

Freeway Segments and Ramp Junctions

Long-term (2035) cumulative conditions would result in unacceptable freeway segment and ramp junction LOS at 42 facilities, including the freeway segments and ramp junctions identified in the near-term cumulative scenario, above, as provided in Table 4.2.14-15.

Table 4.2.14-15. Long-Term (2035) Freeway Mainline Segment and Ramp Junction Levels of Service without Project

			Long-Term without Project Conditions						
			AM Peak Hour			PM Peak Hour			
Intersection	Type	Mainline Lanes	Speed	Density	LOS	Speed	Density	LOS	
I-10 Eastbound									
1	West of Sierra Avenue Off-Ramp	Basic	5	70.0	19.5	C	-	-	F
2	Sierra Avenue Off-Ramp	Basic	5	70.0	19.5	C	-	-	F
3	Between Sierra Avenue Ramps	Basic	4	70.0	19.4	C	-	-	F
4	Sierra Avenue On-Ramp	1 Lane On	4	56.0	28.5	D	-	-	F
5	Sierra Avenue On-Ramp to Cedar Avenue Off-Ramp	Basic	4	68.2	26.0	C	-	-	F
6	Cedar Avenue Off-Ramp	1 Lane Off	4	55.3	30.6	D	54.7	56.9	F
7	Between Cedar Avenue Ramps	Basic	4	69.8	21.5	C	-	-	F
8	Cedar Avenue On-Ramp	1 Lane On	4	60.0	23.0	C	52.0	36.5	F
9	East of Cedar Avenue On-Ramp	Basic	4	68.0	26.3	D	-	-	F
SR-60 Eastbound									
10	West of Valley Way Hook Off-Ramp	Basic	4	63.9	32.0	D	-	-	F
11	Valley Way Hook Off-Ramp	Basic	4	63.9	32.0	D	-	-	F
12	Between Valley Way Ramps	Basic	3	-	-	F	-	-	F
13	Valley Way Hook On-Ramp	1 Lane On	3	48.0	40.2	F	12.0	50.1	F
14	Valley Way Hook On-Ramp to Valley Way Slip On-Ramp	Basic	3	-	-	F	-	-	F
15	Valley Way Slip On-Ramp	1 Lane On	3	44.0	43.1	F	-	-	F
16	Valley Way Slip On-Ramp to Rubidoux Blvd Off-Ramp	Basic	3	-	-	F	-	-	F
17	Rubidoux Blvd Off-Ramp	1 Lane Off	3	55.4	34.1	D	54.5	43.6	F
18	Between Rubidoux Blvd Ramps	Basic	3	-	-	F	-	-	F
19	Rubidoux Blvd On-Ramp	1 Lane On	3	27.0	47.6	F	-	-	F

	Intersection	Type	Mainline Lanes	Long-Term without Project Conditions					
				AM Peak Hour			PM Peak Hour		
				Speed	Density	LOS	Speed	Density	LOS
20	Rubidoux Blvd On-Ramp to Market Street Off-Ramp	Basic	3	-	-	F	-	-	F
21	Market Street Off-Ramp	1 Lane Off	3	55.0	36.2	E	53.4	44.3	F
22	Between Market Street Ramps	Basic	4	66.6	28.4	D	59.0	37.9	E
23	Market Street On-Ramp	1 Lane On	4	60.0	22.1	C	60.0	24.5	F
24	East of Market Street On-Ramp	Basic	4	63.6	32.4	D	-	-	F
I-10 Westbound									
25	West of Sierra Avenue On-Ramp	Basic	5	-	-	F	62.4	33.9	D
26	Sierra Avenue On-Ramp	Basic	5	-	-	F	62.4	33.9	D
27	Between Sierra Avenue Ramps	Basic	4	-	-	F	58.4	38.6	E
28	Sierra Avenue Off-Ramp	Basic	5	-	-	F	64.3	31.6	D
29	Cedar Avenue On-Ramp to Sierra Avenue Off-Ramp	Basic	5	-	-	F	64.3	31.6	D
30	Cedar Avenue On-Ramp	1 Lane On	4	36.0	42.4	F	54.0	33.9	F
31	Between Cedar Avenue Ramps	Basic	4	-	-	F	57.2	40.1	E
32	Cedar Avenue Off-Ramp	1 Lane Off	4	55.0	56.7	F	55.5	42.4	F
33	East of Cedar Avenue Off-Ramp	Basic	4	-	-	F	-	-	F
SR-60 Westbound									
34	West of Valley Way Slip On-Ramp	Basic	4	62.1	34.2	D	66.3	29.0	D
35	Valley Way Slip On-Ramp	Basic	4	62.1	34.2	D	66.3	29.0	D
36	Between Valley Way Ramps	Basic	3	-	-	F	57.9	39.3	E
37	Valley Way Slip Off-Ramp	1 Lane Off	3	54.4	40.1	F	54.3	38.4	E
38	Rubidoux Blvd On-Ramp to Valley Way Slip Off-Ramp	Basic	3	-	-	F	-	-	F
39	Rubidoux Blvd On-Ramp	1 Lane On	3	26.0	47.1	F	35.0	44.8	F
40	Between Rubidoux Blvd Ramps	Basic	3	-	-	F	58.1	39.0	E

	Intersection	Type	Mainline Lanes	Long-Term without Project Conditions					
				AM Peak Hour			PM Peak Hour		
				Speed	Density	LOS	Speed	Density	LOS
41	Rubidoux Blvd Off-Ramp	1 Lane Off	3	48.0	40.0	F	47.7	38.6	F
42	Market Street On-Ramp to Rubidoux Off-Ramp	Basic	3	-	-	F	-	-	F
43	Market Street On-Ramp	1 Lane On	3	41.0	44.9	F	42.0	44.3	F
44	Between Market Street Ramps	Basic	3	-	-	F	54.0	44.2	E
45	Market Street Off-Ramp	1 Lane Off	3	48.4	35.8	E	48.8	31.9	D
46	East of Market Street Off-Ramp	Basic	3	-	-	F	-	-	F

Source: LSA Associates, August 2013 (Appendix L)

I = Interstate

LOS = level of service

SR = State Route

Operational Impacts: Cumulative with Project

Project contributions to long-term impacts would be cumulatively considerable if the proposed project would cause a circulation facility (intersection, freeway mainline, or ramp junction) to operate at a deficient LOS or would contribute more than 50 trips to an intersection or more than 100 trips to a freeway segment that operates at a deficient peak hour LOS under long-term cumulative conditions without the proposed project. As detailed above, certain cumulative traffic conditions are significant in the long-term without the proposed project. Development of the proposed project would contribute to those significant impacts as provided below.

Long-Term (2035) Cumulative Impacts

As shown in Tables 4.2.14-16 and 4.2.14-17, the proposed project would result in a cumulatively considerable contribution to significant cumulative impacts at 26 intersections and 42 freeway mainline and ramp junctions in the long term (2035).

Table 4.2.14-16. Long-Term (2035) Intersection Level of Service with Project

	Intersection	Control	Jurisdiction	LOS Standard	Long-Term With Project					
					AM Peak Hour			PM Peak Hour		
					v/c	Delay	LOS	v/c	Delay	LOS
1	SR-60 EB Ramps/Mission Blvd	Signal	Caltrans	D/45 Sec. ¹	0.61	29.4	C	1.03	>100	F
2	Sierra Ave/I-10 Ramps	Signal	Caltrans	D/45 Sec.	0.84	43.9	D	0.91	55.5	E
3	Sierra Ave/Slover Ave	Signal	City of Fontana	C	0.88	36.8	D	0.93	40.1	D
4	Sierra Ave/Santa Ana Ave	Signal	City of Fontana	C	0.53	25.2	C	0.75	29.5	C
5	Sierra Ave/Jurupa Ave	Signal	City of Fontana	C	0.58	27.0	C	0.81	32.3	C
6	Armstrong Rd/Sierra Ave	Signal	City of Jurupa Valley	D	1.20	92.1	F	1.19	90.0	F
7	Valley Way/SR-60 WB Off-Ramp	Signal	Caltrans	D/45 Sec.	1.22	>100	F	1.24	>100	F
8	Valley Way/SR-60 WB On-Ramp	TWSC	Caltrans	D/45 Sec.	-	>100	F	-	>100	F
9	Valley Way/SR-60 EB On-Ramp	TWSC	Caltrans	D/45 Sec.	-	0.0	A	-	0.0	A
10	Valley Way/Mission Blvd	Signal	City of Jurupa Valley	D	0.75	34.2	C	0.85	35.8	D
11	Alder Ave/Slover Ave	TWSC	County of San Bernardino	D	-	>100	F	-	>100	F
12	Alder Ave/Jurupa Ave	TWSC	City of Fontana	C	-	9.0	A	-	10.0	A
13	Driveway 1/7 th St	TWSC	City of Fontana	C	-	9.0	A	-	9.0	A
14	Driveway 2/7 th St	TWSC	City of Fontana	C	-	9.0	A	-	9.0	A
15	Driveway 3/7 th St	TWSC	City of Fontana	C	-	9.9	A	-	9.9	A
16	Locust Ave/Slover Ave	AWSC	County of San Bernardino	D	1.42	>100	F	2.07	>100	F
17	Locust Ave/Santa Ana Ave	AWSC	County of San Bernardino	D	1.75	>100	F	2.08	>100	F
18	Locust Ave/Jurupa Ave	TWSC	City of Fontana	C	-	>100	F	-	>100	F
19	Locust Ave/Driveway 4	TWSC	City of Fontana	C	-	12.9	B	-	28.4	D
20	Locust Ave/Driveway 5	TWSC	City of Fontana	C	-	22.5	C	-	46.6	E
21	Locust Ave/11th St-Driveway 6	TWSC	City of Fontana	C	-	32.9	D	-	>100	F
22	Locust Ave/10 th St	TWSC	City of Fontana	C	-	14.0	B	-	20.9	C
23	Locust Ave/9th St-Driveway 7	TWSC	City of Fontana	C	-	24.3	C	-	57.7	F
24	Locust Ave/8th St	TWSC	City of Fontana	C	-	12.3	B	-	34.9	D
25	Locust Ave-Armstrong Rd/7th St	TWSC	City of Fontana	C	-	40.9	E	-	>100	F
26	Locust Ave/Driveway 8	TWSC	City of Fontana	C	-	19.9	C	-	32.1	D
27	Locust Ave/Driveway 9	TWSC	City of Fontana	C	-	19.8	C	-	37.5	E
28	Locust Ave/Driveway 10	TWSC	City of Fontana	C	-	14.4	B	-	19.0	C
29	Driveway 11/Jurupa Ave	TWSC	City of Fontana	C	-	15.8	C	-	16.1	C

	Intersection	Control	Jurisdiction	LOS Standard	Long-Term With Project					
					AM Peak Hour			PM Peak Hour		
					v/c	Delay	LOS	v/c	Delay	LOS
30	Cedar Ave/I-10 WB Ramps	Signal	Caltrans	D/45 Sec.	1.31	83.7	F	0.99	35.3	D
31	Cedar Ave/I-10 EB Ramps	Signal	Caltrans	D/45 Sec.	1.14	58.0	F	1.35	95.0	F
32	Cedar Ave/Slover Ave	Signal	County of San Bernardino	D	0.79	32.2	C	0.83	44.3	D
33	Cedar Ave/Santa Ana Ave	Signal	County of San Bernardino	D	0.54	22.7	C	0.66	26.2	C
34	Cedar Ave/Jurupa Ave	Signal	County of San Bernardino	D	0.53	24.1	C	0.70	25.7	C
35	Cedar Ave/7 th St	Signal	County of San Bernardino	D	0.40	15.0	B	0.46	19.7	B
36	Rubidoux Blvd/20th St-Market St	Signal	City of Jurupa Valley	D	1.71	>100	F	1.73	>100	F
37	Rubidoux Blvd/30th St-SR-60 WB Off Ramp	Signal	Caltrans	D/45 Sec.	0.97	33.8	C	1.11	59.2	F
38	Rubidoux Blvd/SR-60 WB On Ramp	TWSC	Caltrans	D/45 Sec.	-	>100	F	-	>100	F
39	Rubidoux Blvd/SR-60 EB Off Ramps-30th St	Signal	Caltrans	D/45 Sec.	1.29	>100	F	1.40	>100	F
40	Market St/SR-60 WB Ramps	Signal	Caltrans	D/45 Sec.	1.00	54.0	D	1.07	67.4	F
41	Market St/SR-60 EB Ramps	Signal	Caltrans	D/45 Sec.	0.80	32.1	C	1.09	72.7	F

Source: LSA Associates, August 2013 (Appendix L)

¹ Acceptable LOS for Caltrans facilities is between LOS C and D, which correlates to an average delay of 45 seconds or less.

AWSC = all-way stop controlled

Caltrans = California Department of Transportation

EB = eastbound

I = Interstate

LOS = level of service

Sec. = seconds

SR = State Route

TWSC = two-way stop controlled

v/c = volume to capacity ratio

WB = westbound

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Table 4.2.14-17. Long-Term (2035) Freeway Mainline Segment and Ramp Junction Levels of Service with the Project

Intersection			Type	Mainline Lanes	Near-Term with Project Conditions					
					AM Peak Hour			PM Peak Hour		
					Speed	Density	LOS	Speed	Density	LOS
I-10 Eastbound										
1	West of Sierra Avenue Off-Ramp	Basic	5	70.0	19.7	C	-	-	F	
2	Sierra Avenue Off-Ramp	Basic	5	70.0	19.7	C	-	-	F	
3	Between Sierra Avenue Ramps	Basic	4	70.0	19.5	C	-	-	F	
4	Sierra Avenue On-Ramp	1 Lane On	4	56.0	28.7	D	-	-	F	
5	Sierra Avenue On-Ramp to Cedar Avenue Off-Ramp	Basic	4	68.1	26.1	D	-	-	F	
6	Cedar Avenue Off-Ramp	1 Lane Off	4	55.2	30.8	D	54.7	57.0	F	
7	Between Cedar Avenue Ramps	Basic	4	69.8	21.5	C	-	-	F	
8	Cedar Avenue On-Ramp	1 Lane On	4	60.0	23.1	C	52.0	36.2	F	
9	East of Cedar Avenue On-Ramp	Basic	4	67.9	26.5	D	-	-	F	
SR-60 Eastbound										
10	West of Valley Way Hook Off-Ramp	Basic	4	63.7	32.3	D	-	-	F	
11	Valley Way Hook Off-Ramp	Basic	4	63.7	32.3	D	-	-	F	
12	Between Valley Way Ramps	Basic	3	-	-	F	-	-	F	
13	Valley Way Hook On-Ramp	1 Lane On	3	48.0	40.2	F	12.0	50.2	F	
14	Valley Way Hook On-Ramp to Valley Way Slip On-Ramp	Basic	3	-	-	F	-	-	F	
15	Valley Way Slip On-Ramp	1 Lane On	3	43.0	43.1	F	-	-	F	
16	Valley Way Slip On-Ramp to Rubidoux Blvd Off-Ramp	Basic	3	-	-	F	-	-	F	
17	Rubidoux Blvd Off-Ramp	1 Lane Off	3	55.4	34.2	D	54.5	43.7	F	
18	Between Rubidoux Blvd Ramps	Basic	3	-	-	F	-	-	F	
19	Rubidoux Blvd On-Ramp	1 Lane On	3	27.0	47.6	F	-	-	F	
20	Rubidoux Blvd On-Ramp to Market Street Off-Ramp	Basic	3	-	-	F	-	-	F	
21	Market Street Off-Ramp	1 Lane Off	3	55.0	36.2	E	53.4	44.3	F	
22	Between Market Street Ramps	Basic	4	66.6	28.4	D	59.0	37.9	E	
23	Market Street On-Ramp	1 Lane On	4	60.0	22.1	C	60.0	24.5	F	
24	East of Market Street On-Ramp	Basic	4	63.5	32.5	D	-	-	F	

Intersection	Type	Mainline Lanes	Near-Term with Project Conditions						
			AM Peak Hour			PM Peak Hour			
			Speed	Density	LOS	Speed	Density	LOS	
I-10 Westbound									
25 West of Sierra Avenue On-Ramp	Basic	5	-	-	F	62.0	34.3	D	
26 Sierra Avenue On-Ramp	Basic	5	-	-	F	62.0	34.3	D	
27 Between Sierra Avenue Ramps	Basic	4	-	-	F	58.1	39.0	E	
28 Sierra Avenue Off-Ramp	Basic	5	-	-	F	64.1	31.8	D	
29 Cedar Avenue On-Ramp to Sierra Avenue Off-Ramp	Basic	5	-	-	F	64.1	31.8	D	
30 Cedar Avenue On-Ramp	1 Lane On	4	36.0	42.3	F	54.0	33.9	F	
31 Between Cedar Avenue Ramps	Basic	4	-	-	F	57.2	40.1	E	
32 Cedar Avenue Off-Ramp	1 Lane Off	4	54.9	56.9	F	55.5	42.6	F	
33 East of Cedar Avenue Off-Ramp	Basic	4	-	-	F	-	-	F	
SR-60 Westbound									
34 West of Valley Way Slip On-Ramp	Basic	4	61.9	34.4	D	66.1	29.2	D	
35 Valley Way Slip On-Ramp	Basic	4	61.9	34.4	D	66.1	29.2	D	
36 Between Valley Way Ramps	Basic	3	-	-	F	57.7	39.5	E	
37 Valley Way Slip Off-Ramp	1 Lane Off	3	54.4	40.2	F	54.3	38.4	E	
38 Rubidoux Blvd On-Ramp to Valley Way Slip Off-Ramp	Basic	3	-	-	F	-	-	F	
39 Rubidoux Blvd On-Ramp	1 Lane On	3	26.0	47.3	F	35.0	44.9	F	
40 Between Rubidoux Blvd Ramps	Basic	3	-	-	F	58.1	39.0	E	
41 Rubidoux Blvd Off-Ramp	1 Lane Off	3	48.0	40.0	F	47.7	38.6	F	
42 Market Street On-Ramp to Rubidoux Off-Ramp	Basic	3	-	-	F	-	-	F	
43 Market Street On-Ramp	1 Lane On	3	41.0	44.9	F	42.0	44.3	F	
44 Between Market Street Ramps	Basic	3	-	-	F	54.0	44.2	E	
45 Market Street Off-Ramp	1 Lane Off	3	48.4	36.0	E	48.7	32.0	D	
46 East of Market Street Off-Ramp	Basic	3	-	-	F	-	-	F	

Source: LSA Associates, August 2013 (Appendix L)

I = Interstate

LOS = level of service

SR = State Route

Mitigation Measures

The project would be required to pay fees to fund future installation of improvements to improve operations at 26 deficient intersections and 42 freeway mainline segments and ramp junctions, as provided below in **Mitigation Measure TRA-1d**.

In setting forth **Mitigation Measure TRA-1d**, Fontana explicitly recognizes that under *Tracy First v. City of Tracy*, the City is not required to mandate that the applicant make fair share payments to agencies other than the City to provide fair share payment for improvements where the agencies do not have a plan in place for such improvements. In addition, although **Mitigation Measure TRA-1d** includes requirements for fair share payments to mitigate project-related impacts within Riverside County and on Caltrans freeway facilities, Fontana has no jurisdiction to ensure construction of physical improvements for which fair share payment is provided. Therefore, traffic-related impacts outside of the Fontana's jurisdiction are considered to be significant and unavoidable. Nevertheless, the City of Fontana recognizes that the proposed project involves the distribution of truck traffic onto roadways within Riverside County and on freeways, and as a result determined that mandating fair share payment to Riverside County (**Mitigation Measure TRA-1d**) would be appropriate.

Mitigation Measure TRA-1d: Payment of Development Impact Fees for Transportation Improvements. Prior to the issuance of occupancy permits for a building within the WVLCSF, the applicant shall make fee payments to the City to fund the improvements needed to mitigate the project's contribution to cumulative impacts on intersections, freeway mainline segments, and/or ramp junctions that would operate at an unacceptable LOS in 2035. Such fee payments, based on unique traffic flow and the distribution of truck trips outside of the City of Fontana, will include:

- City of Fontana DIF¹⁴, which represents the required fee for mitigation of impacts on both regional (Nexus Study) and additional local facilities;
- Fair share payment¹⁵ to Riverside County as mitigation for the project's contribution of traffic to the Rubidoux Boulevard/20th Street-Market Street intersection and the need for:
 - Converting signal timing to provide a northbound right turn overlap phasing;
 - Adding a southbound left turn lane, eastbound right turn lane, and westbound left turn lane; and
 - Restriping the eastbound through-right turn lane to an eastbound through lane.
- Fair share payment¹⁶ to Caltrans as mitigation for the project's contribution of traffic to the Market Street/SR-60 eastbound ramps and the need for restriping the southbound approach to provide two left turn lanes and one through lane, which is not included in Riverside County's TUMF Program.

¹⁴ It is currently estimated that the project applicant will be required to pay the City of Fontana development impact fees for the entire WVLCSF development in the amount of \$6,539,442. The timing of payment of the full fee will be phased as building permits are issued for construction within the WVLCSF area; however, all payments will be required to be provided by the fifth anniversary of issuance of the first building permit within the project site, regardless of whether building permits have been issued for all buildings.

¹⁵ It is currently estimated that the project's fair share is \$19,160 (6.51% of a \$400,000 improvement cost).

¹⁶ It is currently estimated that the project's fair share is \$524 (5.24% of a \$10,000 improvement cost).

Residual Impacts

The project site is within a highly traveled and rapidly growing area of Southern California and traffic continues to increase incrementally every year as new development is added. As stated previously, ongoing implementation of San Bernardino County's Development Mitigation Nexus Study program would provide funding to construct the improvements needed to achieve desired LOS in the regional system within San Bernardino County. In addition, implementation of Riverside County's existing TUMF Program would provide needed improvements within Riverside County. The specific intersection and freeway mainline and ramp junction improvements have been identified in the Development Mitigation Nexus Study prepared by SANBAG, the WRCOG's TUMF Program, and individual City CIPs. **Mitigation Measure TRA-1d** ensures that the project pays its full DIF as part of the Nexus Study Program, as well as fair share fees for its contribution of traffic to intersections that are not part of the Nexus Study or TUMF programs.

By the time the project is fully constructed and in operation during the long-term project scenario, the applicant would have installed improvements to the following existing roadways—specifically, traffic signals at intersections along Locust Avenue at 11th Street, Armstrong Road/7th Street, and Jurupa Avenue and widening along with a two-way left turn lane on Locust Avenue along the project's frontage and widening of Jurupa Avenue along the project's frontage. The TIA evaluated certain improvements to affected roadways with deficient LOS with the project. For the long-term (2035) scenario provided in Table 4.2.14-17, the project would contribute to a significant increase in an unacceptable LOS to 26 intersections, and improvements to each of those intersections would improve LOS to acceptable levels. Therefore, all impacted intersections would operate at acceptable LOS with project improvements and installation of intersection improvements by other jurisdictions (Jurupa Valley, County of San Bernardino, Caltrans) as specified in Table E-7 (Year 2035 With Project [With No Sierra Avenue Access] Circulation Improvements) in Appendix L.

Even with implementation of all feasible mitigation, impacts would remain significant and unavoidable and LOS could operate unsatisfactorily at 42 freeway mainline and ramp junctions in the long term (2035). Payment of fees to fund future improvements and mitigate the project's contribution to cumulative impacts on the regional roadway and highway system, included as **Mitigation Measure TRA-1d** as part of the ongoing implementation of San Bernardino County's Nexus Study program along with fair share contributions for facilities outside of Fontana that are not part of the Nexus Study and TUMF systems, would reflect the project's contribution of funding to construct some of the improvements needed to alleviate project-related impacts and achieve improved LOS within San Bernardino County. However, the funds generated by the WVLCSF project itself would not be sufficient to install all improvements necessary to allow the circulation system in the project vicinity to operate at acceptable LOS. While these facilities are identified in congestion management programs and the applicant would provide a fee contribution to fund future improvements, because timing and funding is unknown, there is not enough evidence to support the conclusion that impacts would be reduced to less-than-significant levels and impacts would be significant until all improvements can be made pursuant to the San Bernardino County Nexus Study and the Riverside County TUMF Program. If improvements are made to the roadway network, as supported by Table 4.12.14-18, the project plus cumulative traffic condition for 2035 with all improvements in place would result in acceptable LOS for all facilities. However, as timing is not known for the implementation of the improvements and as jurisdictions outside of the City of Fontana need not commit to constructing needed improvements pursuant to any specific timing in relation to project site development, impacts would remain significant and unavoidable. As no other feasible mitigation is proposed, the project's contribution to facilities operating at unacceptable LOS would result in impacts that remain significant and unavoidable.

Table 4.2.14-18. Long-Term (2035) with Improvements Intersection Level of Service

	Intersection	Control	Funding Source	Jurisdiction	LOS Standard	2035 + Project with Improvement					
						AM Peak Hour			PM Peak Hour		
						v/c	Delay	LOS	v/c	Delay	LOS
1	SR-60 EB Ramps/Mission Blvd	Signal	TUMF	Caltrans	D/45 Sec.	0.46	27.3	C	0.63	29.0	C
2	Sierra Ave/I-10 Ramps	Signal	SANBAG Nexus Study	Caltrans	D/45 Sec.	0.77	34.0	C	0.83	31.8	C
3	Sierra Ave/Slover Ave	Signal	Nominal Cost, Part of Regional Traffic Signal Synchronization Plan	City of Fontana	C	0.85	30.3	C	0.90	32.0	C
6	Armstrong Rd/Sierra Ave	Signal	TUMF includes widening of Armstrong Road from San Bernardino County Line to Valley Way	City of Jurupa Valley	D	0.91	45.6	D	0.93	48.7	D
7	Valley Way/SR-60 WB Off-Ramp	Signal	Interchange Design Part of Riverside County CEDS-CMAQ funds	Caltrans	D/45 Sec.	0.97	38.8	D	0.95	43.2	D
8	Valley Way/SR-60 WB On-Ramp	Signal	West County DIF Signal Mitigation Fund	Caltrans	D/45 Sec.	0.92	14.1	B	0.94	23.1	C
11	Alder Ave/Slover Ave	Signal	Part of the County of San Bernardino	County of San Bernardino	D	0.54	12.2	B	0.72	8.5	A
16	Locust Ave/Slover Ave	Signal	County of San Bernardino CIP & SANBAG Nexus Study	County of San Bernardino	D	0.43	3.8	A	0.89	22.6	C
17	Locust Ave/Santa Ana Ave	Signal	County of San Bernardino CIP & SANBAG Nexus Study	County of San Bernardino	D	0.62	18.5	B	0.72	21.7	C
18	Locust Ave/Jurupa Ave	Signal	County of San Bernardino CIP & SANBAG Nexus Study	City of Fontana	C	0.64	16.9	B	0.81	19.3	B
30	Cedar Ave/I-10 WB Ramps	Signal	Cedar Avenue Interchange included in the Nexus Study. Environmental	Caltrans	D/45 Sec.	0.77	28.0	C	0.67	22.5	C

	Intersection	Control	Funding Source	Jurisdiction	LOS Standard	2035 + Project with Improvement					
						AM Peak Hour			PM Peak Hour		
						v/c	Delay	LOS	v/c	Delay	LOS
31	Cedar Ave/I-10 EB Ramps	Signal	documents/designs are almost complete Cedar Avenue Interchange included in the Nexus Study. Environmental documents/designs are almost complete	Caltrans	D/45 Sec.	0.65	25.7	C	0.83	30.4	C
36	Rubidoux Blvd/20 th St-Market St	Signal	TUMF	City of Jurupa Valley	D	0.86	45.8	D	0.94	50.0	D
37	Rubidoux Blvd/30 th St-SR-60 WB Off Ramp	Signal	TUMF	Caltrans	D/45 Sec	0.90	31.3	C	0.97	40.8	D
38	Rubidoux Blvd/SR-60 WB On Ramp	Signal	TUMF	Caltrans	D/45 Sec.	0.89	6.4	A	0.88	7.7	A
39	Rubidoux Blvd/SR-60 EB Off Ramps-30 th St	Signal	TUMF	Caltrans	D/45 Sec	0.85	32.3	C	0.49	42.9	D
40	Market St/SR-60 WB Ramps	Signal	Nominal Cost	Caltrans	D/45 Sec	0.64	21.8	C	0.85	28.5	C
41	Market St/SR-60 EB Ramps	Signal	Nominal Cost	Caltrans	D/45 Sec	0.63	24.2	C	0.75	26.1	C
Source: LSA Associates, 2013; Translutions, 2014 (Appendix L) AWSC = all-way stop controlled EB = eastbound I = Interstate LOS = level of service SR = State Route TWSC = two-way stop controlled v/c = volume to capacity ratio WB = westbound											

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Impact TRA-2. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways

Construction

SANBAG is the congestion management agency for San Bernardino County and maintains a CMP with LOS standards. As noted above, SANBAG considers the City exempt from CMP traffic impact analysis, and no CMP analysis is required for this project.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

Operation

No CMP analysis is required for the proposed project, and no impacts would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

Impact TRA-3. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks

Construction

As discussed in the existing conditions above, there are no airports within the City of Fontana and the nearest airport is more than 3 miles south of the project site in Riverside County (Flabob Airport). No construction impacts are anticipated to result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks.

Operation

Similar to the discussion for construction impacts, project operations would not impact air traffic patterns. No impact would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

Impact TRA-4. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)***Construction***

Project construction activities are not anticipated to result in any obstacles to sight distance. There are no sharp roadway curves in the project area and construction activities would not modify existing right-of-way along any existing roadways in the project vicinity. However, general operation and maneuvering of heavy and large construction equipment along roadways such as Armstrong Road, Locust Avenue, and Jurupa Avenue during project construction could potentially create a safety hazard, and impacts could be significant. Implementation of the Construction Management Plan as discussed in **Mitigation Measure TRA-1a**, above, would reduce this impact to a less-than-significant level. As such, construction of the proposed project would result in a less-than-significant impact with mitigation incorporated.

Mitigation Measures

Implement **Mitigation Measure TRA-1a**.

Residual Impacts

Implementation of the Construction Management Plan, as discussed in **Mitigation Measure TRA-1a** above, would reduce this impact to a less-than-significant level by ensuring that precaution is used during construction, including detours, a flag person, and other similar safety measure to ensure that construction activities are performed in a safe and responsible manner. As such, construction of the proposed project would result in a less-than-significant impact with mitigation incorporated.

Operation

Similar to existing conditions, roadways in the area would not have sharp roadway curves once the project is constructed, and project operations would involve truck trips associated with light industrial development to and from the proposed project site. Truck and other vehicle access to the project site would be achieved via three driveways along Armstrong Road, four driveways on Locust Avenue, three driveways on 7th Street, and one driveway along Jurupa Avenue for a total of 11 driveways, as illustrated on Figure 4.2.14-3. As shown, several driveways would align with local residential streets; however, the proposed project would incorporate driveway channelization, truck route designation, and other methods including a TMA to guide project traffic to the regional transportation network and away from residential streets, as provided in **Specific Plan Requirement SP-TR-1** and **SP-TR-2**. The TMA would create a tenant-based system and set of regulations for tracking, monitoring, and providing feedback for vehicles, specifically related to truck traffic as it enters and exits the project development. The applicant or its designee will prepare a truck route management plan as a part of the TMA for review by the City of Fontana. Truck driver education training, as part of the TMA, will be developed and presented to all truck drivers and/or vendors overseeing deliveries before they can make deliveries to or from the proposed project site. Each truck driver and associated trucking company, leasing company, and/or individual property owner will need to receive training and educational and reference materials, such as the approved truck route plan showing appropriate access to and from the project site from all major freeways and contact information for a designee overseeing the management program. The applicant or its designee will also keep records showing compliance with the TMA for review by the City.

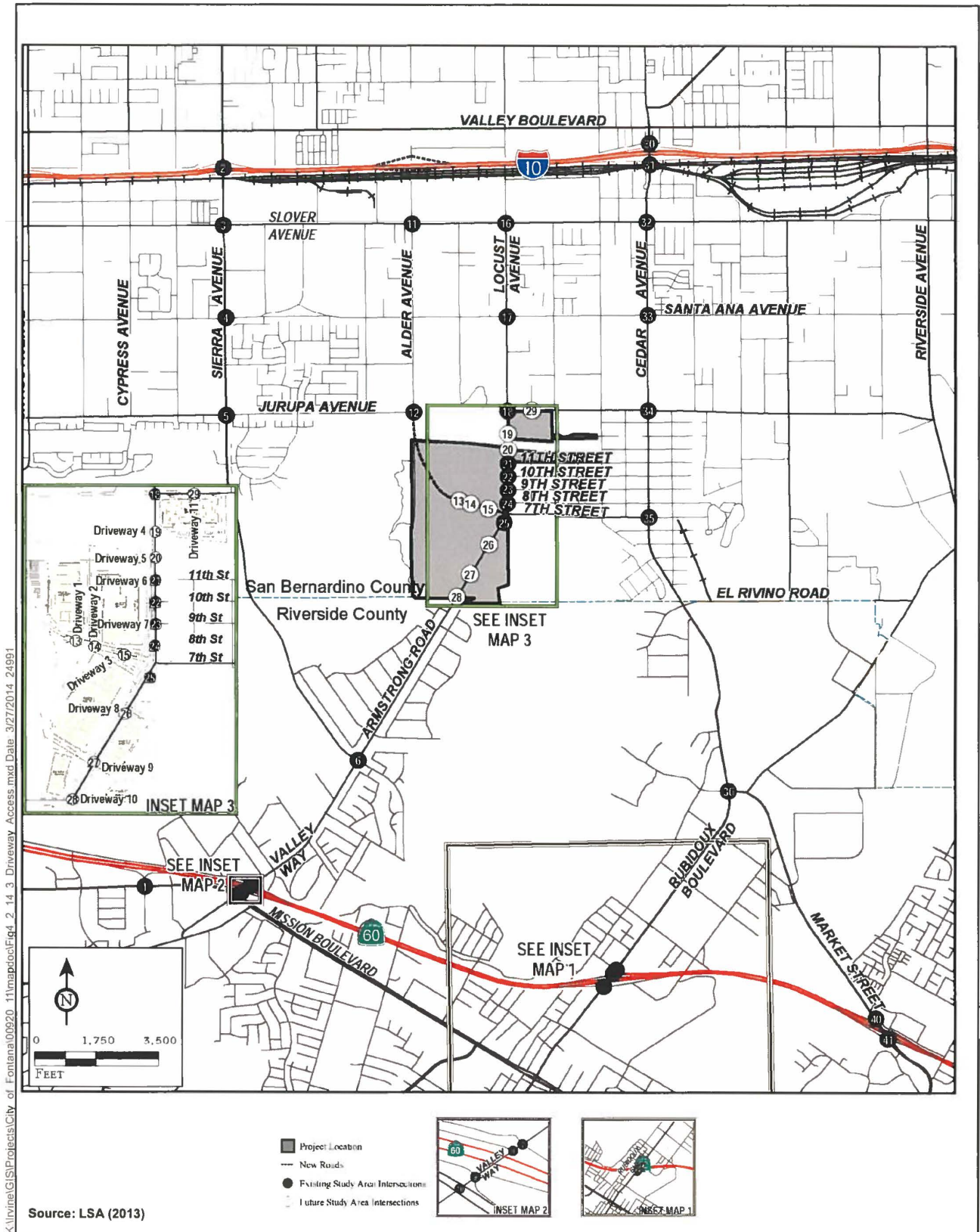


Figure 4.2.14-3
Proposed Project Driveway Access
West Valley Logistics Center Specific Plan EIR



Access to the project site would be provided by the applicant via driveways into and out of the industrial parcels, including four driveways on Locust Avenue, five driveways on Armstrong Road, and one driveway on Jurupa Avenue in compliance with the approved site plan for the WVLCSP. Entry drives would also be clearly marked by special features, including enhanced paving, landscaping features, decorative walls, and signage to promote safety and to increase the visibility of driveway intersections. A private road (Old Alder Avenue) at 7th Street and Armstrong Road/Locust Avenue would be fully improved with a signal and five driveways into industrial Parcels 1, 2, and 3. The project includes widening and other improvements to Locust Avenue and Armstrong Road (widening from two to four lanes) and Jurupa Avenue along the project frontage. The driveway design would also include features to prevent trucks from using local residential streets and other safety features, and no impacts would result. Per **Specific Plan Requirement SP-TR-2**, entry drives would be clearly marked by special features, including enhanced paving, landscaping features, decorative walls, and signage to promote safety and to increase the visibility of driveway intersections. As such, operation of the proposed project would result in a less-than-significant impact related to hazardous design features or incompatible uses.

Specific Plan Requirements

The applicant shall implement the following specific plan requirements, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **SP-TR-1:** Prepare a Transportation Management Association.
- **SP-TR-2:** Ensure Installation of Safety Features.

Mitigation Measures

Implement **Mitigation Measure TRA-1a**.

Residual Impacts

Implementation of **Specific Plan Requirements SP-TR-1** and **SP-TR-2**, specifically for compliance with a TMA and the installation of safety features for the project, and **Mitigation Measure TRA-1a**, would reduce this impact to a less-than-significant level.

Impact TRA-5. Result in inadequate emergency access

Construction

Emergency access to the project area would be provided via Armstrong Road, Locust Avenue, Jurupa Road, and several project driveways. Emergency access could be affected as a result of proposed project construction activities, which may involve temporary road closures, detours, and general construction-related delays that could obstruct or temporarily impair the movement of emergency vehicles.

Mitigation Measures

Implement **Mitigation Measure TRA-1a**.

Residual Impacts

Implementation of a Construction Management Plan per **Mitigation Measure TRA-1a** would reduce this temporary impact to a less-than-significant level.

Operation

During operations, emergency access would continue to be provided via Armstrong Road, Locust Avenue, Jurupa Road, and several project driveways. Access would be clearly marked, as discussed above under Impact TRA-4, and the proposed project is not expected to result in inadequate emergency access. Impacts would be less than significant and no mitigation would be required.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impact.

Impact TRA-6. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities**Construction**

The specific programming of project site construction activities cannot be known at this time; however, it can be reasonably concluded that the majority of (if not all) construction workers and vendors would travel to the site by automobile. At most, only a small number of workers and vendors may utilize the existing public transit system. In any event, no elements of proposed project construction would result in a conflict with the adopted policies, plans, or programs supporting alternative transportation, and existing public transportation options would not be decreased as a result of project construction. Impacts would be less than significant.

Operation

As analyzed in Section 4.9, *Land Use and Planning*, the proposed project is consistent with adopted policies, plans, and programs regarding public transit, bicycle, and pedestrian facilities. As described by **Specific Plan Requirement SP-TR-3**, bicycle racks will be provided at central locations on Parcels 1 through 7 for Buildings 1 through 7 (e.g., between buildings or in central parking areas) for employees who wish to bicycle. For analysis on consistency with existing policies, plans, or programs, see Section 4.9, *Land Use and Planning*. Impacts would be less than significant and no mitigation would be required.

Specific Plan Requirement

The applicant shall implement the following specific plan requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **SP-TR-3:** Install Bicycle Racks.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impact.

4.2.15 Utilities and Service Systems

Introduction

This section discusses potential impacts associated with utilities (water supply, storm water drainage, solid waste, sewer and wastewater treatment, solid waste disposal, electricity, and natural gas) and energy consumption resulting from implementation of the proposed West Valley Logistics Center Specific Plan (WVLCSP). For each of the services and utilities addressed in this section, existing infrastructure and levels of service are described, as well as any improvements required to serve the project, including design features set forth in the proposed WVLCSP that would reduce impacts related to utilities. Finally, mitigation measures are prescribed where impacts associated with services or utilities are determined to be potentially significant.

The *Existing Conditions* and *Impact Analysis* sections below utilize information contained in the following technical studies provided in the Draft Environmental Impact Report (EIR) Appendices: (1) *Water Supply Assessment for the West Valley Logistics Center* prepared for West Valley Water District by Engineering Resources of Southern California, Inc. provided in Appendix J; (2) *Sewer Area Study for the West Valley Logistics Center, Fontana, CA* and (3) *Water Distribution Analysis for the West Valley Logistics Center, Fontana, California. Job No. 2884*, both prepared by Thienes Engineering, Inc and provided in Appendix M; (4) the Will-Serve letters submitted by utility providers, provided within Appendix M; and (5) energy use calculations prepared for the greenhouse gas analysis (Section 4.2.6) and for vehicle miles traveled (LSA Associates, Inc. 2014), provided in Appendix I. Additional reference materials as noted in this section were also reviewed.

Existing Conditions

The project site contains no land uses that require demand for utilities and service systems, as the site is vacant. Currently, no water, electricity, or natural gas supplies are being consumed on site, nor are wastewater or solid waste being generated.

Water Supply

The West Valley Water District (WVWD) is the water supplier for the project area. The specific plan area is within Zones 2 and 3 of the WVWD service area. Most of the specific plan area is within Zone 3, and the northeastern portion of the specific plan area east of Locust Avenue is within Zone 2.

WVWD collects water from five groundwater basins and two surface water sources. The following description of these sources is based on WVWD's 2012 Water Master Plan:

- *Lytle Creek Basin*: Extraction right of 12,105 gallons per minute (gpm) when WVWD is diverting its full allotment of surface flow (2,290 gpm) from Lytle Creek. When creek flows are low and WVWD is extracting a portion of its allotment, it can pump the difference from groundwater wells to a combined maximum of 14,395 gpm. WVWD's current well capacity from this source is 9,100 gpm or 8.7 million gallons per day (mgd). WVWD plans to increase its use of Lytle Creek water by drilling a new well and re-drilling two existing wells.
- *Rialto Basin*: Unlimited extraction right during normal precipitation years using six pumps with 7,745-gpm or 7.4-mgd capacity. During drought conditions such as currently exist, adjudication goes into effect, limiting extraction to 6,134 acre-feet per year (af/yr) during drought periods

and a low of 3,067 af/yr during the most severe drought periods. Planned wells and treatment facilities are projected to supply an additional 1.0 mgd during drought conditions.

- *North Riverside Basin:* Unlimited extraction rights and three wells with 5,570-gpm or 5.3-mgd capacity and, during current conditions, the ability to extract up to 5,990 af/yr. Planned wells would increase capacity by 13.8 mgd (drought capacity of 1.0 mgd) within WVWD's Zone 2 and 1.4 mgd (drought capacity of 1.0 mgd) within Zone 3.
- *Chino Basin:* Extraction rights are limited to approximately 1,000 af/yr without replenishment costs. WVWD has two wells in this basin that can produce 1.4 and 3.8 mgd; neither was in service in 2012.
- *Bunker Hill Basin:* WVWD has unrestricted rights but is restricted from pumping and exporting from certain areas of the basin by a City of San Bernardino Municipal Water Department Basin Management Ordinance. WVWD has two wells that produce 2,300 gpm or 2.2 mgd. In addition, WVWD and the City of Rialto, in agreement with the San Bernardino Valley Municipal Water District, have contracted to pump groundwater from this basin up to 5,000 af/yr (7.76 mgd) from new wells replacing inoperable wells. Through additional planned wells, WVWD projects that it will eventually increase its Bunker Hill Basin supply capacity to 20 mgd.
- *Lytle Creek (surface source):* WVWD has a 2,290-gpm, or 5.09-cubic feet per second (cfs), right in Lytle Creek surface water and has entered into an agreement with the City of San Bernardino to purchase the City's 1,350 gpm (3.00 cfs) rights, for a total of 3,640 gpm (5.2 mgd, 8.09 cfs). Combined, WVWD, the City of Rialto, and the City of San Bernardino have 6.7 mgd (10.3 cfs) rights to Lytle Creek surface water. Constructed jointly by WVWD and the City of Rialto, the Oliver P. Roember Water Filtration Facility has a capacity to treat approximately 5.2 mgd annual average daily flow of Lytle Creek water for WVWD and approximately 1.5 mgd for the City of Rialto. Lytle Creek flows fluctuate seasonally, and when they fall below 16 cfs, WVWD and City of Rialto water rights are subject to proration.
- *State Water Project (surface source):* In 1998, WVWD began to purchase State Water Project (SWP) water to augment Lytle Creek surface supplies to its water filtration facility. The availability of this water has decreased in recent years as Delta pumping operations have been restricted to protect the threatened fish species delta smelt. WVWD acquires SWP water from the San Bernardino Valley Municipal Water District, a state contractor for SWP water whose supply is considered interruptible. This means that WVWD must have 100% backup supply for domestic use. For this reason, WVWD considers SWP water a supplemental source.

WVWD water storage facilities that would serve the project site consist of three reservoirs: R2-2 and R2-3 in Zone 2 and R3-1 in Zone 2 (Appendix J: Thienes Engineering, Inc. 2013a). An existing 24-inch water line is located along the western boundary of the site, extending south from the intersection of Alder Avenue and Jurupa Avenue to the water reservoir tanks just off site. A 12-inch line extends westward from the water tanks to Locust Avenue and then travels north. Domestic water transmitted by the existing 24-inch pipeline would be provided to the WVLCSP area.

Storm Water Drainage

Flood control facilities for Fontana are provided by the City of Fontana and the San Bernardino County Flood Control District (SBCFCD). The latter is responsible for constructing dams, containment basins, channels, and regional storm drains to collect and convey storm flows. Fontana is responsible for building and maintaining local facilities that conduct storm runoff into the SBCFCD

drainage facilities. The City's efforts in this regard are guided by its 1992 Master Plan of Drainage. Fontana is subject to federal water quality controls under the National Pollutant Discharge Elimination System (NPDES) requiring permits for discharges from municipal storm drainage systems. The City is a permittee within the Santa Ana Regional Water Quality Board Basin Plan, and it implements a Municipal Storm Water Management Plan that provides for discharge regulation, inspections and public education, controls over new development and redevelopment, and specification of site and construction site maintenance practices (City of Fontana 2003).

The City of Fontana has adopted a Master Storm Drainage Plan that was prepared by the County of San Bernardino. The project site is situated at the far southeastern corner of the Fontana city limits, within the Project 3-4 area of the City's Master Plan of Drainage. The drainage infrastructure for south Fontana comprises a single 120-inch-diameter pipe serving the WVLCSF site and the adjacent tributary areas. Fontana's Master Storm Drainage Plan includes provision of stormwater drainage facilities in the Project 3-4 area in the future, but the City does not currently provide such facilities for this area.

SBCFCD has no existing facilities or right-of-way in the Project 3-4 area. The nearest County-maintained Fontana stormwater conduit is a 54-inch pipe near Jurupa Avenue and Tamarind Avenue that does not serve the Project 3-4 area. SBCFCD's local area drainage plan for Project 3-4 recommends development of a 78-inch reinforced concrete pipe transitioning to a 108-inch reinforced concrete pipe. The plan envisions this stormwater pipe crossing the northeastern portion of the WVLCSF area and running south from Jurupa Avenue east of Locust Avenue, turning east at a right angle within the plan area, and extending south at Cedar Avenue (Garay pers. comm.; Zamora pers. comm.).

The City has a Storm Drainage Development Impact Fee Schedule for funding improvements to its storm drainage infrastructure. The fees range from a low of \$4,998 per net acre to a high of \$27,684 per net acre and are assessed on the basis of storm drainage benefit areas. The development impact fee for the Project 3-4 benefit area currently stands at \$16,719 per net acre (Garay pers. comm.; City of Fontana 2012).

Sewer and Wastewater Treatment

The City of Fontana Department of Engineering maintains a sanitary sewer system that consists of over 250 miles of 6- to 42-inch lines and six sewage pump stations. However, the WVLCSF site is within the City of Fontana's Rialto Service Area, and the neighboring City of Rialto provides domestic wastewater treatment and sewer services within this service area in accordance with an extraterritorial sewer services agreement between the two cities. The agreement gives Fontana 1.6 mgd of wastewater rights. Fontana currently discharges approximately 310,000 gallons per day (gpd) (approximately 19% of allowed flow under the agreement) to the Rialto Wastewater Treatment Plant (WWTP) at 501 E. Santa Ana Avenue (Mata pers. comm.). Four out of the five plants at this treatment facility are currently operational, and together the four operational plants have a design capacity of approximately 11.1 mgd and permitted capacity of 11.7 mgd (City of Rialto 2013). According to the City of Rialto's 2013 Sewer Master Plan, "average flows" to the Rialto treatment facility "are on the order of 7 mgd, resulting in capacity for growth" (City of Rialto 2013:ES-3).

Solid Waste

Solid waste hauling services for Fontana are provided by Burrtec Waste Industries, a private company under franchise agreement with the City. Burrtec Waste Industries also operates the City's

curbside recycling (including greenwaste recycling) program. The County of San Bernardino Solid Waste Management Division is responsible for the operation and management of the County's solid waste disposal system, which consists of six regional landfills, eight transfer stations, and five community collection centers. The County of San Bernardino contracts the operation of these landfills, transfer stations, and collection centers to Athens Services (a subsidiary of Arakelian Enterprises, Inc.) (Mata pers. comm.; Meeka pers. comm.; San Bernardino County Department of Public Works 2007).

Municipal and household waste from Fontana is primarily hauled to the County's Mid-Valley Sanitary Landfill in Rialto. This landfill has a 408-acre permitted area of disposal and remaining capacity of approximately 69.3 million cubic yards. Its maximum permitted throughput is 7,500 tons per day (tpd). The year of its permit closure date is 2033. Since the onset of the recent recession, waste deliveries to County facilities have declined approximately 30 to 40%. (However, with improvement in the economy, waste deliveries are increasing back toward pre-recession levels.) During this period, waste imports to these facilities from outside the County remained limited to small amounts delivered from the City of Claremont in Los Angeles County. From April to June 2013, the Mid-Valley Sanitary Landfill received approximately 1,500 to 1,600 tpd of solid waste. Under current plans, Athens Services will import up to approximately 2,200 tpd of solid waste from outside San Bernardino County to waste management facilities within the County (Meeka pers. comm.).

Electricity

Southern California Edison (SCE) provides Fontana's electrical power. SCE provides daily power to over 14 million people, 180 cities, 5,000 large businesses, and 280,000 small businesses within a 50,000-square-mile service area in southern and central California. SCE is the largest regulated subsidiary of Edison International, and it maintains a system of over 59,000 circuit miles of overhead lines, 44,000 circuit miles of underground lines, and over 700 distribution substations. SCE also maintains hydropower and coal plants while generating power from geothermal, wind, solar, small hydropower, and biomass resources. In 2012, 20% of the electricity procured by SCE came from renewable sources. SCE employs over 16,500 people in southern and central California (SCE 2013a, 2013b).

SCE is currently responding to changing circumstances to ensure adequate electricity supply for its customer base. While SCE's total number of customers increased from 4,866,324 in 2008 to 4,950,465 in 2012, its kilowatt-hour (kWh) sales (in millions of kWh) declined from 98,577 in 2008 to 88,215 in 2012. Electricity consumption among SCE's residential customers, commercial customers, public authorities, and agricultural and other customers remained relatively stable during that period, but the company's sales to industry declined slightly. Its re-sales declined more sharply, from 8,769 million kWh in 2008 to 1,735 kWh in 2012. SCE recently announced the permanent retirement of the San Onofre Nuclear Generating Station, which supplied power to 1.4 million homes. SCE expects recent investments in new transmission infrastructure and other measures to compensate for the San Onofre Nuclear Generating Station closure. SCE's new Tehachapi, Devers-Colorado, and Eldorado-Ivanpah transmission systems will increase capacity for importing electricity. SCE will also enhance reserves in the Los Angeles basin by creating 1,700 megawatts of new generation capacity from its Walnut Creek, CPV Sentinel, and El Segundo generation stations (SCE 2013c, 2013d).

Natural Gas

Headquartered in Los Angeles, Southern California Gas Company (SoCalGas) provides natural gas service to residents and businesses within Fontana. A regulated subsidiary of Sempra Energy, SoCalGas is the nation's largest natural gas distribution utility, serving 20.9 million people through 5.8 million gas meters in more than 500 communities (SoCalGas 2013).

California's gas supply is regionally diverse (the southwestern United States, the Rocky Mountains, Canada, and Mexico) and includes supplies from on- and offshore sources. Recent estimates indicate that California's natural gas demand will grow at a rate of 0.07% annually from 2010 to 2030. The estimate is based on projections of moderate growth in core residential, core commercial, and electric generation markets, tempered by declining demand in noncore commercial and industrial markets. SoCalGas's delivery rates in recent years reflect modest economic improvement in the region following the worst economic downturn since the 1930s. The company's core deliveries reached a recession low of 940 measured million cubic feet per day (MMcf/day) in 2009, increased to 1,002 MMcf/day in 2011, and fell to 950 MMcf/day in 2012. Non-core deliveries stood at 1,376 MMcf/day in 2012 after reaching a low of 1,218 MMcf/day in 2010 (California Gas & Utilities 2010, 2013).

SoCalGas projects that demand for all its market sectors will contract at an annual average rate of approximately 0.212% from 2010 to 2030. Demand is expected to remain virtually flat for the next 21 years because of modest economic growth, regulation-mandated demand-side management and renewable energy goals, decline in commercial and industrial demand, increased use of non-utility pipeline systems by enhanced oil recovery customers, and savings linked to advanced metering modules. The 2010 California Gas Report predicts that the total capacity available will remain constant at 3,875 MMcf/day through 2030 and that gas supply taken will be 2,733 MMcf/day in 2015 and 2,661 MMcf/day in 2030 (California Gas & Utilities 2010).

Regulatory Setting

State

California Water Code Section 10910 (Senate Bill 610)

California Water Code Section 10910 requires cities and counties to request that water purveyors prepare water supply assessments for certain projects (as defined in Water Code Section 10912) subject to CEQA. In accordance with Section 10912 (a)(5) of the California Water Code, a proposed industrial, manufacturing, processing plant, or industrial park planned to employ more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area must have a water supply assessment included in its EIR. The primary issue for the water supply assessment to determine is whether the projected supply for the next 20 years—based on normal, single dry, and multiple dry water years—would meet the demand projected for a proposed project plus the existing and planned future uses, including agricultural and manufacturing uses. A water supply assessment was prepared for the proposed project and is included in Appendix J.

AB 939—Solid Waste

California requires that all jurisdictions achieve compliance with Assembly Bill (AB) 939, a state mandate that requires reaching 50% diversion of solid waste from landfills by 2000. AB 939 further

requires each city to conduct a solid waste generation study and to prepare annually a source reduction and recycling element to describe how it will reach its goals.

In response to this legislation, in 1990, the City adopted a comprehensive source reduction and recycling element and a household hazardous waste element. These elements quantified and characterized the City's solid waste, evaluated source reduction strategies, addressed household hazardous waste collection, and described funding for programs.

Regional Water Quality Control Board

The Santa Ana Regional Water Quality Control Board (RWQCB) regulates waste discharges to land that could affect water quality, including both groundwater and surface water quality. Waste discharges that reach groundwater are regulated to protect both groundwater and any surface water in continuity with groundwater. Refer to Section 4.2.8, *Hydrology and Water Quality*, for further discussion of this agency's role and oversight responsibilities pertaining to protection of the quality of waters of the state, as required by the federal Clean Water Act and the Porter-Cologne Water Quality Control Act.

California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates privately owned electric, telecommunications, natural gas, water, and transportation companies, in addition to household goods movers and rail safety. CPUC's Energy Division works in setting electric rates, protecting consumers, and promoting energy efficiency, electric system reliability, and utility financial integrity. CPUC regulates natural gas local distribution facilities and services, natural gas procurement, intrastate pipelines, and intrastate production and gathering. It works to provide opportunities for competition when in the interest of consumers, takes the lead in environmental review of natural gas-related projects, recognizes the growing interaction of electric and gas markets, and monitors gas energy efficiency and other public purpose programs.

California Energy Commission

The California Energy Commission (CEC) is the state's principal energy policy and planning organization. CEC has five major responsibilities: (1) forecasting future energy needs and maintaining historical energy data; (2) licensing 50-megawatt or larger thermal power plants; (3) promoting energy efficiency through appliance and building standards; (4) developing energy technologies and supporting renewable energy; and (5) planning for and directing state response to energy emergencies. CEC has been directed by the state legislature to direct energy research programs and renewable energy programs in the wake of electricity industry restructuring or deregulation.

Appendix F of the California Environmental Quality Act (CEQA) Guidelines

CEQA Guidelines Appendix F, Energy Conservation, states that EIRs are required to include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. In addition, Appendix F suggests the following potential types of mitigation be considered in the EIR for reduction of energy consumption:

- Measures to reduce wasteful, inefficient, and unnecessary consumption of energy during construction, operation, and maintenance of the project;

- The siting and orientation of buildings and structures to minimize energy consumption, including transportation energy;
- Measures for reducing peak energy demand;
- Incorporation of alternative fuels, particularly renewable ones, or energy systems; and
- Incorporation of recycling of nonrenewable resources.

In addition to the regulations above, Section 4.2.6, *Greenhouse Gas Emissions*, contains energy and water conservation regulations, including but not limited to the California Green Building Code (CCR, Title 24, Part II) that includes the 2013 Energy Code (Title 24, part 6).

Local

Fontana General Plan Public Facilities, Services, and Infrastructure Element

The Public Facilities, Services, and Infrastructure Element of the General Plan covers two major areas: (1) Public Facilities and Services and (2) Infrastructure. Infrastructure addresses the physical systems that sustain a community, including water, sewers, flood control, and power. Goals related to infrastructure involve planning to ensure the timely, logical, and cost-effective development of infrastructure facilities in Fontana; adequate management of wastewater, solid waste, and flood control and drainage systems; and the provision of public utilities at a reasonable cost.

City of Fontana Municipal Code

Chapter 23, Sewers and Sewage Disposal, provides rules and regulations for the construction and use of sanitary sewer facilities installed, altered, or repaired within the city after July 3, 1963. Section 23-7, Pollution of Waters, states that it shall be unlawful to discharge into any stream or watercourse any sewage, wastes, or other polluted waters, except where suitable treatment has been provided in accordance with the provisions of this chapter.

Chapter 24, Solid Waste and Recycling, provides standards for solid waste recycling, nuisance, and vector control, self-hauling, storage and accumulation, and container maintenance.

Chapter 27, Utilities, provides requirements for utility undergrounding and utility underground districts.

Chapter 31, Water Service, provides rules, regulations, and procedures relating to water service, water supply, and water billing.

Refer also to Section 4.2.6, *Greenhouse Gas Emissions*, which contains the San Bernardino County Regional Greenhouse Gas Reduction Plan, which includes methods for use of solar, water efficiency, and conservation.

Impact Analysis

Methodology

The potential impacts associated with the proposed project are evaluated on a quantitative and qualitative basis through coordination with respective service agencies. Significant impacts would occur if the project would adversely affect the ability of service agencies to provide adequate service to the project area or other existing service areas and if new facilities would be required as a result

of the project, the construction of which could cause significant environmental effects. These impacts are assessed through significance criteria from the State CEQA Guidelines, Appendix G. Several technical studies for water and sewer services examining the proposed project in relation to currently available and planned utility capacity were prepared (see Appendices J and M). In other cases, local agencies were contacted in order to gather information on the proposed project's potential impacts on utility systems and services maintained by those agencies or their private contractors. Additionally, several utility service providers have issued Will Serve letters verifying that those companies will serve the proposed WVLCSF. These various studies, communications with agencies, and Will Serve letters provide the basis for the analysis below and are referenced accordingly. Fuel usage estimated for project traffic was calculated by taking the total daily vehicle miles and the average speed for vehicle travel and converting that into fuel consumption.

Thresholds of Significance

Criteria for determining the significance of impacts related to utilities are based on criteria contained in Appendix G of the State CEQA Guidelines. The proposed project could have a significant impact on the environment if it would:

- UTIL-1** Exceed wastewater treatment requirements of the applicable regional water quality control board.
- UTIL-2** Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- UTIL-3** Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- UTIL-4** Have insufficient water supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements.
- UTIL-5** Result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- UTIL-6** Not comply with federal, state, and local statutes and regulations related to solid waste.
- UTIL-7** Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.
- UTIL-8** Result in the use of large amounts of energy or use energy in a wasteful manner during project operations that would in turn require or result in the construction of new energy utility service or system infrastructure or the expansion of existing infrastructure, the construction of which could cause significant environmental effects.¹
- UTIL-9** Result in the use of large amounts of energy or use energy in a wasteful manner during project construction.

¹ In addition to the Appendix G CEQA thresholds, this threshold was used to evaluate the effects that energy and other utilities not previously covered in the other thresholds could experience as a result the project.

UTIL-10 Use vehicular fuel in a wasteful manner from vehicle trips associated with proposed project operations.

Project Design Features

The following public services and utilities-related project design features, which include specific plan requirements and standard requirements, would prevent or reduce potentially significant impacts.

Specific Plan Requirements

SP-GG-1: Incorporate Water Conservation and Efficient Measures for Landscaping. The project will devise a comprehensive water conservation strategy in compliance with the California Green Building Standards Code (CALGreen) Water Efficiency Measures and Leadership in Energy and Environmental Design (LEED) Neighborhood Development standards to reduce water use during project operation. The strategy will include the following, plus other innovative measures that may be appropriate.

- Install drought-tolerant plants for landscaping.
- Use reclaimed water for landscape irrigation within the project where reasonably available. Install the infrastructure to deliver and use reclaimed water, on the property frontage only.
- Install water-efficient irrigation systems, such as weather-based and soil-moisture-based irrigation controllers and sensors, for landscaping according to the California Department of Water Resources Model Efficient Landscape Ordinance.
- Ensure that all landscape and irrigation measures are in compliance with the City's Municipal Code Article IV, Landscaping and Water Conservation.

SP-GG-2: Design Building Components to Meet 2013 Title 24 Standards. The project will design building shells and building components, such as windows, roof systems and electrical systems, to meet 2013 Title 24 standards, which are 30% more stringent than the 2008 Title 24 standards for nonresidential buildings.

SP-GG-3: Design CALGreen-Compliant Buildings. Buildings will be designed to provide CALGreen standards with LEED features for potential certification and will employ energy and water conservation measures in accordance with such standards. This includes design considerations related to the building envelope, heating, ventilating, and air conditioning (HVAC), lighting, and power systems.

SP-GG-4: Provide Electrical Loading Docks. Electrical outlets will be provided in loading dock areas to provide power for trucks when refrigeration is needed. This allows trucks with refrigerated cargo to keep their cargo cool without using their engines, minimizing idling time to reduce air emissions and use of fuel on site.

SP-GG-5: Utilize Energy-Efficient Lighting. The project will utilize energy-efficient interior and exterior lighting, including light-emitting diodes (LED), T5 and T8 fluorescent lamps, or other lighting that is at least as efficient. Lighting will incorporate motion sensors that turn them off when not in use.

SP-GG-6: Select Efficient Refrigerants and HVAC Systems. Refrigerants and HVAC equipment will be selected to minimize or eliminate the emission of compounds that contribute to ozone depletion

and global warming. Ventilation and HVAC systems will be designed to meet or exceed the minimum outdoor air ventilation rates described in the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHREA) standards and/or per California Title 24 requirements.

SP-GG-7: Provide Landscaped Parking Lots. Surface parking lots will be well landscaped to reduce the heat island effect. Parking lot landscaping will be planted with 15-gallon trees, one per every four parking stalls. The trees may be clustered, but a minimum of one cluster will be provided for each 100 feet of parking row. Trees will be selected and placed to provide canopy and shade for the parking lots.

SP-TR-1: Prepare a Transportation Management Association (TMA). A TMA, a member-controlled organization that provides transportation services in a particular area, will be formed by the applicant or its designee to guide project traffic to the regional transportation network and away from residential streets. The applicant or its designee will submit the TMA prior to issuance of the certificate of occupancy for the first building. The TMA will be required to:

- Create a tenant-based system and set of regulations for monitoring and providing feedback for vehicles, specifically including truck traffic, entering and exiting the development.
- Include site plans for individual buildings with driveway channelization and truck route designation.

SP-UT-1: Ensure Access to Utility Easements. Access to utility easements on site will remain unimpeded and no disturbance will occur within the existing easements, with the exception of improvements to facilitate access. A 50-foot area surrounding suspension towers will be kept clear. Coordination with the appropriate utility agencies will be required for any improvements to utility easements or structures on or off site as a result of project implementation.

SP-UT-2: Incorporate Water-Efficient Building Designs. The project will incorporate water-efficient building designs, fixtures, and appliances that meet Leadership in Energy and Environmental Design (LEED) Silver certification standards for water efficiency.

SP-UT-3: Incorporate Recycling Program. The project will be designed to incorporate an operational recycling program that includes paper, cardboard, glass, plastic, and metals.

SP-UT-4: Comply with Fontana Sewer Master Plan. Sewer/wastewater facilities will be designed in accordance with the City of Fontana Sewer Master Plan.

SP-UT-5: Install Sewer/Wastewater Facilities. Sewer/wastewater facilities will be installed in accordance with specifications of the California Department of Health Services and San Bernardino County Health Department.

SP-UT-6: Comply with West Valley Water District (WVWD) Water Master Plan. Domestic water pipe alignments and sizes will be designed in accordance with design criteria outlined in WVWD's 2012 Water Master Plan.

Standard Requirements

SR-G-1: Develop and Implement an Erosion Control Plan. The applicant or developer will prepare and submit to the City Department of Engineering for approval 30 days prior to construction an Erosion Control Plan. (Note: The Erosion Control Plan may be part of the same document as the Stormwater Pollution Prevention Plan.) The Erosion Control Plan will identify the

locations of all soil-disturbing activities (including but not limited to sites involving new development or roadways), the locations of all drainage structures that will be directly affected by soil-disturbing activities, and the locations and types of all Best Management Practices (BMPs) that will be installed. The plan will also include a proposed schedule for the implementation and maintenance of erosion control measures and a description of the erosion control practices, including appropriate design details. As part of the plan, the construction contractor will maintain a logbook of the erosion-prevention effectiveness of the BMPs, as well as a description of any post-storm modifications to those BMPs.

SR-GG-1: Provide Waste Reduction and Recycling Education. The property operator will distribute readily available information provided by the City for employee education about reducing waste and available recycling services.

SR-UT-1: Comply with City of Fontana Municipal Code, Chapter 27, Article III. This code requires undergrounding of utilities as part of new development, including the WVLCSP, involving new/additional utility connections to the project site.

SR-UT-2: Provide Reliable Water Supply. Conditions for Reliable Water Supply, included in the Water Supply Assessment (WSA) prepared for the proposed WVLCSP (see Appendix J), include the following:

- The project will install water-efficient devices and landscaping according to the requirements of West Valley Water District's (WVWD's) water use efficiency ordinance(s), if any, at the time of construction of the project to reduce the impact of this project on WVWD's water supplies.
- Prior to project construction, the project developer is required to meet with WVWD staff to develop a plan of service. The plan of service will include, but not be limited to, water and recycled water requirements to serve the project. If there is a change in the circumstances detailed in the water supply assessment, WVWD has the option to suspend the approval of the WSA.
- This project is not near any existing recycled water facilities; however, in the future it may be possible to serve this project with recycled water. WVWD policy recognizes recycled water as a preferred source of water supply for all non-potable water demands, including, without limitation, irrigation of recreation areas, greenbelts, open space, common areas, commercial landscaping and supply for aesthetic impoundment, or other water features. The majority of landscaped areas in this project will be designed to use recycled water to the greatest extent possible. According to WVWD requirements, the project may be conditioned to construct a recycled water system physically separated from the potable water system². This system will need to be constructed to WVWD's recycled water standards. The project may also be conditioned to construct off-site recycled water facilities. WVWD will make a determination on requirements for recycled water use and facilities during the design phase of the project.
- The WSA will be reviewed every 3 years until the project begins construction. The property owner shall notify WVWD when construction has begun. The review will ensure that the information included in the project WSA remains accurate and that no significant changes to the project or WVWD's water supply have occurred. If the property owner has not contacted WVWD

² Because such a system would be constructed in the same streets as the other water and wastewater lines being constructed for the proposed project, construction of recycled water lines would not result in any additional environmental impacts.

within 3 years of approval of the WSA, it will be assumed that the proposed project no longer requires the estimated water demand calculated, the demand for this project will not be considered in assessments for future projects, and the assessment provided by the WSA will become invalid.

- Based on present information, WVWD has determined that it will be able to provide adequate water supplies to meet the potable water demand for the WVLCSP project in addition to existing and future uses. Water service will be guaranteed by the satisfaction of all rules and regulations of WVWD. WVWD reserves the right to revisit the water supply assessment in the event of a potential increase in water demand to the project.
- The WSA is not a commitment to serve the project, but a review of WVWD's supplies based on present information available.

Impacts and Mitigation

Impact UTIL-1. Exceed wastewater treatment requirements of the applicable regional water quality control board

The proposed project would be fully compliant with existing wastewater treatment requirements of the Santa Ana RWQCB, pursuant to the federal Clean Water Act. Additionally, as the project would involve warehouse distribution facilities and open space, the proposed light industrial uses would not generate the release of industrial water discharges or require special permits related to other types industrial uses, such as manufacturing or production uses.

The proposed project would be connected to the City of Rialto sewer system. Sewage generated by the proposed project would be processed and sanitized at the Rialto WWTP. As described previously and analyzed in more detail below in Impact UTIL-5, the Rialto WWTP has sufficient capacity to process wastewater conveyed from the project site.

As discussed in more detail below in Impact UTIL-2, sewer lines developed as part of the project would meet the design requirements set forth by the City of Fontana Sewer Master Plan. Therefore, with sufficient capacity to treat wastewater at the Rialto WWTP and appropriate design and sizing of all conveyance features, implementation of the proposed project would not violate wastewater treatment requirements of the Santa Ana RWQCB. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTIL-2. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects

The proposed project is in an area of Fontana for which wastewater treatment service is provided by the City of Rialto in accordance with the Extraterritorial Sewer Services Agreement between the Cities of Fontana and Rialto.

Development under the proposed Specific Plan would include on- and off-site sewer facility upgrades to adequately provide for wastewater service to the project site. Wastewater would flow from the Specific Plan area through a new gravity main and lift station that would be located in the rights-of-way of Alder Avenue, Locust Avenue, and Armstrong Road. The wastewater from the proposed WVLCSP area would gravity flow through 8-inch sewers to the intersection of Locust Avenue and 11th Street and continue to gravity flow through a 15-inch sewer eastward to a new lift station near the northwestern corner of 11th Street and Linden Avenue. These facilities would be constructed as part of the proposed project. The lift station would convey wastewater northerly along Linden Avenue to discharge into an existing 27-inch gravity main at the intersection of Linden Avenue and Santa Ana Avenue to deliver wastewater to the Rialto system for processing (Appendix M: Thienes Engineering 2013b; City of Rialto 2013). Sewer lines developed as part of the proposed project would be designed to meet the requirements set forth by the City of Fontana Sewer Master Plan (refer to **Specific Plan Requirement SP-UT-4**). Wastewater facilities would be installed in accordance with the requirements and specifications of the State Department of Health Services and the San Bernardino County Health Department (refer to **Specific Plan Requirement SP-UT-5**). The project would pay any connection fees and obtain any required permits in order to connect to existing wastewater infrastructure. As addressed below in Impact UTIL-5, existing public wastewater treatment facilities have the capacity to accommodate sewage generated by the project.

Water to serve the proposed project would be provided by WVWD. As stated previously, the project site is within WVWD's Zone 2 and Zone 3. As addressed below in Impact UTIL-4, WVWD's existing entitlements and resources would be sufficient to serve the project. Water storage for the project would be provided by WVWD Reservoirs R2-2 and R2-3 in Zone 2, and Reservoir R2-3 in Zone 3. The project would be responsible for providing connections to existing WVWD facilities. Water pipelines would be constructed within the project's proposed extensions of Alder Avenue, Armstrong Avenue, and Locust Avenue and therefore would not result in any additional environmental impacts. An existing 12-inch water main that crosses the site would be relocated. Water pipeline construction would also serve to supply sufficient water flows to fire hydrants placed in accordance with Fontana Fire Protection District standards. The proposed project would also include the installation of reclaimed pipe for future use; however, reclaimed water is not currently available in the area, and the reclaimed water system would remain dry until non-potable water becomes available. Pipe alignments and sizes would satisfy design criteria outlined in WVWD's 2012 Water Master Plan (Appendix J: Thienes Engineering 2013a). Refer to **Specific Plan Requirement SP-UT-6**. The project would pay any connection fees and obtain any required permits in order to connect to existing WVWD infrastructure.

The proposed project would not require or result in the Cities of Rialto or Fontana to develop new wastewater treatment facilities that could cause significant environmental effects, nor would the project require WVWD to develop new water infrastructure as confirmed in the Will Serve letters submitted in response to the applicant's request for a service review for the project. Alterations to the infrastructure of these water and wastewater utility systems would be limited to the proposed project's development of conveyance features and a sewer lift station connecting to existing infrastructure. All off-site facilities would be located within existing street rights-of-way that involve previous surface and subsurface ground disturbance and construction activities, which would preclude new significant environmental effects. In addition, as discussed in Section 4.2.14, *Transportation and Traffic*, implementation of the Construction Management Plan required by **Mitigation Measure TRA-1a** would reduce potential impacts related to road closures caused by construction to a less-than-significant level by ensuring that precaution is used during construction,

including detours, a flag person, and other similar safety measures to ensure that construction operations are performed in a safe and responsible manner. Impacts resulting from the construction of these utility connections and the proposed sewer lift station would therefore be less than significant.

New on-site water and wastewater infrastructure that would be installed for the proposed project would result in physical alteration of the existing ground areas where the conveyance infrastructure would be installed, potentially causing soil erosion and impacts on sensitive resources. The on-site physical impacts of infrastructure construction were analyzed in the applicable resource analysis sections within Chapter 4, *Environmental Analysis of the Proposed Project*. These sections discuss impacts from construction activities that could result in unearthing unknown cultural resources (Section 4.2.4, *Cultural Resources*) or impacts from erosion and water quality (Section 4.2.8, *Hydrology and Water Quality*). The proposed new lift station that would be installed near the northwestern corner of 11th Street and Linden Avenue would be within the boundaries of Lot A (detention basin area) of the proposed Specific Plan project site. Lot A was surveyed for sensitive resources as part of the technical studies conducted for the WVLCSP and evaluated in this EIR. Installation of the proposed lift station was determined not to have any significant impacts on cultural resources, biological resources, and hydrology and water quality (refer to those topical sections of this Recirculated Draft EIR).

Additionally, temporary impacts associated with the operation of construction equipment and added worker vehicle trips would contribute air and greenhouse gas emissions (Section 4.2.2, *Air Quality*, and Section 4.2.6, *Greenhouse Gas Emissions*), noise (Section 4.2.10, *Noise*), and vehicle trips to the existing street network (Section 4.2.14, *Transportation and Traffic*), which have been analyzed in each of these sections, and appropriate mitigation measures have been identified.

Specific Plan Requirements and Standard Requirement

The applicant shall implement the following specific plan requirements and standard requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **SP-UT-4:** Comply with Fontana Sewer Master Plan.
- **SP-UT-5:** Install Sewer/Wastewater Facilities.
- **SP-UT-6:** Comply with West Valley Water District Water Master Plan.
- **SR-G-1:** Develop and Implement an Erosion Control Plan.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTIL-3. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects

Developed land uses in Fontana are generally served by municipal storm drainage facilities consisting of curbs, gutters, inlets, piping, detention basins, outfalls, and related facilities. The

WVLCSP is within the Plan 3-4 area of the City's Master Plan of Drainage; however, neither the City nor SBCFCD have existing facilities, easements, or rights-of-way in the Project 3-4 area.

Runoff from the Jurupa Hills and other on-site and off-site areas west of Locust Avenue currently drains onto the project site and then flows to Locust Avenue. Off-site runoff from east of Armstrong Road typically drains to Locust Avenue, where it generally enters the existing detention basin at the northeastern corner of Locust Avenue and 11th Street (Lot A of the proposed Specific Plan). The proposed project would be designed to detain its drainage on site (refer to **Regulatory Requirements RR-HW-2** and **RR-HW-4** in Section 4.2.8, *Hydrology*), such that proposed detention basins on site would reduce 100-year peak flow to less than 90% of the existing 25-year conditions (Appendix J). Most of the drainage would be detained in an existing stormwater detention basin north of 11th Street (Lot A), which would be improved. Stormwater runoff produced by the project would be intercepted by a storm drain system consisting of a series of stormwater basins and pipes that drain to the existing stormwater detention basin. The remaining drainage would be retained in smaller basins adjacent to proposed buildings 1, 3, 5, and 7. No additional stormwater drainage beyond runoff from the currently undeveloped project site is expected to occur. The newly constructed stormwater basins would be designed as both retention and water quality basins. A Storm Water Quality Management Plan designed for the project (Appendix J: Thienes Engineering 2013c) details best management practices (BMPs) for source control, treatment control, and design criteria, as well as operations and maintenance and inspection requirements. The proposed project's stormwater improvements would not require connections to existing public stormwater drainage infrastructure because all stormwater would be retained on site (see Section 4.2.8, *Hydrology and Water Quality*). Therefore, the proposed project would have no impact on existing public stormwater drainage systems.

Stormwater drainage facilities installed on the site by the project developer may result in construction impacts. Each of these impacts is considered in the applicable resource analysis sections of Chapter 4, *Environmental Analysis of the Proposed Project*, as discussed in Impact UTIL-2. Overall, impacts involving the construction of new drainage basins on the project site would be less than significant with drainage contained on site.

Specific Plan Requirement and Regulatory Requirement

The applicant shall implement the following specific plan requirement and regulatory requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **RR-HW-1:** Prepare and Implement a Stormwater Pollution Prevention Program.
- **RR-HW-4:** Include Best Management Practices for Water Quality Management.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTIL-4. Have insufficient water supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements

Implementation of the WVLCSP is projected to require 292 gpm of water supplies, or 0.84 mgd, based on a generation factor of 1.39 gpm/acre doubled for light industrial development, as specified in the WSA prepared for the project and adopted by the WVWD Board on November 21, 2013 (Appendix J) for approximately 210 acres of potential industrial development. According to Appendix J, the existing entitlements and resources of WVWD would be sufficient to serve the proposed project. WVWD's 2012 Water Master Plan has accounted for the development of the proposed project within its water demand projections. WVWD calculates system-wide production at 42.3 mgd in July 2010. It estimates potential production capacity from existing entitlements to be 122.6 mgd, and 83.1 mgd during extended drought periods. As of 2010–2011, average daily demand was 19.59 mgd and peak daily demand was 33.29 mgd. Ultimate average daily demand is expected to reach as high as 49.05 mgd, and ultimate peak daily demand is expected to reach 83.39. Based on these projections, the WVWD would maintain supplies adequate to meet average daily demand. Ultimate demand would exceed potential supply only during extended drought periods, and only by 380,000 gallons per day (WVWD 2012).

Section 10912 (a)(5) of the California Water Code stipulates that a water supply assessment must be prepared for "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 square feet of floor area." Accordingly, the *Water Supply Assessment for the West Valley Logistics Center* was prepared for the proposed project in 2013 and is provided in Appendix J. In that document, WVWD demonstrated that water supplies would be available during normal, single dry, and multiple dry years within a 20-year projection that would meet the projected demand associated with the proposed development, in addition to existing and planned future uses. The project has been accounted for within WVWD's water projections and is also included within and consistent with the 2012 Master Plan. The WSA specified requirements for a reliable water supply to be provided for the proposed WVLCSP; these requirements are listed in **Standard Requirement SR-UT-2**. With adherence to **Standard Requirement SR-UT-2**, WVWD determined that there would be no foreseeable impacts from the proposed project on the availability of water resources for other uses within WVWD's public water system service area that are not currently receiving water from WVWD's water system (Appendix J). Sufficient water supplies are available to serve the project from existing entitlements and resources. Therefore, the proposed project would have a less than significant impact on water supply entitlements and resources with adherence to the requirements included in the WSA (**Standard Requirement SR-UT-2**).

Standard Requirement

The applicant shall implement the following standard requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **SR-UT-2:** Provide Reliable Water Supply.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTIL-5. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments

Wastewater generated within the project site would be conveyed through existing sanitary sewer lines operated by the City of Fontana to the City of Rialto WWTP for treatment. The Rialto WWTP is operated in compliance with the waste discharge requirements set forth by the RWQCB for that treatment facility. This arrangement is set forth in the Extraterritorial Sewer Service Agreement between the two cities. This agreement provides for the City of Fontana to convey up to 1.6 mgd of wastewater from the eastern and southeastern portions of the City to Rialto's sewage system for treatment at the Rialto WWTP. Currently, the City of Fontana discharges approximately 310,000 gpd (approximately 19% of allowed flow under the agreement) (Mata pers. comm.).

The project site is presently vacant and undeveloped. During construction, portable toilets would be provided at the site for use by construction workers. Therefore, wastewater entering the Rialto WWTP would not be generated at the project site during construction, and no impacts related to wastewater would occur. New wastewater would be generated upon completion of the project's proposed warehouse buildings. Based on wastewater generation estimated in the City of Fontana Sewer Master Plan of 2000, "planned industrial," "general industrial," and "industrial specific plan" developments are expected to generate 3,000 gpd per acre of development (Appendix M: Thienes Engineering Inc. 2013b). The master plan does not specify a rate for "warehouse" development. Because "office professional" uses generate only 1,500 gpd per acre of development, the higher industrial generation rate of 3,000 gpd per acre was used to estimate sewage generation for the entire project site. Because the 3,000 gpd per acre rate is for industrial uses that are more labor intensive than warehousing and contain wastewater-generating industrial processes not found in warehouse development, applying the 3,000 gpd per acre wastewater generation rate to warehouse development would yield a conservative analysis.

Buildings constructed as part of the proposed project would occupy less than the 212 acres contained within Parcels 1 through 7, and 209 acres was therefore used as the development area for the warehouse distribution facility uses because open space parcels within the project site would not generate wastewater. Assuming the project generates 3,000 gpd per acre of industrial development, the proposed project is expected to generate approximately 627,000 gpd of wastewater at buildout. This amount added to the 310,000 gpd of wastewater currently transmitted from Fontana to the Rialto WWTP would total 937,000 gpd. This is well within the allowed 1.6 mgd maximum flow specified in the Extraterritorial Sewer Service Agreement between the Cities of Fontana and Rialto. The Rialto WWTP has a capacity of over 11 mgd, and average flows currently stand at approximately 7 mgd. Even though the additional demand for wastewater services is more than double the current usage, the Cities of Rialto and Fontana would have sufficient capacity to accommodate the wastewater generated by the project in addition to existing commitments. Therefore, impacts on wastewater treatment capacity resulting from the proposed project would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTIL-6. Not comply with federal, state, and local statutes and regulations related to solid waste

The proposed project would comply with all mandated federal, state, and local statutes related to solid waste, including AB 939. As such, no impacts would occur as a result of the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impacts.

Impact UTIL-7. Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs

According to the report titled *Contractor's Report to the Board, Targeted Statewide Waste Characterization Study: Waste Disposal and Diversion Findings for Selected Industry Groups* (Cascadia Consulting Group 2006), durable wholesale goods distributors (warehousing uses) on average generate 4,719 pounds of waste material per employee per year. Of the total waste generation, approximately 48%, or 2,259 pounds per employee per year, is diverted from entering landfills and recycled or reused. If projections for the project involve up to 2,907 new employees, the total amount of waste to be generated would be 13,718,133 pounds per year (6,223 tons per year). Assuming a 48% diversion rate, the project is projected to generate 7,151,220 pounds per year (3,244 tons per year) of solid waste that would enter a landfill. Assuming solid waste is generated in a 5-day workweek, approximately 250 days a year, a total of 13 tons per day of solid waste generated at the project site would enter a landfill.

Solid waste generated by the proposed project would be hauled by Burrtec Waste Industries, which operates under a franchise agreement with the City of Fontana. Burrtec Waste Industries would haul project waste to the Mid-Valley Sanitary Landfill, a County facility operated under contract by Athens Services. This landfill has a 408-acre permitted area of disposal with a remaining capacity of approximately 69.3 million cubic yards. Its maximum permitted throughput is 7,500 tpd. From April to June 2013, the Mid-Valley Sanitary Landfill received approximately 1,500 to 1,600 tpd of solid waste. Under current plans, Athens Services would import up to approximately 2,200 tpd of solid waste from outside the County to other waste management facilities within the County (Mata pers. comm.; Meeka pers. comm.). Assuming a current average throughput rate of 1,600 tpd, the Mid-Valley Sanitary Landfill would receive approximately 3,800 tpd of solid waste, with Athens Services disposing of a projected high of 2,200 tpd of solid waste imports to the County. This would leave the Mid-Valley facility with available permitted throughput capacity of approximately 3,700 tpd, nearly half its 7,500-tpd maximum permitted throughput. The Mid-Valley facility has ample capacity to accommodate the 9.8-tpd average of new solid waste generated by the project. In addition, the proposed project would include an on-site recycling program for the warehouse uses (**Specific Plan Requirement SP-UT-3**) and would be required to meet **Standard Requirement SR-GG-1**, solid waste and recycling education actions. Therefore, impacts related to sufficient landfill capacity as a result of the proposed project would be less than significant.

Specific Plan Requirement and Standard Requirement

The applicant shall implement the following specific plan requirement and standard requirement, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **SP-UT-3:** Incorporate Recycling Program.
- **SR-GG-1:** Provide Waste Reduction and Recycling Education.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTIL-8. Result in the use of large amounts of energy or use energy in a wasteful manner during project operations that would in turn require or result in the construction of new energy utility service or system infrastructure or the expansion of existing infrastructure, the construction of which could cause significant environmental effects

Implementation of the WVLCSP for a warehouse distribution development would result in increases in demand for electricity and natural gas as compared to the currently undeveloped project site, which does not have any energy-consuming uses.

Appendix F of the State CEQA Guidelines provides guidance for assessing energy impacts of projects. The appendix provides three goals:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on natural gas and oil; and
- Increasing reliance on renewable energy sources.

Consistent with Appendix F goals, the significance criteria used to evaluate environmental impacts in this analysis focus on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. Consequently, the proposed warehouse distribution project would have a significant effect on the environment if it were to:

- Use large amounts of energy or fuel, or consume energy or fuel in a wasteful manner during construction;
- Result in the construction or expansion of energy infrastructure that would cause significant environmental effects;
- Use large amounts of energy or use energy in a wasteful manner within proposed project buildings or other on-site operations (stationary source consumption); or
- Use fuel in a wasteful manner as the result of vehicle trips associated with proposed development (mobile source consumption). This topic is addressed under Impact UTIL-10.

Energy Consumption

Operational use of energy includes the heating, cooling, and lighting of buildings; water heating; operation of electrical systems and plug-in appliances within buildings; parking lot and outdoor lighting; and the transport of electricity, natural gas, and water to the areas where they would be

consumed. The proposed 3,473,690 square feet of warehouse development at buildout would consume approximately 22,315 megawatt hours per year of electricity, and 21,820 thousand British thermal units (MBTU) per year (21,392,157 cubic feet) of natural gas³.

Natural gas and electricity infrastructure are available to the proposed project, and both SoCalGas and SCE have issued Will Serve letters for natural gas and electricity service to the proposed project stating that they have infrastructure in the project vicinity (Alamillo 2013; Fiedler 2013; see Appendix M). Both companies have also stated that they each have sufficient capacity to serve the proposed project. Even though the proposed project would increase the use of electricity and natural gas resources, the proposed project would not increase demand such that SoCalGas and SCE would need to plan for new electricity or natural gas facilities, the construction of which could cause significant environmental effects. Furthermore, with **Specific Plan Requirements SP-GG-1** through **SP-GG-7** and **SP-UT-2**, the project proposes sustainability measures to reduce the amount of energy consumed by the project so that the project would not result in a wasteful, inefficient, and unnecessary consumption of energy, including: building design and fixtures to be compliant with or exceeding state-required Title 24 energy standards; building design to consider the interactions of building envelope, HVAC, lighting, and power systems as they affect energy performance; and ventilation and HVAC systems to be designed to meet or exceed the minimum outdoor air ventilation rates described in the ASHREA standards and/or per California Title 24 requirements (see Section 3.4.5, *Sustainability Features*). Mitigation prescribed in Section 4.2.2, *Air Quality*, would reduce energy consumption, including **Mitigation Measure AQ-10** (Require Equipment to Turn Off When Not in Use), **Mitigation Measure AQ-11** (EPA Smartway Features), and **Mitigation Measure AQ-12** (Energy Efficiency in Vendor Trucks). In addition, **Mitigation Measure GHG-2** prescribed in Section 4.2.6, *Greenhouse Gas Emissions*, requires the incorporation of energy efficiency measures in new warehouse buildings of the proposed project.

Therefore, with implementation of energy reduction measures in the WVLCSP and adherence to standard requirements, the project would not generate significant physical impacts for new energy utility services and infrastructure.

Specific Plan Requirements

The applicant shall implement the following specific plan requirements, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **SP-GG-1:** Incorporate Water Conservation and Efficient Measures for Landscaping.
- **SP-GG-2:** Design Building Components to Meet 2013 Title 24 Standards.
- **SP-GG-3:** Design CALGreen-Compliant Buildings.
- **SP-GG-4:** Provide Electrical Loading Docks.
- **SP-GG-5:** Utilize Energy-Efficient Lighting.
- **SP-GG-6:** Select Efficient Refrigerants and HVAC Systems.
- **SP-GG-7:** Provide Landscaped Parking Lots.
- **SP-UT-2:** Incorporate Water-Efficient Building Designs.

³ LSA Associates, Inc., 2014.

Mitigation Measures

Implement **Mitigation Measures AQ-10, AQ-11, AQ-12, and GHG-2.**

Residual Impacts

Impacts would be less than significant.

Impact UTIL-9. Result in the use of large amounts of energy or use energy in a wasteful manner during project construction.

Construction of the proposed warehouse uses would involve the use of electricity for a variety of construction activities, including but not limited to operation of hand tools, air compressors, temporary construction offices, security lighting, diesel fuel for grading and other construction equipment, delivery trucks and earth hauling trucks, and gasoline for construction worker commute vehicles. If soil remediation is required (refer to discussion in Section 4.2.7, *Hazards and Hazardous Materials*), energy would also be required to conduct that work.

Construction of energy infrastructure needed to serve the proposed on-site industrial development would also require use of fuels and electricity to power construction equipment and vehicles. Installation of proposed electrical and natural gas lines to connect the project development with existing utility lines would correspond with construction phasing of project buildings and the necessary roadway circulation system (connecting roadways to the site). Final utility plans would be reviewed for approval by Southern California Edison and SoCalGas during plan review. The proposed project's utility designs would be reviewed for adherence to the required energy efficiency measures discussed previously.

Construction activities would result in wasteful, inefficient, or unnecessary use of energy if: (1) the construction equipment used is old or not maintained or is left to idle when not in use; (2) travel routes are not planned to minimize vehicle miles traveled; or (3) excess lighting or water is used during construction.

Because typical construction techniques are proposed, project site construction would not be expected to result in a demand for electricity and fuels on a per-unit-of-development basis in excess of energy use by other development projects in the region. In addition, demand for construction-related electricity and fuels would be spread out over the life of the construction phases of the project. Nonetheless, consumption of energy and fuels for construction of 3,473,690 square feet of warehouse development would be significant unless construction practices are in place to ensure efficient energy consumption.

If, in fact, soil remediation is required, additional energy and fuel would be required for the site remediation; however, the energy consumed to return the site to a safe and healthy condition is not considered to be wasteful, but rather a necessary and mandatory expenditure.

Mitigation required by the air quality (Section 4.2.2, *Air Quality*) and greenhouse gas emissions (Section 4.2.6, *Greenhouse Gas Emissions*) analyses of the proposed project would reduce energy usage and fuel consumption from construction activities. These mitigation measures include **Mitigation Measure AQ-2** (Tier 3 Construction Equipment), **Mitigation Measure AQ-4** (Alternative Fuel Technology Construction Equipment), **Mitigation Measure AQ-5** (Proper Maintenance of Construction Equipment), **Mitigation Measure AQ-6** (Submission of Construction Plans, with proposed schedule and projected equipment use and idling limitations), **Mitigation**

Measure AQ-7 (Construction Equipment Off When Not in Use), **Mitigation Measure AQ-8** (Encourage Ridesharing and Transit Incentives), **Mitigation Measure AQ-9** (Construction Contractors to Use Particulate Matter Traps), and **Mitigation Measure GHG-1** (Incorporate More Energy-Efficient Measures Related to Construction and Building Materials). Further reduction of construction energy use would be achieved by implementing the requirements of **Mitigation Measure UT-1** (Efficient Use of Energy During Construction), prescribed below.

Mitigation Measures

Mitigation Measures AQ-2, AQ-4 through AQ-9, and GHG-1, listed above and specified in Sections 4.2.2, *Air Quality*, and 4.2.6, *Greenhouse Gas Emissions*.

Mitigation Measure UT-1: Efficient Use of Energy During Construction. Project construction plan specifications shall include the following measures to be implemented by the Construction Contractor to prevent the wasteful or inefficient use of energy and fuel during construction:

- Implement work schedules and procedures that minimize equipment idle time and double-handling of material;
- Switch off office equipment and lights when not in use;
- Use solar power resources for road signs and other applicable equipment required at the construction site; and
- Design all temporary roads to minimize travel distances.

Residual Impacts

Impacts would be less than significant.

Impact UTIL-10. Use vehicular fuel in a wasteful manner from vehicle trips associated with proposed project operations.

Consistent with State CEQA Guidelines Appendix F goals, the significance criteria used to evaluate environmental impacts in this analysis focus on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. Therefore, the proposed warehouse distribution project would have a significant effect on the environment if it were to use fuel in a wasteful manner as the result of vehicle trips associated with proposed development (mobile source consumption).

Operation of the proposed WVLCSP warehouse uses would result in a substantial increase in fuel use associated with vehicle trips to, from, and within the project site compared with the existing undeveloped project site. The total average daily traffic of the proposed project would be 6,384 trips (refer to Section 4.2.14, *Traffic and Transportation*) and the total daily vehicle miles traveled (VMT) would be 168,730.

Table 4.2.15-1 provides the estimated fuel usage from the project traffic by vehicle type, based on the projected daily VMT and miles per gallon for the four categories of vehicles. The fuel consumption rates (miles per gallon) are based on the URBEMIS model runs for the air pollutant emissions, and fuel consumption rates for each vehicle category are shown in the table. Daily fuel consumption is estimated for project traffic at 2,683 gallons of diesel fuel and 6,878 gallons of gasoline.

Table 4.2.15-1. Fuel Consumption by Project Traffic

Vehicle Type	VMT ⁴	Avg. Speed (miles/hour)	Fuel Use (Gallons per Day)	
			Diesel	Gasoline
Passenger Vehicles	134,310	55	100	4,700
2-Axle Trucks	5,906	50	153	65
3-Axle Trucks	7,762	50	300	113
4-Axle Trucks	20,754	50	2,130	0
Total	-----	-----	2,683	4,878

Source: LSA Associates 2014.

Development of the proposed WVLCSP would result in additional fuel consumption by project-related traffic. Inefficient, wasteful, and unnecessary consumption of diesel and gasoline fuels associated with project site development-related trips would be avoided or reduced with implementation of **Specific Plan Requirement SP-TR-1**, a Transportation Management Association for area circulation, **Specific Plan Requirement SP-GG-4** for the provision of electrical loading docks, **Mitigation Measure AQ-8** (Encourage Ride Sharing and Transit Incentives), **Mitigation Measure AQ-11** (EPA Smartway features), **Mitigation Measure AQ-12** (Energy Efficiency in Vendor Trucks), and **Mitigation Measure AQ-13** (Electric Vehicle Charging Stations and Carpool Parking).

Specific Plan Requirements

The applicant shall implement the following specific plan requirements, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*.

- **SP-GG-4:** Provide Electrical Loading Docks.
- **SP-TR-1:** Prepare a Transportation Management Association.

Mitigation Measures

Mitigation measures from the air quality analysis would reduce otherwise potentially inefficient or wasteful use of vehicular fuel during project operations. See Section 4.2.2, *Air Quality*, for complete text of these measures.

- **Mitigation Measure AQ-8:** Encourage Ride Sharing and Transit Incentives
- **Mitigation Measure AQ-11:** EPA Smartway Features
- **Mitigation Measure AQ-12:** Energy Efficiency in Vendor Trucks
- **Mitigation Measure AQ-13:** Electrical Vehicle Charging Stations and Carpool Parking.

⁴ VMT breaks down to fleet mix for heavy warehouse uses, as 79.57% passenger vehicles, 3.46% 2-axle trucks, 4.64% 3-axle trucks, and 12.33% 4-axle trucks (Fontana Truck Trip Generation Study, 2003).

Residual Impacts

Impacts would be less than significant with implementation of the specific plan requirements and mitigation measures noted previously.

4.3 Significant and Unavoidable Effects

Section 15126.2(b) of the CEQA Guidelines requires a discussion of any significant impacts that cannot be avoided, even with implementation of mitigation measures. A significant and unavoidable impact is one that would cause a substantial adverse effect on the environment and for which no mitigation is available to reduce the impact to a less-than-significant level. The significant and unavoidable impacts of the proposed project are as follows:

- Impact AQ-2: Violate any air quality standard or contribute substantially to an existing or projected air quality violation (Construction and Operation).
- Impact AQ-3: 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors).
- Impact NOI-1: Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- Impact NOI-3: A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- Impact TRA-1. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

4.3.1 Significant and Unavoidable Traffic Impacts

The potential for significant and unavoidable impacts to occur as a result of the project's effect on area traffic volumes and levels of service is identified in Section 4.2.15, *Transportation and Traffic*. The project would result in a direct impact on two intersections (intersections 17 and 18) and contribute to a significant increase in unacceptable levels of service to three intersections (intersections 6, 11, and 30) and eight freeway segments and ramp junctions (facilities 5, 6, 8, 9, 27, 30, 32, and 33) under existing conditions. The project plus cumulative traffic would result in unacceptable levels of service to 26 intersections and 42 freeway mainline and ramp junctions in the long term (2035). **Mitigation Measures TRA-1b** through **TRA-1d** are recommended to reduce the level of significance of these impacts to less-than-significant. However, the implementation of the recommended project traffic improvements within the City of Fontana are subject to City reviews and approvals; as such, if any of the recommended project traffic improvements within the City area directly adjacent to the proposed project are not approved or implemented, the impact that the traffic improvement is intended to address would be considered significant and unavoidable. Compliance with congestion management programs and the provision of fees would reduce impacts. Implementation of the recommended project traffic improvements within the unincorporated areas of San Bernardino County and Riverside County would be subject to the reviews and approvals of jurisdictional agencies that maintain transportation improvement approval and funding authority.

over those areas; as such, if any of the recommended project traffic improvements within the County areas are not approved or implemented, the impacts that those traffic improvements are intended to address would be considered significant. While circulation facilities are identified in congestion management programs, because the timing of full funding and construction of such improvements cannot be known at this time, there is not enough evidence to support a conclusion that impacts would be reduced to less-than-significant levels with implementation of mitigation, and impacts would be significant and unavoidable until all improvements can be made to improve levels of service and circulation to acceptable levels.

4.4 Significant Irreversible Changes

Pursuant to Section 15126.2(c) of the CEQA Guidelines, an EIR must consider any significant irreversible environmental changes that would be caused by the proposed project, should it be implemented. Section 15126.2(c) reads as follows:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

The project would result in development of light industrial/warehouse use within the currently vacant 291-acre project site. Further, the majority of the project site (approximately 212 acres) would be transformed into building space, landscaping, and permeable hardscape asphalt parking surfaces with areas set aside as detention basins. While the project site is currently undeveloped, the site does not contain any significant environmental resources that would be lost, and the project does not involve irreversible changes that would be considered significant. However, development of the proposed project would result in landform alterations that would be irreversible, although the Jurupa Hills portion of the project site would remain undeveloped.

Implementation of the WVLCSP would result in an irreversible commitment of energy resources, primarily fossil fuels for construction equipment (e.g., fuel, oil, natural gas, and gasoline), and the consumption or destruction of other nonrenewable or slowly renewable resources (e.g., aggregate resources lumber, metals, and water). Construction of new buildings and roadways would involve substantial quantities of building materials and energy, some of which are nonrenewable. However, the project does not represent an uncommon construction project that uses an extraordinary amount of raw materials in comparison to other urban development projects of a similar scope and magnitude.

The addition of employees and customers in the area would increase the local demand for finite energy resources, such as electricity, petroleum, and natural gas. The proposed project would also result in an increase in automobile and transit trips. These additional trips, plus construction activities from development of the site, would also require the use of fossil fuels and other nonrenewable resources. Consumption of such materials and energy is associated with any new development project, and these commitments are not unique or unusual to this project or region. While various natural resources such as construction materials and energy resources would be used for the proposed project, the relative uses of these resources would not result in substantial resource depletion. Therefore, the construction and operation of the proposed project would not result in significant irreversible environmental changes.



5.1 Introduction and Overview

California Environmental Quality Act (CEQA) Section 15126.6 requires that an Environmental Impact Report (EIR) describe a range of reasonable alternatives to the project or to the location of the project that would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any significant environmental impacts. The range of feasible alternatives is selected and discussed in a manner to foster meaningful public participation and informed decision making. According to the State CEQA Guidelines, the EIR should compare merits of the alternatives and determine an environmentally superior alternative. Alternatives for an EIR usually take the form of no project, reduced project size, different project design, or suitable alternative project sites. The range of alternatives discussed in an EIR is governed by the “rule of reason,” which requires the identification of only those alternatives necessary to permit a reasoned choice between the alternatives and the proposed project. An EIR need not consider an alternative that would be infeasible. State CEQA Guidelines Section 15126.6(f)(1) explains that the evaluation of project alternative feasibility can consider “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.” The EIR is also not required to evaluate an alternative that: (1) has an effect that cannot be reasonably identified; (2) has remote or speculative implementation; or (3) would not achieve the basic project objectives (discussed in Section 3.3 of this Draft EIR and below).

This section sets forth a reasonable range of alternatives with the potential to reduce significant impacts resulting from the proposed West Valley Logistics Center Specific Plan (WVLCSP) project and still meet most of the basic project objectives. An evaluation of how well each alternative meets project objectives is included at the end of each alternative subsection, and a summary table of impacts is included at the end of this section as Table 5-9. State CEQA Guidelines Section 15126.6(e) further requires that an alternative be included that describes what would reasonably be expected to occur on the property in the foreseeable future based on current plans and consistent with available infrastructure and community services if the project was not approved. This is considered to be the “No Project Alternative.” This alternatives analysis includes two No Project Alternatives. The No Project/No Build Alternative assumes no development occurs at all on the project site. The No Project/Buildout of the Valley Trails Specific Plan assumes buildout of the currently approved Valley Trails Specific Plan (VTSP) would occur.

5.1.1 Significant and Unavoidable Impacts Resulting from the Project

CEQA requires the alternatives selected for comparison in an EIR to avoid or substantially lessen one or more significant effects of the project. In order to identify alternatives that would avoid or substantially lessen any of the identified significant environmental effects of project site development, the significant impacts must be considered. The analysis in Chapter 4, *Environmental Analysis of the*

Proposed Project (Sections 4.2.1 through 4.2.15), of this EIR determined that development of the proposed project would result in the following significant and unavoidable impacts:

- Impact AQ-2: Violate any air quality standard or contribute substantially to an existing or projected air quality violation (Construction and Operation).
- Impact AQ-3: 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 (including releasing emissions that exceed quantitative thresholds for ozone precursors).
- Impact NOI-1: Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- Impact NOI-3: Create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. This impact is related to truck idling, loading/unloading activities, and overall project traffic noise.
- Impact TRA-1. Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

5.1.2 Project Objectives and Land Use Goals

The overarching goal of the proposed WVLCSP project is to provide for the orderly development of a phased land use plan that balances the need for industrial/warehousing development with the preservation of open space and construction of needed infrastructure improvements. The following objectives were developed for the proposed WVLCSP to implement this goal:

- Create local employment and economic development opportunities for the City of Fontana and surrounding communities that help maintain a balanced community;
- Achieve a high quality, cohesive design character for industrial uses within the project site to create a desirable asset to the community and enhance the project's overall value; and
- Facilitate the timely provision of needed infrastructure and community facilities.

The specific land use goals contained in the WVLCSP are as follows:

- Establish a well-balanced and carefully planned logistics center.
- Develop high-quality sites for warehousing with stringent design standards.
- Implement the City's General Plan by creating a balanced community through strengthening economic opportunities within the City.
- Provide an employment-generating, warehouse-focused industrial development that is located close to potential employees, thus reducing commute times and distances.
- Ensure that the development of the site is compatible with, and sensitive to, existing and planned land uses in the area by providing appropriate transitions and environmental buffers between the proposed industrial development and the surrounding development.

- Conserve on-site critical habitats as natural open space.

An evaluation of how well each alternative meets project objectives is included at the end of each alternative subsection.

5.2 Alternatives Considered but Rejected from Further Analysis

Section 15126.6(c) of the State CEQA Guidelines specifies that alternatives may be eliminated from detailed consideration in the EIR if they fail to meet most of the basic project objectives, are infeasible, or do not avoid any significant environmental effects. The following sections identify the alternatives that were considered but rejected from further consideration.

5.2.1 Building 7 Only Alternative

The Building 7 area is east of Locust Avenue and south of 11th Street and includes approximately 400,000 square feet of high-cube warehousing. It is north, south, and west of existing residential neighborhoods. Building 7 is included as part of the project and located adjacent to the remainder of the project, but separated by a public roadway (Locust Avenue). This alternative would involve the development of Building 7 only. Based on area, the Building 7 Only Alternative would facilitate development of only 11.5% (400,000 square feet) of the development potential and intensity proposed within the WVLCSP (3,473,690 square feet).

The Building 7 Only Alternative would reduce some environmental impacts identified for the proposed project. Given the location of the Building 7 area and the fact that it is not contiguous to the remainder of the development, this scenario was considered separately in the Traffic Impact Analysis (TIA). Development of Building 7 only is expected to generate a total of 882 daily trips, with 58 trips occurring during the a.m. peak hour and 64 trips occurring during the p.m. peak hour. Similar to the proposed project, the Building 7 Only Alternative would contribute to level of service (LOS) deficiencies at intersections and segments under existing and cumulative conditions within the City of Fontana, City of Jurupa Valley, County of San Bernardino, and California Department of Transportation jurisdictions. However, the Building 7 Only Alternative would generate so few trips that the contributions to these intersections would not degrade the LOS further and would not substantially change the volume to capacity ratio or intersection delay. Therefore, the Building 7 Only Alternative would reduce traffic impacts to the point that the project's contribution to significant and unmitigated cumulative impacts¹ would not be cumulatively considerable. Due to the smaller scale of operations, the Building 7 Only Alternative would result in substantially fewer air quality and greenhouse gas (GHG) emissions, avoiding the proposed project's significant and unmitigated air quality and GHG impacts. Due to the decreased footprint size, physical impacts related to biological resources, cultural resources, geology and soils, hazards and hazardous materials, and hydrology and water quality would also be reduced.

The Building 7 Only Alternative would meet some but not all of the project objectives. It would provide needed industrial/warehousing development but at a much reduced scale (88.5% less) than

¹ Traffic impacts have been identified as significant and unmitigated for the proposed project because the installation of roadway improvements and payment of fees to other jurisdictions cannot be guaranteed.

the proposed project. With a 10.4% unemployment rate in the City of Fontana, the creation of local employment and economic development options is very important to the City. Using the Southern California Association of Governments (SCAG) employment generation rate of one employee per 1,195 square feet of San Bernardino County warehouse space, the Building 7 Only Alternative would generate only approximately 335 long-term jobs, which is approximately 2,600 jobs less than would be generated under the proposed project (2,900). Due to the much-decreased footprint size, the number of construction jobs generated would be substantially fewer as well. Because this development would include only a single building, it would not meet the objectives for a cohesive design character for industrial uses and an orderly development of a phased land use plan facilitating the timely provision of infrastructure and community facilities. Also, the Building 7 Only Alternative would not enhance the project's overall value. The project applicant purchased the entire 291-acre project site with a development approval covering the majority of the site already in place. To purchase an entitled project and then develop only 11.5% of the project site's development potential would not make economic sense and would not allow for the development of a desirable asset to the community and highly valuable project site.

In conclusion, the Building 7 Only Alternative was briefly considered during the planning process because of its non-contiguous location with the rest of the project site. However, as part of a discussion regarding the proposed development agreement, the determination was made to dedicate Parcel 7 to the City of Fontana as part of the public benefit being provided in exchange for a development agreement on the balance of the property. The Building 7 Only Alternative would therefore leave no development potential for the applicant under the terms of the proposed development agreement. Removing the dedication of Building 7 from the proposed development agreement and substantially reducing the amount of development permitted within the project site would also involve a substantial reduction or elimination of public benefits, because a development agreement would not be needed for construction of a single building. In addition, the substantial reduction in building square footage under the Building 7 Only Alternative would result in a substantial reduction in Nexus Study fees as compared with the proposed project, and, more importantly, as compared with the intensity of development used by the San Bernardino Associated Governments to determine needed regional roadway improvements and Nexus Study fees. The Building 7 Only Alternative would greatly reduce the fees paid into the Nexus Study because of the reduced intensity with no concurrent reduction in facilities improvement needs or costs.

While the Building 7 Only Alternative would reduce some of the significant unavoidable impacts identified for the proposed project (i.e., air quality, GHG, and traffic), it would not decrease impacts related to industrial uses and truck loading docks in proximity to residential uses. Furthermore, the Building 7 Only Alternative would not fully meet the project's objectives, as it would provide for only a fraction of the development's intensity potential, resulting in much less warehouse capacity, 2,600 fewer jobs, a less cohesive industrial area, and much less of a desirable asset to the community, when compared with the proposed project. Finally, it is highly unlikely that the Building 7 Only Alternative would ever be built given the very low, if any, return on investment for the developer who purchased the site believing the full development footprint previously approved as part of the VTSP would be developable. Because the Building 7 Only Alternative would not meet project objectives and is unlikely to ever be built, this alternative was removed from further consideration. Therefore, no further analysis of this alternative is provided in the EIR.

5.3 Alternatives Carried Forward

During the preparation of this Draft EIR, the City considered several alternatives to the proposed project. The goal for developing a range of possible alternative scenarios was to identify other means to attain most of the basic project objectives while lessening or avoiding potentially significant environmental impacts caused by the proposed project.

In accordance with the State CEQA Guidelines (Section 15126.6(d)), the discussion of the environmental effects of the alternatives may be less detailed than the discussion of the impacts of the proposed project. Descriptions of each alternative followed by the analysis comparing the impacts of the alternative with the proposed project are provided below.

5.3.1 Alternative 1: No Project/No Build

Section 15126.6(e) of the State CEQA Guidelines requires the analysis of a “no project” alternative. The No Project/No Build Alternative is defined as the continuation of the existing condition (baseline) and trends in the project area. The approximately 291-acre site is primarily undeveloped, containing the Jurupa Hills, two utility corridors, existing roadways, a detention basin and some mature trees scattered throughout the site. Under Alternative 1, the proposed project would not be constructed, and the project area would remain in its current undeveloped condition. No new urban development would occur on the project site under Alternative 1, and no ground-disturbing activities would occur.

Analysis of Impacts

Aesthetics

The project site would remain in its current undeveloped condition under Alternative 1. No grading activities or industrial warehouse development on site would occur. The visual character of the site would not change, and impacts on scenic vistas and scenic resources would not occur. Therefore, impacts on aesthetics associated with the proposed project would not occur.

Air Quality/Greenhouse Gases

Alternative 1 would not require grading of the site for the industrial building pads or roadway improvements. Grading causes air quality emissions, such as fugitive dust and other exhaust emissions created by construction equipment. Importation of fill material with trucks to level the area of the site during grading would not be required. Alternative 1 would not generate truck and other vehicle traffic, which would generate air pollutant or GHG emissions during long-term operation of the project. Impacts on air quality associated with the proposed project would not occur.

Biological Resources

With Alternative 1, elimination of potentially suitable habitat for the gnatcatcher and other species would not occur. Mitigation measures addressing nesting habitat for migratory birds, surveys for burrowing owl, or preservation of wildlife habitat or linkages would not be needed as the site would remain in its current condition. Therefore, no biological impacts would result from Alternative 1.

Cultural Resources

Impacts on cultural and paleontological resources would be reduced under Alternative 1 compared with the proposed project. No groundbreaking activities would occur under Alternative 1 and the site would not be developed. Therefore, the potential to disturb historic, archaeological, and/or paleontological resources would be eliminated under Alternative 1.

Geology and Soils

Since no development or construction would occur under Alternative 1, and the site would remain in its undeveloped condition, impacts related to unstable soil and erosion during construction or new development affected by seismic hazards would not occur. No standard requirements related to construction and design required under the proposed project would be necessary under Alternative 1. Geological impacts associated with the proposed project would be eliminated.

Hazards and Hazardous Materials

Alternative 1 would not involve construction on the project site. Therefore, the potential for impacts related to the routine transport, use, or disposal of hazardous materials would not occur. As no development would occur under Alternative 1, no impacts related to the accidental release of hazardous materials or use of hazardous chemicals common in other light industrial settings would be expected. The site would remain in its undeveloped state and would not experience any impacts related to the emission of hazardous materials. Therefore, unlike the proposed project, Alternative 1 would not result in impacts related to hazards and hazardous materials, and no remediation efforts to clean up the site would be made. Additionally, no impacts related to the increased potential for wildland fires would result.

Hydrology and Water Quality

Under Alternative 1, no construction or development would occur and none of the new detention basins proposed by the project would be installed. Alternative 1 would not generate additional stormwater or potential sources of urban pollutants, and would not alter existing drainage from adjacent natural hillsides and development. As such, stormwater flows would continue in their current unobstructed state to and through the project site, including into the existing detention basin on site, without infiltration or water treatment as proposed by the project. Alternative 1 would avoid additional impervious surfaces, which would require stormwater treatment and construction of detention basins that could affect the existing drainage pattern of the site. Therefore, impacts on hydrology and water quality associated with the proposed project would be eliminated.

Land Use and Planning

Under Alternative 1, the project site would remain designated under the VTSP and any future development of the site would be guided by land use designations currently in place (see Section 5.3.2 for analysis of environmental impacts). No impacts related to the division of a community or conflicts with applicable land use plans and policies would occur as no development of the site would occur with Alternative 1. Impacts of the proposed project would be eliminated, and no amendments to land use plans would be required.

Noise

Because no construction or development would occur, Alternative 1 would eliminate construction-related noise impacts on sensitive receptors. Additionally, Alternative 1 would eliminate potential future operation and maintenance-related noise impacts that could occur with development. Therefore, Alternative 1 would result in no noise impacts.

Population and Housing

No growth in population or housing or displacement of people or housing would occur under Alternative 1. Therefore, impacts on population and housing would not occur under Alternative 1.

Public Services

Demand for public services, including schools, parks and libraries, would not occur, and minimal fire and police protection services would be required (e.g., wildland fires or illegal use of the property by trespassers vandalizing the property). The site would remain in its current undeveloped condition. Therefore, Alternative 1 would result in no impacts on public services.

Recreation

As no construction or development would occur under Alternative 1, impacts related to increased use and construction of new recreational facilities would not occur under Alternative 1.

Transportation and Traffic

Alternative 1 would not generate any new traffic to local and area roadways, as no construction or development would occur that would cause an increase in vehicle trips or result in added congestion. Therefore, Alternative 1 would not create any transportation or traffic impacts.

Utilities and Service Systems

Under Alternative 1, water, wastewater, solid waste, stormwater, and other utilities would not be required. Therefore, Alternative 1 would involve none of the potential impacts associated with utility use and service systems that would result the proposed project.

Summary of Environmental Impacts Compared with the Proposed Project

As shown in the summary table provided later in this Chapter (Table 5-9), under Alternative 1, the existing open space conditions of the project site would remain. Alternative 1 would not develop the site in accordance with land use designations of the General Plan and the approved VTSP, although the site could ultimately be developed in the future because it is zoned for planned residential uses. While Alternative 1 would eliminate the environmental impacts of the proposed project, it would not meet any of the project objectives stated in Section 5.1, as discussed in Table 5-1.

Table 5-1. Evaluation of the No Project/No Build Alternative in Relation to Project Objectives

Objective	Supporting Specific Plan Land Use Goals	Evaluation of Alternative 1
Overarching Objective		
Balance the need for industrial/warehousing development with the preservation of open space and construction of needed infrastructure.	Ensure that the development of the site is compatible with, and sensitive to, existing and planned land uses in the area by providing appropriate transitions and environmental buffers between the proposed industrial development and the surrounding area. Conserve on-site critical habitats as natural open space.	Alternative 1 would not provide for any development on the project site. While the site would preserve open space, Alternative 1 would not meet the need for industrial/ warehousing development, and would therefore not be consistent with the overarching objective for the project.
Additional Objectives		
Create local employment and economic development opportunities for the City of Fontana and surrounding communities that help maintain a balanced community.	Implement the City's General Plan by creating a balanced community through strengthening economic opportunities within the City. Provide an employment-generating, warehouse-focused industrial development that is located close to potential employees, thus reducing commute times and distances.	Alternative 1 would not provide any local employment or local development opportunities, and is therefore inconsistent with this objective.
Achieve a high-quality, cohesive design character for industrial uses within the project site to create a desirable asset to the community and enhance the project's overall value.	Develop high-quality sites for warehousing with stringent design standards.	Alternative 1 would not provide for any development on the project site. Therefore, a high-quality, cohesive industrial site would not be created, and Alternative 1 would be inconsistent with this objective.
Provide for orderly development of a phased land use plan that facilitates the timely provision of needed infrastructure and community facilities.	Establish a well-balanced and carefully planned logistics center.	Alternative 1 would not provide for any development on the project site. Therefore, a well-planned logistics center would not be created.

5.3.2 Alternative 2: No Project/Buildout of Valley Trails Specific Plan (VTSP)

Under Alternative 2, the proposed WVLCSP would not be approved, and buildout of the currently approved VTSP would occur instead. The approved VTSP provides for development of a master planned community with a maximum of 1,154 homes, a 13.8-acre elementary school, 3.7-acre

community center, 18-acre private park and trail system, 20.4-acre public park, and 69.2 acres of dedicated open space. The VTSP project was fully analyzed in the VTSP EIR, and the specific plan was approved by the City Council on May 8, 2007, in accordance with the certified EIR. It is assumed that the mitigation measures set forth in the VTSP Final EIR would be implemented in Alternative 2. Provided below is a summary of the impacts included within the certified VTSP EIR. The land use plan for the VTSP is provided as Figure 5-1.

Analysis of Impacts

Aesthetics

Alternative 2 would result in aesthetics impacts related to scenic vistas and the degradation of the existing visual character or quality of the site and its surroundings. Mitigation measures and/or standard requirements would reduce impacts to less-than-significant levels. By concentrating its residential neighborhoods in the heavily disturbed, flatter sections of the site, the VTSP would preserve much of the natural topography of the Jurupa Hills and further reduce visual impacts, similar to the proposed project. The VTSP would also result in less-than-significant impacts regarding the creation of a new source of substantial light or glare that adversely affects day or nighttime views in the area. Compared with the proposed project, Alternative 2 would have fewer impacts on aesthetics and visual quality, as more green space would be visible to visitors of the site. Alternative 2 would also provide fully improved park space on site, specifically in place of the building on Parcel 7, which would improve views to the site from adjacent viewpoints as compared with the proposed project.

Air Quality/Greenhouse Gases

Under Alternative 2, construction-related emissions exceeding South Coast Air Quality Management District (SCAQMD) thresholds for volatile organic compounds (VOC) and nitrogen oxides (NO_x) emissions would be significant and unavoidable, and carbon monoxide (CO) and particulate matter 10 microns in diameter or less (PM₁₀) emissions would be less than significant with mitigation. Under the proposed project, construction-related NO_x emissions would result in significant unavoidable impacts. An increase in operations-related emissions and air pollutants from long-term occupancy under Alternative 2 would also exceed SCAQMD thresholds for CO, PM₁₀, NO_x, and VOC. Mitigation would reduce impacts, but not to less-than-significant levels. Therefore, operations-related emissions would remain significant and unavoidable. Alternative 2 would exceed SCAQMD thresholds for ROG, NO_x, and CO, resulting in significant and unavoidable air quality impacts during operation, although emissions would be less than those of the proposed project.

The VTSP would result in less-than-significant impacts related to potential exposure of sensitive receptors to hazardous pollutants during and after construction, and operation-related exposure would be less than significant with mitigation, which is similar to impacts anticipated to occur under the proposed project. It should be noted that Alternative 2 would not include truck-intensive uses resulting in significant diesel exhaust, as would the proposed WVLCSP project. Based on air dispersion modeling and additional information, health risks were determined to be less-than-significant under the proposed project even with substantial truck use.

The VTSP EIR did not include a GHG emissions analysis because recognizable thresholds of significance were not available at the time that EIR was prepared. While the VTSP would generate a greater amount of traffic (8,765 total average daily traffic [ADT] versus 8,365 total ADT under the

WVLCSP) and more vehicle miles traveled than the proposed WVLCSP, the proposed industrial use of the WVLCSP would also involve substantial use of trucks, which contribute heavily to criteria pollutant emissions and GHG emissions. Therefore, generally compared with the proposed project, Alternative 2 would have somewhat reduced impacts on air quality and GHG.

Biological Resources

Alternative 2 includes a similar development area to the proposed project (without Parcel 9 and 1.54 acres). Alternative 2 would preserve slightly less open space (69.2 acres) than the proposed project (71.7 acres; Parcels 8 and 9 and Lot A), although Alternative 2 would provide an additional approximately 42 acres of park space, which may allow for the preservation of existing biological resources on the site. Alternative 2 would result in the potential disturbance of biological habitat and species, which could be mitigated to a less-than-significant level. Similar to the proposed project, the VTSP would result in less-than-significant impacts with mitigation related to special-status plants and animals, raptor foraging habitat, City-designated specimen or otherwise important trees, depleted natural communities, degradation of adjacent sensitive biological resources, and introduction and/or spread of noxious weed species. Unlike under the proposed project, the introduction of residential population and household pets could affect wildlife and biological communities and resources in adjacent sensitive habitat areas, including the Jurupa Hills. Mitigation, including fencing, would reduce impacts to a less-than-significant level. Workers within an industrial development as part of the proposed project would be far less likely to enter and disturb adjacent habitat areas than would the residents and their pets within the VTSP. As is the case for the proposed project, Alternative 2 would not result in conflicts with local policies, ordinances, or the Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP), which protect biological resources on adjacent land and jurisdictions. Impacts under Alternative 2 related to wildlife corridors for California gnatcatcher would be similar to those anticipated to occur under the proposed project. Although Alternative 2 and the proposed project would result in potential disturbance to similar habitat and species, Alternative 2 would have slightly fewer impacts on biological resources as a reduced area would be permanently developed, offsetting impacts related to increased presence of humans and pets in open space areas.

Cultural Resources

Alternative 2 includes a similar development area to the proposed project. Alternative 2 would preserve slightly less open space (69.2 acres) than the proposed project (71.7 acres), although Alternative 2 would provide an additional approximately 42 acres of park space, which may allow for preservation of cultural resources in place. Similar to the proposed project, under Alternative 2, the potential for ground-disturbing activities to damage previously unidentified buried cultural resources sites and unidentified human remains would be less than significant with mitigation. Additionally, impacts on prehistoric site CA-RIV-1573 (previous residential structure) and the potential loss of City-designated heritage trees would be less than significant with mitigation. Both the proposed project and Alternative 2 would require ground-breaking activities in similar areas, but Alternative 2 would have slightly fewer impacts on cultural resources, as a reduced area would be permanently developed.

Geology and Soils

Similar to the proposed project, Alternative 2 would expose people or structures to potentially adverse effects involving seismic ground-shaking and seismically induced landslides. This would

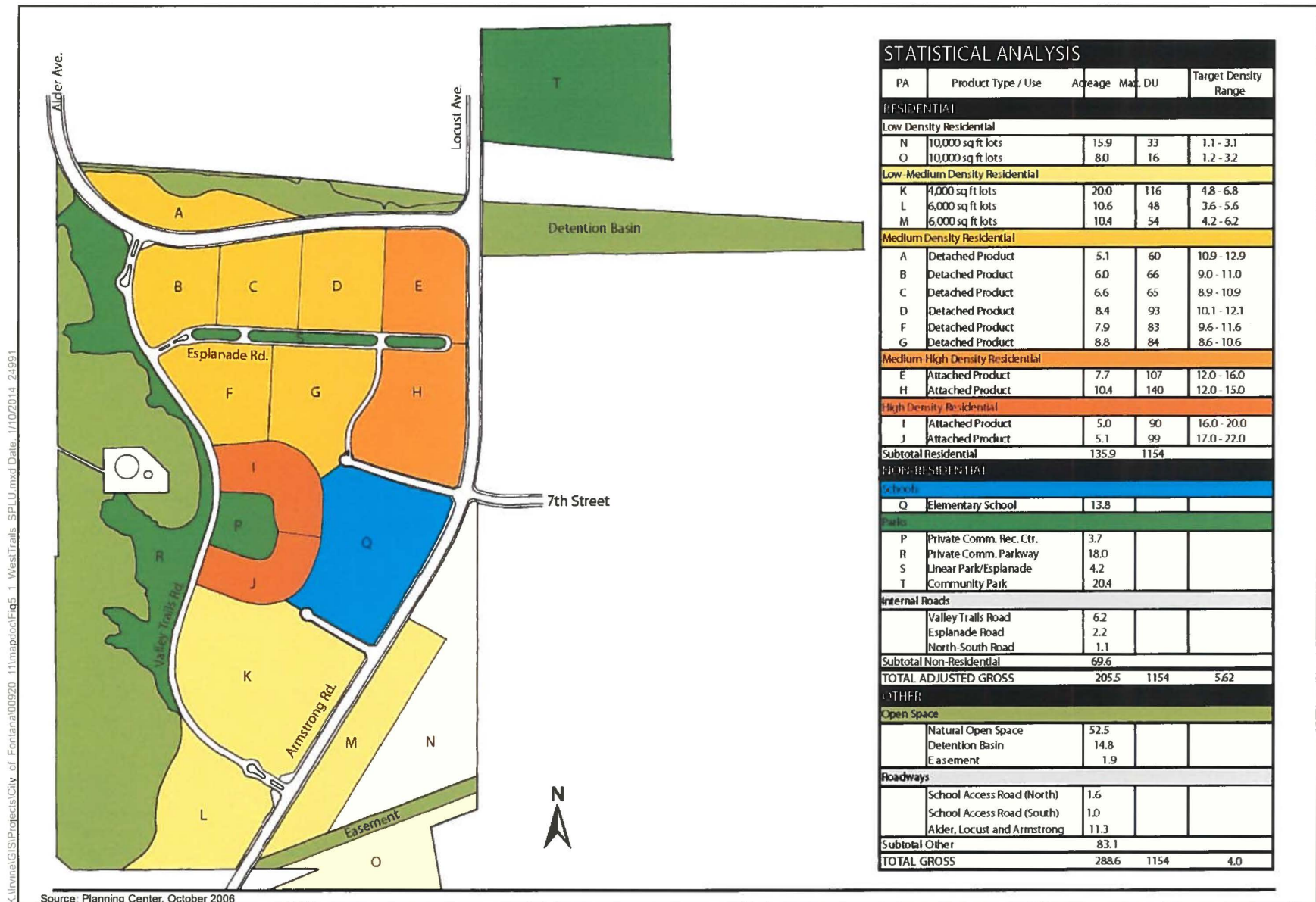


Figure 5-1
Valley Trails Specific Plan Land Use Plan
West Valley Logistics Center Specific Plan EIR

result in a less-than-significant impact with mitigation (the proposed project utilizes similar measures as a part of its standard requirements rather than mitigation). Additionally, impacts related to substantial soil erosion, loss of topsoil, and on-site and off-site structural damage as a result of development would be considered less than significant with mitigation. Alternative 2 would have impacts on geologic hazards and soils similar to those expected to occur under the proposed project.

Hazards and Hazardous Materials

During construction, Alternative 2 would result in less-than-significant impacts with mitigation related to hazards and hazardous materials, including the release of hazardous materials, hazardous emissions, the handling of hazardous materials and substances, interference with an adopted emergency response plan or emergency evacuation plan, and exposure to wildland fires. Under Alternative 2, the number of people introduced to the area would be greater than for the proposed project because local residents and their pets would be more likely to enter and disturb adjacent high fire hazard areas than the proposed industrial uses.

The VTSP includes residential uses and open space as well as community facilities, such as a new school and parks. Construction and future operation of these uses would require the limited use of some hazardous materials, including, but not limited to, gasoline, diesel, motor oil, hydraulic oil, solvents, and paint. Industrial uses proposed as part of the project are likely to use hazardous materials similar to those of Alternative 2, in addition to other potential hazardous materials, such as toners, lubricants, and refrigerants associated with building mechanical and heating, ventilation, and air conditioning (HVAC) systems, and other maintenance materials. Compared with the proposed project, Alternative 2 would have fewer impacts related to hazards and hazardous materials, due to the greater potential for routine use and transport of hazardous materials under the proposed project.

Hydrology and Water Quality

Under Alternative 2, construction impacts related to runoff would be less than significant with mitigation. Impacts related to flooding, groundwater, and water quality would be less than significant with mitigation and incorporation of Best Management Practices. The project site is not within a 100-year flood hazard zone, but is within a minimal to moderate flood hazard area (100- to 500-year or above). Alternative 2 would expose more residents to moderate flooding than would the proposed project, which does not include residential use. Nevertheless, compared with the proposed project, Alternative 2 would have slightly fewer impacts on hydrology and water quality, as more undeveloped areas and park areas are proposed, resulting in more pervious surfaces on site that allow more groundwater recharge and storm drainage capacity.

Land Use and Planning

The VTSP, as included under Alternative 2, was determined to be consistent with the City's zoning and General Plan land use designations of Residential Planned Community (R-PC; 3.0–6.4 dwelling units/acre), Public Utility Corridor Overlay (P-UC), Hillside Overlay (HO), and Public Facilities (P-PF), and consistent with the R-PC zoning requirement to prepare a specific plan. Adoption in 2007 resulted in a zone change from R-PC to Specific Plan (SP), in compliance with the City's zoning and development code, and no impacts related to land use would result under the VTSP. As stated in the VTSP EIR, impacts related to conflicts with a habitat conservation plan or a natural communities

conservation plan would be less than significant with mitigation. Similar to the proposed project, Alternative 2 would result in less-than-significant impacts on land use and planning with development of land uses as adopted for the site.

Noise

Under Alternative 2, exposure of residents to noise during construction or operations would be less than significant with mitigation. Introduction of noise that is in excess of 65 equivalent noise level (L_{eq}) to new sensitive land uses (residential, recreational, and public facilities) and new roads in incompatible areas within the City of Fontana would be less than significant with mitigation. Exposure of noise-sensitive land uses to noise levels generated by stationary sources that exceed interior levels during nighttime hours or exterior/interior levels during daytime hours would also be less than significant with mitigation. Compared with the proposed project, Alternative 2 would have fewer impacts on noise, as the proposed project would result in a significant unavoidable operational noise impact (project-related traffic and truck idling noise).

Population and Housing

Alternative 2 would introduce residential uses (1,154 residential units) onto the project site, thereby directly increasing the population (by 4,605 persons) on the site. No commercial uses are proposed, so no new jobs would be anticipated to be created other than short-term construction jobs and employment related to the school and community center proposed in the VTSP. There is the potential for new job creation if a school or community center is constructed and operated within the project site. Less-than-significant impacts on population growth would occur, according to the VTSP EIR. No impacts related to the displacement of housing or residents would occur, as the site is vacant. Therefore, similar to those anticipated to occur under the proposed project, impacts on population and housing would be less than significant under Alternative 2. However, compared with the proposed project, Alternative 2 would have greater impacts on population and housing because of the direct inducement of population growth.

Public Services

As stated in the VTSP EIR, Alternative 2 would not result in significant impacts on fire, police, schools, or community facilities (library services). The developer would be required to pay impact fees, which would mitigate any potential impacts to less-than-significant levels. Alternative 2 would also include a 13.8-acre elementary school site and a community center. However, Alternative 2 could result in greater impacts on public services including police and fire services due to the greater potential for additional service calls, as more people would be on site as compared with the proposed project. It should be noted that response times would be similar, as emergency responders would need to get to this relatively remote portion of the City, especially with the fire station to be relocated farther from the site, which was not previously evaluated in 2007 when the VTSP was approved. Overall, compared with the proposed project, Alternative 2 would have slightly greater impacts on public services.

Recreation

Alternative 2 would result in an additional 1,154 residential units, which is anticipated to increase the local population by approximately 4,605 persons. Increases in localized populations normally result in an increase in the general use of local and regional recreational facilities. An increase in

residents also generally increases the demand for recreational programs and the overall costs to deliver them. However, Alternative 2 would include a 4.2-acre linear neighborhood park, an 18-acre private park and trail system, a 20.4-acre public park, and 69.2 acres of dedicated open space. Alternative 2 includes a public trail through the northern and eastern portions of the community that will run alongside Alder Avenue, Locust Avenue, and Armstrong Road, providing a link to the Jurupa Hills Regional Trail. This trail is part of a trail system that traverses the Jurupa Hills and connects the Martin Tudor-Jurupa Hills Regional Park to the Santa Ana River Trail in Riverside County. Impacts related to the implementation of new recreational facilities would be considered less than significant with mitigation under Alternative 2.

By comparison, the proposed project is a warehouse logistics center, and would not result in any new demand for recreational land or facilities. Impacts on recreation anticipated to occur under the proposed project would be considered less than significant, and no mitigation would be required. While the proposed project is not required to provide park space or pay park facilities fees, a large public benefit contribution is included within the development agreement, which would go toward the development of parks or trails in the City. While the proposed project does not provide for the construction of trails, conceptual project design plans included in the WVLCSP illustrate that the project would not prohibit access to existing regional trails, including the Jurupa Hills Trail and the Southern California Edison Easement trail. Although Alternative 2 would result in greater demand for recreational resources requiring the construction or expansion of facilities, it would provide needed recreational facilities on site, resulting in less than significant impacts, as would the proposed project.

Transportation and Traffic

As stated in the VTSP EIR, impacts related to increases in area traffic volumes and degradation of LOS due to construction-generated traffic would result in less-than-significant impacts with mitigation. As such, upon full completion, the VTSP is expected to generate a total of 8,765 new daily trips, with 734 new trips occurring during the a.m. peak hour and 846 new trips occurring during the p.m. peak hour. This is slightly greater than the 8,365 daily trips anticipated to occur under the proposed project, accounting for the passenger car equivalents of WVLCSP truck traffic. The VTSP EIR concluded that impacts related to operational traffic volumes and degradation of LOS under future cumulative conditions within the City of Fontana would be less than significant with mitigation under Alternative 2. The VTSP EIR also stated that:

“implementation of the recommended project traffic improvements within the unincorporated areas of San Bernardino County and Riverside County are subject to the reviews and approvals of jurisdictional agencies that maintain transportation improvement approval and funding authority over those areas; as such, if any of the recommended project traffic improvements within the county areas are not approved or implemented, the impact that the traffic improvement is intended to address would be considered significant and unavoidable.”

Refer to Section 4.2.14, *Transportation and Traffic*, for a further discussion of traffic improvements in other jurisdictions, including the City of Jurupa Valley, which was regulated by Riverside County prior to incorporation.

Impacts related to emergency access and circulation due to construction-generated traffic would be considered less than significant.

Mitigation measures would reduce all potentially significant traffic impacts to less-than-significant levels under Alternative 2. The proposed project would result in significant unavoidable traffic

impacts during operation. Although Alternative 2 would generate more daily trips than the proposed project, it would result in fewer traffic impacts than the proposed project because of the proposed project's truck traffic impacts on adjacent jurisdictions.

Utilities and Service Systems

As stated in the VTSP EIR, a less-than-significant impact on water or wastewater treatment, stormwater facilities, water supplies, or solid waste disposal would occur. Similarly, the proposed project would result in less-than-significant impacts related to utility systems, solid waste, wastewater, water supplies, and storm water drainage. However, Alternative 2 could result in greater impacts on utilities, as more people would live on site and would utilize more water, wastewater treatment, and solid waste disposal as compared with the proposed project. Therefore, impacts expected to occur under Alternative 2 generally would be greater than those anticipated to occur under the proposed project.

Summary of Environmental Impacts Compared with the Proposed Project

As shown in the summary table provided later in this Chapter (Table 5-9), the Alternative 2 would reduce the following impacts as compared with the proposed WVLCSP project: aesthetics, air quality (reduced but still significant and unavoidable), GHG, biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, noise, and traffic. Alternative 2 would avoid the significant and unavoidable noise impacts identified for the proposed project but would continue to have significant and unavoidable air quality impacts. Alternative 2 would result in impacts similar to those anticipated to occur under the proposed project for geology and soils and land use and planning. Impacts would be greater than the proposed project for population and housing, public services, recreation, and utilities and service systems because of the increase in residential population under Alternative 2. An evaluation of Alternative 2 in relation to the project objectives is provided in Table 5-2.

Table 5-2. Evaluation of the No Project/Buildout of VTSP Alternative in Relation to Project Objectives

Objective	Supporting Specific Plan Land Use Goals	Evaluation of Alternative 2
Overarching Objective		
Balance the need for industrial/warehousing development with the preservation of open space and construction of needed infrastructure.	Ensure that the development of the site is compatible with, and sensitive to, existing and planned land uses in the area by providing appropriate transitions and environmental buffers between the proposed industrial development and the surrounding area. Conserve on-site critical habitats as natural open space.	Alternative 2 includes development of 1,154 residential units, and would not meet the overarching objective in terms of meeting the need for industrial/warehousing development, but would balance on-site development with provision of open space and needed roadway and utility infrastructure to support a residential project.
Additional Objectives		
Create local employment and economic development opportunities for the City of Fontana and surrounding communities that help maintain a balanced community.	Implement the City's General Plan by creating a balanced community through strengthening economic opportunities within the City. Provide an employment-generating, warehouse-focused industrial development that is located close to potential employees, thus reducing commute times and distances.	Alternative 2 would introduce residential uses onto the project site, but would not create local employment or economic development opportunities. No new jobs would be created other than short-term construction jobs. Alternative 2 would not provide for an employment-generating warehouse in proximity to potential employees but would instead increase the residential population in a city already experiencing 10% unemployment.
Achieve a high-quality, cohesive design character for industrial uses within the project site to create a desirable asset to the community and enhance the project's overall value.	Develop high-quality sites for warehousing with stringent design standards.	While Alternative 2 would involve the implementation of a specific plan with design guidelines for residential development, it would not meet the objective for achieving a high-quality design character for industrial development or warehousing uses.
Provide for orderly development of a phased land use plan that facilitates the timely provision of needed infrastructure and community facilities.	Establish a well-balanced and carefully planned logistics center.	While Alternative 2 would involve the implementation of a specific plan with a phasing plan for provision of needed infrastructure and community facilities, it would not do so for a carefully planned logistics center.

5.3.3 Alternative 3: Multi-Tenant Business Park

Under Alternative 3, a multi-tenant business park with a mix of small-scale, light industrial, business services, and employee-serving commercial uses (e.g., cafés, print shops) would be developed. Rather than large warehouse buildings on separate parcels, the site would be developed with single-story, multi-tenant buildings designed as a single planned development with common access points to the surrounding street system. Similar to the proposed project, Alternative 3 would include construction of approximately 3.47 million square feet of building area; however, because Alternative 3 would consist of a business park rather than a logistics center, site development would be substantially less truck-intensive and would result in less truck traffic than the proposed project. The 14.93-acre detention basin and 55.23 acres of natural hillsides would remain under Alternative 3, and the development area would involve the same footprint.

Analysis of Impacts

Aesthetics

Alternative 3 would result in essentially the same aesthetics impacts related to scenic vistas and the degradation of the existing visual character or quality of the site and its surroundings due to the disturbance of the same construction footprint as anticipated under the proposed project. Similar to the proposed project, Alternative 3 would also result in less-than-significant impacts related to the creation of a new source of substantial light or glare that adversely affects day or nighttime views in the area. Compared with the proposed project, Alternative 3 would have similar impacts on aesthetics and visual quality, as both would involve the same amount of building space similarly constructed within the same area of the project site with the exception being that additional smaller buildings would be developed instead of fewer larger buildings.

Air Quality/Greenhouse Gases

Similar to the proposed project, Alternative 3 would introduce 3.47 million square feet of development on the project site. Grading activities would be required under Alternative 3, similar to the proposed project. Construction-related air quality impacts generally would be similar in nature to impacts expected to occur under the proposed project.

Alternative 3 would result in a multi-tenant business park that would not include truck-intensive uses, although five times more non-truck traffic would be generated as compared with the proposed project. Therefore, fewer truck emissions yet greater non-truck emissions would occur under Alternative 3. Under the proposed project, large haul trucks would make up only about 12% of the project vehicles, but their exhaust would compose about 80 to 85% of the overall mobile source emissions (NO_x, PM₁₀, and PM_{2.5}). As such, Alternative 3 is expected to result in reduced air quality and GHG impacts because of a substantially reduced number of large haul trucks. Because substantial passenger car travel by on-site employees would still occur, it is anticipated that, although air pollutant emissions would be reduced compared with the proposed project, impacts would remain significant and unavoidable.

Biological Resources

Alternative 3 would result in the same amount of development to be constructed within the same area of the project site as the proposed project. Additionally, the 14.93-acre detention basin and

55.23 acres of natural hillsides would remain under Alternative 3. Impacts on biological resources, including impacts related to the Migratory Bird Treaty Act and to plant species that are found on the site, would be similar to impacts expected to occur under the proposed project. Generally, impacts on biological resources would be similar to impacts anticipated to occur under the proposed project.

Cultural Resources

Similar to the proposed project, Alternative 3 would require ground-disturbing activities for the development of 3.47 million square feet of building area within the same area of the project site. Impacts on archaeological, historical, and paleontological resources under Alternative 3 would be similar to those anticipated to occur under the proposed project.

Geology and Soils

Alternative 3 would require ground-disturbing activities that would result in the same amount of development to be constructed within the same area of the project site as the proposed project. Impacts on geology and soils, including impacts related to seismic safety, unstable soils, and loss of topsoil, are anticipated to be similar to impacts expected under the proposed project.

Hazards and Hazardous Materials

Impacts related to hazardous emissions, the handling of hazardous materials and substances, interference with an adopted emergency response plan or emergency evacuation plan, and exposure to wildland fires would be less than significant with mitigation. Similar to the proposed project, it is expected that Alternative 3 would operate in compliance with federal, state, and local regulations. Impacts related to hazards and hazardous materials would be similar to those anticipated to occur under the proposed project.

Hydrology and Water Quality

Construction impacts related to runoff and impacts related to flooding and groundwater are expected to be less than significant. The construction of detention basins to hold on-site stormwater is assumed to be similar to the project. Alternative 3 would have impacts on hydrology and water quality similar to those of the proposed project, as both would involve the same amount of building space constructed within the same area of the project site.

Land Use and Planning

Alternative 3 would involve changing the City zoning and General Plan land use to allow business park uses, although the land use designation changes and developable area would be the same as the proposed project. Alternative 3 would also be required to rescind the VTSP, similar to the proposed project, and would require a new specific plan to regulate the land uses on the site. Adoption of land use changes to Light Industrial, in compliance with the City's zoning and development code, would not result in significant impacts related to land use. Similar to those anticipated to occur under the proposed project, impacts related to conflicts with a habitat conservation plan or a natural communities conservation plan would be less than significant with mitigation. Similar to the proposed project, Alternative 3 would result in less-than-significant impacts on land use and planning with adoption of land use changes.

Noise

Construction-related noise impacts would be less than significant, similar to those anticipated to occur under the proposed project. Like those expected to occur under the proposed project, any construction-related noise impacts would be less than significant with implementation of standard requirements and compliance with the City's noise code.

The proposed business park use under Alternative 3 would not require truck-intensive uses to the same degree as the industrial/warehousing use included under the proposed project. Therefore, under Alternative 3, on-site and off-site noise from truck-intensive uses would not occur and the significant and unavoidable impacts related to truck loading/unloading and idling activities would be avoided. Because Alternative 3 would generate more than five times the traffic as the proposed project (45,936 total ADT versus 8,365 total ADT) adjusting for passenger car equivalents of truck traffic generated by the proposed project, impacts of operational noise from off-site traffic would be expected to be significant and unavoidable, similar to those anticipated to occur under the proposed project. Any operations-related noise impacts on sensitive receptors (nearby residences) could be mitigated (with a sound barrier) to less-than-significant levels, but installation in certain areas may not be feasible due to access constraints (e.g., need for driveway access).

Population and Housing

Alternative 3 would develop a multi-tenant business park with a mix of small-scale, light industrial uses, business services, and employee-serving commercial uses (e.g., cafés, print shops). No impacts related to the displacement of housing or residents would occur. Like the proposed project, no residential uses would be developed under Alternative 3. However, using the SCAG employment generation factor for research and development/Flex Space (the closest land use category to business park) of 834 square feet per employee, Alternative 3 would generate 4,165 new employees. Compared with the 2,907 employees expected under the proposed project, Alternative 3 would result in greater impacts than those of the proposed project due to the potential for indirect population migration; however, impacts would remain less than significant.

Public Services

Similar to the proposed project, the proposed multi-tenant business park use would increase demand for police and fire services compared with existing conditions. Due to the increase in employees generated by a multi-tenant business park, demand for public services would be higher than under the proposed project. Impacts on libraries and parks would be considered less than significant, similar to those anticipated to occur under the proposed project.

Recreation

As with the proposed project, under Alternative 3, project site employees would not place a substantial demand on park facilities. No City park development fees would be required under Alternative 3 because no residential component would be included. No park or recreational facilities would be constructed or expanded under Alternative 3. The detention basin and preservation of open space included under the proposed project would also be included under Alternative 3. Impacts on parks would be similar to those anticipated to occur under the proposed project.

Transportation and Traffic

Based on ITE Trip Generation, 9th Edition, Alternative 3 would result in 5,148 a.m. peak hour trips, 4,644 p.m. peak hour trips, and 45,936 daily trips. The projected number of daily trips under Alternative 3 is substantially (approximately five times) higher than what is expected under the proposed project (575 a.m. peak hour, 621 p.m. peak hour, and 8,365 daily trips), increasing the severity of Alternative 3's significant unavoidable traffic impacts. Impacts related to emergency access and circulation due to construction-generated traffic would be considered less than significant, similar to those anticipated to occur under the proposed project.

Utilities and Service Systems

As with the proposed project, utility improvements would be required on the project site to accommodate development. Water, wastewater, and solid waste generation would increase under implementation of Alternative 3 compared with existing conditions, due to the amount of additional people working on site. Generally, impacts would be greater than those anticipated to occur under the proposed project due to the greater number of employees on site in comparison to the proposed project.

Summary of Environmental Impacts Compared with the Proposed Project

As shown in the summary table provided later in this Chapter (Table 5-9), compared with the proposed project, Alternative 3 would reduce air quality, GHG emissions, and truck-related noise impacts and increase the level of impact for population and housing, public services, traffic, and utilities and service systems. Similar impacts would occur for all other issue areas. Alternative 3 would not avoid any of the significant and unavoidable impacts identified for the proposed project including those related to air quality and off-site traffic noise. Alternative 3 would avoid the significant and unavoidable noise impact related to truck activities but would not avoid significant impacts related to mobile-source ambient noise increases due to the substantially higher level of ADT expected under Alternative 3. An evaluation of Alternative 3 in relation to the project objectives is provided in Table 5-3.

Table 5-3. Evaluation of the Multi-Tenant Business Park Alternative in Relation to Project Objectives

Objective	Supporting Specific Plan Land Use Goals	Evaluation of Alternative 3
Overarching Objective		
Balance the need for industrial/warehousing development with the preservation of open space and construction of needed infrastructure.	Ensure that the development of the site is compatible with, and sensitive to, existing and planned land uses in the area by providing appropriate transitions and environmental buffers between the proposed industrial development and the surrounding area. Conserve on-site critical habitats as natural open space.	Alternative 3 would provide for small-scale light industrial, business services, and employee-serving commercial uses. It would include the 55.23 acres of natural hillsides that would also be preserved as open space under the proposed project. Alternative 3 would require adoption of a specific plan that would likely include appropriate buffer areas between land uses to ensure compatibility with adjacent residential neighborhoods, and it would conserve on-site critical habitats as natural open space. However, by increasing project site-generated traffic more than five-fold, Alternative 3 would not be sensitive to surrounding land uses. Also, Alternative 3 would not provide for the needed warehousing development.
Additional Objectives		
Create local employment and economic development opportunities for the City of Fontana and surrounding communities that help maintain a balanced community.	Implement the City's General Plan by creating a balanced community through strengthening economic opportunities within the City. Provide an employment-generating, warehouse-focused industrial development that is located close to potential employees, thus reducing commute times and distances.	Alternative 3 would create local employment and economic opportunities within the City of Fontana through the creation of an estimated 4,165 jobs (1,258 more than the proposed project). While Alternative 3 would not provide for an employment generating, warehouse-focused industrial development, it would create jobs in proximity to potential employees, reducing commute times and distances.
Achieve a high-quality, cohesive design character for industrial uses within the project site to create a desirable asset to the community and enhance the project's overall value.	Develop high-quality sites for warehousing with stringent design standards.	While Alternative 3 would involve the implementation of a specific plan with design guidelines for business park development, it would not meet the objective for achieving a high-quality design character for a warehousing site with stringent design standards. In

Objective	Supporting Specific Plan Land Use Goals	Evaluation of Alternative 3
		addition, by substantially increasing traffic generated at the project site and the severity of significant unavoidable traffic impacts, business park development would not create a desirable asset for the community.
Provide for orderly development of a phased land use plan that facilitates the timely provision of needed infrastructure and community facilities.	Establish a well-balanced and carefully planned logistics center.	While Alternative 3 would involve the implementation of a specific plan with a phasing plan for provision of needed infrastructure and community facilities, it would not do so for a carefully planned logistics center. By substantially increasing project site traffic generation, Alternative 3 would increase the need for roadway improvements whose timing cannot be precisely determined due to reliance of regional development impact fee programs in both San Bernardino and Riverside Counties.

5.3.4 Alternative 4: Reduced Intensity Multi-Tenant Business Park

Under Alternative 4, a multi-tenant business park with mix of small-scale, light industrial, business service, and employee-serving commercial uses (e.g., cafés, print shops) would be developed in a manner similar to Alternative 3, but with a development intensity about 25% lower than the proposed project. Therefore, a total development of 2.6 million square feet of multi-tenant building area would be constructed within a development footprint, which would be approximately 25% smaller than that of Alternative 3 and the proposed project. The 14.93-acre detention basin would still be constructed, and the 55.23-acre natural hillside preservation area provided in the proposed project would be expanded due to the 25% smaller development footprint of Alternative 4.

Analysis of Impacts

Aesthetics

Alternative 4 would result in fewer aesthetics impacts related to scenic vistas and the degradation of the existing visual character or quality of the site and its surroundings due to the disturbance of a smaller construction footprint than the proposed project. Similar to the proposed project, Alternative 4 would also result in less-than-significant impacts regarding the creation of a new

source of substantial light or glare that adversely affects day or nighttime views in the area. Compared with the proposed project, Alternative 4 would have fewer impacts on aesthetics and visual quality, as it would involve a smaller amount of building space constructed within a reduced area of the project site. Additional areas of the site would be preserved as natural open space with Alternative 4.

Air Quality/Greenhouse Gases

Alternative 4 would introduce business park uses on site as well as a development density about 25% lower than the proposed project. Similar to the proposed project, Alternative 4 would require grading and construction activities but within a smaller development footprint than the proposed project. Therefore, construction emissions would be about 25% less. High-intensity truck-related uses associated with industrial uses would not occur under Alternative 4. Therefore, emissions associated with these truck-related uses, which make up more than 85% of overall mobile source emissions (NO_x, PM₁₀, and PM_{2.5}) for the proposed project, would be eliminated or substantially reduced under Alternative 4. Alternative 4 would result in a multi-tenant business park with office uses that would result in four times more non-truck traffic than the proposed project. As such, fewer truck emissions but greater non-truck emissions would occur under Alternative 4. However, due to a smaller development (2.6 million square feet) proposed under Alternative 4 compared with the 3.47 million square feet under the proposed project, reduced air quality and GHG impacts are anticipated to occur. Because project-related emissions of air pollutants and GHG would need to be reduced by more than 25% to achieve less-than-significant impacts, emissions would still be expected to be above SCAQMD thresholds for criteria pollutants. Therefore, Alternative 4 would still result in significant and unavoidable impacts for air quality.

Biological Resources

Alternative 4 would introduce 2.6 million square feet of development onto the project site. Impacts on biological resources would be similar in nature to those anticipated to occur under the proposed project. Impacts on biological resources, including impacts related to the Migratory Bird Treaty Act and to plant species that are found on the site, would be similar to impacts expected to occur under the proposed project. However, as Alternative 4 proposes 25% less development area than the proposed project, reduced impacts on biological resources would occur compared with the proposed project. Also, additional areas of the site would be preserved as natural open space with Alternative 4, allowing a greater amount of potential biological resources to remain on site.

Cultural Resources

Similar to the proposed project, Alternative 4 would require ground-disturbing activities for proposed development. Impacts on archaeological, historical, and paleontological resources would be similar in nature; however, Alternative 4 proposes a smaller development area, and reduced impacts on cultural resources would be expected to occur. Also, additional areas of the site would be preserved as natural open space with Alternative 4, allowing previously undiscovered cultural resources (should any exist) to remain undisturbed on site.

Geology and Soils

Similar to the proposed project, Alternative 4 would require ground-disturbing activities. However, Alternative 4 would introduce a smaller development area to the project site than the proposed

project. Impacts on geology and soil, specifically impacts related to seismic safety, unstable soils, and loss of topsoil, are anticipated to occur under Alternative 4, and impacts are anticipated to be similar in nature to those expected to occur under the proposed project. However, as less development is proposed under Alternative 4, fewer geology and soils impacts are expected to occur compared with the proposed project.

Hazards and Hazardous Materials

The project site is not within an airport land use plan or within 2 miles of a public airport or public use airport. Additionally, there are no existing schools within 0.25 mile of the project site. Impacts related to hazardous emissions, the handling of hazardous materials and substances, interference with an adopted emergency response plan or emergency evacuation plan, and exposure to wildland fires would be less than significant with mitigation. As with the proposed project, it is expected that Alternative 4 would operate in compliance with federal, state, and local regulations. Alternative 4 would consist of a multi-tenant business park with a development intensity about 25% lower than the proposed project. Although impacts would be similar in nature, due to the smaller scale of development proposed under Alternative 4, reduced impacts related to hazards and hazardous materials would occur compared with the proposed project.

Hydrology and Water Quality

Under Alternative 4, construction impacts related to runoff would be less than significant with mitigation, similar to those anticipated to occur under the proposed project. Impacts related to flooding and groundwater would also be less than significant. Compared with the proposed project, Alternative 4 would have fewer impacts on hydrology and water quality, as Alternative 4 would involve less intense development within a smaller area of the project site, allowing more areas of the site to remain undisturbed.

Land Use and Planning

Alternative 4 would involve changing the City zoning and General Plan land use to allow business park uses, although the land use designation changes would be the same as the proposed project. Alternative 4 would involve more areas of the site to be zoned as natural open space and would reduce areas allowed for business park development. Alternative 4 would also be required to rescind the VTSP, similar to the proposed project, and would require a new specific plan to regulate the land uses on the site. Adoption of land use changes to Light Industrial, which allows for office and business park uses, in compliance with the City's zoning and development code, would not result in significant impacts related to land use. Similar to those anticipated to occur under the proposed project, impacts under Alternative 4 related to conflicts with a habitat conservation plan or a natural communities conservation plan would be less than significant with mitigation. Like the proposed project, Alternative 4 would result in less-than-significant impacts on land use and planning with adoption of land use changes as proposed.

Noise

The project site is not within 2 miles of a public airport; therefore, similar to those anticipated to occur under the proposed project, noise impacts under Alternative 4 related to projects within an airport land use plan would be less than significant. Also, construction-related noise impacts would be less than significant with implementation of standard requirements and compliance with the

City's noise code, and reduced compared with the proposed project due to reduced building development. Any operations-related noise impacts on sensitive receptors (nearby residences) could be mitigated (with a sound barrier) to less-than-significant levels, but installation may not be feasible in some locations due to access constraints (e.g., need to maintain driveway access). Because Alternative 4 would generate four times the total amount of ADT as the proposed project (33,176 total ADT versus 8,365 total ADT), operational noise impacts from off-site traffic would be expected to be significant and unavoidable, similar to those anticipated to occur under the proposed project.

The proposed business park use would not require truck-intensive uses to the same degree as the industrial/warehousing uses included under the proposed project. Therefore, under Alternative 4, noise impacts from truck-intensive uses would not occur and the significant and unavoidable impacts related to truck loading/unloading and idling activities would be avoided. Additionally, Alternative 4 would include a smaller development than what is proposed under the project, reducing operational noise related to building use (e.g., HVAC equipment, electrical generation). As Alternative 4 would reduce impacts related to truck noise and on-site building noise, but increase traffic-related noise, overall noise impacts would be similar to those anticipated to occur under the proposed project.

Population and Housing

Alternative 4 would develop a smaller multi-tenant business park with a development intensity about 25% lower than the proposed project. No impacts related to the displacement of housing or residents would occur. As with the proposed project, no residential uses would be developed under Alternative 4. Alternative 4 would result in the creation of 3,118 new jobs, which is 211 more than would result under the proposed project (2,907). Therefore, Alternative 4 would result in slightly greater impacts than those of the proposed project due to a slightly higher employment growth potential and potential for indirect population migration, although neither the proposed project nor Alternative 4 would create significant impacts on population and housing.

Public Services

Alternative 4 would develop a smaller multi-tenant business park with a development intensity about 25% lower than the proposed project. Similar to the proposed project, Alternative 4 would not involve development of residential uses. As with the proposed project, demand for police and fire services would increase compared with existing conditions, and a 7% greater number of employees would be on site as compared with the proposed project. Generally, impacts on public services would be slightly greater than those anticipated to occur under the proposed project, although both would be less than significant.

Recreation

Similar to the proposed project, Alternative 4 would involve no impacts on recreational facilities and no requirement for City park development fees because no residential component would be included. No park or recreational facilities would be constructed or expanded under Alternative 4. The detention basin included under the proposed project would also be included under Alternative 4. Also, additional areas of the site would be preserved as natural open space with Alternative 4, allowing additional areas of the site to potentially be utilized for recreational purposes.

in the future. As no plan is in place for the conversion of open space to park uses, impacts on parks would be similar to those anticipated to occur under the proposed project.

Transportation and Traffic

Based on ITE Trip Generation, 9th Edition, Alternative 4 would result in 3,718 a.m. peak hour trips, 3,354 p.m. peak hour trips, and 33,176 daily trips. The projected number of trips under Alternative 4 is approximately four times higher than what is anticipated under the proposed project (575 a.m. peak hour, 621 p.m. peak hour, and 8,365 passenger car equivalent daily trips). Therefore, traffic impacts are anticipated to be substantially greater under Alternative 4 than under the proposed project, increasing the severity of Alternative 4's significant unavoidable traffic impacts. Impacts related to emergency access and circulation due to construction-generated traffic would be considered less than significant, similar to those anticipated to occur under the proposed project.

Utilities and Service Systems

Alternative 4 would develop a smaller multi-tenant business park with a development intensity about 25% lower than the proposed project. As with the proposed project, utility improvements would be required on the project site. Water, wastewater, and solid waste generation would increase under implementation of Alternative 4 compared with existing conditions, due to the amount of additional people working on site. Generally, impacts would be slightly greater to those anticipated to occur under the proposed project due to the higher number of employees anticipated for Alternative 4.

Summary of Environmental Impacts Compared with the Proposed Project

As summarized in the table provided later in this Chapter (Table 5-9), compared with the proposed project, Alternative 4 would reduce the following impacts: aesthetics, air quality/GHG, biological resources, cultural resources, geology and soils, hazards and hazardous materials, and hydrology and water quality. Greater impacts would occur for the following: population and housing, public services, traffic, and utilities and service systems. Similar impacts would occur for land use and planning, noise, and recreation. Alternative 4 would not avoid any of the significant and unavoidable impacts identified for the proposed project, including those related to air quality and off-site traffic related noise. Alternative 4 would avoid the significant and unavoidable noise impacts related to truck activities but not related to mobile-source ambient noise increases due to the higher level of ADT expected under Alternative 4. An evaluation of Alternative 4 in relation to the project objectives is provided in Table 5-4.

Table 5-4. Evaluation of the Reduced Intensity Multi-Tenant Business Park Alternative in Relation to Project Objectives

Objective	Supporting Specific Plan Land Use Goals	Evaluation of Alternative 4
Overarching Objective		
Balance the need for industrial/warehousing development with the preservation of open space and construction of needed infrastructure.	Ensure that the development of the site is compatible with, and sensitive to, existing and planned land uses in the area by providing appropriate transitions and environmental buffers between the proposed industrial development and the surrounding area. Conserve on-site critical habitats as natural open space.	Alternative 4 would provide for small-scale light industrial uses, business services, and employee-serving commercial uses. It would also expand the 55.23 acres of natural hillsides that would also be preserved as open space under the proposed project. Alternative 4 would require adoption of a specific plan that would likely include appropriate buffer areas between land uses to ensure compatibility with adjacent residential neighborhoods, and it would conserve on-site critical habitats as natural open space. However, by increasing project site-generated traffic more than four-fold, Alternative 4 would not be sensitive to surrounding land uses. Also, Alternative 4 would not provide for the needed industrial/warehousing development.
Additional Objectives		
Create local employment and economic development opportunities for the City of Fontana and surrounding communities that help maintain a balanced community.	Implement the City's General Plan by creating a balanced community through strengthening economic opportunities within the City. Provide an employment-generating, warehouse-focused industrial development that is located close to potential employees, thus reducing commute times and distances.	Alternative 4 would create local employment and economic opportunities within the City of Fontana through the creation of an estimated 3,118 jobs (211 more than the proposed project). While Alternative 4 would not provide for an employment-generating, warehouse-focused industrial development, it would create jobs in proximity to potential employees, reducing commute times and distances.
Achieve a high-quality, cohesive design character for industrial uses within the project site to create a desirable asset to the community and enhance the project's overall value.	Develop high-quality sites for warehousing with stringent design standards.	While Alternative 4 would involve the implementation of a specific plan with design guidelines for business park development and achieve a high-quality business park design, it would not meet the objective for achieving a high-quality

Objective	Supporting Specific Plan Land Use Goals	Evaluation of Alternative 4
		warehousing design with stringent design standards. In addition, by substantially increasing traffic generated at the project site and the severity of significant unavoidable traffic impacts, business park development, even at a reduced development intensity, would not create a desirable asset for the community.
Provide for orderly development of a phased land use plan that facilitates the timely provision of needed infrastructure and community facilities.	Establish a well-balanced and carefully planned logistics center.	While Alternative 4 would involve the implementation of a specific plan with a phasing plan for provision of needed infrastructure and community facilities, it would not do so for a carefully planned logistics center. By substantially increasing project site traffic generation, Alternative 4 would increase the need for roadway improvements whose timing cannot be precisely determined due to reliance of regional development impact fee programs in both San Bernardino and Riverside Counties.

5.3.5 Alternative 5: Reduced Intensity Logistics Center

Alternative 5 provides for development of a warehouse-based logistics center with a 30% reduction in intensity and development footprint as compared with the proposed project (i.e., for a total of 2.4 million square feet of warehouse buildings). Alternative 5 was designed to reduce impacts on air quality, GHG emissions, and noise. A 30% reduction would reduce impacts but not enough to fully mitigate the significant and unavoidable impacts identified for air quality or noise from off-site traffic increase. Note that the Building 7 Only Alternative described above in Section 5.2.1 would represent an 88% reduced intensity alternative to reduce all significant and unavoidable air quality impacts from off-site traffic (but not impacts related to truck noise). Alternative 5 proposes a more modest reduction in intensity.

Analysis of Impacts

Aesthetics

Similar to the proposed project, Alternative 5 would also result in less-than-significant impacts related to new sources of substantial light or glare that adversely affect day or nighttime views in

the area. Compared with the proposed project, Alternative 5 would have fewer impacts on scenic vistas and visual character or quality, as it would involve a smaller amount of building space constructed within a smaller development footprint on the project site.

Air Quality/Greenhouse Gases

Alternative 5 would introduce a warehouse-based logistics center at a development density 30% lower than the proposed project. The project would require a 74% reduction to reduce GHG emissions and a 77% reduction to reduce operational NO_x air pollutant emissions below the SCAQMD threshold of significance. (Note that a 77% reduction is what would be needed after mitigation and assuming U.S. Environmental Protection Agency Smartway Program vehicles are in operation and utilized by the project. Before mitigation, the needed reduction would be 87.5%.) While the Building 7 Only Alternative described above in Section 5.2.1 would represent an 88% reduced intensity alternative to reduce all significant and unavoidable air quality and GHG impacts, because the Building 7 Only Alternative was determined to be infeasible, Alternative 5 proposes a more modest reduction in intensity.

Similar to the proposed project, Alternative 5 would require grading and construction activities, but on a 30% smaller development area with 30% less building square footage (total of 2.4 million square feet of building area). Alternative 5 would result in significant and unavoidable NO_x emissions (30% over the SCAQMD threshold, but substantially less than the proposed project) during construction after implementation of prescribed mitigation measures. While Alternative 5 would result in a further reduction of NO_x emissions due to reduced building construction, because the same type of construction vehicles would be required during building construction, daily NO_x emissions would continue to exceed the SCAQMD significance threshold (after mitigation similar to that for the proposed WVLCSP project is implemented).

In general, criteria pollutants and GHG emissions produced during operation, including from high-intensity, truck-related uses, would be reduced by 30%. This reduction would not be enough to mitigate significant air quality impacts to less-than-significant levels. Due to a smaller development (2.4 million square feet) proposed under Alternative 5 compared with the 3.47 million square feet under the proposed project, reduced air quality impacts are anticipated to occur.

Biological Resources

Alternative 5 would introduce 2.4 million square feet of development onto the project site within a 30% smaller development footprint than the proposed project. Additionally, the 14.93-acre detention basin would remain and the 55.23 acres of natural hillside preservation would be expanded under Alternative 5. Impacts on biological resources would be similar in nature, but reduced in scale compared with those anticipated to occur under the proposed project. Impacts on biological resources, including impacts related to the Migratory Bird Treaty Act and to plant species that are found on the site, would be reduced compared with impacts expected to occur under the proposed project. Generally, impacts on biological resources would be reduced compared with the less-than-significant impacts anticipated to occur under the proposed project.

Cultural Resources

Alternative 5 would introduce 2.4 million square feet of development onto the project site within a smaller development footprint than the proposed project. Similar to the proposed project, Alternative 5 would require ground-disturbing activities during construction. However, due to the

smaller area of disturbance, impacts on previously undiscovered cultural resources would be less likely under Alternative 5 compared with the proposed project, although both would result in less-than-significant impacts (with mitigation).

Geology and Soils

Alternative 5 would require ground-disturbing activities that would result in a reduced amount of development to be constructed within a smaller portion of the project site than the proposed project. Impacts on geology and soil, specifically impacts related to seismic safety, unstable soils, and loss of topsoil, are anticipated to occur under Alternative 5, and impacts are anticipated to be similar in nature to those expected to occur under the proposed project. However, as less development is proposed under Alternative 5, fewer geology and soils impacts are expected to occur compared with the proposed project.

Hazards and Hazardous Materials

Under Alternative 5, impacts related to hazardous emissions, the handling of hazardous materials and substances, interference with an adopted emergency response plan or emergency evacuation plan, and exposure to wildland fires would be less than significant with mitigation and lower than the proposed project due to a reduced amount of development. As with the proposed project, it is expected that Alternative 5 would operate in compliance with federal, state, and local regulations. Alternative 5 would consist of the same warehouse logistics center uses with a development intensity about 30% lower than the proposed project. Although impacts would be similar in nature, due to the smaller scale of development proposed under Alternative 5, reduced impacts related to hazards and hazardous materials would occur compared with the proposed project, although both would be less than significant.

Hydrology and Water Quality

Under Alternative 5, construction impacts related to runoff would be less than significant with mitigation, similar to those anticipated to occur under the proposed project. Impacts related to flooding and groundwater would also be less than significant. Compared with the proposed project, Alternative 5 would have reduced impacts on hydrology and water quality, as it would involve the creation of less impervious surface area due to less intense development than the proposed project.

Land Use and Planning

Alternative 5 would involve changing the City zoning and General Plan land use to allow for warehouse uses, similar to the proposed project. Alternative 5 would also be required to rescind the VTSP, similar to the proposed project, and would require a new specific plan to regulate the land uses on the site. Adoption of land use changes to Light Industrial, which allows for warehouse logistics centers, in compliance with the City's zoning and development code would not result in significant impacts related to land use. Similar to those anticipated to occur under the proposed project, impacts related to conflicts with a habitat conservation plan or a natural communities conservation plan would be less than significant with mitigation. Like the proposed project, Alternative 5 would result in less-than-significant impacts on land use and planning with adoption of land use changes.

Noise

The project site is not within 2 miles of a public airport; therefore, similar to those anticipated to occur under the proposed project, noise impacts under Alternative 5 related to projects within an airport land use plan would be less than significant. Also, construction-related noise impacts under Alternative 5 would be less than significant with implementation of project design features and compliance with the City's noise code, and reduced compared with the proposed project due to a reduced amount of development. Operations-related noise impacts on sensitive receptors (nearby residences) could be mitigated (with a sound barrier) to less-than-significant levels, but installation may not be feasible in some locations due to access constraints (e.g., need to maintain driveway access). Truck idling and loading/unloading noise impacts would result with Alternative 5, although to a lesser degree than the proposed project due to the reduced intensity of the development.

Significant and unavoidable noise impacts were identified for the proposed project along Locust Avenue between 11th Street and 7th Street and along Jurupa Avenue between Locust Avenue and Cedar Avenue. Assuming that distributed traffic volumes would be proportionately reduced under Alternative 5 by 30% along each roadway segment, traffic volumes would still be higher than under existing conditions, resulting in a 3 A-weighted decibel (dBA) increase, despite the relatively low traffic volumes and noise levels below the City's exterior noise thresholds. Because the ambient noise levels would increase by 3 dBA, Alternative 5 would continue to result in significant and unavoidable impacts related to perceptible noise increases above ambient conditions. However, reduced noise impacts would occur under Alternative 5 compared with the proposed project.

Population and Housing

Alternative 5 would develop a warehouse-based logistics center with a development intensity 30% lower than the proposed project with an employment growth potential of 2,035 employees (versus 2,907 for the proposed project). No impacts related to the displacement of housing or residents would occur. As with the proposed project, no residential uses would be developed under Alternative 5. Because 872 fewer employees would be expected under this reduced alternative, there would be less potential for indirect population migration compared with the proposed project. Therefore, Alternative 5 would result in reduced impacts compared with the proposed project, although both would result in less-than-significant impacts.

Public Services

Alternative 5 would develop a warehouse-based logistics center with a development intensity 30% lower than the proposed project. As with the proposed project, no residential uses would be developed. As with the proposed project, under Alternative 5, demand for police and fire services would increase compared with existing conditions, but a reduced number of employees would be on site as compared with the proposed project (2,035 versus 2,907). Generally, impacts on public services under Alternative 5 would be reduced compared with those anticipated under the proposed project.

Recreation

As with the proposed project, new employees on site would not create a significant demand for park land. No City park development fees would be required under Alternative 5 because no residential component would be included. No park or recreational facilities would be constructed or expanded under Alternative 5. The detention basin included under the proposed project would also be

included under Alternative 5. Impacts on parks under Alternative 5 would be similar to those anticipated to occur under the proposed project.

Transportation and Traffic

Based on ITE Trip Generation, 9th Edition, Alternative 5 would result in 404 a.m. peak hour trips, 440 p.m. peak hour trips, and 5,926 daily trips. The projected number of trips under Alternative 5 is 30% lower than what is anticipated under the proposed project (575 a.m. peak hour, 621 p.m. peak hour, and 8,365 daily trips). Therefore, traffic impacts are anticipated to be substantially less under Alternative 5 than under the proposed project. Alternative 5 would still result in significant and unmitigated peak hour traffic impacts, because area roadway segments already operate at deficient LOS, and a 30% reduction in project-generated traffic would not be sufficient to eliminate Alternative 5's cumulatively considerable contribution to cumulative impacts. In addition, payment of development impact fees along with fair share fees for impacts on facilities not included in regional fee programs as mitigation for the project's share of cumulative impacts would still result in significant impacts, because the use of such fees and timing of improvements by agencies other than the City of Fontana cannot be guaranteed. Impacts under Alternative 5 related to emergency access and circulation due to construction-generated traffic would be considered less than significant, similar to those anticipated to occur under the proposed project.

Utilities and Service Systems

Alternative 5 would develop a warehouse-based logistics center with a development intensity 30% less than the proposed project. No residential uses would be developed under Alternative 5. As with the proposed project, utility improvements would be required under Alternative 5. Water, wastewater, and solid waste generation would increase under implementation of Alternative 5 compared with existing conditions, but to a lesser degree than the proposed project because there would be fewer employees. Generally, impacts under Alternative 5 would be less than those anticipated to occur under the proposed project.

Summary of Environmental Impacts Compared with the Proposed Project

As shown in the summary table provided later in this Chapter (Table 5-9), compared with the proposed project, Alternative 5 would reduce the following impacts: aesthetics, air quality/GHG, biological resources, cultural resources, geology and soils, hazards and hazardous materials, noise, population and housing, public services, traffic, and utilities and services. Similar impacts would occur for hydrology and water quality, land use and planning, and recreation. Alternative 5 would reduce noise levels, but impacts related to increases in ambient noise levels due to off-site traffic and loading/unloading and idling of trucks would continue to be significant and unavoidable. Air quality impacts would be reduced during construction and operation, but would continue to be significant and unavoidable. In addition, although overall traffic generation would be reduced, traffic impacts would remain significant and unavoidable, because the timing of improvements funded by development impact fee programs in San Bernardino and Riverside counties and improvements funded by the payment of impact fees to jurisdictions other than the City of Fontana cannot be guaranteed. An evaluation of Alternative 5 in relation to the project objectives is provided in Table 5-5.

Table 5-5. Evaluation of the Reduced Intensity Logistics Center Alternative in Relation to Project Objectives

Objective	Supporting Specific Plan Land Use Goals	Evaluation of Alternative 5
Overarching Objective		
Balance the need for industrial/warehousing development with the preservation of open space and construction of needed infrastructure.	Ensure that the development of the site is compatible with, and sensitive to, existing and planned land uses in the area by providing appropriate transitions and environmental buffers between the proposed industrial development and the surrounding area. Conserve on-site critical habitats as natural open space.	Alternative 5 would meet the objective for an industrial/warehousing development although to a lesser extent than the proposed project due to the 30% reduction in developable square footage. Alternative 5 would include a smaller development footprint than the proposed project, thus expanding the 55.23 acre natural hillside conservation area and providing a similar, if not improved, buffer from adjacent residential uses.
Additional Objectives		
Create local employment and economic development opportunities for the City of Fontana and surrounding communities that help maintain a balanced community.	Implement the City's General Plan by creating a balanced community through strengthening economic opportunities within the City. Provide an employment-generating, warehouse-focused industrial development that is located close to potential employees, thus reducing commute times and distances.	Alternative 5 provides for an employment-generating, warehouse-focused industrial development in proximity to potential employees, reducing commute times and distances, and would therefore strengthen economic opportunities within the City. However, Alternative 5 would create 30% fewer jobs than the proposed project in an area exhibiting a high unemployment rate.
Achieve a high-quality, cohesive design character for industrial uses within the project site to create a desirable asset to the community and enhance the project's overall value.	Develop high-quality sites for warehousing with stringent design standards.	Through implementation of the design standards within the proposed WVLCSP (albeit for a 30% smaller development), Alternative 5 would achieve a high-quality, cohesive design character for industrial uses that would be a desirable asset to the community and would enhance the project's overall value.

Objective	Supporting Specific Plan Land Use Goals	Evaluation of Alternative 5
Provide for orderly development of a phased land use plan that facilitates the timely provision of needed infrastructure and community facilities.	Establish a well-balanced and carefully planned logistics center.	Through implementation of the phased land use plan within the proposed WVLCSP (albeit for a 30% smaller development), Alternative 5 would establish a well-balanced and carefully planned logistics center that facilitates the timely provision of needed infrastructure and community facilities.

5.3.6 Alternative 6: Proposed Project with No Prohibition on Trucks Using Sierra Avenue Alternative

Alternative 6 would involve the extension of Alder Avenue south of Jurupa Avenue to meet the west leg of Locust Avenue-Armstrong Street at 7th Street. Under this scenario, project-related trucks would be permitted to use Sierra Avenue north of the project. All other project components and features would be the same as for the proposed project, including automotive trip assignments.

Analysis of Impacts

Aesthetics

Because Alternative 6 would involve the same on-site development as the proposed project, but with different truck routing, impacts related to aesthetics would be the same as those anticipated to occur under the proposed project.

Air Quality/Greenhouse Gases

Similar to the proposed project, Alternative 6 would introduce 3.47 million square feet of development on the project site. The same on-site grading and construction would be required under this alternative as would be required for the proposed project. Therefore, construction-related air quality and GHG impacts would be the same as those that would occur under the proposed project.

Operational uses would also be the same under Alternative 6 as those for the proposed project, with the exception of the routing of trucks. The Air Quality Technical Report (Appendix F) included an analysis of Alternative 6 to determine whether the proposed truck routes for the proposed project would have an otherwise greater impact on the surrounding jurisdictions if access to Sierra Avenue from the project site was developed and permitted. Vehicular trips associated with the project would contribute to congestion at intersections and along roadway segments in the project vicinity. Localized air quality impacts would occur when emissions from vehicular traffic increase in local areas as a result of the proposed project. The primary mobile source pollutant of local concern is CO, which is a direct function of vehicle idling time and, therefore, traffic flow conditions. As shown in the Air Quality Technical Report, under the existing, 2014, and future scenarios, the intersections and roadways analyzed for the daily peak hour would experience 1-hour and 8-hour CO

concentrations below the federal and state standards for both the proposed project and Alternative 6. Along some segments, there were slight changes in project-related increases of plus or minus 0.2 parts per million of CO. However, these differences were inconsequential because the resultant concentrations were far below state 1-hour and 8-hour standards. Therefore, air quality impacts for Alternative 6 would be similar to those identified for the proposed project. In addition, including Sierra Avenue as a route for project-related trucks would not substantially reduce vehicle miles traveled. Therefore, under Alternative 6, emissions of criteria pollutants and GHG from stationary sources would be the same as for the proposed project, while mobile source emissions would be similar to those under the proposed project.

Biological Resources

Because Alternative 6 would involve the same area of disturbance as the proposed project, on-site biological resource impacts would be the same as those anticipated to occur under the proposed project. Under Alternative 6, additional ground-disturbing activities affecting biological resources would occur from off-site construction of Alder Avenue improvements.

Cultural Resources

Because Alternative 6 would involve the same area of disturbance as the proposed project, on-site cultural resource impacts would be the same as those anticipated to occur under the proposed project. Under Alternative 6, additional ground-disturbing activities affecting cultural resources would occur from off-site construction of Alder Avenue improvements, increasing the potential for disturbance of previously undisturbed resources.

Geology and Soils

Because Alternative 6 would involve the same development area as the proposed project, impacts related to geology and soils would be the same as those anticipated to occur under the proposed project.

Hazards and Hazardous Materials

Because Alternative 6 would involve the same development area as the proposed project, impacts related to hazards and hazardous materials would be the same as those anticipated to occur under the proposed project.

Hydrology and Water Quality

Because Alternative 6 would involve the same development area as the proposed project, impacts related to hydrology and water quality would be the same as those anticipated to occur under the proposed project.

Land Use and Planning

Because Alternative 6 would involve the same development area and the same uses as the proposed project, impacts related to land use and planning would be the same as those anticipated to occur under the proposed project.

Noise

The project site is not within 2 miles of a public airport; therefore, noise impacts under Alternative 6 related to projects within an airport land use plan would be the same as those anticipated to occur under the proposed project. Also, construction-related noise impacts would be the same as those anticipated to occur under the proposed project. As with the proposed project, any construction-related noise impacts would be less than significant with implementation of project design features and compliance with the City's noise standards.

The Noise Technical Report (Appendix K) included an analysis of Alternative 6 to determine whether the proposed truck routes for the proposed project would have an otherwise greater impact on the surrounding jurisdictions if access to Sierra Avenue from the project site was developed and permitted. This comparison was made by analyzing project traffic noise levels for the proposed project and for Alternative 6 for existing, 2014, and 2035 scenarios. A with-project noise level change of 3 dBA or less is generally considered to be below the threshold of noticeable hearing. Table 5-6 provides a summary of the affected segments for Alternative 6 and the proposed project. The table also identifies whether the roadway segment has sensitive receptors present.

As shown, Alternative 6 would result in greater impacts on residences along Alder Avenue north of Jurupa Avenue. It would result in fewer impacts to residences along Jurupa Avenue between Locust Avenue and Cedar Avenue and Locust Avenue between 11th Street and 7th Street. It should be noted that the segments along Sierra Avenue are not included in Table 5-6 because the existing and future baseline noise levels are such that neither Alternative 6 nor the proposed project would result in noticeable and significant noise increases. However, due to the routing of trucks onto Sierra Avenue allowed under Alternative 6, incremental noise increases along the Sierra Avenue segments would be higher than those under the proposed project. For example, under the Opening Year (2014) scenario, Table S in the Noise Technical Report (Appendix K) shows that the Sierra Avenue between Slover Avenue and Jurupa Avenue segment would increase by 0.1 dBA, resulting in noise levels of 75.6 dBA under Alternative 6. There would be no increase under the proposed project for the same segment. For the segment of Sierra Avenue north of Slover Ave, noise levels would increase by 0.2 dBA, resulting in a noise level of 77.8 dBA. This is 0.1 dBA higher than would occur under the proposed project. In both cases, the resultant noise levels exceed the City's noise standards.

As shown in Table 5-6, Alternative 6 would shift noise impacts on residences to different areas but would not result in overall different levels of noise impacts from the proposed project.

Table 5-6. Comparison of Traffic Noise Levels on Affected Roadways Segments for Proposed Project with No Prohibition on Trucks Using Sierra Avenue Alternative and Proposed Project (Without Sierra Ave)

Roadway Segment	Alternative 6 (with Sierra Avenue)	Proposed Project (without Sierra Avenue)	Sensitive Land Uses Present
<i>Existing Conditions</i>			
Jurupa Avenue between Locust Avenue and Cedar Avenue	+3.4 dBA	+4.1 dBA	Yes
Alder Avenue north of Jurupa Avenue	+4.1 dBA	+2.7 dBA *	Yes
Alder Avenue south of Jurupa Avenue	+13.3 dBA	+0 dBA *	No
Locust Avenue between Jurupa Avenue and 11 th Street	+2.5 dBA *	+3.3 dBA	No
Locust Ave. between 11 th Street and 7 th Street	+2.5 dBA *	+3.4 dBA	Yes
<i>Opening Year 2014</i>			
Jurupa Avenue between Locust Avenue and Cedar Avenue	+2.9 dBA *	+3.7 dBA	Yes
Alder Avenue north of Jurupa Avenue	+2.8 dBA *	+2.1 dBA *	Yes
Alder Avenue south of Jurupa Avenue	+6.4 dBA	-7.9 dBA *	No
Locust Avenue between Jurupa Avenue and 11 th Street	+2.4 dBA *	+3.4 dBA	No
Locust Avenue between 11 th Street and 7 th Street	+2.3 dBA *	+3.3 dBA	Yes
<i>2035</i>			
Jurupa Avenue between Locust Avenue and Cedar Avenue	+1.3 dBA *	+1.6 dBA *	Yes
Alder Avenue north of Jurupa Avenue	+0.6 dBA *	+1.3 dBA *	Yes
Alder Avenue south of Jurupa Avenue	+1.2 dBA *	-43.9 dBA *	No
Locust Avenue between Jurupa Avenue and 11 th Street	+1.2 dBA *	+2.9 dBA *	No
Locust Ave. between 11 th Street and 7 th Street	+1.3 dBA *	+3.1 dBA	Yes

Source: LSA Associates 2013.

* increase is below 3.0 dBA and, therefore, impacts are not significant.

Bold shows which alternative has the higher dBA contribution.

Population and Housing

Because Alternative 6 would involve the same development area and the same land uses as the proposed project, impacts related to population and housing would be the same as those anticipated under the proposed project.

Public Services

Because Alternative 6 would involve the same development area and the same land uses as the proposed project, impacts related to public services would be the same as those anticipated under the proposed project.

Recreation

Because Alternative 6 would involve the same development area and the same land uses as the proposed project, impacts related to recreation would be the same as those anticipated under the proposed project.

Transportation and Traffic

The projected number of daily trips would be the same (8,365 daily trips) for Alternative 6 as it would be for the proposed project. Impacts related to emergency access and circulation due to construction-generated traffic would be less than significant, the same as those anticipated under the proposed project. The primary difference between Alternative 6 and the proposed project relates to the routing of truck traffic. The goal of the proposed project's routing plan was to incorporate driveway channelization, truck route designation, and other methods including a Transportation Management Association (TMA) to guide project traffic to the regional transportation network and away from residential streets. Under the proposed project, 100% of trucks would be routed east of the project site on Jurupa Avenue with 57% traveling north on Cedar Avenue, with a few trucks veering off in either direction on Slover Avenue and most heading north to I-10. The other 43% of trucks would head south on Cedar Avenue and then split off to either Market Street or Rubidoux Boulevard to reach SR-60. Residential areas are located north and south of Jurupa Avenue and east and west of Cedar Avenue. The proposed project would avoid affecting the large residential community northeast of the Sierra Avenue and Jurupa Avenue intersection.

Under Alternative 6, 70% of the trucks would be routed the same way as for the proposed project: east on Jurupa Avenue and then north on Cedar Avenue to I-10 or south on Cedar Avenue to SR-60. Unique to Alternative 6, however, is that 30% of trucks would be routed to the west of the project site on Jurupa Avenue and north on Sierra Avenue to I-10. Alternative 6 would reduce noise and traffic adjacent to the residential communities east of the project site by 30% compared with the proposed project, but would also create truck traffic and related noise impacts adjacent to the residential communities west of the project site along Jurupa Avenue and Sierra Avenue.

The TIA (Appendix L) included an analysis of Alternative 6 to determine whether the proposed truck routes for the proposed project would have an otherwise greater impact to the surrounding jurisdictions if access to Sierra Avenue from the project site was developed and permitted. Trip distribution patterns for project trips were developed separately for autos and trucks for both the proposed project (no Sierra Avenue access) and Alternative 6 (with Sierra Avenue access). Truck trip distribution for the proposed project has been assigned to avoid the more sensitive residential areas within the project vicinity. For example, according to the trip assignment utilized in the TIA that was prepared in compliance with the TMA for the project, truck traffic would not be allowed to travel to and from the project site from the south via SR-60 from Valley Way or Armstrong Road. Truck distribution with Sierra Avenue Access under Alternative 6 is shown on Figure 9 in the TIA (Appendix L). Truck distribution for the proposed project (without Sierra Avenue Access) is shown on Figure 7 in the TIA (Figure 4.2.14-2B in Section 4.2.14, *Traffic and Transportation*).

The TIA included Alternative 6 (with Sierra Avenue access) in its analysis of intersection and freeway segment impacts. Table 5-7 summarizes the direct and cumulative impacts identified for the proposed project and Alternative 6 (with Sierra Avenue access) for the existing, 2014, and 2035 conditions.

As shown in Table 5-7, Alternative 6 would result in one less direct impact during existing plus project conditions compared with the proposed project. No direct impact is identified for the Locust Avenue/Jurupa Avenue Intersection under Alternative 6. This is because, with no prohibition of routing trucks to Sierra Avenue under Alternative 6, Alder Avenue would be extended through the project site, so 30% of the trucks leaving the site would be routed directly onto Alder Avenue and up to Jurupa Avenue, reducing traffic at the Locust Avenue/Jurupa Avenue intersection. It should be noted that this impact would be fully mitigated with conversion to all-way stop control at the intersection under the proposed project.

Alternative 6 would result in two fewer direct impacts during opening year 2014 conditions compared with the proposed project. No direct impacts are identified for the Locust Avenue/Jurupa Avenue and Locust Avenue/Armstrong Road–7th Street intersections under Alternative 6. As explained above, Alternative 6 would route 30% of the trucks through Alder Avenue up to Jurupa Avenue, reducing trucks traveling along Locust Avenue affecting the intersections of Locust Avenue/Jurupa Avenue and Locust Avenue/Armstrong Road. It should be noted that these impacts would be fully mitigated with the conversion to all-way stop control at both of these intersections under the proposed project.

Alternative 6 would result in four fewer direct impacts during future year 2035 conditions compared with the proposed project. No direct impacts are identified for the Locust Avenue/Driveway 4, Locust Avenue/Driveway 5, Locust Avenue/9th Street-Driveway 7, and Locust Avenue/8th Street intersections under Alternative 6. As explained above, Alternative 6 would route 30% of the trucks through Alder Avenue up to Jurupa Avenue, reducing trucks traveling along Locust Avenue and avoiding the direct impacts at the four intersections along Locust Avenue identified for the proposed project. It should be noted that these impacts would be fully mitigated by adding a two-way left-turn lane at all four intersections under the proposed project.

The evaluation of freeway mainline impacts for Alternative 6 contained in Appendix L indicated that Alternative 6 would have the same impacts on freeway mainline segments as those anticipated to occur under the proposed project.

As shown below, Alternative 6 would result in fewer affected intersections when compared with the proposed project. However, it would not avoid any of the significant and unavoidable traffic impacts that would occur under the proposed project. Alternative 6 would affect the same residential neighborhoods east of the project site as the proposed project, but to a lesser extent due to 30% fewer trucks traveling east. However, Alternative 6 would add truck traffic and resulting impacts on the residential neighborhoods west of the project site that would not experience truck traffic under the proposed project.

Table 5-7. Significantly Affected Intersections for the Proposed Project with No Prohibition of Trucks on Sierra Avenue Alternative and the Proposed Project

Intersection	Existing		2014		2035	
	Alternative 6	Proposed Project (without Sierra Avenue)	Alternative 6	Proposed Project (without Sierra Avenue)	Alternative 6	Proposed Project (without Sierra Avenue)
1. SR-60 Eastbound Ramps/Mission Boulevard	--	--	--	--	Cumulative ¹	Cumulative
2. Sierra Avenue/I-10 Ramps	--	--	--	--	Cumulative	Cumulative
3. Sierra Avenue/Slover Avenue	--	--	--	--	Cumulative	Cumulative
7. Valley Way/SR-60 Westbound Off-Ramp	Cumulative	Cumulative	Cumulative	Cumulative	Cumulative	Cumulative
11. Alder Avenue/Slover Avenue	Cumulative	Cumulative	Cumulative	Cumulative	Cumulative	Cumulative
17. Locust Avenue/Santa Ana Avenue	Direct ²	Direct	Direct	Direct	Cumulative	Cumulative
18. Locust Avenue/Jurupa Avenue	--	Direct	--	Direct	Cumulative	Cumulative
19. Locust Avenue/Driveway 4	--	--	--	--	--	Direct
20. Locust Avenue/Driveway 5	--	--	--	--	--	Direct
21. Locust Avenue/11 th Street-Driveway 6	--	--	--	--	Direct	Direct
23. Locust Avenue/9 th Street-Driveway 7	--	--	--	--	--	Direct
24. Locust Avenue/8 th Street	--	--	--	--	--	Direct
25. Locust Avenue/Armstrong Road-7 th Street	--	--	--	Direct	Direct	Direct
26. Locust Avenue/Driveway 8	--	--	--	--	Direct	Direct
27. Locust Avenue/Driveway 9	--	--	--	--	Direct	Direct
30. Cedar Avenue/I-10 Westbound Ramps	Cumulative	Cumulative	Cumulative	Cumulative	Cumulative	Cumulative
31. Cedar Avenue/I-10 Eastbound Ramps	--	--	--	--	Cumulative	Cumulative
36. Rubidoux Boulevard/20 th Street-Market Street:	--	--	--	--	Cumulative	Cumulative
37. Rubidoux Boulevard/30 th Street-SR-60 Westbound Off-Ramp	--	--	Cumulative	Cumulative	Cumulative	Cumulative

Intersection	Existing		2014		2035	
	Alternative 6	Proposed Project (without Sierra Avenue)	Alternative 6	Proposed Project (without Sierra Avenue)	Alternative 6	Proposed Project (without Sierra Avenue)
38. Rubidoux Boulevard/ SR-60 Westbound On-Ramp	--	--	--	--	Cumulative	Cumulative
39. Rubidoux Boulevard/ SR-60 Eastbound Off-Ramps-30 th Street	--	--	--	--	Cumulative	Cumulative
41. Market Street/ SR-60 Eastbound Ramps	--	--	--	--	Cumulative	Cumulative

Source: LSA Associates, August 2013 and Translutions, August 2014 (provided in Appendix L).

¹ Cumulative= Cumulative Impact. A cumulative impact is identified when project traffic contributes a substantial concentration to an already deficient (below LOS standards set by the jurisdiction) intersection.

² Direct= Direct Impact. A direct impact is identified when project traffic degrades an acceptable LOS to an unacceptable LOS (below LOS standards set by the jurisdiction).

Utilities and Service Systems

Because Alternative 6 would involve the same development footprint and intensity as the proposed project, impacts related to utilities and services would be the same as those anticipated under the proposed project.

Summary of Environmental Impacts Compared with the Proposed Project

As shown in the summary table provided later in this Chapter (Table 5-9), compared with the proposed project, Alternative 6 would reduce some truck-related noise and traffic impacts. Similar impacts would occur for all other issue areas. Alternative 6 would not avoid any of the significant and unavoidable impacts identified for the proposed project, including those related to air quality and off-site traffic noise. Overall, the physical environmental impacts of eliminating the proposed project's prohibition on truck travel on Sierra Avenue as compared with the proposed project with no truck traffic on Sierra Avenue are minimal. While some truck traffic would be shifted away from Armstrong Avenue, the shift would not be great enough to eliminate the site's cumulatively considerable contribution to cumulative traffic impacts. In addition, while noise levels would be reduced at certain locations by routing some project truck traffic to Sierra Avenue, project-related contributions to ambient noise levels would increase at other locations. An evaluation of Alternative 6 in relation to the project objectives is provided in Table 5-8.

Table 5-8. Evaluation of the Proposed Project with No Prohibition on Trucks Using Sierra Avenue Alternative in Relation to Project Objectives

Objective	Supporting Specific Plan Land Use Goals	Evaluation of Alternative 6
Overarching Objective		
Balance the need for industrial/warehousing development with the preservation of open space and construction of needed infrastructure.	Ensure that the development of the site is compatible with, and sensitive to, existing and planned land uses in the area by providing appropriate transitions and environmental buffers between the proposed industrial development and the surrounding area. Conserve on-site critical habitats as natural open space.	Alternative 6 would meet the objective for an industrial/warehousing development to the same extent as the proposed project because it would involve the same on-site development, and would differ from the proposed project only in relation to truck routing. Alternative 6 would include the same footprint of development as the proposed project and so would include the same 55.23 acres of natural hillsides to conserve on-site habitats.
Additional Objectives		
Create local employment and economic development opportunities for the City of Fontana and surrounding communities that help maintain a balanced community.	Implement the City's General Plan by creating a balanced community through strengthening economic opportunities within the City. Provide an employment-generating, warehouse-focused industrial development that is located close to potential employees, thus reducing commute times and distances.	Alternative 6 provides for an employment-generating, warehouse-focused industrial development in proximity to potential employees, reducing commute times and distances, and would therefore strengthen economic opportunities within the City to the same extent as the proposed project.
Achieve a high-quality, cohesive design character for industrial uses within the project site to create a desirable asset to the community and enhance the project's overall value.	Develop high-quality sites for warehousing with stringent design standards.	Through implementation of the design standards within the proposed WVLCSP, Alternative 6 would achieve a high-quality, cohesive design character for industrial uses that would be a desirable asset to the community and enhance the project's overall value. However, Alternative 6 would diminish the project's overall value and desirability for the community by spreading truck traffic and resulting noise over a greater area, affecting more residential neighborhoods than would the proposed project.

Objective	Supporting Specific Plan Land Use Goals	Evaluation of Alternative 6
Provide for orderly development of a phased land use plan that facilitates the timely provision of needed infrastructure and community facilities.	Establish a well-balanced and carefully planned logistics center.	Through implementation of the phased land use plan within the proposed WVLCSP, Alternative 6 would establish a well-balanced and carefully planned logistics center that facilitates the timely provision of needed infrastructure and community facilities.

5.4 Environmentally Superior Alternative

An EIR must identify the environmentally superior alternative to the proposed project. As discussed above and summarized in Table 5-9, Alternative 1, the No Project/No Build Alternative, would be environmentally superior to the proposed project on the basis of the minimization or avoidance of physical environmental impacts. However, according to the State CEQA Guidelines, if the environmentally superior alternative is the No Project Alternative, the EIR shall identify an environmentally superior alternative among the other alternatives (Section 15126.6(c)).

In terms of the physical effects on the environment, the environmentally superior alternative (other than the No Project/No Build Alternative) is Alternative 5, the Reduced Intensity Logistics Center Alternative. Alternative 5 would have fewer impacts on the environment than the proposed project in relation to aesthetics, air quality/GHG, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, and noise. Although air quality impacts would be reduced during construction and operation compared with the proposed project, impacts would still be significant and unavoidable. In addition, although overall traffic generation would be reduced compared with the proposed project, traffic impacts would be significant and unavoidable because the timing of improvements funded by development impact fee programs in San Bernardino and Riverside Counties and improvements funded by payment of impact fees to jurisdictions other than the City of Fontana cannot be guaranteed.

Because Alternative 5 would involve a reduced development potential (a reduction of 30%), it would not meet project objectives related to jobs creation and economic development opportunities to the same extent as would the proposed project. In addition, Alternative 5 would result in substantially reduced public benefit payments to the City, and place the applicant in the position of having purchased a fully entitled development site and allowing for use of 70% of the site's approved development capacity, while eliminating no project-related significant unavoidable impacts.

Table 5-9. Summary of Comparison of Alternatives Impacts

Environmental Issue Area	Proposed Project	Alternative 1 No Project/ No Build	Alternative 2 No Project/ Buildout of VTSP	Alternative 3 Multi-Tenant Business Park	Alternative 4 Reduced Intensity Multi- Tenant Business Park	Alternative 5 Reduced Intensity Logistics Center	Alternative 6 Proposed Project with No Prohibition on Trucks Using Sierra Avenue
Aesthetics	Less than Significant	Reduced	Reduced	Similar	Reduced	Reduced	Similar
Air Quality/ Greenhouse Gases	Significant Unavoidable with Mitigation	Reduced	Reduced	Reduced	Reduced	Reduced	Similar
Biological Resources	Less than Significant with Mitigation	Reduced	Reduced	Similar	Reduced	Similar	Similar
Cultural Resources	Less than Significant with Mitigation	Reduced	Reduced	Similar	Reduced	Similar	Similar
Geology and Soils	Less than Significant	Reduced	Similar	Similar	Reduced	Reduced	Similar
Hazards and Hazardous Materials	Less than Significant with Mitigation	Reduced	Reduced	Similar	Reduced	Reduced	Similar
Hydrology and Water Quality	Less than Significant with Mitigation	Reduced	Reduced	Similar	Reduced	Similar	Similar
Land Use and Planning	Less than Significant	Reduced	Similar	Similar	Similar	Similar	Similar
Noise	Significant Unavoidable with Mitigation	Reduced	Reduced	Reduced	Similar	Reduced	Reduced
Population and Housing	Less than Significant	Reduced	Greater	Greater	Greater	Reduced	Similar

Environmental Issue Area	Proposed Project	Alternative 1 No Project/ No Build	Alternative 2 No Project/ Buildout of VTSP	Alternative 3 Multi-Tenant Business Park	Alternative 4 Reduced Intensity Multi- Tenant Business Park	Alternative 5 Reduced Intensity Logistics Center	Alternative 6 Proposed Project with No Prohibition on Trucks Using Sierra Avenue
Public Services	Less than Significant with Mitigation (Fire Services)	Reduced	Greater	Greater	Greater	Reduced	Similar
Recreation	Less than Significant	Reduced	Greater	Similar	Similar	Similar	Similar
Transportation and Traffic	Significant Unavoidable with Mitigation	Reduced	Reduced	Greater	Greater	Reduced	Reduced
Utilities and Service Systems	Less than Significant	Reduced	Greater	Greater	Greater	Reduced	Similar

Chapter 6

Cumulative Impacts

6.1 Introduction

The California Environmental Quality Act (CEQA) requires an Environmental Impact Report (EIR) to evaluate a project's contribution to cumulative impacts. Cumulative impacts are the project's impacts combined with the impacts of other related past, present, and reasonably foreseeable future projects. As set forth in the State CEQA Guidelines, the discussion of cumulative impacts must reflect the severity of the impacts as well as the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the project alone. As stated in CEQA, Title 14, Section 21083(b), "a project may have a significant effect on the environment if the possible effects of a project are individually limited but cumulatively considerable."

According to the State CEQA Guidelines:

Cumulative impacts refer to two or more individual effects that, when considered together, are considerable and 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 that 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 (CCR, Title 14, Division 6, Chapter 3, Section 15355).

In addition, as noted in the State CEQA Guidelines, the "mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the project's incremental effects are cumulatively considerable" (California Code of Regulations [CCR], Title 14, Division 6, Chapter 3, Section 15064(I)(5)).

6.1.1 Requirements for Cumulative Impact Analysis

"Individual effects" refers to changes resulting from a single project or a number of separate projects; in contrast, "cumulative impacts" are changes in the environment from the incremental impact of a project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor, but collectively significant, projects taking place over a period of time. An adequate discussion of significant cumulative impacts involves analyzing either "a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency" or "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." A reasonable combination of the two approaches may also be used.

The cumulative impact analysis in this EIR uses both the list of projects approach and the projections approach, depending upon the resource area being analyzed.

The cumulative study area limits for the traffic analysis of the West Valley Logistics Center Specific Plan (WVLCSP) include a 5-mile radius from the project site and a larger set of cumulative projects within nearby jurisdictions, as provided in Appendix C of the Traffic Impact Analysis (TIA) (Appendix L: LSA 2013). According to the TIA, the 50-trip threshold for intersections and 100-trip threshold for freeway segments were met prior to reaching the 5-mile limit consistent with the guidelines established by the San Bernardino County Congestion Management Program (CMP) (adopted November 3, 1993, and revised December 2003). All CMP locations where the project is forecast to add 50 trips at intersections and 100 trips at freeway segments have been included in the cumulative analysis for traffic. The 2014 and 2035 cumulative traffic analyses were generated by taking the 2012 traffic counts and assigning a percentage of growth. For example, to develop year 2014 background traffic volumes, 8.6% (or 2/23) of the total modeled 2012–2035 growth at each intersection was added to the existing 2012 counts, since it is 2 years from 2012 to 2014, and 23 years from 2012 to 2035 (refer to Section 4.2.14, *Transportation and Traffic*, for more information).

Year 2035 cumulative traffic volumes for the proposed project were developed using the Comprehensive Transportation Plan traffic model, maintained by the Southern California Association of Governments (SCAG). To account for cumulative projects identified by the different agencies in the area, the socioeconomic data (SED) in the traffic model were compared with the list of cumulative projects at a traffic analysis zone. At locations where the SED in the model were found to be less intense than the proposed project, the SED were updated to reflect the more intense data using SCAG conversion rates. No changes were made to the base year model. Therefore, the 2035 traffic volumes include trips from cumulative projects.

The traffic model and associated growth projections were prepared and refined specifically for use in the traffic, air quality, greenhouse gas emission, and noise evaluations. The remaining environmental resource areas evaluated in the EIR were analyzed in relation to past, present, and foreseeable future development projects, as listed in Table 6-1, generally for a 3-mile study area as shown in Figure 6-1, *Related and Cumulative Projects*. The study area includes portions of the cities of Fontana, Rialto, Jurupa Valley, Colton, Riverside, San Bernardino, and the Bloomington and Crestmore areas of San Bernardino County. The study area is roughly bounded by Hemlock Avenue to the west, Merrill Avenue to the north, Eucalyptus Avenue (in the Cities of Colton, Rialto, and San Bernardino) and Main Street (in the City of Riverside) to the east, and Galena Street (in the City of Jurupa Valley) to the south.

6.1.2 Geographic Scope of Cumulative Impact Analysis

Different types of cumulative impacts occur over different geographic areas. For example, the geographic scope of the cumulative air quality analysis, where cumulative impacts occur over a large area, is different from the geographic scope considered for cumulative analysis of aesthetic resources, for which cumulative impacts are limited to specific viewsheds. Therefore, in assessing aesthetic resources impacts, only development within the vicinity of the project site would contribute to a cumulative visual effect, whereas cumulative air quality impacts are based upon all development within the air basin. Because the geographic scope and other parameters of each cumulative analysis discussion can vary, the cumulative geographic scope and the cumulative projects included in the geographic scope (when the list of projects approach is used) are described for each resource area.



Figure 6-1
Related and Cumulative Projects
West Valley Logistics Center Specific Plan EIR

6.1.3 Projects Considered in the Cumulative Analysis

Cumulative impact discussions for each environmental topic area are provided in this chapter of the EIR. As previously stated and as set forth in the State CEQA Guidelines, related projects consist of “closely related past, present, and reasonably foreseeable probable future projects that would be likely to result in similar impacts and be located in the same geographic area” (CCR, Title 14, Division 6, Chapter 3, Section 15355), as provided in Table 6-1 for projects that are considered as part of the cumulative impact analysis within this EIR¹.

Table 6-1. Cumulative Projects List by Jurisdiction

#	Project Title	Status	Location Relative to the Proposed Project	Description
City of Fontana				
1	Monterey Villa Apartments	Time Extension for a previously approved Design Review currently being processed	San Bernardino Avenue and Juniper Avenue, 1.8 miles west of the project	100-unit affordable housing complex
2	Industrial Project	Time Extension DRP 10-003X currently being processed	11251 Hemlock Avenue, 3 miles west of the project	Three buildings totaling 1,277,728 sq. ft.
3	Paseo Verde Apartments	In construction phase	16556 Valley Boulevard, 2.25 miles northwest of the project	46 multi-family units on 4 acres
4	OMP Fontana Distribution Center	Proposed	Between Poplar and Elm, south of Slover Avenue, 3 miles northwest of the project	454,000 sq. ft. of warehouse development
5	OMP Fontana Commerce Center	Site and Architectural Review currently being processed	10825 Beech Avenue, 3 miles northwest of the project	Concrete tilt-up warehouse of 420,000 sq. ft. on two parcels comprising 17.6 acres
6	Westech College	Design Review currently being processed	9460 Sierra Avenue, 2.75 miles northwest of the project	College building two-story 20,008 sq. ft. and subdivision of a 4-acre parcel into two 2-acre parcels
7	Robert's Apartments	Site and Architectural Review currently being processed	Juniper Avenue, 2.8 miles northwest of the project	Three-story senior apartment complex with 71 units
8	Walmart Commercial Center	Site and Architectural Review currently being processed	10591 Sierra Avenue, 1.6 miles northwest of project	194,583 sq. ft. store 24,850 sq. ft. retail/food space

¹ The Traffic Impact Analysis prepared by LSA Associates, Inc. utilized a larger list of projects spanning a farther distance from the project site than the list of projects analyzed for all environmental categories except traffic, air quality, greenhouse gas emissions, and noise. This list is provided in Appendix C of the TIA (LSA 2013).

#	Project Title	Status	Location Relative to the Proposed Project	Description
9	Citrus Commerce Park	Proposed, applications for zone change and general plan amendment currently being processed	Bounded by Jurupa Avenue, Citrus Avenue, Santa Ana Avenue and Oleander Avenue, 1.8 miles northwest of the project	1,883,234 sq. ft. of new industrial area to replace residentially designated land uses on 77.56 acres
County of San Bernardino				
10	Kessler Park Improvements	Final Finding of No Significant Impact/Environmental Assessment and Mitigated Negative Declaration being prepared	Southwest corner of Jurupa and Linden Avenues in Bloomington, directly east of Parcel 7	Rehabilitation, relocation, and expansion of Kessler Park
City of Jurupa Valley (County of Riverside)				
11	Pedley Shopping Center	Draft EIR prepared	Southeast corner of SR-60 and Pedley Road in Jurupa Valley, 3.4 miles southwest	300,000 sq. ft. of a retail commercial shopping center
12	Tentative Tract Map 31894 "Highland Park"	Proposal involving environmental review	North of Canal Street and Union Pacific Railroad and east of Sierra Avenue/20 th Street, near Rattlesnake Mountain/Rock Quarry, 1 mile south	General Plan amendment, change of zone, and tentative tract map (TTM36391) for a residential subdivision on approximately 168.3 acres involving 408 single-family residential lots, several water quality treatment basins, and associated open space
13	Emerald Meadows Ranch Specific Plan	In pre-planning stage to revise approved specific plan	Just south of 30 th Street on the east side of Rubidoux Boulevard, 2.25 miles southeast	Specific plan for a mixed-use community on 278 acres. Approved for 1,196 dwelling units (density of 4.3 dwelling units per acre [du/ac]) and 186,000 sq. ft. of retail commercial uses
14	Rio Vista Specific Plan	Submitted for pre-application review to amend approved specific plan	Between Armstrong Road and Rubidoux Boulevard, directly southeast	Specific plan for a master planned community of 1,697 homes (density of 1.8 du/ac), parks, schools, and commercial uses on 918 acres; proposed amendment would reduce development by approximately 1,200 dwelling units

#	Project Title	Status	Location Relative to the Proposed Project	Description
15	Conditional Use Permit 1401, Alpha Materials Inc.	Conditional use permit approved and Mitigated Negative Declaration adopted in October 2014	6170 20 th Street, 1 mile southeast	Continue an existing concrete business and expand an aggregate materials storage and handling facility with truck parking on 9.73 acres
City of Rialto				
16	Hazardous Buildings Removal	City of Rialto going out to construction bid	2524 and 2530 S. Lilac Avenue and 1394 N. Laurel Avenue in Rialto, 1.7 miles northeast	Removal of asbestos and lead paint hazardous materials and demolition of three properties
17	Walmart Commercial Center	Site and Architectural Review, Supplemental EIR	Southeast corner of San Bernardino and Willow Avenues in Rialto, 2.7 miles northeast	230,000 sq. ft. retail center with Walmart anchor
18	Gateway Development Opportunities	Proposed	Northwest corner of Riverside Avenue and Valley Boulevard, in Rialto, 2.6 miles northeast	Existing Walmart to be converted to Lowe's with other commercial uses
City of Colton				
19	DAP 001-105 Architectural & Site Plan Review, DAP 001-104 TPM 19471, HPO 000-019 Major Historic Certificate of Appropriateness	Mitigated Negative Declaration prepared, case in review	1350 to 1600 W. Agua Mansa Road in Colton, 2.9 miles southeast	DAP 001-105 Architectural & Site Plan Review for the development of an 808,500 sq. ft. warehouse distribution building on 40.49 acres in the Agua Mansa Industrial Corridor Specific Plan
20	West Valley Specific Plan	Specific Plan and Focus Area in Colton's general plan	Bounded by Colton's western boundary, San Bernardino Avenue to the north, Burlington Northern Santa Fe railroad to the east, and I-10 to the south in Colton, 2.6 miles southeast	Contains existing Arrowhead Regional Medical Center, Hermosa Gardens Cemetery, golf course, and commercial and industrial businesses. At buildout, the area will accommodate 1,300 residential units at varying densities and 2 million sq. ft. of retail, office, business park development, and parks and habitat preservation

#	Project Title	Status	Location Relative to the Proposed Project	Description
21	Pellissier Ranch Solar Photovoltaic Project	Proposed by Riverside Public Utilities	South and east of the Santa Ana River, west of the Riverside Avenue and La Loma Hills, north of Center Street in Colton, 2.9 miles southeast	Execution of a Power Purchase Agreement for up to 10 megawatts of solar photovoltaic power and a subtransmission station on 100 acres of a 227-acre site
City of Riverside				
22	TM 35004 (P06-1096)	Tract Map approved 11/2007, map recorded	Westerly terminus of Rivera Street near the Santa Ana River in Riverside, 2.6 miles southeast	TM 35004 recorded to create 8 lots on 2.41 acres for industrial/condo purposes
23	TM-32292 (P07-0370)	PM 35354 approved 6/2007	4054 Strong Street in Riverside, 2.8 miles southeast	TM 32292 to create 48 single-family residential units
24	PM 35354 (P07-0101 and P07-0099)	PM 35354 and Design Review approved 5/2008, map recorded	Southeasterly corner of Main Street and Garner Road in Riverside, 2.8 miles southeast	PM 35354 and Design Review to create six lots for industrial purposes totaling 207,744 sq. ft.
25	P06-1628 and P06-1640, P12-0717	Design Review approved in 4/2008, 4/2013	1710 Main Street in Riverside, 2.9 miles southeast	Rezone and Design Review to rezone from R-1-7000 to CR to facilitate a commercial retail office building for a 8,039 sq. ft. Family Dollar store
26	P07-0682 and P07-0683	General plan amendment and rezoning approved 3/2009	4300-4371 Latham Street, 4500-4590 Allstate Drive, 1950-2000 Market Street, 1919 Atlas Street, 2.9 miles southeast	General plan amendment and rezoning for 13 parcels from B/OP to the O General Plan and from CR to the O Zone
27	P10-0219	Conditional use permit approved 7/2010	4183 Fairgrounds Street, 2.9 miles southeast	Conditional use permit for a church with 180 fixed seat within an existing building
28	Stealth Wireless Telecommunications Facility (P13-0069)	Minor conditional use permit and Mitigated Negative Declaration approved 6/2013	2300 Market Street, situated on the corner of Market Street and Fairmount Boulevard, 3.4 miles southeast	Minor conditional use permit to allow for a wireless telecommunications facility within three existing roof-top towers on an approximately 3.45-acre site currently developed with a 3-story office building

#	Project Title	Status	Location Relative to the Proposed Project	Description
29	3105-3189 Market Street, 3804-3894 First Street, 3847-3891 Second Street, and 3130 and 3144 Fairmount Boulevard (P12-0214)	Draft Mitigated Negative Declaration prepared	3189 Market Street, 3130 and 3144 Fairmount Boulevard, and 3867 Second Street, 3.5 miles southeast	Development of a multiple-family residential project consisting of 125 units (42 one-bedroom units, 76 two-bedroom units, and 7 three-bedroom units), within a five-story building,
30	Smart Code Specific Plan for the Former Riverside Golf Club and AB Brown Sports Complex	Proposed; master plan to determine a future development with residential, retail, commercial, light industrial and park space uses; public meeting held on 3/13/2014	Former Riverside Golf Club at 1011 N. Orange Street and AB Brown Sports Complex at 3700 Placentia Lane, 3 miles southeast	Smart Code Specific Plan, Program EIR, and Northside Neighborhood Vision Plan for 179 acres of vacant property within the Northside Neighborhood
31	Single Family Residential/TTM 33550 (P05-0269 and P08-0416)	Approved by City Council on 9/08, not built	3719 Strong Street, 3 miles southeast	TTM 33550 and Rezoning of vacant parcels within a multifamily zone to establish nine single-family residential lots
32	Senior Housing Facility (P13-0087 and P13-0262)	Approved by City Council on 8/2013	2450 Market Street, 3 miles southeast	Conditional use permit to establish a 77-unit senior housing facility within an existing three-story, approximately 51,321 sq. ft. building

City of San Bernardino

No projects were found to occur within the study area (west by South Eucalyptus Avenue and north of West Randall Street).

Multiple Jurisdictions

33	Agua Mansa Industrial Corridor Specific Plan	Specific plan adopted in 1986	Bounded by I-10 to the north, Santa Ana River and Rancho Avenue to the east, Rubidoux Boulevard and Market Street to the southwest, and Bloomington to the west	Specific plan prepared as a master economic development plan for 4,285 acres within portions of Colton, Rialto and Counties of San Bernardino and Riverside
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#	Project Title	Status	Location Relative to the Proposed Project	Description
34	Riverside Transmission Reliability Project (RTRP)	EIR certified February 2013 by Riverside Public Utilities	Western and northern Riverside, portions in Norco and Jurupa Valley. Connection occurring through Fontana, north of Planning Areas 1 and 3	Construction of a 230-kilovolt (kV) transmission line, 230/69 kV electrical substation and 69 kV subtransmission lines. Will interconnect to transmission line through Fontana (no construction to occur within study area)
35	La Rivera Development - Surface Drainage Improvement Project (P11-0415)	Mitigated Negative Declaration prepared by the City of Riverside in 2012	Southern terminus of Salmon River Road in the La Rivera residential development (Tracts 30922-3 and 30922-4) in the City and County of Riverside, 2.6 miles southeast	Proposal to improve existing drainage conditions due to storm flow runoff and installation of storm drains adjacent to the Santa Ana River
36	Rialto Commerce Center	EIR and project approved in 2011	North of El Rivino Road at Cactus Road, in Rialto (previously unincorporated San Bernardino County), 1.2 miles east	3.6 million sq. ft. of warehouse space on 164 acres including the 129-acre El Rivino golf course property, recently annexed by the City of Rialto

Source: ICF compiled the list of cumulative projects based on a projects list provided by the City of Fontana; a review of projects being processed within a 5-mile radius of the project utilized in the traffic analysis and included in Appendix C of the TIA (Appendix L: LSA 2013); and a review of information provided on city websites, such as City Council and Planning Commission agenda and staff reports, listings of redevelopment opportunity areas, CEQA documents, planning documents, and bid notices for nearby jurisdictions including the Cities of Colton, Jurupa Valley, Rialto, Riverside, and San Bernardino and the County of San Bernardino conducted from summer of 2013 through winter of 2014. Additional project information was provided by the City of Jurupa Valley in June and August 2014.

For purposes of this cumulative analysis and as provided in Table 6-1, the cumulative study area contains 36 projects and specific plans. As summarized in Table 6-2, the development potential of all cumulative projects combined includes 3,096 residential units (plus 148 senior dwelling units), 5,282,500 square feet of warehousing development, 1,485,472 square feet of industrial development, 935,388 square feet of regional retail development involving three major shopping centers proposed in the cumulative study area, and 20,008 square feet of office development. Additionally, numerous specific plans involve unknown build-out potential, including the West Valley Specific Plan in the City of Colton with the build-out potential of up to 1,300 additional existing and proposed residential units and 2,000,000 square feet of industrial and commercial space (The Arroyo Group 1996). For the Agua Mansa Industrial Corridor Specific Plan, an area encompassing multiple jurisdictions, the build-out potential for the area could involve up to 18,000 new industrial jobs, if a factor of 12 workers per developable acre for 1,500 acres of vacant land (as of 1986) was utilized in the calculation of area potential within this plan area (Willdan Associates and Williams-Kuebelbeck & Associates 1986). The City of Riverside is currently investigating the build-out potential of the former Riverside Golf Club and AB Brown Sports Complex as part of the Smart Code Specific Plan and no specific development plan is currently in place (City of Riverside 2013).

Table 6-2. Cumulative Projects Development Summary

Type of use	Total in Study Area	Generation Factor (Average)*	Number of New Employees	Number of New Residents
Warehouse	5,282,500 sq. ft.	1,195 sq. ft. per employee	4,421	--
Industrial	3,368,706 sq. ft.	834 sq. ft. per employee	4,039	--
Residential	146 (Fontana), 2,893 (Jurupa Valley), 57 (Riverside), 148 (senior) residential units (71 in Fontana, 77 in Riverside)	3.95 (Fontana), 3.27 (Riverside), 3.64 (Jurupa Valley), and 1.25 (senior) residents per household	--	11,500
Regional Retail	935,388 sq. ft.	1,009 sq. ft. per employee	927	--
Office	20,008 sq. ft.	697 sq. ft. per employee	29	--
Total			9,416	11,500
Indirect Generation of Residents from new Employment				9,510

*Generation factors are based on the SCAG Employment Density Study Summary Report (SCAG 2001). The SCAG report lists the generation factors for average employees per acre in San Bernardino County as follows:

- one employee per 1,195 square foot of Warehouse space projection factor
- one employee per 834 square foot of Industrial (R&D/Flex Space) space projection factor
- one employee per 1,009 square foot of Regional Retail space projection factor
- one employee per 697 square foot of Low-Rise Office space projection factor

For Residential, a factor of 4.04 was used for the average household size in the City of Fontana for the year 2013, based on the City of Fontana's adopted 2014 Housing Element, data from the U.S. Bureau of Census 2000 SF3, DOF Table E-5, 2009 (Fontana Housing Element 2006–2014). For Riverside, review of U.S. Census Bureau QuickFacts for the City of Riverside (U.S. Census Bureau n.d.) indicated that the average household size in the City was 3.27 persons per household for 2008–2012. For Jurupa Valley, review of the 2012 Department of Finance figures indicated 3.64 people per dwelling unit. For senior housing, a factor of 1.25 persons per household was utilized. The indirect population growth generation factor is assumed to be 25% of employment multiplied by 4.04 persons per household.

6.2 Cumulative Impact Analysis

The discussion below evaluates the potential for the proposed project to contribute to a cumulative adverse impact on the environment. For each resource area, an introductory statement is made describing what would constitute a significant cumulative impact for that particular resource area.

The analysis that follows considers two separate impacts. First, the significance of the cumulative effect of the project combined with past, present, and reasonably foreseeable projects is evaluated to

determine whether significant cumulative impacts will result. Secondly, in the event a significant cumulative effect is identified, the proposed project's incremental contribution to the identified cumulative effect is evaluated to determine whether the project's contribution to the significant cumulative effect is cumulatively considerable. If it is determined that the proposed project's contribution to the cumulative effect is considerable, additional mitigation for the project's contribution to the significant cumulative effect may be recommended.

6.2.1 Aesthetics

Although 36 reasonably foreseeable future projects occur within the project vicinity (see Table 6-1) that generally contribute to the trend of an increasingly urban character to the cumulative analysis area, the geographic scope of analysis for cumulative aesthetics impacts is limited to areas where views of the project site are available and is largely restricted to areas within the set of representative viewpoints described previously. As such, the visual impact analysis area generally encompasses areas along Armstrong Road, Locust Avenue, and the residential neighborhoods and local roadways (e.g., 7th Street and 11th Street) south and east of the project.

Scenic Vistas: Views of the Jurupa Hills and Rattlesnake Mountain are considered scenic vistas. Past development projects within the area have altered the land in and around the project site from a natural and undeveloped setting with mountains and other topographic features to a semi-rural and suburban setting defined by single-family homes. However, development has not occurred on the Jurupa Hills or Rattlesnake Mountain, and some of the original aesthetic features of the area remain unchanged. In its analysis of the effects of General Plan buildout on scenic vistas, the Fontana General Plan EIR concluded that substantial increase in urban uses throughout the City and its Sphere of Influence would substantially alter open space views. The General Plan EIR further noted that this alteration might affect views of the Jurupa Mountains, obstructing existing open views and/or potentially obstructing distant panoramic views from existing development. In its cumulative impact analysis, the General Plan EIR concluded that the conversion of currently vacant land would result in a significant visual impact that would remain significant even with the mitigation proposed in the General Plan and its associated EIR.

Cumulative project #10, which would consist of the rehabilitation, relocation, and expansion of Kessler Park, would be at the southwestern corner of Jurupa and Linden Avenues in Bloomington, directly east of Parcel 7. Cumulative project #34, which would include the construction of a 230-kilovolt (kV) transmission line, 230/69 kV electrical substation, and 69 kV subtransmission lines, would interconnect to a transmission line through Fontana north of Planning Areas 1 and 3. However, no construction of cumulative project #10 would occur within the study area.

Cumulative projects #12 and #14, which would consist of residential subdivisions within the hillside, several water quality treatment basins, and associated open space, would involve disturbance into Rattlesnake Mountain and may alter views.

Because views of the project site from surrounding residential areas are already largely blocked by development and trees within those neighborhoods, and only the upper elevations of the site are visible, the proposed project's contribution to cumulative impacts on scenic vistas would not be cumulatively considerable. **Scenic Resources:** Cedar Avenue, a San Bernardino County designated scenic route, is about 0.75 mile east of the proposed project and is the only scenic route with the potential to have views of the proposed project. The Jurupa Hills and San Gabriel Mountains are important visual features contributing to the scenic quality of Cedar Avenue. Because cumulative

project sites are in disparate locations, travelers along Cedar Avenue will not view multiple projects at a time. Therefore, cumulative impacts related to the Cedar Avenue scenic route would be less than significant. In addition, neither the proposed project nor any of the cumulative projects would involve physical modifications to the Jurupa Hills. Cumulative projects #12 and #14 would result in some modifications to Rattlesnake Mountain, and their impacts could combine with those of the project to create a cumulatively significant impact. However, because there would be no substantial damage to the area's scenic resources themselves as these projects would be planned to maintain the integrity of the mountain (even though scenic views of those resources would be affected), cumulative impacts on scenic resources would be less than significant.

Visual Character: The character of views in the project vicinity is formed by sloped natural areas with native vegetation (such as coastal sage scrub); single-family residential neighborhoods; a tree nursery; paved roadways; mature street trees; overhead utility improvements; and undeveloped, partially graded, and disturbed areas. Views from the area, including the nearby communities of Jurupa Valley and Bloomington, are dominated by the Jurupa Hills and Rattlesnake Mountain in the foreground and middleground. The highest visible peak in the area is 1,913 feet in elevation at the top of the Jurupa Hills, which extend farther west of the project site. Steep topography around Rattlesnake Mountain is also visible in the foreground and middleground as slopes continue to the west and southeast. These topographic features have precluded development along steeper hillside areas; however, the foothill and valley areas at the base of these hills consist of single-family residential development and vacant areas, and include the project site. Three white concrete water reservoirs are visible just west of the project site and are surrounded by low-lying vegetation in the slopes of the Jurupa Hills. The surrounding hillsides are generally devoid of dense vegetation; however, there are occasional trees scattered along the slopes.

Present and future projects including the Monterey Villa Apartments (cumulative project #1), the Paseo Verde Apartments (cumulative project #3), Robert's Apartments (cumulative project #7), and a Walmart proposal (cumulative project #8) would continue to modify the visual appearance of Fontana; however, these projects are outside of the geographic scope of analysis for aesthetics.

Furthermore, these cumulative projects are all under site and architectural review or have already completed a design review to ensure that their appearances comply with City standards and regulations and demonstrate consistency with surrounding development. Past and present projects have somewhat urbanized the project area, and reasonably foreseeable future projects would continue to alter views in the cumulative analysis area as its transition to urban use continues. Changes from past, present, and reasonably foreseeable future projects have been and would continue to be subject to site and architectural reviews prior to project approval. The proposed project would be subject to site and architectural reviews prior to approval of building construction, similar to the visual requirements that apply to the cumulative projects in Table 6-1. As a result of these design reviews, cumulative impacts would not be significant.

Nighttime Lighting and Daytime Glare: The majority of the cumulative projects identified above in Table 6-1 would result in new sources of light and glare in the project site vicinity. The area surrounding the site is currently moderately lit, while the project site is not currently lit at night. With typical mitigation consisting of non-glare building surfaces applied to each project, buildings and structures would be designed to avoid significant daytime glare impacts under both project and cumulative conditions.

The proposed project, as well as most of the cumulative projects, would produce new sources of light and glare where no lighting or artificial sources to create glare currently exist. Because night lighting from cumulative projects would occur over a large area, projects would not combine to cause increased spillage of light onto any specific property; however, the combination of these new sources of light would contribute to decreasing darkness of the night sky. This is considered to be a significant cumulative impact.

With implementation of the architectural and design guidelines contained in the WVLCSP, the proposed project would be designed to avoid glare-producing building surfaces and to direct night lighting downward to confine direct light rays to the project site (e.g., to parking and roadway areas). Street lighting and parking lot lighting would be low-level and shielded to avoid affecting the dark night sky. Any landscape accent lighting would be placed at the base of trees and directed so as to avoid dark night sky impacts. The proposed project would thus not have a cumulatively considerable contribution to cumulative nighttime lighting impacts.

6.2.2 Air Quality

The geographic scope of analysis for cumulative air quality impacts pertaining to consistency with air quality plans and air quality threshold levels is the entire South Coast Air Basin (SCAB), because plans and thresholds are established at the air basin-wide level. The geographic scope for cumulative impacts on sensitive receptors and odors is considered at a more localized level due to the more limited area of dispersion, and includes the neighborhoods adjacent to the project site and areas close to the source of the odor, respectively.

Air Quality Management Plan (AQMP): Projects that are consistent with the forecasts identified by SCAG are considered to be consistent with the AQMP. Because development must either (1) be consistent with the existing general plan or an adopted specific plan; (2) propose a similar or lesser intensity of development as indicated by the existing general plan or an adopted specific plan; or (3) provide sufficient mitigation so that the project site would not generate more air pollutant emissions than was accounted for from the project site in the adopted AQMP, past, present, and future projects would be incorporated within SCAG's growth projections and therefore would not conflict with or obstruct implementation of the South Coast Air Quality Management District's (SCAQMD's) air quality management plan. Cumulative projects #12, #13, #14, #26, #31, and #33 include one or more of the following land use actions: specific plan, general plan amendment, or rezoning. These land use changes could affect the individual projects' consistency with the SCAQMD AQMP. However, as discussed below for the proposed project, the new land use designations and growth projections would be incorporated into the next updated AQMP, which occurs on a 3-year cycle. Therefore, while the cumulative projects may contribute to a cumulative impact related to consistency with the AQMP, the impact would be short term and addressed in the subsequent update cycle. Cumulative impacts pertaining to the region's air quality plan would thus be less than significant with the addition of individual project approvals for consistency.

Construction and Operation Emissions: SCAQMD does not recommend quantified analyses of cumulative construction or operational emissions, nor does it provide separate methodologies or thresholds of significance to be used to assess cumulative impacts. Instead, SCAQMD recommends that a project's potential contribution to cumulative impacts should be assessed using the same significance criteria as those for project-specific impacts. Therefore, individual development projects that generate construction-related or operational emissions that exceed the SCAQMD

recommended daily thresholds for project-specific impacts would also cause a cumulatively considerable increase in emissions for those pollutants for which the SCAB is nonattainment.

Past development projects within the SCAB have involved emissions related to construction and operation, resulting in violations of air quality standards and the current nonattainment status for several criteria pollutants, including particulate matter 10 microns or less in diameter (PM₁₀), particulate matter 2.5 microns or less in diameter (PM_{2.5}), and ozone. Air quality violations and the region's nonattainment status are consequences of past and present projects, and the region is subject to continued violations and a nonattainment status by the cumulative contribution of reasonably foreseeable future projects, such as those listed in Table 6-1. Reasonably foreseeable future projects that could contribute to cumulative impacts on localized air quality conditions would include construction related to any of the cumulative projects listed in Table 6-1. Emissions from any of these projects would be subject to the same SCAB rules and regulations that would reduce emissions from the proposed project, including Rules 402 and 403 to control fugitive dust, but could combine with emissions associated with the proposed project to contribute to exceeding PM₁₀, PM_{2.5}, and ozone threshold levels per the SCAB. Therefore, because past and present projects have resulted in air quality violations and the current nonattainment status for ozone, nitrogen oxides (NO_x), PM₁₀, and PM_{2.5}, and reasonably foreseeable future projects would continue to contribute to air quality violations and the nonattainment status, impacts related to the violation of air quality standards and the cumulative contribution of nonattainment pollutants (ozone, NO_x, PM₁₀, and PM_{2.5}) would be cumulatively significant.

The proposed project's contribution to cumulative air quality impacts is addressed in Impact AQ-3 within Section 4.2.2, *Air Quality*. The project would temporarily contribute criteria pollutants to the area during project construction. A number of individual projects in the area may be under construction simultaneously with the proposed project. Depending on construction schedules and actual implementation of projects in the area, generation of fugitive dust and pollutant emissions during construction could result in substantial short-term cumulative increases in air pollutants. As discussed for Impact AQ-2, the proposed project would result in significant emissions of NO_x during the construction phase, and reactive organic gases (ROG) and carbon monoxide (CO) during the operational phase. Implementation of **Specific Plan Requirement SP-GG-1, Regulatory Requirements RR-AQ-1 through RR-AQ-6, and Mitigation Measures AQ-1 through AQ-14** would reduce the severity of the violations but not to a less-than-significant level. Consequently, construction of the proposed project, in conjunction with other planned developments within the cumulative study area, would contribute to the existing nonattainment status. Therefore, the proposed project would make a cumulatively considerable contribution of NO_x during the construction phase and ROG and CO during the operational phase to adverse cumulative air quality impacts.

Sensitive Receptors: The TIA included vehicular trips from all present and future projects in the project vicinity (Appendix L). The CO hot spot concentrations calculated at intersections include the cumulative traffic effect. Based on Tables 4.2.2-17 through 4.2.2-19, 1-hour and 8-hour CO concentrations at nearby intersections would not exceed federal and state standards, and no significant cumulative CO impacts would occur.

Although past and present projects in the region would contribute to air quality violations and the region's nonattainment status, impacts on sensitive receptors would be limited. Sensitive receptors in the vicinity of the project would not likely be exposed to substantial pollutant concentrations from the proposed project combined with past, present, and future projects in the area. Because the

cumulative projects are physically separated from each other, it is not likely that multiple projects would be under construction at the same time in close enough proximity to any single sensitive receptor to result in cumulative pollutant concentrations that would significantly affect a single sensitive receptor. Consequently, cumulative impacts pertaining to sensitive receptors would be less than significant.

Cumulative health risks are addressed in Section 4.2.2, *Air Quality*, under Impact AQ-3. Because the SCAB is in non-attainment of air quality goals, a significant cumulative impact would exist. As described in more detail in the Impact AQ-4 discussion, project toxic air contaminant emissions would contribute no more than 1.5 in a million, well under the 10 in a million project threshold. As stated, this does not take into consideration the improvements to diesel engines and resulting 75% reduction in particle emissions from diesel-powered trucks and other equipment (as compared with 2000 levels), or future reductions of 85% by 2020. Based upon the air dispersion modeling and additional information, the project would add 0.19% to the overall ambient cancer risk level under the worst-case scenario. As a result, the project would not make a cumulatively considerable contribution to a regional significant cumulative impact because it would not exceed the threshold.

Odor: Odor impacts occur primarily during the construction phase of a project, except for specific land uses that have operational activities that emit odors, such as wastewater treatment plants, sanitary landfills, and asphalt batch plants. In addition, odors are typically localized to the general vicinity of the odor source. Because the cumulative projects identified in Table 6-1 are physically separated from each other and because of the localized nature of odors in general, it is not likely that multiple projects would be under construction at the same time in close enough proximity to any single sensitive receptor to result in cumulative odor impacts at any single sensitive receptor. Consequently, it is not likely that the proposed project in combination with past, present, and future projects in the area would have a cumulatively significant construction impact related to odor generation. Because many of the past, present, and future projects listed in Table 6-1 are residential or retail uses that would not generate odors, or involve other uses that would not generate odors during operation (e.g., cumulative project #6, Westech College, and others like a solar farm, electrical transmission lines, and wireless telecommunication facility), remaining projects with the potential for odor generation during operations are located well separated from each other and the proposed project. The only exception to this would involve cumulative project #15 for the continued production of aggregate materials; however, this site is 1 mile southeast of the proposed project, and the site is separated from the proposed project by Rattlesnake Mountain. Consequently, because of the localized nature of odor impacts, cumulative impacts pertaining to odor sources would be less than significant.

6.2.3 Biological Resources

The cumulative analysis of effects on biological resources considers species and habitats within a specific geographic area, in this case the southwestern portion of San Bernardino County and northwestern portion of Riverside County (Jurupa Valley), including the Jurupa Hills, in which the project site is located.

An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Adverse impacts would be those that substantially diminish or result in the loss of an important biological resource, or those that conflict with local, state, and/or federal resource conservation plans, goals, or regulations. Impacts can be locally adverse but not significant because, although they would result in an adverse

alteration of existing conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population- or region-wide basis.

The projects in Table 6-1 in combination with the proposed project may contribute to cumulative biological impacts in the cumulative analysis area. Related development projects would be subject to regulatory requirements (e.g., Clean Water Act, state and federal Endangered Species Acts, California Porter-Cologne Water Quality Control Act). Cumulative projects in the cities of Jurupa Valley and Riverside, and in the Riverside County portions of cumulative projects #13, #14, #15, #32, #34, and #35, would also be subject to the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Implementation of the MSHCP would reduce cumulative impacts of development within Riverside County to a less-than-significant level. Within San Bernardino County, impacts would be mitigated on a case-by-case basis.

The majority of the cumulative projects identified in Table 6-1 that are within San Bernardino County are in urban and urbanizing areas or are physically separated from the open space areas adjacent to the project site, and would not contribute to cumulative biological impacts in combination with the proposed project.

As discussed under Impact BIO-4, the proposed project lies between the Jurupa Hills and Rattlesnake Mountain. If the proposed project is built, the existing open land between the two mountains would be removed, potentially impeding the movement of coastal California gnatcatcher [CAGN] between the two expanses of open space within the higher elevations in the area. Should the linkage between the Jurupa Hills and Rattlesnake Mountain be severed, the proposed project in combination with other projects would result in the habitat area remaining between Jurupa Hills and Rattlesnake Mountain becoming severely degraded and no longer serving as a wildlife movement corridor. The cumulative effect of past projects has already resulted in impeding the movement of wildlife between the Jurupa Hills and Rattlesnake Mountain, which is considered to be a significant cumulative impact.

Loss of the remaining open space between the Jurupa Hills and Rattlesnake Mountain resulting from development of the proposed project would further contribute to the loss of wildlife movement between the Jurupa Hills and Rattlesnake Mountain. However, as discussed in Impact BIO-5, the only species that could potentially move between the Jurupa Hills and Rattlesnake Mountain under current conditions is CAGN. By maintaining an appropriately landscaped corridor through the southerly portion of the project site through a linkage between the Jurupa Hills and Rattlesnake Mountain as required by **Mitigation Measure BIO-8**, the proposed project's contribution to a significant cumulative impact would be eliminated.

The proposed project would not result in a cumulatively considerable contribution to the regional decline of CAGN, rare plants, tricolored blackbird, Southern California rufous-crowned sparrow, burrowing owl, northwestern San Diego pocket mouse, red-diamond rattlesnake, loggerhead shrike, San Diego black-tailed jackrabbit, San Diego desert woodrat, or Los Angeles pocket mouse because of the protections afforded by the MSHCP and requirements for compliance with the state and federal endangered species acts.

No cumulative impact on fairy shrimp or Delhi sands flower-loving fly would occur, as these species do not occur on the project site.

Riparian habitat and jurisdictional water resources would be directly affected by the project. However, three jurisdictional drainages potentially have no federal jurisdiction and provide little

value to plants and wildlife or hydrological function and value. The isolated wetland and associated riparian vegetation also are of low function and value based on the small amount that is present and isolated within the project site. As a result, the proposed project would not contribute to cumulative impacts on riparian habitat or jurisdictional waters.

6.2.4 Cultural Resources

The geographic scope of the area affected by potential cumulative archaeological impacts is defined by the cultural setting and ethnographic territory of the prehistoric and historic peoples who have occupied this region of San Bernardino and Riverside Counties. The geographic scope for paleontology is the area in the San Bernardino region that has similar sedimentary deposits and/or a similar distribution of fossil-bearing geologic formations.

The project area was part of the territory of the Gabrieleno people and part of a potentially historic transmission alignment. Without mitigation, cumulative projects in the study area and other development in the County could result in the loss of historic period and unidentified archaeological resources. This loss, without proper mitigation, would be an adverse cumulative impact.

Cultural Resources: Construction activities associated with past, present, and reasonably foreseeable future projects in the cumulative analysis area would likely involve subsurface grading that could uncover cultural resources. These activities, in combination with the proposed WVLCSP project, could contribute to the progressive loss of cultural resources and result in significant cumulative impacts. However the proposed project and cumulative projects are subject to CEQA review. Accordingly, it is expected that existing federal, state, and local laws protecting historical and archaeological resources would be adhered to, that appropriate studies would be conducted, and that mitigation would be implemented to ensure that significant resources, if encountered, would be preserved. These mitigation measures could include monitoring, recovery, treatment, and deposition of archaeological resources in a recognized repository. Therefore, cumulative impacts to cultural resources would be less than significant.

Paleontological Resources: Because the proposed WVLCSP project site and the larger cumulative analysis area, consisting of similar sedimentary environments at the base of the Jurupa Hills and Rattlesnake Mountain south to the Santa Ana River, do not have a high occurrence of containing paleontological resources, the proposed project along with past, present, and reasonably foreseeable future projects would not have a significant cumulative impact on the paleontological resources of the region. The inclusion of other projects in the cumulative analysis area would also not add to the level of significance for impacts related to paleontological resources for this or other projects because of the low potential for resources to exist in the area. Therefore, the cumulative impacts involving paleontological resources would not be cumulatively considerable.

6.2.5 Geology and Soils

Project site development, combined with the cumulative development identified in Table 6-1, would result in increased population in an area subject to geologic and seismic risks and hazards. However, because impacts related to seismicity, geology, and soils are generally site-specific and do not extend beyond individual development sites, cumulative effects are typically localized and are evaluated based on the potential for the project to pose risks to people or structures on adjacent land uses as the result of on-site conditions.

Because the cumulative projects are physically separated from each other, and each project would be required to meet building code requirements that address the various seismic and geologic hazards present within the Southern California region, impacts related to geology, soils, and seismicity would not be cumulatively significant. Development projects are required to meet the most recent building code standards, which are generally more stringent than older codes and practices, making site construction less likely to affect adjacent properties, as well as making new structures likely to perform better than older structures in the event of a significant seismic or geologic event. Because the cumulative projects identified in Table 6-1 are site specific and would be constructed at varying times and in compliance with applicable building and other codes, creation of geologic, soils, or seismic impacts would not be created on off-site properties and cumulative impacts would be less than significant.

6.2.6 Greenhouse Gas Emissions

Greenhouse gas (GHG) emissions and global climate change are exclusively cumulative impacts; there are no non-cumulative GHG emissions impacts from a climate change perspective. Climate change is the result of cumulative global emissions. No single project, when considered in isolation, can cause climate change because a single project's emissions are not enough to change the radiative balance of the atmosphere. Because climate change is the result of GHG emissions and GHGs are emitted by innumerable sources worldwide, global climate change would have a significant cumulative impact on the natural environment as well as human development and activity. As such, GHGs and climate change are cumulatively considerable, even though the contribution of any particular source of GHG emissions may be individually limited (South Coast Air Quality Management District 2008). SCAQMD methodology is thus cumulative in nature. The cumulative effect of past, present and reasonably foreseeable future projects in the absence of implementing specific GHG emissions reduction strategies ("business as usual") would be significant.

Based on a series of legislative acts and executive orders, the State of California has determined that a 15% reduction of GHG emissions from "business as usual" conditions is necessary to reduce the State's contribution to global GHG emissions. This 15% GHG emissions reduction goal is reflected in San Bernardino County's Regional Greenhouse Gas Reduction Plan, and the 15% GHG emissions reduction goal was also adopted by the City of Fontana. Therefore, development projects implementing specific GHG emissions reduction measures sufficient to achieve a 15% GHG emissions reduction from "business as usual" conditions are considered to have a less than cumulatively considerable contribution to cumulative GHG impacts.

As discussed in Section 4.2.6, *Greenhouse Gas Emissions*, the proposed project would exceed the GHG emissions CEQA threshold SCAQMD uses on projects for which it is the lead agency. However, the project's design features and mitigation measures set forth in Section 4.2.2, *Air Quality*, and Section 4.2.6, *Greenhouse Gas Emissions*, would reduce GHG emissions sufficiently to achieve more than a 15% reduction in GHG emissions compared to "business as usual" conditions. By achieving consistency with the GHG emissions target selected by the City of Fontana pursuant to the San Bernardino County Regional Greenhouse Gas Reduction Plan and the emissions reduction target set forth in the California Air Resources Board's Scoping Plan to reduce statewide GHG emissions, the project's contribution to a cumulatively significant GHG impact related to global climate change would not be considerable.

6.2.7 Hazards and Hazardous Materials

The geographic area for cumulative impacts from hazards and hazardous materials includes the area within 3 miles of the project site for interference with emergency response and within 0.5 mile of the site for all other hazards, including hazardous materials.

Impacts related to the routine transport, disposal, and handling of hazardous materials, and intermittent use and transport of petroleum-based lubricants, solvents, fuels, herbicides, and pesticides to and from the project site, may occur during construction and operation. However, because of the types of warehouse uses most likely to locate within the project site and the site's location in relation to nearby residential uses, the routine transport, use, or disposal of acutely hazardous materials, as defined by the Hazardous Materials Transportation Uniform Safety Act, is not anticipated. Furthermore, all routine transport, handling, and disposal of hazardous materials is highly regulated under state and federal law such that the impacts of the proposed project, in combination with the projects identified in Table 6-1, would be less than cumulatively significant. In addition, even if on-site soil contamination as the result of past agricultural practices or other uses is found within the project site and other cumulative project sites identified in Table 6-1, regulatory requirements for site remediation would prevent creation of any new inhalation hazards. Therefore, impacts associated with project site development and operation would be less than significant and would not have the potential to contribute to hazards associated with cumulative projects.

With respect to impacts related to the creation of a hazard through upset or accident conditions involving the release of a hazardous material, the following could occur during project construction and operation: site grading, excavation, installation of support structures, and the use and transport of petroleum-based lubricants, solvents, fuels, herbicides, and pesticides to and from the sites. However, conformance with existing state and county regulations, as well as **Regulatory Requirements RR-HM-1 through RR-HM-3, Standard Requirement SR-HM-1**, and implementation of **Mitigation Measures HAZ-1 and HAZ-2** would render this impact less than significant. This impact does not have the potential to contribute to hazards associated with other cumulative projects because these types of impacts would be localized, occurring only in the immediate vicinity of the project site. As shown in Figure 6-1, cumulative project #10 is directly adjacent to the project site and shares the area of the former Crestmore Disposal Landfill. Additionally, cumulative project #34 would interconnect to a transmission line through Fontana north of Planning Areas 1 and 3. Most other projects are more than 1 mile away from the project site. In addition, the implementation of appropriate safety measures during construction of the proposed project would reduce the impact to a level that would not contribute to cumulative effects. Therefore, impacts related to hazards or hazardous materials would not be cumulatively considerable.

Wildland Fires: The geographic area for cumulative wildland fire impacts includes areas where large expanses of open space occur and connect to the project site, including areas within the City of Fontana west of the project site, areas of the City of Jurupa Valley to the southwest and southeast, and areas within the County of San Bernardino east of the site. The project would introduce new development, including structures and people, into an area adjacent to *high* and *very high* fire hazard severity zones, and the addition of the proposed project would increase the overall wildland fire hazard risk under cumulative conditions. As other development occurs within the open space areas, the amount of open space land would be reduced and hazards posed by human intrusion could result in a larger fire potential. As such, the fire damage is inherent in these areas and the risk is cumulatively significant. However, project-related impacts related to wildland fires would be

reduced with implementation of **Standard Requirements SR-HM-2** and **SR-HM-3**, and implementation of **Mitigation Measure HAZ-3** would be required to reduce the proposed project's impacts such that its contribution to significant cumulative impacts would not be cumulatively considerable.

6.2.8 Hydrology and Water Quality

Cumulative impacts on hydrology and water quality would result from the construction and operation of new facilities in combination with other projects currently proposed or under construction within the project vicinity. A list of past, present, and reasonably foreseeable future projects within an approximately 3-mile distance of the project site is provided in Table 6-1.

The closest cumulative project that could increase the potential for impacts on surface water/groundwater hydrology and water quality during construction and operation is Kessler Park (cumulative project #10), which is at the southwestern corner of Jurupa Avenue and Linden Avenue in the Bloomington area of unincorporated San Bernardino County. The project consists of the rehabilitation of existing baseball fields and relocation of current equestrian arenas at Kessler Park, where the western half of the ball fields and arenas are currently situated over the closed Crestmore Disposal Landfill, a portion of which the project site shares within Parcel 7. As stated in the Kessler Park Project Mitigated Negative Declaration (MND), there would be no significant impacts on hydrology and water quality. A Storm Water Pollution Prevention Plan and Best Management Practices (BMPs) would be implemented to reduce water quality impacts, and there would be only a minor increase in impervious area as part of the Kessler Park project. The Rio Vista Specific Plan (cumulative project #14) is southeast of the project site. The Rio Vista Specific Plan is currently undergoing revisions, and the amended specific plan would be subject to similar water quality protection requirements and implementation of BMPs, resulting in less-than-significant impacts. The proposed WVLCSP project would also have less-than-significant impacts on hydrology and water quality. The project would not increase the volume of stormwater runoff, and would add biotreatment facilities (landscaping and stormwater detention basins) that would aid in groundwater recharge and improve water quality. The proposed project would not result in any unmitigated significant impacts on hydrology, water quality, and groundwater resources with implementation of **Regulatory Requirements RR-HW-1** through **RR-HW-4**, **Standard Requirement SR-G-1**, and **Mitigation Measure HYD-1**. While it is not likely that substantial construction of these projects would occur at the same time, the implementation of BMPs at all three sites would ensure that combined impacts of the three projects would not be cumulatively considerable, even if their construction occurs simultaneously.

6.2.9 Land Use and Planning

The cumulative impact analysis for land use and planning is based on the context of cumulative growth and the resulting effects on land use change. Land use and planning impacts generally affect the jurisdiction in which projects are located, and therefore the geographic context for cumulative analysis is the City of Fontana and the County of San Bernardino.

Increases in population as a result of both natural increases in the existing population and the immigration of new residents to the City of Fontana and surrounding communities in San Bernardino and Riverside Counties are anticipated and accommodated in the general plan documents of the jurisdictions within these areas. However, because the EIRs for these general plans identify

significant unavoidable impacts, the growth anticipated in Fontana and the cumulative impact area is considered to be cumulatively significant.

If the project is approved, it would contribute to the growth of industrial uses within the City, but would not result in the conversion of established land uses because the site is currently undeveloped. The project is generally consistent with the growth projections for new industrial uses within the cumulative analysis area. As shown in Table 6-1, the cumulative analysis area contains 36 projects and specific plans. Cumulative projects #12, #13, #14, #26, #31, and #33 include one or more of the following land use actions: specific plan, general plan amendment, or rezoning. With the exception of cumulative project #33, none of these projects involve a change of land use from non-industrial to industrial uses; rather, they are proposing residential uses. The analysis set forth in Section 4.2.9, *Land Use and Planning*, demonstrates that the project's proposed General Plan land use amendment would not jeopardize the City's ability to meet its share of regional housing needs for all economic segments of the community. Therefore, while the proposed project includes a General Plan amendment and rezone to change the adopted land uses from residential to industrial, it would not contribute to a cumulatively significant change in the nature of Fontana and San Bernardino land uses.

The cumulative projects encompass a range of land uses including residential, commercial, industrial, and institutional projects. Similar to the proposed project, these projects would be subject to local and regional land use plans and policies. The development potential of all cumulative projects combined includes 3,244 residential units, 5,282,500 square feet of warehousing development, 3,368,706 square feet of industrial development, 935,388 square feet of regional retail development involving three major shopping centers, and 20,008 square feet of office development.

Future cumulative development would result in substantial changes to the existing land uses through conversion of vacant land to developed uses. Development of cumulative projects would also be subject to environmental and planning review that would address compatibility with adjacent land uses. It is anticipated that each cumulative project, as adopted, would be consistent with the adopted goals, policies, and objectives of the jurisdiction within which it is located. The cumulative projects as a whole would result in a substantially different built environment than currently exists. However, because each community's general plan sets forth policies to protect the character of existing development, it is anticipated that cumulative projects adopted in a manner consistent with those general plans would not cumulatively degrade the existing character of area's land uses. As a result, there would be no significant cumulative impact to which project site development could contribute.

6.2.10 Noise

The cumulative impacts analysis for noise and vibration includes opening year (2014) and future year (2035) analyses for the proposed project. The study area for the cumulative analysis is consistent with that of the operational traffic noise analysis and consists of the immediate area surrounding the proposed project and areas along the major project-related traffic routes. The cumulative geographic scope related to impacts from construction-related noise and vibration includes areas close to the project site.

Construction Noise: As discussed in Section 4.2.10, *Noise*, construction noise levels would reach 65 to 81 maximum A-weighted sound level (dBA L_{max}) at residences near the boundary of the project site. While these noise levels would likely represent a substantial increase over the existing ambient

noise level, construction is exempted by the City's municipal code provided that it occurs between the hours of 7:00 a.m. and 6:00 p.m. on weekdays, between 8:00 a.m. and 5:00 p.m. on Saturdays, and at no time on Sundays and federal holidays, as provided in **Regulatory Requirement RR-N-1**. Furthermore, to reduce noise exposure to nearby residences to the greatest extent practicable, the proposed project would adhere to the project design features listed in Section 3.6, *Project Design Features*, related to the municipal code's requirement for activity restrictions as well as the operation and location of construction equipment (**Regulatory Requirement RR-N-1** and **Standard Requirements SR-N-1** through **SR-N-3**). Only two of the cumulative projects (Kessler Park, cumulative project #10, and the Rio Vista Specific Plan, cumulative project #14) could be constructed in proximity to the proposed project. Kessler Park includes rehabilitation and expansion of Kessler Park and is directly east of proposed Parcel 7. The Rio Vista Specific Plan is southeast of the project site and is in the process of being amended to reduce buildout from 1,697 dwelling units to approximately 1,200 units. It is reasonable to assume that construction of these projects would adhere to the same regulatory requirements and standard conditions as the proposed project, reducing their impacts to less-than-significant levels. Because there are no other projects identified close by that are likely to be constructed at the same time as the proposed project, the cumulative effect of the project in combination with past, present, and reasonably foreseeable future projects would be less than cumulatively significant.

Operational Noise: Calculated noise levels at most of the study area roadway segments resulted in incremental cumulative increases. Four studied roadways segments showed substantial increases associated with the proposed project at Jurupa Avenue between Locust Avenue and Cedar Avenue, Alder Avenue north of Jurupa Avenue, Locust Avenue between Jurupa Avenue and 11th Street, and Locust Avenue between 11th Street and 7th Street. Analysis of existing traffic data showed noise levels ranging from 54 to 66 A-weighted decibels (dBA) Community Noise Equivalent Level (CNEL). An opening year cumulative noise condition (2014) and a future year cumulative noise condition (2035) were evaluated in the noise impact analysis using the traffic volumes from each of the *with* and *without project* scenarios. The additional projected traffic would not necessarily result in greater noise because there is a diminishing level of noise as traffic speeds slow with greater volumes, such as during traffic rush hours. However, as shown in Table 4.2.10-12, when considering future growth and development, the future noise levels would increase by 2 to 4 decibels (dB) during the opening year (2014) and 1 to 4 dB during future year (2035) conditions². Inclusion of the proposed project would cause the Jurupa Avenue segment to exceed the City's 65 dBA CNEL threshold during the opening year timeframe. Alder Avenue would exceed the threshold in the future 2035 timeframe. Therefore, the proposed project would result in a cumulatively considerable contribution to significant cumulative noise impacts. Even with the installation of sound barriers consistent with **Mitigation Measures NOI-1** and **NOI-3**, impacts on nearby sensitive receptors associated with project-related traffic would be significant and unavoidable.

Construction Vibration: Construction of cumulative projects would result in temporary vibration from use of heavy equipment and machinery at the individual cumulative project sites, as well as from trucks hauling construction equipment and materials to those sites. However, as explained further in Section 4.2.10, *Noise*, based on the levels of vibration produced during construction of the proposed project, vibration levels would be under the threshold of perception and would not cause damage to structures in the area. Because the predicted vibration levels from project construction

² Because of the smaller amount of background traffic and resulting noise in the opening year as compared with that of 2035, impacts of new development measured in terms of noise increase tend to be greater in the short term than in the long term.

would be at or below the threshold of perception, impacts from groundborne vibration or groundborne noise would be less than significant. As stated above, the only cumulative projects that could be constructed in proximity to the project would be the rehabilitation and expansion of Kessler Park (cumulative project #10) and the Rio Vista Specific Plan (cumulative project #14), both located on opposite ends of the project site. While it is unlikely that both projects would be constructed simultaneously with the proposed WVLCSP project using heavy equipment that could cause vibration levels, there is the possibility that a cumulatively considerable vibration impact could occur. The impacts of the projects would be short term in nature and, because vibration impacts are localized and do not travel long distances, construction vibration impacts would not combine to create significant cumulative effects on other properties.

Operational Vibration: Operational impacts related to vibration would occur from loaded trucks on area roadways. Sensitive receptors would be located along the proposed truck routes and could be within 50 feet of the loaded trucks. As explained in Section 4.2.10, *Noise*, because the predicted vibration levels from project operations would be at or below the threshold of perception, exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels would not occur and impacts from groundborne vibration or groundborne noise would be less than significant. None of the other cumulative projects include truck-intensive uses with trucks routed along the same roadways as the proposed project. Therefore, the cumulative effect of operational vibrations from past, present, and reasonably foreseeable future projects would be less than cumulatively significant.

6.2.11 Population and Housing

The cumulative analysis context for population and housing impacts relate to the geographic locations identified in regional growth management plans (such as the 2012–2035 SCAG Regional Transportation Plan/Sustainable Communities Strategy), which include the City of Fontana, County of San Bernardino, and the entire SCAG Region. Cumulative impacts on population and housing would occur if the cumulative projects would displace a substantial number of people or housing, or directly or indirectly induce growth. As stated in Table 6-2, cumulative projects would involve development of 3,244 residential units, 5,282,500 square feet of warehousing development, 3,368,706 square feet of industrial development, 935,388 square feet of regional retail development involving three major shopping centers, and 20,008 square feet of office development. This would result in 11,500 new residents and 9,416 new employees within the cumulative analysis area. Up to an additional 9,510 additional residents could be attracted to the area as an indirect result of the jobs created by the new employment opportunities of cumulative projects.

Currently, very few housing and commercial developments are proposed or under construction within approximately 3 miles of the project area, including areas of Fontana, Jurupa Valley, Rialto, Colton, Riverside, San Bernardino, and unincorporated San Bernardino County and Riverside County, as shown in Figure 6-1. Therefore, the cumulative projects would not cause a substantial displacement of residents or housing within Fontana or adjacent jurisdictions.

Development of the cumulative projects would create new housing and permanent jobs, and would thereby contribute to a local increase in long-term population and employment. Even though the types of employment offered by the cumulative projects would be common in the region, and employees are available as evidenced by the 10% local unemployment rate, some employees may relocate to work within the cumulative analysis area. Estimating the number of future employees who would choose to relocate to the area is difficult because many factors influence personal

housing location decisions (e.g., current place of residence, traffic congestion along the commute route, family income levels and the cost and availability of suitable housing in the local area, employment locations of other household members). Although the non-residential cumulative projects may result in additional demand for housing in the area, there is available housing capacity—both built and planned—in the region. While the proposed commercial and industrial cumulative projects could attract up to 9,287 residents to the area, the residential cumulative projects would provide housing for approximately 11,500 residents (see Table 6-2). As described above, the vacancy rate for residential units is 5.3% within the City of Fontana and 12.5% within the County of San Bernardino. Therefore, while the cumulative projects represent a large amount of development, they would not induce substantial additional population growth, and cumulative impacts would be less than significant.

The cumulative projects may also indirectly induce growth if they increase the capacity of the infrastructure in an area in which growth is constrained by a lack of public services or infrastructure. Fontana, Jurupa Valley, Rialto, Colton, Riverside, San Bernardino, and San Bernardino County have planned for an increase in capacity of infrastructure to meet future demands as part of their general plans and therefore can accommodate the demands; additionally, the jurisdictions all require contribution of impact fees to help pay for future expansions. Cumulative projects would either be served by existing public service agencies and infrastructure from surrounding areas or would provide the necessary improvements for the respective developments. The cumulative projects would also provide contributions of impact fees to agencies that would provide water, wastewater, and emergency services, among others; furthermore, project impacts are typically mitigated on a case-by-case basis. Fees paid by the applicants would not create new infrastructure or result in new services beyond those that are needed for the respective projects, or beyond those that are already planned. Therefore, the cumulative projects would not result in significant indirect growth-inducing impacts because the projects would not substantially increase the capacity of infrastructure that could be accommodated by future growth.

6.2.12 Public Services

The geographic scope for cumulative effects on public services and utilities, also discussed below in Section 6.2.13, *Recreation*, and Section 6.2.15, *Utilities and Service Systems* (including police, fire, schools, parks/recreation, water, wastewater, and solid waste), are limited to each respective service area. A number of housing developments of varying types are currently proposed or are under construction within the project area, along with numerous industrial and commercial developments as shown in Table 6-1. The development of housing, however, is typically the biggest driver of demand for services because it most directly affects population growth. As shown in Table 6-2, cumulative projects propose development of 3,244 residential units, 5,282,500 square feet of warehousing development, 3,368,706 square feet of industrial development, 935,388 square feet of regional retail development involving three major shopping centers, and 20,008 square feet of office development. Combined, these projects could result in 11,500 new residents and 9,416 new employees within the cumulative analysis area, which would collectively increase demand for police, fire, schools, parks/recreation, and other facilities.

Physical environmental changes or impacts associated with the direct population and employment growth related to the cumulative projects would be analyzed in their respective CEQA compliance documents. Each of these developments is required to mitigate its own environmental effects, as well as its cumulative contribution to other effects, such as the provision of public services and other

facilities. As the City of Fontana and neighboring jurisdictions have planned for much of this growth as part of their general plans, they can accommodate the demands or require contribution of fees to help pay for future expansions. These projects either would be served by existing public service agencies from surrounding areas or would be required to pay the necessary fees for the respective developments. It is anticipated that each cumulative project, when adopted, would be consistent with the adopted goals, policies, and objectives of the general plan of the respective jurisdiction within which it is located, including goals and policies for the provisions of adequate public services and facilities. Similar to the proposed project, the related projects would be required to demonstrate the availability of services or mitigate accordingly; therefore, the past, present, and future projects would not result in a cumulative impact related to the provision of public services.

6.2.13 Recreation

The geographic scope for cumulative effects on recreation is limited to the City of Fontana and the southern portion of the County of San Bernardino. As shown in Table 6-1, residential projects would be located in the City of Fontana and in the County of San Bernardino. Cumulative project #10 would include the expansion and improvement of Kessler Park.

The proposed project together with other projects would not contribute to significant cumulative impacts on parks and recreational facilities in the area. It is anticipated that each cumulative project, as adopted, would be consistent with the adopted goals, policies, and objectives of the general plan of the respective jurisdiction within which it is located. Any proposed residential project to be developed in Fontana would be subject to City park area per resident requirements including provision of parks or payment of park development fees. Therefore, there would be no cumulative parks or recreation impacts to which the proposed project would contribute.

6.2.14 Transportation and Traffic

Impacts of project site development in relation to roadway levels of service (LOS) in combination with past, present, and reasonably foreseeable future development were evaluated as part of Impact TRA-1 of Section 4.2.12, *Transportation and Traffic*, which concluded that cumulative development would exceed roadway LOS standards even with the implementation of feasible mitigation measures. A similar cumulative analysis was undertaken for impacts on the freeway mainline segments and ramp junctions as part of Impact TRA-1, which found that cumulative development would result in significant impacts even with implementation of feasible mitigation measures.

Roadways and Freeways: As discussed in Impact TRA-1, cumulative development has added vehicle trips within several miles of the project site, and future projects will continue to add vehicle trips to intersections and freeways in the cumulative analysis area. Several of the cumulative projects, including cumulative project #11 (Pedley Shopping Center), would require truck trips for the export of materials. Additional truck trips could result in increased temporary impacts during construction activities. Other planned projects in Jurupa Valley (cumulative projects #13, #14, and #15) could result in additional export or import of materials near the project site. Additionally, impacts related to intersection and freeway mainline and ramp junction LOS from past, present, and reasonably foreseeable future projects would be cumulatively significant in the long-term (2035) cumulative scenario at 19 intersections and 42 freeway segments and ramp junctions even without development of the proposed WVLCSP.

If improvements are installed as specified in Table E-7 (Year 2035 With Project [With No Sierra Avenue Access] Circulation Improvements) in Appendix L, all affected intersections would operate at acceptable LOS for the long-term (2035) cumulative with project scenario provided in Table 4.2.14-17. However, because funding of needed improvements on regional roadways and freeways would occur through implementation of San Bernardino County's Nexus Study program and Riverside County's Transportation Uniform Mitigation Fee (TUMF) program, the timing of such improvements cannot be precisely determined. As a result, there is not enough evidence to support the conclusion that the cumulative impacts of the project in combination with past, present, and reasonably foreseeable future projects would be reduced to less-than-significant levels. Therefore, cumulative impacts on regional roadway systems in the cumulative analysis area would remain significant until all improvements are made pursuant to the San Bernardino County Nexus Study and the Riverside County TUMF programs. The proposed project would provide physical mitigation to achieve acceptable LOS for direct impacts. The proposed project would also be required to provide fair share payment for improvements to facilities that it would not directly impact, but to which it would contribute cumulative impacts on local roadways that are not part of the regional system in either San Bernardino or Riverside Counties. Because the timing of improvements using such fair share fees cannot be precisely determined, significant cumulative impacts would result.

In summary, roadway LOS standards would be exceeded, and significant cumulative impacts would result in the long term. The contribution of project site development-related traffic would be cumulatively considerable because of the large amount of traffic that would be generated by the project, as demonstrated in Impact TRA-1.

Hazardous Designs/Incompatible Uses: Past, present, and reasonably foreseeable future projects identified in Appendix C of the TIA (Appendix L: LSA 2014) are generally residential and redevelopment projects built or proposed in accordance with the City of Fontana General Plan and compliant with the City's street design regulations. Other cumulative projects outside of the City of Fontana and within adjacent jurisdictions include a mix of development and infrastructure projects. Most of these projects are not near the project site and are too distant to cause a hazardous situation, with the exception of cumulative project #10, Kessler Park Improvements, which is directly adjacent to the project site, and cumulative project #14, the Rio Vista Specific Plan, directly southeast of the project site. According to the Kessler Park Improvements Draft Environmental Assessment (EA) and Initial Study/Mitigated Negative Declaration (IS/MND) (Tetra Tech 2013), no changes to local road designs would occur as a result of that project. In addition, roadways within the Rio Vista Specific Plan are required to meet Riverside County roadway design standards. All other cumulative projects, as well as the proposed WVLCSF project, would be required to meet the roadway design standards of the agency in which they are located. Therefore, cumulative projects are not expected to result in hazardous designs or incompatible uses related to transportation. As such, the proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively significant impact due to an increase in hazards as a result of design features or incompatible uses.

Emergency Access: Emergency access within the vicinity of the proposed project is provided by the existing street system, and access is primarily granted via Armstrong Avenue, Locust Avenue, Jurupa Road, and several project driveways. All past, present, and reasonably foreseeable future projects that have not yet been built have the potential to affect traffic and emergency access during construction, and will be required by the jurisdictions in which they are located to submit a traffic control plan for the jurisdiction's approval. According to the Kessler Park Improvements Draft EA and IS/MND, access and egress points from the Kessler Park project site, which is the closest

cumulative project to the WVLCSP site, would allow emergency access or egress to continue unimpeded, and no lane closures or access restrictions would occur from either construction of this project or its implementation. The Rio Vista Specific Plan (cumulative project #14), southeast of the project site, is currently undergoing modifications to reduce its overall development intensity and will be required to provide continued unimpeded emergency access along Armstrong Road. All other cumulative projects are much farther from the project site and physically separated from each other, and emergency access into and out of the project area would not be impeded. Therefore, none of the cumulative projects identified in Table 6-1 are expected to affect emergency access and, as such, the project in combination with past, present, and reasonably foreseeable future projects would not result in a cumulatively significant impact.

Alternative Transportation: Effects from past, present, and reasonably foreseeable future projects will increase demands for alternate forms of transportation such as walking, bicycling, and use of public transit (i.e., bus, train, and trolley). Given the cumulative analysis area's residential, commercial, and industrial uses, there would be sufficient density to support alternative forms of transportation. Therefore, the proposed project in combination with past, present, and reasonably foreseeable projects would increase demand for alternative transportation facilities such as buses and pedestrian/bicycle movement free from hazards. As demand increases on these facilities, it is anticipated that future regional and local transportation planning would account for the increase in demand in accordance with the general plan of each jurisdiction in the cumulative analysis area. Improvements would likely be funded through transit rates, impact fees and improvements, and transportation taxes approved by voters for regional transportation improvements. Therefore, no cumulative impacts on alternative forms of transportation would occur as the result of the project in combination with other past, present, and reasonably foreseeable future projects.

Overall, project site development in combination with the past, present, and reasonably foreseeable projects included in the traffic model analysis reported in Impact TRA-1 and other projects included in Table 6-1 would result in significant cumulative impacts. Because the proposed project would be consistent with adopted policies, plans, and programs regarding public transit, bicycle, and pedestrian facilities as analyzed in Section 4.9, *Land Use and Planning*, its contribution to significant cumulative impacts would not be considerable.

6.2.15 Utilities and Service Systems

Cumulative impacts on utilities would occur if the cumulative projects result in the need for new or expanded services or utilities and the construction of those services or facilities results in significant adverse environmental impacts. A number of other developments of varying types are currently proposed or under construction within the project area, as well as numerous industrial, residential, recreational, and commercial developments, as depicted in Table 6-1 and Figure 6-1. The cumulative project closest to the proposed project is cumulative project #10, the Kessler Park Improvements Project, which is directly adjacent to the project site. According to the Kessler Park Improvements Draft EA and IS/MND (Tetra Tech 2013), no significant impacts related to utilities or service systems would occur with this project. The Rio Vista Specific Plan (cumulative impact #14) is directly southeast of the project site in the City of Jurupa Valley. As the two cumulative projects are within different jurisdictions from the project, the utilities serving those sites would come from different agencies than those serving the WVLCSP project site, with the exception of electricity (SCE) and natural gas (Southern California Gas Company).

Development under the proposed project would require on- and off-site sewer facility upgrades to adequately provide wastewater service to the project site and surrounding area. A new gravity main connection would be constructed at Locust Avenue and 7th Street to connect with an existing gravity main in Santa Ana Avenue. Off-site improvements on Linden Avenue (between Santa Ana and 11th Street) and on 11th Street (between Linden Avenue and Locust Avenue) would be constructed as part of the project, along with a new lift station on 11th Street near Linden Avenue.

The combined cumulative projects would directly place added demand on utilities. As shown in Table 6-2, cumulative projects propose development of 3,244 residential units, 5,282,500 square feet of warehousing development, 3,368,706 square feet of industrial development, 935,388 square feet of regional retail development involving three major shopping centers, and 20,008 square feet of office development. The combined development of these projects could directly result in 11,500 new residents and 9,416 new employees within the cumulative analysis area.

Each of these developments would be required to mitigate its own environmental effects either through direct improvements or payment of impact fees, as well as its cumulative contribution to other effects related to energy use, water supply, solid waste disposal, or stormwater drainage. Also, the Counties of San Bernardino and Riverside and the Cities of Fontana, Jurupa Valley, Rialto, Colton, Riverside, and San Bernardino have generally planned for this growth as part of their general plans, and utility companies take this into account when determining needed capacity; therefore, vendors of utilities can accommodate the demands or require contribution of fees to help pay for future expansions. These are typically mitigated on a case-by-case basis.

The proposed project and cumulative projects would construct and/or provide impact fees to agencies for needed facilities that would provide services such as water, wastewater, and solid waste services for the regional service area to accommodate future expansion as development increases. Because the proposed project and cumulative projects would be required to demonstrate the availability of services and utilities or mitigate accordingly, impacts would not be cumulatively considerable.



7.1 Introduction

The California Environmental Quality Act (CEQA) requires a discussion of the potential growth-inducing impacts of a proposed project. This discussion addresses how implementation of the proposed project would foster economic or population growth, or the construction of additional housing, either directly or indirectly upon the surrounding environment. In accordance with Section 15126.2(d) of the State CEQA Guidelines, a project would be considered to have a growth-inducing effect if it would result in any of the following.

- Directly or indirectly foster economic or population growth, or the construction of additional housing in the surrounding environment.
- Remove obstacles to population growth (e.g., construction of an infrastructure expansion to allow for more construction in service areas).
- Tax existing community service facilities, requiring the construction of new facilities that could cause significant environmental effects.
- Encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

Under CEQA, growth inducement is not considered necessarily detrimental, beneficial, or of significance to the environment. Typically, the 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 the Southern California Association of Governments (SCAG). Significant growth impacts could also occur if the project provides infrastructure or service capacity to accommodate growth beyond the levels currently permitted by local or regional plans or 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. This section of the Draft Environmental Impact Report (EIR) evaluates whether the proposed project, and implementation of the West Valley Logistics Center Specific Plan (WVLCSP), would directly or indirectly induce economic, population, or housing growth in the surrounding environment.

7.2 Impact Discussion

A project could induce population growth in an area either directly or indirectly. The development of new homes or businesses could induce population growth directly, whereas the extension of roads or other infrastructure could induce population growth indirectly. The project site is currently vacant and is partially surrounded by residential development on the north, east, and south. As stated in Chapter 3, *Project Description*, implementation of the proposed project would result in a maximum of 3,473,690 square feet of new industrial development. This could result in the creation of approximately 2,907 new jobs, replacing the potential for direct population growth from

residential, school, recreation, and open space uses identified under the Valley Trails Specific Plan approved on May 8, 2007 for the site.

7.2.1 Direct Growth-Inducing Impacts in the Surrounding Environment

The State CEQA guidelines identify a project as growth inducing if it would foster economic or population growth or result in the construction of additional housing. New employees from commercial and industrial development, and population increases resulting from residential development, represent direct forms of growth. These direct forms of growth have the secondary effect of expanding the size of local markets and inducing additional economic activity in the area.

The proposed project does not include residential uses; therefore, the project would not directly contribute to population growth by adding housing. However, the creation of new jobs associated with industrial development is a direct growth-inducing effect. The extent to which the new jobs created by a project are filled by existing residents reduces growth-inducing effects of a project.

As stated in Section 4.2.11, *Population and Housing*, the unemployment rate within the City of Fontana and County of San Bernardino is approximately 10%. Implementation of the WVLCSP would provide both short-term employment opportunities during construction and long-term employment opportunities during operation of the proposed project. Because the existing labor pool could meet construction needs of the WVLCSP, the project would not be expected to induce substantial population growth or development through increased construction employment that could cause substantial adverse physical changes in the environment. Impacts would be less than significant.

The analysis provided in Section 4.2.11, *Population and Housing*, states that development of the proposed WVLCSP project would create permanent jobs and thereby would contribute to a local increase in long-term employment. Based on the SCAG employment projection factor of one employee per 1,195 square foot of San Bernardino County warehouse space, at buildout the approximately 3,473,690-square foot industrial park development could support approximately 2,907 jobs (SCAG 2001). This could indirectly result in up to 2,936 new residents within the area from increased employment opportunities should new employees at the logistics center choose to move in the Fontana area. The job opportunities expected to be created by the proposed project include positions in warehouse and office management; warehouse operations, such as forklift driving and inventory management; and truck driving. Truck drivers may be employed by the company occupying the warehouse, may be self-employed, or may be employed by other companies that pick up and deliver goods from several similar warehousing centers. These types of employment opportunities are common within Southern California and are unlikely to generate significant population migration. If not filled by Fontana residents, these jobs would likely be taken by persons residing in neighboring communities. Although the project may result in additional demand for housing in the area, there is available housing capacity—both built and planned—in the project's general vicinity. The City of Fontana has a 5.3% vacancy rate and the County of San Bernardino has a 12.5% vacancy rate (California Department of Finance 2013). As such, the project would not require the need for new housing in the project area as the existing housing supply in the City and surrounding area would be available to accommodate the project.

The jobs created by this project are not included within the SCAG employment projections for Fontana, and the proposed use is not consistent with the City's General Plan (City of Fontana 2010)

and Zoning Map as currently designated. Development of the project site would remove the potential for residential, school, recreation, and open space uses envisioned as part of the City's General Plan and identified under the adopted Valley Trails Specific Plan and would facilitate development of the site with a proposed light industrial project. The project would thereby replace projected direct population growth potential related to 1,154 new residential units (4,448 residents) with the employment growth associated with the proposed 3,473,690-square-foot industrial park (2,907 jobs) and indirect population growth of up to 2,936 residents.¹ The increased potential for employment growth in comparison to the existing vacant use of the project site would be considered to have a growth-inducing effect through direct employment and job growth. However, the project would result in a reduced potential for direct population growth as compared to the construction of housing that could occur with full build-out of the site's adopted land uses.

7.2.2 Indirect Growth-Inducing Impacts in the Surrounding Environment

A project would indirectly induce growth by reducing or removing barriers to growth or by creating a condition that attracts additional population or new economic activity. Indirect growth may also occur if it would increase the capacity of the infrastructure in an area in which the public service currently meets demand. Examples would be increasing the capacity of a sewer treatment plant or a roadway beyond that which is needed to meet existing demand.

Existing infrastructure would be extended to the site from adjacent areas, including roads, water supply, wastewater, stormwater, sewer service, electricity, and natural gas. Off-site improvements on Linden Avenue (between Santa Ana and 11th Street) and on 11th Street (between Linden Avenue and Locust Avenue) would be constructed as part of the project, along with a new lift station at Linden Avenue to improve sewer capacity.

Development under the WVLCSP would require on- and off-site sewer facility upgrades to adequately provide for wastewater infrastructure at the project site. A new gravity main connection would be constructed at Locust Avenue and 7th Street to connect with an existing gravity main in Santa Ana Avenue. Off-site improvements on Linden Avenue and on 11th Street would be constructed as part of the project, along with a new lift station. To provide an adequate water supply to the project area, water pipeline infrastructure would be constructed within the future extensions of Armstrong Avenue, Locust Avenue, and a new private street (old Alder Avenue), and an existing 12-inch water main that crosses the site would be relocated, as stated in Section 3.4.4, *Public Facilities and Service Improvements*. All drainage would be retained on site, minus predevelopment flows. All stormwater on the site would be held in stormwater basins, and would not be released into the storm drain system. All new infrastructure required to serve the proposed project would be sized according to City design requirements. No additional capacity beyond what is need for the project would be made available by the construction of the off-site lift station and pipelines. Therefore, the construction of infrastructure improvements required for development of the WVLCSP would not induce growth in the area.

The project would be served by existing, planned, or previously approved infrastructure from surrounding areas, with upgrades to the surrounding street system that are required to provide the

¹ The population growth generation factor is assumed to be 25% of employment multiplied by 4.04 persons per household, which represents the average household size in the City of Fontana for the year 2013 (City of Fontana 2014 Housing Element, Table 2-9 and data from the U.S. Bureau of Census 2000 SF3, DOF Table E-3, 2013).

appropriate level of service capacity to existing, approved, and proposed development in Fontana.² On- and off-site transportation improvements are required to improve accessibility to the City-approved truck route plan for the project site through Fontana and the County of San Bernardino. Improvements to adjacent streets—Locust Avenue, Armstrong Avenue, Jurupa Avenue, and a new private street (old Alder Avenue)—would be required to provide sufficient access to the project site. These improvements would include paving, widening, and installation of traffic signals at 7th Street and Armstrong Road/Locust Avenue and at Jurupa Avenue and Locust Street. However, on- and off-site transportation improvements are proposed as part of San Bernardino County's Nexus Study Program and Riverside County's Transportation Uniform Mitigation Fee (TUMF) program³ to provide sufficient capacity to accommodate future traffic for the project and would not open up new areas to development other than those already planned for development in local general plans. Additionally, the project would be required to contribute City development impact fees for regional and local roadway improvements and a fair share contribution to fund off-site improvements. These off-site improvements include construction of improved roadways for Jurupa Avenue and Cedar Avenue, a traffic signal at Jurupa Avenue and Cedar Avenue, and others (see Section 4.2.14, *Transportation and Traffic*). The improvements are required to improve accessibility to the City-approved truck route plan for the project site through Fontana and the County of San Bernardino. The project would be served by existing, planned, or previously approved infrastructure from surrounding areas, with upgrades to the surrounding street system that are required to provide the minimum level of service to existing, approved, and proposed development in Fontana. As on-site and off-site circulation improvements are included specifically to serve the project, as detailed in Section 3.4.3, *Circulation Improvements*, the construction of project-specific circulation improvements is not considered to induce growth within the project area.

³ See Section 4.2.14, *Traffic and Transportation*, for a discussion of San Bernardino County's Nexus Study and Riverside County's TUMF programs.

8.1 City of Fontana (Lead Agency)

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8.2 Consultants

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9.1 Executive Summary

None.

9.2 Chapter 1: Introduction

None.

9.3 Chapter 2: Environmental Setting

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