WEST VALLEY LOGISTICS CENTER SPECIFIC PLAN

SECOND RECIRCULATED DRAFT ENVIRONMENTAL IMPACT REPORT

SCH# 2012071058

PREPARED FOR:

City of Fontana
Community Development Department, Planning Division
8353 Sierra Avenue
Fontana, CA 92335
Contact: Orlando Hernandez
ohernand@fontana.org
(909) 350-6602

PREPARED BY:

ICF
1 Ada, Suite 100
Irvine, CA 92618
Contact: Chad Beckstrom
949-333-6600

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ICF

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Acronyms and Abbreviations

1st RDEIR	Recirculated Draft Environmental Impact Report
2nd RDEIR	Second Recirculated Draft Environmental Impact Report
AB	Assembly Bill
ADT	average daily traffic
af/yr	acre feet per year
AMSL	above mean sea level
AQMP	Air Quality Management Plan
ASTM	American Society for Testing and Materials
Basin Plan	Water Quality Control Plan
BMP	Best Management Practice
BP	before present
CAGN	California gnatcatcher
CAL FIRE	California Department of Forestry and Fire Protection
Cal/EPA	California Environmental Protection Agency
CBC	California Building Code
CC&Rs	Covenants, Conditions, and Restrictions
CCR	California Code of Regulations
CDF	California Department of Forestry
CDFW	California Department of Fish & Wildlife
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CIP	capital improvements program
City	City of Fontana
CJUSD	Colton Joint Unified School District
CMP	Congestion Management Program

CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
Construction General Permit	General NPDES Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities
County	San Bernardino County
CPTED	Crime Prevention through Environmental Design
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Ranking
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dBA	A-weighted decibels
DEHS	San Bernardino County Division of Environmental Health Services
DEHS	Department of Environmental Health Services
DIF	Development Impact Fee
DOT	U.S. Department of Transportation
DPR	California Department of Pesticides Regulation
DSFLF	Delhi sands flower-loving fly
DTSC	Department of Toxic Substance Control
EDR	Environmental Data Resources
EIC	Eastern Information Center
EIR	Environmental Impact Report
EOC	Emergency Operations Center
ESA	Environmental Site Assessment
FCD	San Bernardino County Flood Control DistrictSBC
FEMA	Federal Emergency Management Agency
FESA	federal Endangered Species Act
FFPD	Fontana Fire Protection District
FINDS	Facility Index System
FPD	Fontana Police Department
FS-3	Fire Safety Area 3

General Plan	City of Fontana General Plan
GHG	greenhouse gas
gpd	gallons per day
gpm	gallons per minute
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HDP	hillside development permit
HMMP	habitat mitigation and monitoring plan
HVAC	Heating, Ventilating, and Air Conditioning
I-	Interstate
I-L	Light Industrial
ISO	Insurance Services Office
ITE	Institute of Traffic Engineers
kV	kilovolt
kVA	kilovolt-ampere
LACM	Los Angeles County Natural History Museum
LEED	Leadership in Energy & Environmental Design
L_{eq}	equivalent noise level
LI	Light Industrial
LID	Low Impact Development
LOS	level of service
LRA	Local Responsibility Area
LUST	Leaking Underground Storage Tank
MAA	Management Agency Agreement
MBTA	Migratory Bird Treaty Act
mg/L	milligrams per liter
mgd	million gallons per day
MMRP	Mitigation Monitoring and Reporting Program
MPO	metropolitan planning organization
MS4	Municipal Separate Storm Sewer Systems
MS4 Permit	NPDES General Permit for Municipal Separate Storm Sewer Systems

MSHCP	Multiple Species Habitat Conservation Plan
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NCP	National Contingency Plan
Nexus Study	SANBAG Development Mitigation Nexus Study
NHPA	National Historic Preservation Act
NOC	Notice of Completion
NOP	Notice of Preparation
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OES	Office of Emergency Services
OHP	Office of Historic Preservation
OS	Open Space
OSHA	Occupational Safety and Health Administration
OS-NA	Open Space – Natural Area
OS-PF	Open Space – Public Facilities
PCE	passenger car equivalent
PHGA	Peak Horizontal Ground Acceleration
PM_{10}	particulate matter 10 microns in diameter or less
POCs	pollutants of concern
P-PF	Public Facilities
P-R	Recreational Facilities
PRC	Public Resources Code
RCRA	Resource Conservation and Recovery Act
RDEIR	Recirculated Draft Environmental Impact Report
RGA LUST	Recovered Government Archive Leaking Underground Storage Tank
R-M	Medium Density Residential
R-MF	Multi Family Residential
R-PC	Residential Planned
RSS	Riversidean sage scrub

RTDM	Regional Transportation Development Mitigation Plan
RTP	Regional Transportation Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SANBAG	San Bernardino Associated Governments
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SBAIC	San Bernardino Archaeological Information Center
SBCL	San Bernardino County Library
SBCM	San Bernardino County Museum
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SGMP	Soil and Groundwater Management Plan
SGMP	Soil and Groundwater Management Plan
SHPO	State Historic Preservation Officer
SOI	Sphere of Influence
SP	Specific Plan
SPCC	Spill Prevention, Control, and Countermeasure
SR	State Route
SR-60	State Route 60
SRA	State Responsibility Area
SWEEPS UST	Statewide Environmental Evaluation and Planning System
SWIP	Southwest Industrial Park
SWP	State Water Project
SWPPP	Stormwater Pollution Prevention Program
SWQMP	Stormwater Quality Management Plan
SWRCB	State Water Resources Control Board
TDS	total dissolved solids

TIA	Traffic Impact Analysis
TMDL	total maximum daily load
TUMF	Transportation Uniform Mitigation Fee
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
UST-CB	UST-CB Partners, L.P.
v/c	volume to capacity ratio
VHFHSZs	very high fire hazard severity zones
VOC	volatile organic compound
VP	Viewpoint
VTSP	Valley Trails Specific Plan
WDRs	Waste Discharge Requirements
WDS	Waste Disposal Site
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 Second Recirculated Draft Environmental Impact Report (2nd RDEIR) 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 Environmental Impact Report (EIR) is necessary.[1]

This 2nd RDEIR is part of the environmental review process for the Specific Plan that is being proposed by UST-CB Partners, L.P. (UST-CB). 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 received comments on the Draft EIR from state and local agencies, interest groups, and the public. Pursuant to the provisions of CEQA Guidelines Section 15088.5 (a), the City of Fontana determined that a thorough response to the comments received by the City of Fontana during the public review period necessitated the inclusion of new information, and would thereby require recirculation of the entire Draft EIR.

A Recirculated Draft EIR (1st RDEIR) was made available for public comment beginning on December 18, 2014, and ending on February 2, 2015. Based on the comments received by the City of Fontana on the 1st RDEIR, the applicant agreed to revisions to the proposed project in relation to routing of trucks between the project site and area freeways. As a result of this revision and the availability of updated models to address project traffic generation and resulting impacts, the City determined that the project's traffic impact analysis, air quality, greenhouse gas (GHG), and noise technical studies each needed to be updated. In addition to the availability of updated technical studies, pursuant to the provisions of 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 for the 1st RDEIR necessitated the inclusion of new information, and would therefore require a second recirculation of the entire 1st RDEIR.

As required by CEQA, this 2nd RDEIR 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; and (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 CEQA Guidelines Section 15088.5 (f)(1), because the entirety of the Draft EIR and the 1st RDEIR have been recirculated, the City of Fontana has chosen not to provide written responses to comments received during either of the two earlier circulation periods. Pursuant to the provisions of CEQA Guidelines Section 15088.5(f)(1), although the comments received during the original Draft EIR and 1st RDEIR public review periods 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

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

EIR. Therefore, new comments must be submitted for this 2nd RDEIR, and the City will prepare written responses only to those comments submitted in response to this 2nd RDEIR.

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 2nd RDEIR 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.

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 7.5-minute quadrangle within Section 33, Township 1 south, Range 5 west. Regional transportation corridors in the area include the San Bernardino Freeway (Interstate [I-] 10) to the north, the Pomona Freeway (State Route [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, a Southern California Edison (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 that is being proposed by UST-CB. The proposed project proposes adoption of the 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, which was never developed. The project would replace the approved but unbuilt residential, school, recreation, and open space uses identified in the Valley Trails Specific Plan with the

warehouse and open space uses proposed in the WVLCSP. Specifically, 3,473,690 square feet of 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 be dedicated for roadway rights-of-way.

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 2nd RDEIR, and is considering the adoption of the proposed Specific Plan to allow for the development of warehouse distribution uses, a detention basin, the preservation of natural hillside open space, and right-of-way dedications.

The overarching goal of the project as stated by the applicant in the proposed Specific Plan is to implement the City of Fontana General Plan by providing clear, achievable plans and standards for development of a high-quality, state-of-the-art logistics center that will attract quality employers to the community. The following overarching project goals and specific objectives are set forth in the proposed Specific Plan:

- Facilitate the development of a functional, well serviced, and attractive logistics center that is sensitive to its setting in proximity to residential neighborhoods, and is economically competitive in the marketplace.
- Balance the need for warehouse distribution development with the preservation of on-site habitat in natural open space.
- Facilitate economic development, build on Fontana's existing industrial base, increase the number of business enterprises located in Fontana, and assist in meeting the diverse needs of local and regional commerce.
- Establish development standards and design guidelines that facilitate business and employment opportunities, are adaptive to changing market conditions, and achieve local planning objectives.
- Ensure that proposed development has a positive effect on the City of Fontana and surrounding communities.

Specific objectives contained in the WVLCSP include:

- Land Use Objectives
    - Develop high-quality and functional warehouse/distribution logistics sites with stringent design standards.
    - Ensure that the development of the site is compatible with, and sensitive to, existing and planned land uses in the area.
    - Conserve on-site habitats as natural open space.
- Economic Objectives
    - Attract new businesses to the community and thereby expand employment opportunities for area residents.

- Improve the local jobs/housing balance and reduce the need for out-commuting by Fontana area residents.
- Meet part of the major regional demand in the industrial sector by providing warehouse/ distribution logistics space.
- Provide an asset base for the long-term economic health of the City.
- Increase economic opportunities in the Fontana area by:
  - Providing warehouse/distribution logistics development that will provide employment opportunities for Fontana area residents and provide services needed by the area's expanding industrial economy;
  - Providing an attractive, functional, and economically productive logistics center that will add business and consumer purchasing power to the City of Fontana; and
  - Enhancing the fiscal health of the City of Fontana by generating net municipal revenues for the City.

- Design Objectives
  - Promote compatibility with surrounding neighborhoods through site design that maximizes distances between warehouse/distribution logistics operations and adjacent uses, and provides appropriate transitions and environmental buffers.
  - Develop a logistics center that is noteworthy for technological innovation in building design with regard to lighting, heating and cooling, materials re-use, and water and energy conservation.
  - Provide an attractive, pleasant workplace, as reflected in the landscaping, quality buildings, and aesthetic design of the logistics center.
  - Create a positive community image through quality design, environmental performance standards, and sustainable development.
  - Enhance the community image of the southeastern part of the City through design of "clean" industrial uses that coexist with planned residential communities.
  - Provide architectural diversity through imaginative and creative design within the project.
  - Provide landscaping that improves the streetscape experience and is supportive of the site's character and the character of the surrounding community.
- Circulation Objectives
  - Provide for an equitable distribution[2] of truck traffic along routes connecting the West Valley Logistics Center to the regional freeway system.
  - Minimize truck access through residential areas.

[2] "Equitable distribution" is defined in the proposed Specific Plan as "the majority of trucks accessing the project site through San Bernardino County, with more trucks using the Sierra Avenue interchange along the I-10 freeway in Fontana than the Cedar Avenue interchange along the I-10 freeway in unincorporated San Bernardino County."

  - Improve circulation in the project area with the addition of new travel and turn lanes, signals, and other improvements needed to accommodate projected traffic from the West Valley Logistics Center and the surrounding area.
  - Promote and maintain a comprehensive transportation system that will provide safe, convenient, and efficient circulation to and within the logistics center.
  - Provide for necessary transportation improvements and strategies that will accommodate the demands of new and existing development, while preventing the deterioration of existing levels of service along access routes.
- Utilities Objectives
  - Ensure adequate water, sewer, drainage, telecommunications, electrical and natural gas, and other infrastructure necessary to attract and serve a state-of-the-art logistics center.
  - Implement environmentally sound wastewater management and stormwater treatment.
- Environmental Objectives
  - Implement environmentally advanced construction and operational practices that conserve natural resources and reduce greenhouse gas emissions, energy consumption, and water use.
  - Accommodate the use of alternative means of transportation for home-work trips.
  - Facilitate appropriate habitat protection and preservation.
  - Maximize on-site open space.
  - Implement site designs that maximize land use compatibility with nearby residential neighborhoods by minimizing noise, nighttime lighting, aesthetics, and other impacts.
  - Implement solid waste diversion programs during site construction and operations.
  - Incorporate feasible best available technologies and best management practices into project construction and operations.
  - Protect any archaeological resources that may be found within the Specific Plan area.

ES.3 Required Project Approvals

Pursuant to CEQA Guidelines §15124(d)(1)(B), this 2nd RDEIR contains a list city actions required to approve the proposed project.

- Approval of the West Valley Logistics Center Specific Plan
- Recision of the currently adopted Valley Trails 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

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 Substance Control (DTSC), the Native American Heritage Commission, 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 2nd RDEIR in Chapter 4, *Environmental Analysis of the Proposed Project*.

A Draft EIR for the WVLCSP was made available for public comment beginning on April 22, 2014, and ending on June 5, 2014. Eight comment letters regarding the project were received during the Draft EIR's 45-day public review period, including letters from Laborers International Union of North America, Local Union 783 (May 8, 2014, and June 5, 2014), Native American Heritage Commission, San Bernardino County Department of Public Works, Southern California Association of Governments, City of Jurupa Valley Planning Department, CDFW, and Governor's Office of Planning and Research.

The 1st RDEIR was made available for public comment beginning on December 18, 2014, and ending on February 2, 2015. Nine comment letters were received during the Draft EIR's 45-day public review period, including letters from San Bernardino County Department of Public Works (January 28, 2015, and July 31, 2012); SCAQMD; K. Shawn Smallwood, Ph.D.; Lozeau Drury on behalf of Laborers International Union of North America, Local Union 783; City of Riverside Community Development Department, Planning Division; CDFW; City of Jurupa Valley Planning Department; and Governor's Office of Planning and Research. All issues raised during the public and agency review process for the Draft EIR and the 1st RDEIR are addressed in this 2nd RDEIR in Chapter 4, *Environmental Analysis of the Proposed Project*.

Areas of known controversy include:

- Location of warehouse development adjacent to residential neighborhoods
- Truck traffic occurring on roadways outside of the City of Fontana
- Project-related air pollutant and 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 2nd RDEIR 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, GHG emissions, 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 CEQA Guidelines states 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, UST-CB.

ES.6 Incorporated by Reference

Pertinent documents related to this Draft EIR have been cited in accordance with Section 15148 of the 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 (December 2017).
- Thienes Engineering. Tentative Tract Map 19156 (December 2017).
- 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 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 2nd RDEIR.

In accordance with the 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.

ES.7.1 Alternative 1: No Project/No Build

Section 15126.6(e) of the 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 this alternative, and no ground-disturbing activities would occur.

ES.7.2 Alternative 2: No Project/Buildout of Valley Trails Specific Plan

Under Alternative 2, the proposed West Valley Logistics Center Specific Plan would not be approved, and buildout of the currently approved Valley Trails Specific Plan would occur instead. The approved Valley Trails Specific Plan 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 Valley Trails Specific Plan project was fully analyzed in the Valley Trails Specific Plan 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 Valley Trails Specific Plan and the mitigation measures set forth in the Valley Trails Specific Plan Final EIR would be implemented.

ES.7.3 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 construction of 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, approximately 3.47 million square feet of building area would be built under this alternative; however, because this alternative would consist of a business park rather than a logistics center, site development would be substantially less truck- ntensive, 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 this alternative, and the development area would involve the same footprint.

ES.7.4 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 similar to Alternative 3, but with a development intensity about 25 percent 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 would be expanded due to the 25 percent smaller development footprint of Alternative 4.

ES.7.5 Alternative 5: Reduced Intensity Logistics Center

Alternative 5 provides for development of a warehouse-based logistics center with a 30 percent reduction in intensity and development footprint as compared to the proposed project (i.e., for, a total of 2.43 million square feet of warehouse buildings). This alternative was designed to reduce impacts on air quality, GHG emissions, and noise. A 30 percent 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 increases.

ES.7.6 Alternative 6: Proposed Project with a Prohibition on Trucks Using Sierra Avenue Alternative (Proposed Project Analyzed in the Draft EIR and 1st RDEIR)

Alternative 6 would involve prohibiting truck traffic from the West Valley Logistics Center from traveling northwest via the Sierra Avenue interchange on I-10. Under this scenario, project-related trucks would not be permitted to use Sierra Avenue or the Sierra Avenue interchange on I-10 north of the project. All other project components and features would be the same as for the proposed project.

ES.7.7 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 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). The Reduced Intensity Logistics Center alternative has 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 and GHG impacts would be reduced during construction and operation, impacts 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 payment of impact fees to jurisdictions other than the City of Fontana cannot be guaranteed.

Because this alternative involves a reduced development potential (a reduction of 30 percent), it would not meet project objectives related to job creation and economic development opportunities to the same extent as would the proposed project. As noted in Chapter 5, *Alternatives*, Alternative 5 would result in an employment growth potential of 2,035 employees (compared to 2,907 for the proposed project). In addition, this alternative 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 percent 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 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 GHG-1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- Impact GHG-2: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.
- 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	***Specific Plan Requirements*** • **SP-A-1:** Implement High-quality Development Standards and Design Guidelines. • **SP-A-2:** Install Visual Barriers between Project Areas and Residential Areas. • **SP-A-3:** Install Visual Barriers between Project Areas and Residential Areas. • **SP-A-4**: Light Spillage. • **SP-A-5**: Glare. • **SP-B-1**: Open Space – Natural Area. • ***Regulatory Requirements*** • **RR-A-1:** Maintain Construction Sites. • **RR-A-2:** Maintain Signs. • **RR-A-3:** Limits on Length of Building Permits • **RR-N-1**: Comply with the Construction Noise Municipal Code Exemption**.** ***Mitigation Measures*** No mitigation measures are required.	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 Mountains.	Less than Significant	***Regulatory Requirements*** • **RR-B-2:** Obtain Permits for Removal of Heritage Trees. ***Mitigation Measures*** No mitigation measures are required.	No Impact

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
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	***Specific Plan Requirements*** • **SP-A-1:** Implement High-Quality Development Standards and Design Guidelines. • **SP-A-2:** Install Visual Barriers between Project Areas and Residential Areas. • **SP-A-3:** Install Visual Barriers between Construction Work Areas and Residential Areas. • **SP-B-3**: Avian Habitat Feature. ***Regulatory Requirements*** • **RR-A-1:** Maintain Construction Sites. • **RR-A-2:** Maintain Signs. • **RR-N-1:** Compliance with the Construction Noise Municipal Code. ***Mitigation Measures*** No mitigation measures are required.	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 lighted at night, 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 project does not create a substantial new source of light and glare in the project area.	Less than Significant	***Specific Plan Requirements*** • **SP-A-1:** Implement High-quality Development Standards and Design Guidelines, including standards for reduction of nighttime lighting and daytime glare. • **SP-A-4:** Light Spillage. • **SP-A-5:** Glare. ***Regulatory Requirements*** • **RR-N-1:** Compliance with the Construction Noise Municipal Code (no nighttime construction). ***Mitigation Measures*** No mitigation measures are required.	Less than Significant
Air Quality			
Impact AQ-1. Conflict with or obstruct implementation of the applicable air quality plan. Projects that are consistent	Significant	***Mitigation Measures*** No feasible mitigation measures are available.	Significant Unavoidable

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
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 at the project site. However, the seven industrial warehouse buildings with a total of 3,746,997 square feet of building area, would exceed the growth intensities currently allowed within the General Plan, and is inconsistent with the residential planned community and its zoning designations set forth in the current Valley Trails Specific Plan.			
Impact AQ-2. Violate any air quality standard or contribute substantially to an existing or projected air quality violation. Construction-The unmitigated 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 SCAQMD'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, PM_{10}, and $PM_{2.5}$). The only feasible mitigation to reduce the large haul truck emissions is to reduce the amount of diesel fuel burned, either by reducing the distance traveled or	Significant	***Specific Plan Requirement*** • **SP-GHG-4**: Provide Electrical Connections at Loading Docks ***Regulatory Requirements*** • **RR-AQ-1:** Comply with South Coast Air Quality. Management District Rule 401 – Visible Emissions • **RR-AQ-2**: Comply with South Coast Air Quality Management District Rule 402 – Nuisance. • **RR-AQ-3:** Comply with South Coast Air Quality Management District Rule 403 – Fugitive Dust. • **RR-AQ-4:** Comply with South Coast Air Quality Management District Rule 1113 – Architectural Coatings. • **RR-AQ-5:** Comply with South Coast Air Quality Management District Rule 1301 – General. ***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	Significant Unavoidable

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
improving fuel economy. It is not feasible to place restrictions on the distance trucks travel to serve the future uses of the industrial business park.		Quality Handbook are implemented to reduce the project's emissions: • Revegetate disturbed areas. • Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour. • 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. • Minimize at all times the area disturbed by clearing, grading, earthmoving, or excavation operations. **Mitigation Measure AQ-2: Utilize Tier 4 Construction Equipment.** All non-road construction equipment greater than 50 horsepower shall meet EPA Tier 4 emission standards with the following exception. Equipment with an engine compliant with only Tier 3 emissions standards will be allowed on a case-by-case basis only when the applicant shows a good faith effort to procure Tier 4 equipment, and documents that no Tier 4 equipment is available for a particular equipment type within the County of San Bernardino within the scheduled construction period. Each case shall be documented with signed written or emailed correspondence by the appropriate construction contractor, along with documented correspondence from at least two construction equipment rental firms representing a good faith effort to locate engines that meet Tier 4 requirements, as applicable. Documentation will be submitted to City staff for review before Tier 3 equipment is used on the project. **Mitigation Measure AQ-3: Use Low-VOC Paints**. The project shall utilize "Super-Compliant" low-VOC paints that have been reformulated to exceed the regulatory VOC limits put forth by SCAQMD's Rule 1113 (BACM AQ-2). Super-Compliant low-VOC paints shall be no more than 10 grams per liter of VOC. Alternatively, the applicant may utilize tilt-up concrete buildings	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		that do not require the use of architectural coatings **Mitigation Measure AQ-4: Use Electricity Rather than Internal Combustion Engines during Construction.** The Construction Contractor shall require by contract specifications that construction operations rely on the electricity infrastructure surrounding the construction site, if available, rather than electrical generators powered by internal combustion engines. **Mitigation Measure AQ-5: Use Alternative Fueled Technology during Construction.** The Construction Contractor shall 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-6: Require Proper Maintenance of Construction Equipment.** The Construction Contractor shall require that construction equipment be maintained in good operation condition so as to reduce emissions. The construction contractor shall ensure that all construction equipment is being properly serviced and maintained as per the manufacturer's specification. Maintenance records shall be available at the construction site for City verification. **Mitigation Measure AQ-7: 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 documenting the serial number, horsepower, age, and fuel of all on-site equipment. The plan shall 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 as	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		determined by the City of Fontana. Contractors shall also conform to any construction measures imposed by the SCAQMD as well as City of Fontana Community Development Planning Staff. **Mitigation Measure AQ-8: Require Construction Equipment to Turn Off When Not in Use.** The Construction Contractor shall 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-9: Timing of Construction Activities**. Construction activity associated with off-site utility and infrastructure improvements shall not occur concurrently with site preparation, grading, building construction, architectural coating, or paving phases of activity **Mitigation Measure AQ-10: EPA Smartway features.** The City shall require operators of the project to ensure that haul trucks incorporate EPA Smartway features, as required by ARB. Project operators shall 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-11: Energy Efficiency in Vendor Trucks.** The City shall require operators of the proposed facilities to request that the vendor trucks incorporate energy efficiency improvement features through the voluntary Carl Moyer Program —including truck modernization, retrofits, and/or aerodynamic kits and low rolling resistance tires—to reduce fuel consumption. **Mitigation Measure AQ-12: Incorporate Electric Vehicle Charging Stations and Carpool Parking.** The project shall 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-13: Provide Electric Interior Vehicles.** All buildings shall be designed to provide infrastructure to support use of electric powered forklifts and/or other interior vehicles. **Mitigation Measure AQ-14: Provide Ridesharing and Transit**	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		Incentives. The project will reduce vehicle miles traveled and emissions associated with trucks and vehicles by implementing the following measures: • Pedestrian and bicycle connections shall be provided to surrounding areas consistent with the City's General Plan. • A Transportation Management Association (TMA) or similar mechanism shall be established by the project applicant. The TMA shall establish and coordinate a carpooling program. The TMA shall advertise its services to the building occupants. The TMA shall offer transit incentives to employees and shall provide shuttle service to and from public transit, should a minimum of five (5) employees request and use such service from a transit stop at the same drop-off and/or pick-up time. The TMA shall distribute public transportation information to project site employees. The TMA shall provide message board space for coordination rides. • Preferential parking for carpools and vanpools shall be provided on each warehouse site.	
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). Currently, the SCAB is in nonattainment for PM_{10}, $PM_{2.5}$, and O_3. 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 the SCAB and contribute to adverse cumulative air quality impacts.	Less than Significant	***Mitigation Measures*** No mitigation measures are required.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
The Traffic Impact Study included vehicular trips from all present, present, and reasonably future projects in the project vicinity. The CO hot spot concentrations calculated at these intersections include the cumulative traffic effect. CO concentrations at nearby intersections would not exceed federal and state standards and no significant cumulative CO impacts would occur.			
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 risk assessment was undertaken, and concluded that impacts on sensitive receptors would be less than significant.	Less than Significant	***Mitigation Measures*** No mitigation measures are required.	Less than Significant
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.	Less than Significant	***Regulatory Requirements*** • **RR-AQ-2:** Comply with South Coast Air Quality Management District Rule 402 – Nuisance. ***Mitigation Measures*** No mitigation measures are required.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
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 are not permitted by the proposed Specific Plan.			
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 project construction resulted in ground disturbance within or adjacent to the RSS habitat, removal of the Riversidean Sage Scrub (RSS) plant community, or impacts on individuals of special-status species, a significant impact would result. Permanent loss of approximately 16 acres of disturbed RSS habitat that in its current condition does not meet the definition of Critical Habitat but meets the CEQA definition of locally rare would occur due to site grading and construction of buildings. The western burrowing owl, a California Species of Special Concern, was detected on site in 2017 within the project's development area, although it had not been detected in previous years' surveys. Should burrowing owls colonize any portion site's	Significant	***Specific Plan Requirements*** • **SP-B-1:** Open Space – Natural Area. • **SP-B-2:** Habitat Management Plan. ***Regulatory Requirements*** • **RR-B-1:** Obtain Permits for Jurisdictional Waters of the State and State Streambeds. ***Mitigation Measures*** **Mitigation Measure BIO-1: Pre-Construction Focused Surveys of Proposed Conservation Area and Development Area to Confirm Absence of Special-Status Species.** *Focused Survey for Coastal California Gnatcatcher within 300 feet of the Conservation Area Construction Fence*. 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 RSS habitat within 300 feet of the location where the conservation area fencing will be installed. If CAGN are found to occur within 300 feet of the conservation area construction fence line or water pipeline construction area, an avoidance buffer no less than 300 feet shall be established around the nest(s) until all young have fledged and the nest is confirmed by a qualified biologist to be no longer active. If avoidance is not feasible, consultation with USFWS will be necessary to determine whether an Individual Take Permit is required.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
planned development area prior to the start of construction, a significant impact would result. The habitat assessment for rare plants in 2017 determined that there was a low potential for the RSS in the conservation lands to provide suitable habitat for sensitive plants. However, because focused surveys for such species have not been performed in the conservation area, presence of the species cannot be ruled out. Temporary impacts associated with the construction of the water pipeline would remove special-status plants should they be present within the conservation area. Impacts on one or more of these species (if present) would be significant.		*Preconstruction Surveys within the Proposed Conservation Area for San Diego Black-tailed Jackrabbit***.** At least 48 hours prior to initiation of water pipeline construction activities, the 5.2-acre construction area shall be surveyed to confirm the absence of San Diego black-tailed jackrabbits. If individuals of the species are observed within the construction footprint, their movements shall be monitored until it can be confirmed that each individual has left the pipeline construction area. After that, exclusion fencing shall be established to prevent individuals of the species from re-entering the construction area during construction. *Pre-construction Survey within the Proposed Development Area for Western Burrowing Owl***.** The project applicant shall retain a qualified biologist to conduct preconstruction surveys for burrowing owls no fewer 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. *Preconstruction Nesting Bird Survey of the Proposed Development Area***.** 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	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		qualified biologist to be no longer active. *Pre-construction Surveys for Special-Status Plants*: Prior to construction, or any other project site development-related ground disturbance activities including vegetation removal within RSS habitat that would occur during water pipeline construction, the applicant shall conduct pre-construction presence/absence surveys for Plummer's mariposa lily, Parry's spineflower, and paniculate tarplant by a qualified botanist. Surveys shall be conducted in accordance with CNPS and CDFW rare plant survey guidelines and shall be conducted during the flowering period when each species is most readily identifiable. A botanist shall determine the blooming period for each species and verify blooming during the growing season by visiting a reference site to observe if the target species is flowering or otherwise identifiable. A species-specific survey may be required for each special-status plant depending upon the blooming period. Any special-status plant populations shall be mapped in the field. If the presence of any special-status plant species is confirmed, a copy of the survey results shall be forwarded to CDFW for entry into the CNDDB. In the event that special-status plants are not identified within the WVLCSP development areas, including areas used for construction, no further action is required. If special-status species are determined to be present within the RSS habitat, then prior to issuance of project grading permit, a 5-year on-site restoration mitigation and monitoring program shall be developed and implemented for any planting areas established to mitigate impacts on special-status plant species. Restoration success criteria shall include: 1) Establishment of mitigation site(s) within the conservation area, where plant restoration will occur. 2) Identification by a qualified botanist of an appropriate plant palette and restoration methodology compatible with the specific affected special-status species. Mitigation sites could include existing RSS habitat areas in the preservation area, depending on site conditions and locations of special-status plants found.	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		Mitigation Measure BIO-2: Installation of Environmentally Sensitive Area Fencing to Prevent Encroachment into the 55.23-acre Conservation Area during Construction. At or before the start of construction, including pre-construction establishment of staging areas and/or initiation of grading activities, Environmentally Sensitive Area (ESA) fencing shall be installed along the western limits of disturbance to prevent encroachment into preserved lands. Educational signage shall also be posted to inform workers and area residents 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. Implementation of this measure would not be required should the permanent fencing or barrier called for in Mitigation Measure BIO-5 be constructed prior to the start of construction. **Mitigation Measure BIO-3: Habitat Mitigation and Monitoring Plan.** In coordination with the CDFW Streambed Alteration Agreement, a habitat mitigation and monitoring plan (HMMP) and up to 5 years of post-restoration monitoring and reporting will be established for the 55.23-acre conservation area. The HMMP must include the following key actions to protect the conservation area RSS habitat: • Document the baseline conditions within the 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, disposing of weed species annually, reseeding, and bi-annual monitoring of the site to document treatment actions. • Remove olive trees and pepper trees within the conservation area and implement restoration of RSS in their place. • Create vegetated areas along the southern boundary of the project site to accommodate potential avian movement between Rattlesnake Mountain and the Jurupa Hills regions. • Control and prevent trespassing, dumping and other human	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		intrusion into the RSS open space area through permanent fencing, signage, and coordination with the City of Fontana. • Eliminate signs of human disturbance through annual cleanup **Mitigation Measure BIO-4: On-site Restoration of 16 Acres of RSS within the Proposed Conservation Area.** A minimum of 16 acres of area shall be restored to establish additional RSS plant community within the conservation area (see Figure 4.2.3-4). Appendix D includes a detailed plant palette that would be utilized for restoration of the RSS plant community within the conservation area. Restoration of RSS would occur in the portions of the conservation area that currently support non-native grasslands, disturbed areas, or non-native trees and those portions would be graded, planted, and seeded with RSS plant community species listed in Appendix D. As described in the HMMP (**Mitigation Measure BIO-3**), and in coordination with CDFW as part of the Streambed Alteration Agreement, a monitoring plan and up to 5 years of post-restoration monitoring and reporting will be established for the restored area within the 55.23-acre conservation area. **Mitigation Measure BIO-5: On-site restoration of 5.2 acres of RSS Disturbed by Water Pipeline Construction within the Proposed Conservation Area.** Immediately following conclusion of construction of the water pipeline, the 5.2-acre pipeline construction footprint shall be planted and seeded with RSS plants consistent with the plant palette included in Appendix D. As described in the HMMP (**Mitigation Measure BIO-3**), and in coordination with CDFW as part of the Streambed Alteration Agreement, a monitoring plan and up to 5 years of post-restoration monitoring and reporting will be established for this area that occurs within the conservation area on site**.** **Mitigation Measure BIO-6: Post-Construction Long-term Management and Protection of Proposed Conservation Area.** A permanent fence or barrier shall be erected to protect the 55.23-acre conservation area, the RSS habitat, and restored RSS habitat proposed to occur there. The design and materials used for the fencing shall be consistent with fuel management zone	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		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 Property Owners' Association is established that will assume such responsibility in perpetuity.	
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 or U.S. Fish and Wildlife Service. CNDDB records indicate that one recognized special-status plant community has been reported in the Fontana USGS 7.5-minute quadrangle: Riversidean Alluvial Fan Sage Scrub. Riversidean Alluvial Fan Sage Scrub was not observed on site during the 2017 habitat assessment and is presumed absent from the project site. No impacts on this sensitive natural community would occur. The mulefat scrub habitat on site is considered to be a sensitive plant community and falls within CDFW jurisdiction, as this habitat is considered riparian vegetation and is regulated under the California Fish and Game Code Section	Significant	***Regulatory Requirements*** • **RR-B-1:** Obtain Permits for Jurisdictional Waters of the State. ***Mitigation Measures*** **Mitigation Measure BIO-7: Replacement of Affected Wetland Areas**. At a minimum, compensation at a 1:1 ratio for the loss of 0.27 acre of waters of the State and 0.47 acre of area that meets the CDFW jurisdictional definition would occur off site through the purchase of credits at a local mitigation bank. The in-lieu fee program or off-site mitigation bank credits purchased shall be documented and included in the CDFW Streambed Alteration Agreement required to be provided to the City prior to initiation of site grading activities	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
1602 Streambed Alteration Agreement. Loss or removal of any of the State-regulated wetland habitats identified in the project area would be significant due to the adoption of *no net loss of wetlands, or lake and streambed* policies by RWQCB and CDFW.			
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. Based on wetland surveys conducted on site, U.S. Army Corps of Engineers has confirmed that the isolated nature of the ephemeral drainage and wetland features onsite do not qualify as jurisdictional features pursuant to Section 404 of the Clean Water Act.	No Impact	***Regulatory Requirements*** • **RR-B-1:** Obtain Permits for Jurisdictional Waters of the State and State Streambeds. ***Mitigation Measures*** No mitigation measures are required	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 proposed development area does not represent an opportunity for avian movement between undeveloped areas in the Jurupa Hills and Rattlesnake Mountain, and the project site in its current condition does not provide an east-west movement corridor for avian species. The proposed project would not remove or affect avian movement or movement corridors compared to existing conditions. **Specific**	Less than Significant	***Specific Plan Requirements*** • **SP-B-1:** Open Space – Natural Area. • **SP-B-3:** Avian Habitat Feature. ***Mitigation Measures*** No mitigation measures are required.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
Plan Requirement SP-B-1 commits the applicant to the establishment of a 55.23-acre conservation area to preserve RSS habitat along the lower slopes of the Jurupa Hills. **Specific Plan Requirement SP-B-3** would provide an avian habitat feature in the form of vegetation suitable to support the potential for east-west avian movement between the Jurupa Hills, including the proposed on-site RSS conservation area, and the Rattlesnake Mountains to the east. This avian habitat feature would form a non-contiguous corridor of at-grade native plantings and rooftop RSS habitat creation totaling approximately 15 acres of native and RSS vegetation in the southern portion of the project site. Avian species potentially moving east and west between undeveloped habitat areas could utilize the proposed avian habitat feature as a means of dispersal. Development of the project site may result in an increase in mortality of common terrestrial mammals such as raccoons and skunks crossing Armstrong Road. These species are not special status.			
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	***Regulatory Requirements*** • **RR-B-2:** Obtain Permits for Removal of Heritage Trees. ***Mitigation Measures*** **Mitigation Measure BIO-8: 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,	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		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.	
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 project site abuts, but is outside of the boundaries of the Western Riverside County MSHCP. The project site is not addressed in the MSHCP, nor does it fall within the boundary of any other adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan.	No Impact	***Specific Plan Requirements*** • **SP-B-1:** Open Space – Natural Area ***Mitigation Measures*** No mitigation measures are required.	No Impact

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual 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 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. Preservation is the preferred manner of treatment for the portion of P-36-25455 within the project site. With preservation, no direct impacts on the resource would occur.	Less than Significant	***Conditions of Approval*** • **RR-C-1**: City of Fontana Municipal Code Chapter 5, Buildings and Building Regulations, Article XIII, Section 5-351: Preservation of Historic Resources. ***Mitigation Measures*** No mitigation measures are required.	Less than Significant
Impact CUL-2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5. Grading and trenching, along with other ground-disturbing actions during construction, have the potential to disturb and destroy an archaeological resource. Disturbance of any significant archaeological resource would result in a significant adverse impact.	Significant	***Regulatory Requirements*** • **RR-C-1**: City of Fontana Municipal Code Chapter 5, Buildings and Building Regulations, Article XIII, Section 5-351: Preservation of Historic Resources. • **RR-C-2**: Comply with Requirements if Unanticipated Discovery of Human Remains. ***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, as well as requests by the Gabrielino/Tongva San Gabriel Band of Mission Indians and the Soboba Band of Luiseno Indians, qualified archaeological	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		monitor(s) shall be retained by the applicant after consultation with representatives of the two Tribes 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(s) 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(s) 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(s) 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 to implement the project Monitoring Plan. **Mitigation Measure CUL-2: Unanticipated Discovery of Cultural Resources.** 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 applicant shall prepare an Archaeological Monitoring Plan. The Monitoring Plan shall be prepared by a qualified archaeologist for review and approval by the City of Fontana Director of Community Development. The Monitoring Plan 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 onsite cultural resources	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		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. Disturbance and other adverse effects on any resource determined to be eligible shall be avoided. Should avoidance be infeasible, adverse effects shall 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 California Code of Regulations 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. 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	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		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.	
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. Unless an on-site inspection detects relatively fine-grained Quaternary deposits in the project site, excavations in the project site would not require paleontological monitoring.	Less than Significant	***Mitigation Measures*** **Mitigation Measure CUL-3. Monitoring of Paleontological Resources and Reporting.** Destruction of fossils of significant scientific interest shall be avoided. 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 a Paleontological Monitoring Plan to be prepared by a qualified paleontological consultant for review and approval by the City. The paleontology monitor shall have the authority to reduce monitoring if, in his or her professional opinion, sediments being monitored are previously disturbed. Monitoring may also be reduced by the paleontological monitor 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 CUL-4. Disturb any human remains, including those interred outside	Less than Significant	***Regulatory Requirements*** • **RR-C-2:** Comply with Requirements if Unanticipated Discovery of	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
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 standard condition for the unanticipated discovery of human remains (Regulatory Requirement RR-C-1) would be followed.		Human Remains Occurs. ***Mitigation Measures*** No mitigation measures are required.	
Energy Resources			
Impact EN-1. 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 regional energy utility service or system infrastructure or the expansion of existing infrastructure, the construction of which could cause significant environmental effects. Even though the proposed project would increase consumption of electricity and natural gas resources, the project would not increase demand such that SoCalGas or SCE would need to plan for new regional electricity or natural gas facilities, the construction of which could cause significant environmental effects.	Less than Significant	***Specific Plan Requirements*** • **SP-AQ-1:** Encourage Ridesharing and Transit Incentives. • **SP-GHG-2:** Design Building Components to Meet 2013 Title 24 Standards. • **SP-GHG-3:** Design CALGreen Compliant Buildings. • **SP-GHG-4:** Provide Electrical Connections at Loading Docks. • **SP-GHG-5:** Utilize Energy-efficient Lighting. • **SP-GHG-6:** Select Efficient Refrigerants and Heating, Ventilating, and Air Conditioning (HVAC) Systems. • **SP-GHG-7:** Provide Landscaped Parking Lots. • **SP-TR-5:** Install Bicycle Racks. • **SP-UT-2:** Incorporate Water-efficient Building Designs. • **SP-UT-3:** Incorporate Recycling Program. ***Regulatory Requirements*** • **RR-AQ-7:** Require Equipment to Be Turned Off When Not in Use. ***Standard Requirements*** • **SR-GHG-1**: Provide Waste Reduction and Recycling Education. ***Mitigation Measures*** No mitigation measures are required.	Less than Significant
Impact EN-2. Result in the use of large amounts of energy; use energy in a wasteful manner during project	Significant	***Specific Plan Requirements*** • **SP-AQ-1:** Encourage Ridesharing and Transit Incentives.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
construction. The amount of energy and fuel use anticipated by the project's construction are typical for the type of construction proposed because there are no aspects of the project's proposed construction process that are unusual or energy-intensive. Project construction equipment would conform to the applicable ARB emissions standards, acting to promote equipment fuel efficiencies.		• **SP-GHG-2:** Design Building Components to meet 2013 Title 24 Standards. • **SP-GHG-3:** Design CALGreen Compliant Buildings. • **SP-GHG-4:** Provide Electrical Connections at Loading Docks. • **SP-GHG-5:** Utilize Energy-efficient Lighting. • **SP-GHG-6:** Select Efficient Refrigerants and Heating, Ventilating, and Air Conditioning (HVAC) Systems. • **SP-GHG-7:** Provide Landscaped Parking Lots. • **SP-TR-5:** Install Bicycle Racks. • **SP-UT-2:** Incorporate Water-efficient Building Designs. • **SP-UT-3:** Incorporate Recycling Program. ***Regulatory Requirements*** • **RR-AQ-7:** Require Equipment to Be Turned Off When Not in Use. ***Standard Requirements*** • **SR-GHG-1:** Provide Waste Reduction and Recycling Education. ***Mitigation Measures*** **Mitigation Measure EN-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. **Mitigation Measures AQ-2** through **AQ-7** and **AQ-9**	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
Geology and Soils			
Impact 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.** 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 Uniform Building Code.	Significant	***Regulatory Requirements*** • **RR-G-1**: Comply with Fontana Municipal Code, Chapter 5, Article III**,** 2013 Edition of the California Building Code (CBC). • **SR-HW-1:** Maintain Stormwater Detention Basins and Biotreatment Areas during Project Operation ***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 construction site within the Specific Plan area 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 Public Works 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 2nd 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 California Building Code and local requirements. 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 to minimize any negative effects associated with	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		erosion and sedimentation. **Mitigation Measure GEO-2: Geotechnical Testing During Construction.** Geotechnical observations and testing will be conducted as necessary during construction activities, consistent with the conclusions and recommendations presented in the final Geotechnical Studies (required per Mitigation Measure GEO-1) for development within the project area. 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.	
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 would result in the substantial soil erosion and/or loss of topsoil.	Significant	***Regulatory Requirements*** • **RR-G-1**: Comply with Fontana Municipal Code, Chapter 5, Article III**,** 2013 Edition of the California Building Code (CBC). • **RR-HW-1:** Prepare and Implement a Stormwater Pollution Prevention Program (SWPPP). • **RR-HW-2:** Submit a Final Stormwater Water Quality Management Plan (SWQMP) for City Approval. ***Standard Requirements*** • **SR-G-1:** Develop and Implement an Erosion Control Plan. • **SR-HW-1**: Maintain Stormwater Detention Basins and Biotreatment Areas during Project Operation.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		Mitigation Measures **Mitigation Measure GEO-1**	
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 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	Significant	***Regulatory Requirements*** • **RR-G-1**: Comply with Fontana Municipal Code, Chapter 5, Article III, 2013 Edition of the California Building Code (CBC). ***Mitigation Measures*** **Mitigation Measures GEO-1** and **GEO-2**	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. The soils on site exhibit a very low expansion potential. Design of any proposed structures within the WVLCSP site would conform to current codes and specifications that support protection and stability against seismic events.	Less than Significant	***Regulatory Requirements*** • **RR-G-1**: Comply with Fontana Municipal Code, Chapter 5, Article III, 2013 Edition of the California Building Code (CBC). ***Mitigation Measures*** **Mitigation Measures G-1** and **G-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	***Mitigation Measures*** No mitigation measures are required.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
Greenhouse Gas Emission			
Impact GHG-1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. Because GHG emissions from the proposed project of 60,631.32 $MTCO_2e$ would exceed the SCAQMD's recommended threshold of 3,000 $MTCO_2e$, the proposed project would result in a cumulatively considerable impact with respect to GHG emissions.	Significant	***Specific Plan Requirements*** • **SP-GHG-1:** Incorporate Water Conservation and Efficient Measures for Landscaping • **SP-GHG-2:** Design Building Components to Meet 2016 Title 24 Standards. • **SP-GHG-3:** Design CALGreen-Compliant Buildings. • **SP-GHG-4:** Provide Electrical Connections at Loading Docks. • **SP-GHG-5:** Utilize Energy Efficient Lighting • **SP-GHG-6:** Select Efficient Refrigerants and Heating, Ventilating, and Air Conditioning (HVAC) Systems. • **SP-GHG-7:** Provide Landscaped Parking Lots. • **SP-AQ-1:** Require Equipment to Turn Off When Not in Use. • **SP-AQ-1:** Encourage Ridesharing and Transit Incentives • **SP-AQ-6:** Utilize Electric Cargo Handling Equipment. ***Standard Requirements*** • **SR-GHG-1:** Provide Waste Reduction and Recycling Education. • **SR-GHG-2:** Incorporate More Energy-Efficient Measures Related to Construction and Building Materials. • **SR-GHG-3:** Incorporate Energy-Efficiency Measures for New Warehouse Buildings. ***Mitigation Measures*** Implement **Mitigation Measures AQ-1** through **AQ-14**. **Mitigation Measure GHG-1: Provide Solar-Ready Roofs:** All buildings shall be designed to be "solar ready" to facilitate the future installation of solar energy systems except in rooftop areas where avian habitat feature areas will be created using rooftop plantings of Riversidean sage scrub (RSS) habitat plant species to create vegetative substrate that could facilitate avian species' access east-west dispersal between to the proposed 55.23-acre on-site RSS conservation area and nearby undeveloped RSS habitats.	Significant Unavoidable

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
Impact GHG-2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Estimated GHG emissions from project operation will exceed the SCAQMD threshold (3,000 $MTCO_2e$ per year), even with implementation of project design features and all feasible mitigation measures (MM AQ-1 through MM-AQ-14) due to the size of the proposed project. Therefore, the proposed project is not consistent with SCAG's 2016 RTP/SCS Performance Measure regarding criteria pollutants and GHG emissions, and would therefore conflict with GHG reduction goals set forth in the SCAG 2016 RTP/SCS. The proposed project is, however, consistent with the ARB Scoping Plan and regulations adopted for the purpose of reducing the emissions of GHGs.	Significant	***Specific Plan Requirements*** • **SP-GHG-1:** Incorporate Water Conservation and Efficient Measures for Landscaping. • **SP-GHG-2:** Design Building Components to Meet 2016 Title 24 Standards. • **SP-GHG-3:** Design CALGreen-Compliant Buildings. • **SP-GHG-4:** Provide Electrical Connections at Loading Docks. • **SP-GHG-5:** Utilize Energy Efficient Lighting. • **SP-GHG-6:** Select Efficient Refrigerants and Heating, Ventilating, and Air Conditioning (HVAC) Systems. • **SP-GHG-7:** Provide Landscaped Parking Lots. • **SP-GHG-8:** Implement Onsite Recycling Program. • **SP-AQ-1:** Encourage Ridesharing and Transit Incentives. • **SP-AQ-6**: Utilize Electric Cargo Handling Equipment. • **SP-AQ-3:** Encourage Ridesharing and Transit Incentives. ***Standard Requirements*** • **SR-GG-1:** Provide Waste Reduction and Recycling Education**.** • **SR-GHG-2:** Incorporate More Energy-Efficient Measures Related to Construction and Building Materials. • **SR-GHG-3:** Incorporate Energy-Efficiency Measures for New Warehouse Buildings. ***Mitigation Measures*** **Mitigation Measures AQ-1** through **AQ-14.**	Significant Unavoidable
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. Proposed project construction would involve routine transport, use, and disposal of hazardous materials such as solvents, paints, oils, grease, and caulking. The proposed project would use typical	Less than Significant	***Specific Plan Requirements*** • **SP-HM-1:** Sampling and Remediation. ***Regulatory Requirements*** • **RR-HM-1:** Hazardous Materials Construction Management Plan. ***Mitigation Measures*** No mitigation measures are required.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
hazardous chemicals, including common materials such as toners, paints, lubricants, kitchen and restroom cleaners, refrigerants associated with HVAC systems, and other maintenance materials. Grounds and landscape maintenance would also use commercial products formulated with hazardous materials, including fuels, cleaners and degreasers, solvents, paints, lubricants, adhesives, sealers, and pesticides/herbicides. Transport, use, and disposal of hazardous materials is required to comply with applicable regulations such as the RCRA, Department of Transportation Hazardous Materials Regulations, and local CUPA regulations.			
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. The proposed project would 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	Significant	***Specific Plan Requirements*** • **SP-HM-1:** Sampling and Remediation. ***Regulatory Requirements*** • **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. ***Standard Requirements*** • **SR-HM-1:** Contact Underground Services Alert. • **SR-HM-2**: Require Construction Equipment Spark Arresters. ***Mitigation Measures*** **Mitigation Measure HAZ-1: Engineering Controls and Best Management Practices during Construction**. During construction, the contractor will employ use of engineering controls	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
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.		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	
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. 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.	No Impact	***Regulatory Requirements*** • **RR-HM-2:** Prepare a Hazardous Materials Construction Management Plan for Accidental Spills. ***Mitigation Measures*** No mitigation measures are required.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
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 regard 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	***Specific Plan Requirements*** • **SP-HM-1:** Sampling and Remediation ***Regulatory Requirements*** • **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. ***Standard Requirements*** • **SR-HM-1:** Contact Underground Services Alert. • **SR-HM-2:** Require Spark Arresters for Construction Equipment. ***Mitigation Measures*** **Mitigation Measure HAZ-1**.	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 Zone.	No Impact	***Mitigation Measures*** No mitigation measures are required.	No Impact

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual 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.	No Impact	***Mitigation Measures*** No mitigation measures are required.	No Impact
Impact HAZ-7. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. 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**) would be implemented to minimize obstruction, which would help to ensure continued emergency access to the project site and nearby properties.	Significant	***Mitigation Measures*** **Mitigation Measure TRA-1a**	Less than Significant
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 *high*	Significant	***Regulatory Requirements*** • **RR-HM-4:** Prepare a Fuel Modification Zone Management Plan. ***Standard Requirements*** • **CA-HM-2**: Require Construction Equipment Spark Arresters.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
and *very high* fire hazard severity zones, the potential for exposure of people and structures to wildland fires is considered a potentially significant impact.		***Mitigation Measures*** **Mitigation Measure HAZ-2: Clear Materials that Could Serve as Fire Fuel from Construction Areas.** Prior to ground clearing, grading and other ground disturbance 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 Fontana Fire Protection District prior to issuance of grading permits.	
Hydrology and Water Quality			
Impact HYD-1: Violate any water quality standards or waste discharge requirements. Construction activities such as excavation, grading, and paving 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. 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. Operation and maintenance activities may also include the use of pesticides, fuels to power equipment and vehicles, fertilizers, paints, and cleaners. In addition, urban	Less than Significant	***Specific Plan Requirements*** • **SP-HW-1:** Best Management Practices for Water Quality Management. • **SP-HW-2:** On-site Stormwater Detention. ***Regulatory Requirements*** • **RR-HW-1**: Prepare and Implement a Stormwater Pollution Prevention Program (SWPPP). • **RR-HW-2**: Submit a Stormwater Water Quality Management Plan (SWQMP) 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 (BMPs) for Water Quality Management.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
runoff commonly contains a variety of water pollutants, including elevated levels of pathogens, sediment, trash, fertilizers, pesticides, heavy metals, and petroleum products. During project operations, stormwater could carry pollutants such as pesticides and fertilizers, heavy metals, and petroleum products, and other urban runoff pollutants through storm drain systems and ultimately to receiving waters (i.e., rivers, streams, lakes, bays, and the ocean).		***Standard Requirements*** • **SR-HW-1**: Maintain Stormwater Detention Basins and Biotreatment Areas during Project Operation. • **SR-G-1:** Develop and Implement an Erosion Control Plan. ***Mitigation Measures*** No mitigation measures are required.	
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). Because area groundwater levels are approximately 575 and 1,000 feet above mean sea level, it is not likely that dewatering would be required during construction. Should dewatering be required for activities such as excavation of 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 and would not result in a loss of quantities of water that would deplete groundwater supplies. Implementation of the proposed project would not substantially deplete groundwater supplies or substantially	Less than Significant	***Mitigation Measures*** No mitigation measures are required.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
interfere with groundwater recharge because it would not increase groundwater demand or decrease groundwater recharge areas.			
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. 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.	Less than Significant	***Specific Plan Requirements*** • **SP-HW-1**: Best Management Practices for Water Quality Management. ***Regulatory Requirements*** • **RR-HW-1:** Prepare and Implement a Stormwater Pollution Prevention Program (SWPPP). • **RR-HW-2:** Submit a Stormwater Water Quality Management Plan (SWQMP) 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 (BMPs) for Water Quality Management. ***Standard Requirements*** • **SR-HW-1**: Maintain Stormwater Detention Basins and Biotreatment Areas during Project Operation • **SR-G-1:** Develop and Implement an Erosion Control Plan. ***Mitigation Measures*** No mitigation measures are required.	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	Less than Significant	***Regulatory Requirements*** • **RR-HW-1:** Prepare and Implement a Stormwater Pollution Prevention Program (SWPPP). • **RR-HW-2:** Submit a Stormwater Water Quality Management Plan (SWQMP) 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
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. Proposed detention basins would reduce 100-year flow from proposed improvements to less than 90 percent 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.		• **RR-HW-4:** Include Best Management Practices (BMPs) for Water Quality Management. ***Standard Requirements*** • **SR-HW-1**: Maintain Stormwater Detention Basins and Biotreatment Areas during Project Operation • **SR-G-1**: Develop and Implement an Erosion Control Plan. ***Mitigation Measures*** No mitigation measures are required.	
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 drainage volumes 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.	Less than Significant	***Specific Plan Requirements*** • **SP-HW-1**: Best Management Practices for Water Quality Management. ***Regulatory Requirements*** • **RR-HW-1:** Prepare and Implement a Stormwater Pollution Prevention Program (SWPPP). • **RR-HW-2:** Submit a Stormwater Water Quality Management Plan (SWQMP) 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 (BMPs) for Water Quality Management. ***Standard Requirements*** • **SR-HW-1:** Maintain Stormwater Detention Basins and Biotreatment Areas during Project Operation. • **SR-G-1:** Develop and Implement an Erosion Control Plan.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		Mitigation Measures No mitigation measures are required.	
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.	Less than Significant	***Specific Plan Requirements*** • **SP-HW-1:** Best Management Practices for Water Quality Management. ***Regulatory Requirements*** • **RR-HW-1:** Prepare and Implement a Stormwater Pollution Prevention Program (SWPPP). • **RR-HW-2:** Submit a Stormwater Water Quality Management Plan (SWQMP) 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. ***Standard Requirements*** • **SR-HW-1:** Maintain Stormwater Detention Basins and Biotreatment Areas during Project Operation. • **SR-G-1**: Develop and Implement an Erosion Control Plan. ***Mitigation Measures*** No mitigation measures are required.	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 warehouse distribution buildings, and no residential buildings are proposed as part of the project. Potential impacts on flooding are described in Impact HYD-4. As the project would not involve housing within any designated flood zone, no impacts would occur.	No impact	***Mitigation Measures*** No mitigation measures are required.	No impact

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual 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	***Mitigation Measures*** 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 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.	No Impact	***Mitigation Measures*** No mitigation measures are required.	No Impact
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	***Mitigation Measures*** No mitigation measures are required.	No Impact
Land Use and Planning			
Impact LU-1. Physically divide an established community. Development of the proposed project would not disturb or divide the existing layout of any community. The proposed project includes mobility improvements to facilitate connectivity with	No Impact	***Mitigation Measures*** No mitigation measures are required.	No Impact

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
the surrounding communities of Jurupa Valley and Bloomington.			
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. With the adoption of the proposed General Plan Amendment, the proposed project would be consistent with the Fontana General Plan and other plans adopted for the purpose of avoiding or mitigating an environmental effect.	No Impact	***Mitigation Measures*** No mitigation measures are required.	No Impact
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. The proposed project would preserve existing RSS habitat in perpetuity through the establishment of a 55.23-acre conservation area located along the southwestern boundary of the site, contiguous with existing RSS habitats in the Jurupa Hills and the northern boundary of the Western Riverside County MSHCP. Preservation of RSS habitat for wildlife use adjacent to larger areas of habitat protected under the MSHCP would have a positive effect compared to existing conditions	Less than Significant	***Mitigation Measures*** No mitigation measures are required**.**	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
wherein unauthorized entry into the hillside portions of the project site for off-road motorcycling is not uncommon. No conflicts between the proposed projected and the adjacent MSHCP would therefore occur.			
Noise			
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. 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.	Significant	***Specific Plan Requirements*** • **SP-GHG-4:** Provide Electrical Connections at Loading Docks. • **SP-N-1:** Noise Performance Standards. • **SP-N-2:** Installation of Sound Barriers on Site. • **SP-N-3:** Truck Idling. • **SP N-7**: Limitation on Construction Hours ***Regulatory Requirements*** • **RR-N-1:** Comply with the Construction Noise Municipal Code Exemption. ***Standard Requirements*** • **SR-N-1:** Ensure Proper Operation and Maintenance of Construction Equipment. • **SR-N-2:** Ensure Placement of Stationary Construction Equipment During Construction. • **SR-N-3:** Stage Construction Equipment Away from Noise-sensitive Receptors. • **SR-N-5:** Ensure Proper Maintenance of On-site Pavement. • **SR-N-6:** Post Appropriate Notices. ***Mitigation Measures*** **Mitigation Measure NOI-1: Provide Rubberized Pavement.** To reduce the off-site traffic noise levels resulting from WVLCSP-related truck trips, the use of an asphalt rubber hot mix overlay to reduce the noise levels associated with vehicle tires traveling over pavement is required during off-site project roadway improvements on the following roadway segments:	Significant Unavoidable

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact

		City of Fontana
		• Locust Avenue: South of Jurupa Avenue (Segment #6)
		  ○ South of Driveway 4 (Segment #7)
		  ○ South of Driveway 5 (Segment #8)
		  ○ South of 11th Street (Segment #9)
		  ○ South of 10th Street (Segment #10)
		  ○ South of 9th Street (Segment #11)
		  ○ South of 8th Street (Segment #12)
		• Jurupa Avenue:
		  ○ East of Locust Avenue—eastbound lanes from Locust Avenue to Kessler Park (Segment #36)
		San Bernardino County
		• Locust Avenue:
		  ○ South of Slover Avenue (Segment #4)
		  ○ South of Santa Ana Avenue (Segment #5)
		• Jurupa Avenue:
		  ○ West of Cedar Avenue (Segment #37)	

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. Operational impacts related to vibration would also occur from loaded trucks accessing the site on local roadways. Vibration levels from project construction and operations would be at or below the thresholds of perception and building damage	Less than Significant	***Specific Plan Requirements*** • **SP-N-4**: Vibration Performance Standard. ***Mitigation Measures*** No mitigation measures are required.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
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, implementation of the proposed project would result in an increase in noise levels of up to 3.9 dBA CNEL over the existing without project noise environment and 2.7 dBA CNEL over the future year 2040 without project noise environment.	Significant	***Specific Plan Requirements*** • **SP-GHG-4:** Provide Electrical Connections at Loading Docks. • **SP-N-1:** Noise Performance Standards. • **SP-N-2:** Installation of Sound Barriers on Site • **SP-N-3:** Truck Idling. ***Standard Requirements*** • **SR-N-4:** Ensure Proper Operation and Maintenance of Operational Equipment. • **SR-N-5:** Ensure Proper Maintenance of On-site Pavement. • **SR-N-6:** Post Appropriate Notices. ***Mitigation Measures*** **Mitigation Measure AQ-10** to reduce ambient noise levels related to truck idling during loading and unloading. **Mitigation Measure NOI-1** to reduce ambient noise levels related to increased traffic.	Significant 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-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	Less than Significant	***Specific Plan Requirements*** • **SP-AQ-1**: Require Equipment to Turn Off When Not in Use. • **SP-GHG-4**: Provide Electrical Connections at Loading Docks. • **SP-N-1**: Noise Performance Standards • **SP-N-2**: Installation of Sound Barriers on Site • **SP-N-3**: Truck Idling ***Regulatory Requirements*** • **RR-N-1:** Comply with the Construction Noise Municipal Code Exemption. ***Standard Requirements*** • **SR-N-1:** Ensure 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-	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
experience a substantial noise increase related to on-site parking lot activity.		sensitive Receptors. • **SR-N-4:** Ensure Proper Operation and Maintenance of Operational Equipment. • **SR-N-5:** Ensure Proper Maintenance of On-site Pavement. • **SR-N-6:** Post Appropriate Notices. • **SR-N-7**: Limitations on Construction Hours. ***Mitigation Measures*** Implement **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.	No Impact	***Mitigation Measures*** No mitigation measures are required.	No Impact
Impact NOI-6. For a project within the vicinity of a private airstrip, exposure of	No Impact	***Mitigation Measures***	No Impact

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
people residing or working in the project area to excessive noise levels. No private airstrips are located within the vicinity of the project. 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 mitigation measures are required.	
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 proposed project, it would not induce substantial population growth or development through increased construction employment. Implementation of the project would result in long-term job opportunities in the Inland Empire region, which has an average unemployment rate. Because of the many bedroom communities surrounding Fontana, even as the economy continues to improve, the labor force within the area would likely remain available for increased local employment opportunities, including those provided by the proposed project. 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	Less than Significant	***Mitigation Measures*** No mitigation measures are required.	No Impact

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
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 Sewer Lift Station and Force Main at Linden Avenue).	No Impact	***Mitigation Measures*** No mitigation measures are required.	No Impact
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.	No Impact	***Mitigation Measures*** No mitigation measures are required.	No Impact
Public Services			
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	Less than Significant	***Specific Plan Requirements*** • **SP-PS-1:** Implement Crime Prevention through Implementation of Safety Design (CPTED) Measures. • **SP-PS-2:** Fire Protection through Implementation of Safety Design Measures.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
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** Additional police personnel and equipment may be necessary to adequately serve the project as a consequence of the project's remote location in the City; however, because 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. Fire protection response times to the project site meet current 6-minute standard. However, the Fontana Fire Protection District's 2013 Strategic Plan includes relocation of Fire Station 77 to the southwest, which would place the project site and adjacent developments outside of the 6-minute response area, with projected response times up to 8 minutes. Relocation of Station 77, which is likely to cause FFPD response times to the project site to exceed 6 minutes, would indicate the need for construction of a new fire station to maintain response time goals to the project site and surrounding area; however, this need would be caused by FFPD's planned		***Regulatory Requirements*** • **RR-HM-4:** Prepare a Fuel Modification Zone Management Plan. • **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. ***Standard Requirements*** • **CA-HM-2:** Require Construction Equipment Spark Arresters. ***Mitigation Measures*** No mitigation measures are required.	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
relocation of Station 77, and not by the proposed project. The FFPD does not identify any planned additional facilities in its strategic plan that would maintain adequate response time to the project site and surrounding area following relocation of Station 77; therefore, the relocation would cause response times to the project site and vicinity for fire and paramedic emergency services to fail to meet the FFPD's established response time goal. Because project site workers have the ability to register their children for school based on their place of employment, the proposed project will generate students for the CJUSD. Employees working within the project site might make use of local library facilities; however, as is typical for warehouse development, the proposed project is not expected to generate a significant number of new local library users.			
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. Although there would be no residents living within the project site, employees working within the site could use recreational facilities and open spaces in Fontana and the adjacent unincorporated San Bernardino County community of Bloomington during certain times of the day. Because employees at the project site would have limited opportunities to use recreational facilities	Significant	***Specific Plan Requirements*** • **SP-R-1:** Trail Access and Location Verification. ***Mitigation Measures*** **Mitigation Measure REC-1: Jurupa Hills Trail Realignment Plan.** Any realignment of the Jurupa Hills Trail as a result of the proposed project will 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 will be realigned so as to be within the utility corridor easement in the southeastern portion of the WVLCSP project site, between	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
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. 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 Easement Trail, unless the location of the trail were determined to be within the project's development footprint.		proposed Parcels 5 and 6. The applicant will also submit plans for review and approval and will 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, and accessory structures. For compliance, the applicant will 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. Furthermore, no encumbrance to the existing SCE Easement Trail or the Jurupa Hills Trail would occur under the proposed project, and access would remain.	Less than Significant	***Mitigation Measures*** No mitigation measures are required.	No Impact
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	Significant	***Specific Plan Requirements*** • **SP-TR-1:** Truck Routing Plan. • **SP-TR-2:** Feasibility Studies and Fair Share Payments. • **SP-TR-3:** Property Owners' Association Responsibilities.	Construction: Less than Significant Operation:

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
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:* 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. *Operation:* The 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 cities of Fontana, Jurupa Valley, and Riverside; San Bernardino County; and Caltrans within their respective jurisdictions. Under Existing plus Project conditions, of the 65 study area intersections analyzed, eight intersections would exceed applicable significance criteria, seven of which currently exceed LOS performance standards without WVLCSP traffic. The addition of project traffic to 2040 cumulative traffic conditions would result in three intersection experiencing peak hour		• **SP-TR-5:** Install Bicycle Racks. ***Regulatory Requirements*** • **Regulatory Requirement RR-TR-1**: Pay San Bernardino County Nexus Fees and City of Fontana Development Impact Fees for Roadway Improvements. ***Mitigation Measures*** *Construction* **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 and the San Bernardino County Public Works Director for roadways within unincorporated County areas 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. Such routes shall be consistent with the truck routing set forth in the project's Truck Management Plan. • Specify the hours during which site deliveries and off-site hauling can occur and methods to mitigate construction-related impact to 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 designated representative) within the City of Fontana or the San Bernardino County Public Works Director (or a designated representative) for roadways within unincorporated County areas of any materials that may have been spilled, tracked, or blown onto adjacent streets or areas.	Significant Unavoidable

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
intersection deficiencies, in addition to the 44 intersections that would experience peak hour intersection deficiencies identified under cumulative (2040) without Project conditions, constituting direct project impacts. In addition to the three direct project impacts, the proposed project would result in a considerable contribution to each of the 44 intersections projected to operate at unacceptable LOS with project-related traffic in the cumulative (2040) without Project condition. A queuing analysis was performed for the project determined that the proposed project 's contribution to the potential for off-ramp vehicle queues to back up onto I-10 or SR-60 freeway mainlines would be cumulatively considerable at three locations, each of which would experience queuing issues during the weekday AM or PM peak hours even under cumulative (2040) without Project conditions. Analysis of freeway mainline indicated that eight freeway mainline segments would exceed Caltrans standards under cumulative (2040) without Project conditions. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. Analysis of freeway merge-diverge locations indicated that ten merge-diverge locations would exceed Caltrans standards under cumulative (2040) without Project conditions. Addition of project-related traffic would exacerbate these conditions,		• 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 within the City of Fontana or the San Bernardino County Public Works Director for roadways within unincorporated County areas. 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 within the City of Fontana or the San Bernardino County Public Works Director for roadways within unincorporated County areas. • 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 within the City of Fontana or the San Bernardino County Public Works Director for roadways within unincorporated County areas 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 within the City of Fontana or the San Bernardino County Public Works Director for roadways within unincorporated County areas. • 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 within the City of Fontana and San Bernardino County requirements within unincorporated County areas. • 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	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
resulting in a considerable contribution to a significant cumulative impact.		to effectively communicate emergency access during construction. *Operation* **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 Specific Plan, 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. 15-18 along with the required timing for the improvement. **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 Development Impact Fee (DIF), which represents the project's required fee to mitigate impacts to both regional (Nexus Study) and additional local facilities, including: • Alder Avenue/Santa Ana Avenue (TIA Intersection #11); • Locust Avenue/Santa Ana Avenue intersection (TIA Intersection #19); and • Linden Avenue/Slover Avenue (TIA Intersection #42). • Fair share payment to San Bernardino County to install a traffic signal at the Alder Avenue/Slover Avenue intersection (TIA Intersection #10) that is not included in the Nexus Study. Fair share payment for the WVLCSP will be at the same rate being charged by the County for projects within the unincorporated area. **Mitigation Measure TRA-1d: Construct Intersection**	

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		Improvements. Prior to the issuance of occupancy permits for the first building within the WVLCSP, the applicant shall construct the improvements called for in the WVLCSP TIA at the following intersections: • Locust Avenue/Slover Avenue • Cedar Avenue/Orange Street • Cedar Avenue/Santa Ana Avenue **Mitigation Measure TRA-1e**: **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 the City to fund the improvements needed to mitigate the project's contribution to cumulative impacts on intersections that would operate at an unacceptable LOS (or a further 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 Development Impact Fee (DIF), which represents required fee for mitigation of impacts to both regional (Nexus Study) and additional local facilities; • Fair share payments to San Bernardino County as mitigation for the project's contribution of traffic and the need for the improvements described in the WVLCSP TIA (Appendix L) at the following locations: o Sierra Avenue/Slover Avenue (#3) o Production Avenue/Slover Avenue (#6) o Tamarind Avenue/Slover Avenue (#8) o Alder Avenue/Slover Avenue (#10) o Laurel Avenue/Slover Avenue (#14) o Cedar Avenue/Valley Boulevard (#43) o Cedar Avenue/Slover Avenue (#47) o Cedar Avenue/Jurupa Avenue (#49) o Cedar Avenue/7th Street (#51) o Cedar Avenue/Rubidoux Boulevard/El Rivino Road (#52)	
Impact TRA-2. Conflict with an applicable	No Impact	***Mitigation Measures***	No Impact

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
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 mitigation measures are required.	
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 traffic patterns.	No Impact	***Mitigation Measures*** No mitigation measures are required.	No Impact
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). 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.	Significant	***Specific Plan Requirements*** • **SP-TR-1:** Truck Routing Plan. • **SP-TR-3:** Property Owners' Association Responsibilities. • **SP-TR-4:** Ensure installation of Safety Features. ***Mitigation Measures*** **Mitigation Measure TRA-1a**	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
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 several project driveways.	Significant	***Mitigation Measures*** **Mitigation Measure TRA-1a**	Less than Significant
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 (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.	Less than Significant	***Specific Plan Requirements*** • **SP-TR-5:** Install Bicycle Racks. ***Mitigation Measures*** 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 compliant with existing wastewater treatment	Less than Significant	***Specific Plan Requirements*** • **SP-UT-4**: Comply with Fontana Sewer Master Plan. • ***SP*-UT-5:** Install Sewer/Wastewater Facilities. • **RR-UT-6:** Comply with West Valley Water District Water Master Plan.	Less than Significant

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
requirements of the Santa Ana Regional Water Quality Control Board.		***Mitigation Measures*** No mitigation measures are required.	
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. Existing public wastewater treatment facilities have the capacity to accommodate sewage generated by the project. A wastewater delivery system would be developed as part of the project to convey wastewater to an existing 27-inch gravity sewer main developed by the City of Fontana to deliver wastewater to the Rialto system for processing.	Significant	***Specific Plan Requirements*** • **SP-UT-1**: Ensure Access to Utility Easements. • **SP-UT-4**: Comply with Fontana Sewer Master Plan. • **SP-UT-5:** Install Sewer/Wastewater Facilities. • **RR-UT-6:** Comply with West Valley Water District Water Master Plan. ***Standard Requirements*** • **SR-UT-1**: Comply with City of Fontana Municipal Code, Chapter 27, Article III. ***Mitigation Measures*** **Mitigation Measure TRA-1a** and **Mitigation Measure BIO-4**.	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. The proposed project's stormwater improvements would not require connections to existing public stormwater drainage infrastructure because all stormwater would be retained on site	Less than Significant	***Specific Plan Requirements*** • **SP-HW-1:** Best Management Practices for Water Quality Management. • **SP-HW-2**: On-site Stormwater Detention. ***Standard Requirements*** • **SR-G-1:** Develop and Implement an Erosion Control Plan. ***Mitigation Measures*** No mitigation measures are required.	Less than Significant
Impact UTIL-4. Have insufficient water	Less than	***Specific Plan Requirements***	Less than

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements. Implementation of the proposed project is projected to require 292 gpm of water, or 470 af/yr, based on a generation factor of 1.39 gpm/acre for approximately 210 acres of potential industrial development. Project site water demand has been accounted for within WVWD's water projections, and is also included within and consistent with the 2012 Master Plan and San Bernardino Valley Regional Water Management Plan.	Significant	• **SP-GHG-1:** Incorporate Water Conservation and Efficient Measures for Landscaping. • **SP-UT-2:** Incorporate Water-Efficient Building Designs. ***Standard Requirements*** • **SR-UT-2:** Conditions for Reliable Water Supply. ***Mitigation Measures*** No mitigation measures are required.	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 along 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 Regional Water Quality Control Board for that treatment facility.	Less than Significant	***Specific Plan Requirements*** • **SP-UT-4:** Comply with Fontana Sewer Master Plan. • **SP-UT-5:** Install Sewer/Wastewater Facilities. ***Mitigation Measures*** No mitigation measures are required.	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 federal, state, and local statutes related to solid waste, including Assembly Bill 939.	No Impact	***Specific Plan Requirements*** • **SP-UT-3**: Incorporate Recycling Program. ***Standard Requirements*** • **SR-GHG-1:** Provide Waste Reduction and Recycling Education**.**	No Impact

Impact	Level of Significance	Mitigation Measures and Project Design Features	Residual Impact
		Mitigation Measures No mitigation measures are required.	
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 27,436 pounds per day average of new solid waste generated by the project that would enter a landfill.	Less than Significant	***Specific Plan Requirements*** • **SP-UT-3:** Recycling Program for Project Operations. ***Standard Requirements*** • **CA-GG-2:** Provide Solid Waste and Recycling Education. ***Mitigation Measures*** No mitigation measures are required.	Less than Significant

af/yr = acre-feet per year
AQMP = Air Quality Management Plan
ARB = California Air Resources Board
CAGN = Coastal California Gnatcatcher
Caltrans = California Department of Transportation
CJUSD = Colton Joint Unified School District
CMP = Congestion Management Program
CNDDB = California Natural Diversity Database
CNEL = Community Noise Equivalent Level
CNPS = California Native Plant Society
CO = carbon monoxide
CUPA = Certified Unified Program Agency
dBA = A-weighted decibel
EPA = U.S. Environmental Protection Agency
ESA = Environmental Site Assessment
FFPD = Fontana Fire Protection District
gpm = gallons per minute
L_{max} = maximum sound level
LOS = level of service
LST = Localized Significance Threshold
MBTA = Migratory Bird Treaty Act
MSHCP = Multiple Species Habitat Conservation Plan
$MTCO_2e$ = metric tons of carbon dioxide equivalent
NO_X = nitrogen oxide
O3 = ozone
PM_{10} = particulate matter 10 microns or less in diameter
$PM_{2.5}$ = particulate matter 2.5 microns or less in diameter
RCRA = Resource Conservation and Recovery Act
RHNA = Regional Housing Needs Assessment
RTP/SCS = Regional Transportation Plan/Sustainable Communities Strategy
SANBAG = San Bernardino Associated Governments
SCAB = South Coast Air Basin
SCAG = Southern California Association of Governments
USFWS = U.S. Fish and Wildlife Service
VOC = volatile organic compound
WVWD = West Valley Water District
WWTP = Wastewater Treatment Plant

Chapter 1
Introduction

1.1 Overview

This Second Recirculated Draft Environmental Impact Report (2nd RDEIR) 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 UST-CB Partners, L.P. A Draft Environmental Impact Report (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 by the City during the public review period necessitated the inclusion of new information, and would therefore require recirculation of the entire Draft EIR.

A Recirculated Draft EIR (1st RDEIR) was made available for public comment beginning on December 18, 2014, and ending on February 2, 2015. Based on the comments received by the City of Fontana on the 1st RDEIR, the applicant agreed to revisions to the proposed project in relation to routing of trucks between the project site and area freeways. As a result of this revision and the availability of updated models to address project traffic generation and resulting impacts, the City determined that the project's traffic impact analysis, air quality, greenhouse gas, and noise technical studies each needed to be updated. In addition to the availability of updated technical studies, pursuant to the provisions of 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 for the 1st RDEIR necessitated the inclusion of new information, and would therefore require a second recirculation of the entire 1st RDEIR.

This chapter presents a summary of the proposed project, the purpose of this 2nd RDEIR, an overview of the public involvement process, a summary of the intended uses of this 2nd RDEIR, 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 organization of the 2nd RDEIR.

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," on June 12, 2007. The WVLCSP is proposed to replace the Valley Trails Specific Plan, and redesignate the approved but unbuilt land uses identified by the Valley Trails Specific Plan (residential, school, recreation, and open space uses) with the warehouse distribution development and open space uses proposed in the WVLCSP.

Specifically, 3,473,690 square feet of 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 be dedicated for roadway rights-of-way.

The Specific Plan, including site development, open space preservation, and construction of off-site utilities and roadway infrastructure—along with general plan amendments to the City's Land Use and Circulation Elements, a zone change, rescission of the previously approved Valley Trails Specific Plan, a development agreement, and a tentative parcel map—is considered to be the "whole of the action" and therefore constitutes the scope of the "project" pursuant to 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 CEQA Guidelines, and has determined that this 2nd RDEIR should be prepared and distributed for public review. 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 (CEQA Guidelines Section 15088.5). In the case of this EIR, the term "information" includes a revision to the proposed routing of trucks between the project site and area freeways; updated traffic, air quality, greenhouse gas emissions, and noise technical studies; and additional data and analysis needed to address comments received on the 1st RDEIR.

As permitted by CEQA Guidelines Section 15088.5 (f)(1), because the entirety of the Draft EIR is being recirculated, the City has chosen not to provide specific written responses to comments received during the earlier circulation periods for the DEIR and 1st RDEIR. Pursuant to the provisions of CEQA Guidelines Section 15088.5 (f)(1), although the comments received during the previous DEIR and 1st RDEIR public review periods will be part of the administrative record for the proposed project, the City will not be preparing written responses to those comments in the Final EIR. Therefore, new comments must be submitted for this 2nd RDEIR, and the City will prepare written responses only to these comments.

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 CEQA Guidelines Sections 15086 and 15087.

1.4 Purpose of this Second Recirculated Draft EIR

This 2nd RDEIR 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 Section 21000 et seq.) and its implementing guidelines (CEQA Guidelines; 14 California Code of Regulations Section 15000 et seq.) require that all state and local government agencies consider the environmental effects 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 or mitigated to a less-than-significant level, growth-inducing impacts, significant irreversible environmental changes, impacts not found to be significant, and the project's contribution to any significant cumulative impacts in the context of past, present, and reasonably foreseeable future projects.

Projects in California are required to undergo environmental review in accordance with CEQA to determine the physical environmental changes that would result from implementation of the proposed project. 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 environmental review of a project and consider its environmental effects before making a decision on a project. Here, the City is the lead agency for the preparation and certification of the WVLCSP 2nd RDEIR. A detailed description of the proposed project is provided in Chapter 3, *Project Description*.

Approval of the WVLCSP and certification of the 2nd RDEIR would not necessarily result in the construction of the entire development described in the Specific Plan. If the project is 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 2nd RDEIR, 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 2nd RDEIR, the Final EIR to be prepared following its 45-day public review, 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 interested agencies, citizen groups, and individual members of the public, and also requires that the implementation of required mitigation measures be monitored after project approval to ensure that the mitigation measures identified in the EIR are carried out as intended.

Under CEQA, the lead agency is also required to provide the public with a full disclosure of the expected environmental effects of a project and an opportunity to provide comments. There have been, and continue to be, several opportunities for the public to participate in the decision-making process, as described below:

Notice of Preparation (NOP) and Scoping Meetings. The lead agency prepared and circulated an NOP to responsible, trustee, and local agencies and the public for review and comment from July 17, 2012, to October 3, 2012. In conjunction with this public notice, the City, as lead agency, held two scoping meetings (August 8 and October 3, 2012) to provide a forum for agency and public comments on the scope of the original Draft EIR, as described in more detail below.

Draft EIR Preparation/Notice of Completion (NOC). The original Draft EIR was circulated from April 22 through June 5, 2014, for review and comment by appropriate agencies and individuals and interest groups that requested to be notified of EIR projects. In accordance with Section 15105 of the CEQA Guidelines, the lead agency provided a 45-day public review period for the Draft EIR.

1st Recirculated Draft EIR Preparation/NOC. Like the original Draft EIR, the 1st RDEIR was circulated for a 45-day public review period (pursuant to CEQA Guidelines Sections 15086 and 15087) from December 18, 2014, to February 2, 2015, to provide time for appropriate agencies, individuals, and interest groups to review and provide comments.

2nd Recirculated Draft EIR Preparation/NOC. Like the original Draft EIR and the 1st RDEIR, this 2nd RDEIR is being circulated for a 45-day public review period (pursuant to CEQA Guidelines Sections 15086 and 15087) to provide time for appropriate agencies, individuals, and interest groups to review and provide comments to the lead agency.

Final EIR. The City, as lead agency, will prepare written responses to each comment on this 2nd RDEIR that is received in writing or verbal comments received at any public hearings during the 45-day public review period. Comments and responses to those comments will be presented in 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 2nd RDEIR at least 2 weeks before the City Council hearing, when the Council will consider certification of the Final EIR. Any proposed revisions to this 2nd RDEIR will be included within the Final EIR.

Certification of Final EIR; Public Hearings. The Planning Commission will hold at least one public hearing to receive public testimony, and consider the Final EIR, public comments, and the project before recommending action on the Final EIR and the project to the City Council. The City Council will hold at least one public hearing to receive public testimony; consider the Final EIR; and approve, conditionally approve, or deny the project.

1.5.1 Notice of Preparation

Pursuant to Section 15082 of the CEQA Guidelines, the City prepared and circulated the NOP of the original Draft EIR to responsible and affected agencies and other interested parties for an extended public review period of 79 days from July 17, 2012, to 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, was preparing an EIR, and to solicit input regarding the proposed scope and content of the EIR. The NOP is provided in Appendix A, and the letters providing comments in response to the NOP are provided in Appendix B1 of this 2nd RDEIR.

1.5.2 Scoping Meetings

Pursuant to Section 15206 of the 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 public agencies and interested persons or groups to provide comments regarding the range of actions, alternatives, mitigation measures, environmental effects, and other topics to be

analyzed in an EIR. The City conducted two scoping meetings: one for agencies and the other for the public. Two staff members from the City of Jurupa Valley attended the agency scoping meeting. The public scoping meeting was held near the project site, and approximately 15 community members attended the meeting. The meeting dates and locations were:

Agency Scoping Meeting:	**Public Scoping Meeting:**
August 8, 2012 at 3:00 p.m. Fontana City Hall, DSO Building 8353 Sierra Avenue, Fontana, California	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 for the Original Draft EIR

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 2nd RDEIR
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, 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, Sections 106 and 4f of the National Historic Preservation Act (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 gas technical data, including air quality modeling and health risk assessment files.	Comment noted and copy of Draft EIR provided.

Comment Summary by Respondent	Response in 2nd RDEIR
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 PM2.5 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) 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; a 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
California 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

Comment Summary by Respondent	Response in 2nd RDEIR
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
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 on 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 Original Draft EIR and First Recirculated Draft EIR

Eight comment letters were received during the original Draft EIR's 45-day public review period. Nine comment letters were received during the 45-day public review period for the 1st RDEIR. The comment letters received during the two public review periods are included in Appendices B2 (DEIR) and B3 (1st RDEIR) of this 2nd RDEIR.

Public testimony and agency comments were also provided on May 6, 2014, during a Planning Commission public hearing on the project held during the original Draft EIR's 45-day public review period. Public comments are 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 Planning Commission 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 Second Recirculated Draft EIR

As discussed above under Section 1.4, *Purpose of this Second Recirculated Draft EIR*, this 2nd RDEIR will publicly disclose the significant environmental effects of the proposed project, identify alternatives to the proposed 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 2nd RDEIR 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 this 2nd RDEIR, a Final EIR will be prepared and distributed to decision-makers to inform them of the project-related environmental effects.

1.6.1 Lead Agency

This 2nd RDEIR will be used by the City to inform the Planning Commission and City Council of the environmental impacts associated with the adoption and implementation of the WVLCSP. Projects or actions undertaken by the lead agency may require subsequent oversight, approvals, or permits from other departments of the City or other public agencies, 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 in subsequent sections below.

Table 1-2. WVLCSP Approvals Required

Approval	Agency/Department Name
City of Fontana (Lead Agency)	
General Plan Amendment	City Council
Rescind the Valley Trails Specific Plan	City Council
Adopt the West Valley Logistics Center Specific Plan	City Council
Zoning Amendment	City Council
Tentative Tract Map 19156	City Council
Development Agreement	City Council
Site Plans and Design Review	Community Development Department, Planning Division
Certify the Final EIR	City Council
Heritage Tree Removal Permit	Community Development Department, Building and Safety Division
Roadway Improvements	Public Works Department
Regional Agencies	
Permits (to construct and operate 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
Other Local Agencies	
Roadway Improvements	City of Jurupa Valley Public Works Department City of Riverside Public Works Department
State Agencies	
Workplan/Hazardous Materials Environmental Oversight	California 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 development of a warehouse distribution center, many of these approvals would only be required once grading or construction of site infrastructure or individual building sites is ready to proceed. These approvals may, therefore, not be concurrent with certification of the Final EIR.
- As currently proposed, the project would not require any take permits or compliance with Section 7 of the federal Endangered Species Act (U.S. Fish and Wildlife Service), because the coastal California Gnatcatcher (CAGN) does not occur within the proposed limits of disturbance. The applicant will retain a qualified biologist to conduct a focused survey during the spring prior to project construction to determine presence of CAGN and, if it is found within the area of disturbance, the proposed project may require a take permit. Currently, the proposed design for the project shows full avoidance of suitable habitat to the west of the area of disturbance. Any changes to the area of disturbance would require re-evaluation to determine potential impacts on biological resources and the need for additional mitigation measures, approvals, and permits.

1.6.2 Responsible Agencies

Pursuant to Sections 15381 and 15386 of the 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 authority over the project (Section 15381). The following agency has been identified as a responsible agency on the proposed project.

- Regional Water Quality Control Board, Santa Ana Region

1.6.3 Trustee Agencies

Pursuant to Sections 15381 and 15386 of the 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 & Wildlife (CDFW), the State Lands Commission, the State Department of Parks and Recreation, the Native American Heritage Commission, and the University of California.

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.

- San Bernardino County Department of Public Works
- San Bernardino County Department of Public Health, Division of Environmental Health
- California Department of Toxic Substances Control
- South Coast Air Quality Management District
- City of Riverside Public Works Department
- City of Jurupa Valley Public Works Department

Federal Agencies

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

State Agencies

- Governor's Office of Planning and Research
- CDFW
- 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

Regional Agencies

- Southern California Association of Governments
- South Coast Air Quality Management District

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 2nd RDEIR 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 2nd RDEIR

This 2nd RDEIR, which addresses the potential environmental impacts of the proposed 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 2nd RDEIR are based on the NOP, the original Draft EIR, the 1st RDEIR, and public and agency input received during the previous public review periods for the project. The City, as the Lead Agency, determined that this 2nd RDEIR would be appropriate to address potentially significant environmental impacts related to the following resource areas:

- Aesthetics
- Air quality
- Biological resources
- Cultural resources
- Energy
- Geology and soils
- Greenhouse gas emissions
- Hazards and hazardous materials
- Hydrology and water quality
- Land use and planning
- 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 2nd RDEIR are designed to meet the requirements of CEQA and the CEQA Guidelines and present issues, analysis, mitigation, and other information in a logical and understandable way. This 2nd RDEIR 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 2nd RDEIR, 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 of 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 2nd RDEIR.
- Chapter 9, *References*, identifies referenced sources for the 2nd RDEIR.
- Appendices provide information and technical studies that support the environmental analysis contained within the 2nd RDEIR.

Chapter 2
Environmental Setting

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 (City) 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, which are currently owned by the applicant, UST-CB Partners, L.P. A 1.54-acre utility corridor, not included within the Valley Trails Specific Plan, was added to the project site after the property was sold. The current project site is 291.31 acres.

The assessor's parcel numbers included within the Specific Plan 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 a few, isolated residential structures prior the 1950s, and, after that, was used for agricultural production for approximately 50 years (Appendix C). Portions of the site have also been used historically as a landfill and two quarries. Agricultural, landfill, and quarry activities have ceased, and the site is currently vacant.

2.2 Project Location

The Specific Plan area is in southeastern Fontana, as shown in Figure 2-1, Regional Location Map. The City boundary runs along the southern and eastern sides of the project site, which 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 7.5-minute quadrangle within Section 33, Township 1 south, Range 5 west (Appendix D). The project site and surrounding areas are shown in Figure 2-2, Project Vicinity Map, and Figure 2-3, Aerial Map, which shows an aerial of the project area and the surrounding terrain.

2.3 Setting and Existing Conditions

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 the northern portion of the project site, 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 an existing detention basin on site in the eastern portion of the project site.

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, sloping downward in an easterly direction, and ranging in height from approximately 1,100 feet to 1,450 feet above mean sea level (AMSL). Rattlesnake Mountain, which spans both San Bernardino and Riverside Counties, is southeast of the project site with a maximum elevation of 1,604 feet AMSL. 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.

The portion of the WVLCSP, south of Jurupa Avenue, east of Locust Avenue, as well as lands to the east, including nearby Kessler Park in the County of San Bernardino, overlie the former 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 1955 and 1966 (California Integrated Waste Management Board 2003). Two sites were previously used for mining: one at the base of Jurupa Hills between the Specific Plan's Development and Open Space Natural areas, and the other within the former Crestmore WDS, 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 the area west of Locust Avenue. 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



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

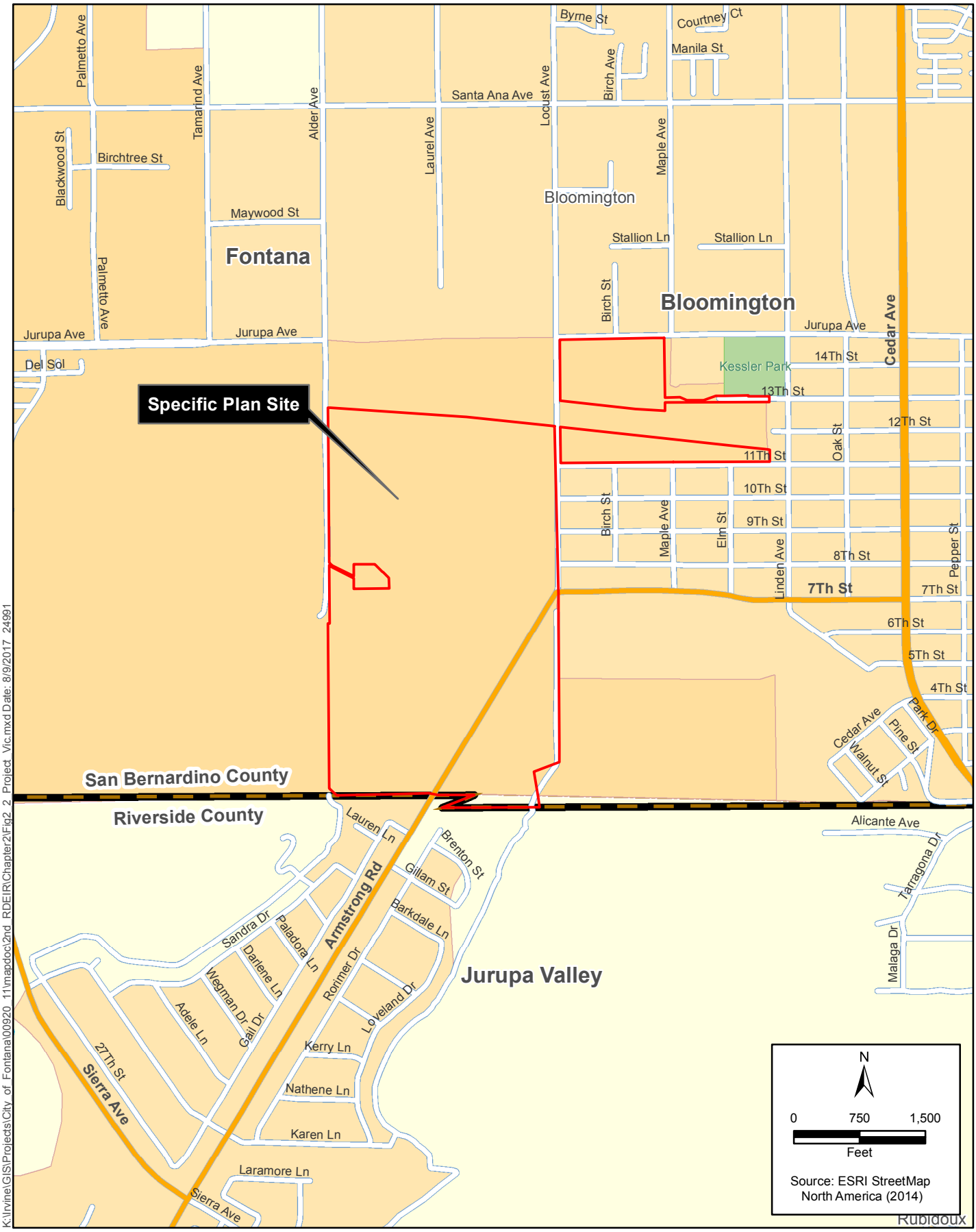


Figure 2-2
Project Vicinity Map
West Valley Logistics Center Specific Plan 2nd RDEIR

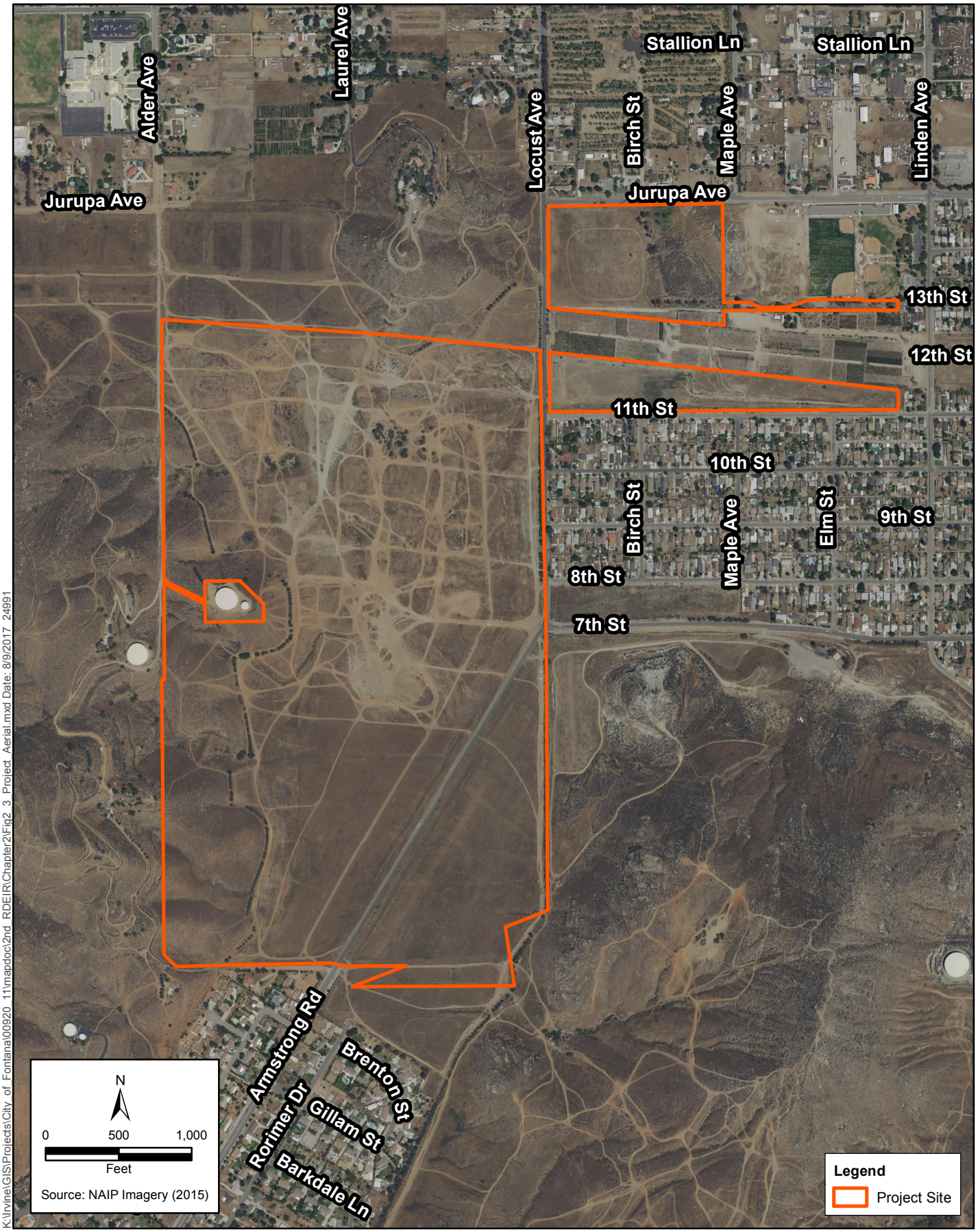


Figure 2-3
Aerial Map
West Valley Logistics Center Specific Plan 2nd RDEIR

have been used to store fencing materials and planting pots, and 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 significant amount of ground 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 AMSL (Appendix D). Former agricultural land uses, current 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, rescission of the Valley Trails Specific Plan, a General Plan Amendment, and a Zone Change. The primary land use policy documents in place that relate to the project site include: the City of Fontana General Plan, the City of Fontana Municipal Code (including Chapter 30, Zoning and Development Code), and the Valley Trails Specific Plan. The following is a description of the existing land use designations for the site.

2.4.1 Existing General Plan

The General Plan (2003) establishes the long-range direction or "blueprint" for development within the City, and designates the Specific Plan area (Parcels 1 through 8 and Lot A) as the Valley Trails Specific Plan #24, and, more 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). Proposed Parcel 9, which is not within the Valley Trails Specific Plan, is designated in the General Plan as R-PC. 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 beginning at Jurupa Avenue, 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 being extended south from Jurupa Avenue as a Secondary Highway (92-foot right-of-way) through the project site to Locust Avenue.

The General Plan also identifies two future park sites associated with the Valley Trails Specific Plan. These facilities are shown on General Plan Figure 10-1 (Existing and Planned Future Parks) and as part of the alignment of the Jurupa Hills Trail on General Plan Figure 10-3 (Recreational Trails).

2.4.2 Existing 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 project 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 is to preserve steep slopes and hillsides and provide development that conforms to the natural terrain, while minimizing geologic hazards and biologic impacts (City Zoning and Development Code Section 30-301.5).

2.4.3 Specific Plan

Specific plans provide focused land use guidance and regulation for particular areas within a community as a means of implementing the community's general plan. 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, that project was never developed.

Chapter 3
Project Description

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 as it is proposed to be amended. The City of Fontana is the Lead Agency for the preparation of this Second Recirculated Draft Environmental Impact Report (2nd RDEIR), and is considering adoption of the proposed Specific Plan to allow for the development of a logistics center, including warehouse distribution and support office uses within warehouse buildings, a detention basin, the preservation of natural hillside open space, and roadway right-of-way dedications (Appendix N).

The project would establish and implement the WVLCSP to replace the Valley Trails Specific Plan, which is currently approved for the site, with a planning concept, design framework, development regulations, design guidelines, and administrative procedures necessary to achieve a high-quality warehouse 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) consisting of an existing detention basin that would be improved as part of the proposed project. In addition, the proposed project includes construction of off-site sewer lines and a lift station within an existing roadway right-of-way, as well as off-site roadway improvements.

The purpose of this chapter is to describe the details of the WVLCSP and to provide a complete description of the proposed action, including the land use plan and associated development standards that would guide development within the Specific Plan area, as well as off-site improvements needed to implement the Specific Plan. This chapter also includes a comparison of the proposed project and the Valley Trails Specific Plan to assist the reader to better understand the differences in the build-out potential of the two different specific plans.

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 in the EIR's Project Description per the 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.

Truck access to the WVLCSP would be from Locust Avenue along routes from the I-10 and SR-60 freeways. Local street access for automobiles to the WVLCSP site from the north also would be from Locust Avenue and Jurupa Avenue. Local automobile access from the south would be from Armstrong Road, which becomes Valley Way south of the project site; trucks would be restricted from travel along Valley Way to the south of the Specific Plan area.

The approximately 291-acre WVLCSP site is bisected by Armstrong Avenue, which runs diagonally northeast to southwest through the southern half of the site, and turns into Locust Avenue north of 7th Street through the northern half of the site.

The proposed Specific Plan characterizes the project site as consisting of three distinct areas, each of which is described below and depicted on Figure 3-1 (Specific Plan Development and Open Space Areas West):

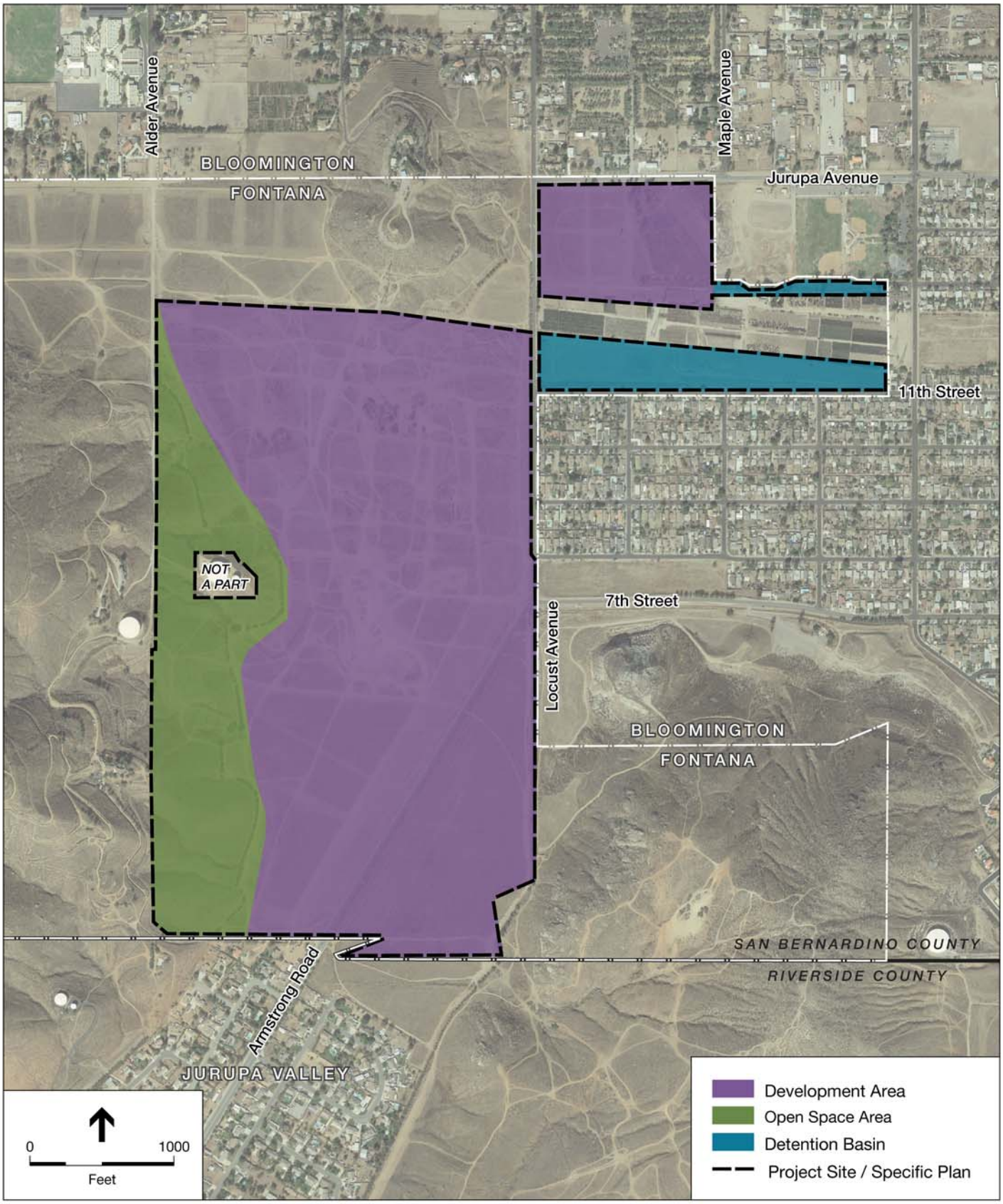
- Development Area: The largest area of the WVLCSP (212.11 acres) is the development area encompassing Parcels 1 through 7. Within this area, which encompasses the flatter, lower elevations of the site, development of up to approximately 3.47 million square feet of warehouse/distribution buildings is proposed.
- Open Space Area: The westernmost portion of the Specific Plan encompasses the steep slopes of the Jurupa Hills. This 55.23-acre area is proposed to be retained in open space to protect the area's biological resources.
- Detention Basins: The 14.93-acre detention basin area (Lot A) would be dedicated as a public facility, and is east of Locust Avenue. 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 Southern California Edison (SCE) utility corridor (Parcel 9) to the north. This area would continue to be used as a detention basin, and would be improved by the applicant to increase its capacity.

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 as described below.

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 at Linden Avenue. The off-site utility improvements would be required for implementation of the project, and would be within existing public rights-of-way and existing utility easements. In addition, off-site roadway improvements will be provided as discussed in Section 3.4.3, *Circulation Improvements*, below. The primary off-site roadway improvements include widening and pavement improvements to Locust Avenue from Jurupa Avenue north to Slover Avenue and improvements along the south side of Jurupa Avenue from Locust Avenue east to Kessler Park.

Final designs of each improvement within unincorporated San Bernardino County would be coordinated with the County.



ICF

Figure 3-1
Specific Plan Development and Open Space Areas West
West Valley Logistics Center Specific Plan 2nd RDEIR

3.3 Project Objectives

A statement of project objectives is required by the CEQA Guidelines (Section 15124 (b)). In general, an objective can be defined as the purpose for which a project 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 overarching goal of the project as stated by the applicant in the proposed Specific Plan is to implement the City of Fontana General Plan by providing clear, achievable plans and standards for development of a high-quality, state-of-the-art logistics center that will attract quality employers to the community. The following overarching project goals and specific objectives are set forth in the proposed Specific Plan:

- Facilitate the development of a functional, well serviced, and attractive logistics center that is sensitive to its setting in proximity to residential neighborhoods, and is economically competitive in the marketplace.
- Balance the need for warehouse distribution development with the preservation of on-site habitat in natural open space.
- Facilitate economic development, build on Fontana's existing industrial base, increase the number of business enterprises located in Fontana, and assist in meeting the diverse needs of local and regional commerce.
- Establish development standards and design guidelines that facilitate business and employment opportunities, are adaptive to changing market conditions, and achieve local planning objectives.
- Ensure that proposed development has a positive effect on the City of Fontana and surrounding communities.

Specific objectives contained in the WVLCSP include:

- Land Use Objectives
    - Develop high-quality and functional warehouse/distribution logistics sites with stringent design standards.
    - Ensure that the development of the site is compatible with, and sensitive to, existing and planned land uses in the area.
    - Conserve on-site habitats as natural open space.
- Economic Objectives
    - Attract new businesses to the community and thereby expand employment opportunities for area residents.
    - Improve the local jobs/housing balance and reduce the need for out-commuting by Fontana area residents.
    - Meet part of the major regional demand in the industrial sector by providing warehouse/distribution logistics space.
    - Provide an asset base for the long-term economic health of the City.

- Increase economic opportunities in the Fontana area by:
  - Providing warehouse/distribution logistics development that will provide employment opportunities for Fontana area residents and provide services needed by the area's expanding industrial economy;
  - Providing an attractive, functional, and economically productive logistics center that will add business and consumer purchasing power to the City of Fontana; and
  - Enhancing the fiscal health of the City of Fontana by generating net municipal revenues for the City.

- Design Objectives
  - Promote compatibility with surrounding neighborhoods through site design that maximizes distances between warehouse/distribution logistics operations and adjacent uses, and provides appropriate transitions and environmental buffers.
  - Develop a logistics center that is noteworthy for technological innovation in building design with regard to lighting, heating and cooling, materials re-use, and water and energy conservation.
  - Provide an attractive, pleasant workplace, as reflected in the landscaping, quality buildings, and aesthetic design of the logistics center.
  - Create a positive community image through quality design, environmental performance standards, and sustainable development.
  - Enhance the community image of the southeastern part of the City through design of "clean" industrial uses that coexist with planned residential communities.
  - Provide architectural diversity through imaginative and creative design within the project.
  - Provide landscaping that improves the streetscape experience and is supportive of the site's character and the character of the surrounding community.

- Circulation Objectives
  - Provide for an equitable distribution[1] of truck traffic along routes connecting the West Valley Logistics Center to the regional freeway system.
  - Minimize truck access through residential areas.
  - Improve circulation in the project area with the addition of new travel and turn lanes, signals, and other improvements needed to accommodate projected traffic from the West Valley Logistics Center and the surrounding area.
  - Promote and maintain a comprehensive transportation system that will provide safe, convenient, and efficient circulation to and within the logistics center.

[1] "Equitable distribution" is defined in the proposed Specific Plan as "the majority of trucks accessing the project site through San Bernardino County, with more trucks using the Sierra Avenue interchange along the I-10 freeway in Fontana than the Cedar Avenue interchange along the I-10 freeway in unincorporated San Bernardino County."

  - Provide for necessary transportation improvements and strategies that will accommodate the demands of new and existing development, while preventing the deterioration of existing levels of service along access routes.

- Utilities Objectives
  - Ensure adequate water, sewer, drainage, telecommunications, electrical and natural gas, and other infrastructure necessary to attract and serve a state-of-the-art logistics center.
  - Implement environmentally sound wastewater management and stormwater treatment.
- Environmental Objectives
  - Implement environmentally advanced construction and operational practices that conserve natural resources and reduce greenhouse gas emissions, energy consumption, and water use.
  - Accommodate the use of alternative means of transportation for home-work trips.
  - Facilitate appropriate habitat protection and preservation.
  - Maximize on-site open space.
  - Implement site designs that maximize land use compatibility with nearby residential neighborhoods by minimizing noise, nighttime lighting, aesthetics, and other impacts.
  - Implement solid waste diversion programs during site construction and operations.
  - Incorporate feasible best available technologies and best management practices into project construction and operations.
  - Protect any archaeological resources that may be found within the Specific Plan area.

3.4 Specific Plan Overview

A Specific Plan is a tool for the systematic implementation of the 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 approved but 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 warehouse distribution 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 Specific Plan, including warehouse distribution, 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, as well as off-site infrastructure to support the land uses described within the Specific Plan area.

- Standards and criteria by which development would proceed, along with standards for the conservation, development, and utilization of natural resources.
- A program of implementation measures that includes regulations and programs necessary to carry out the implementation of the Specific Plan.
- A statement of consistency between the Specific Plan and the City of Fontana General Plan.

3.4.1 Specific Plan Purpose and Intent

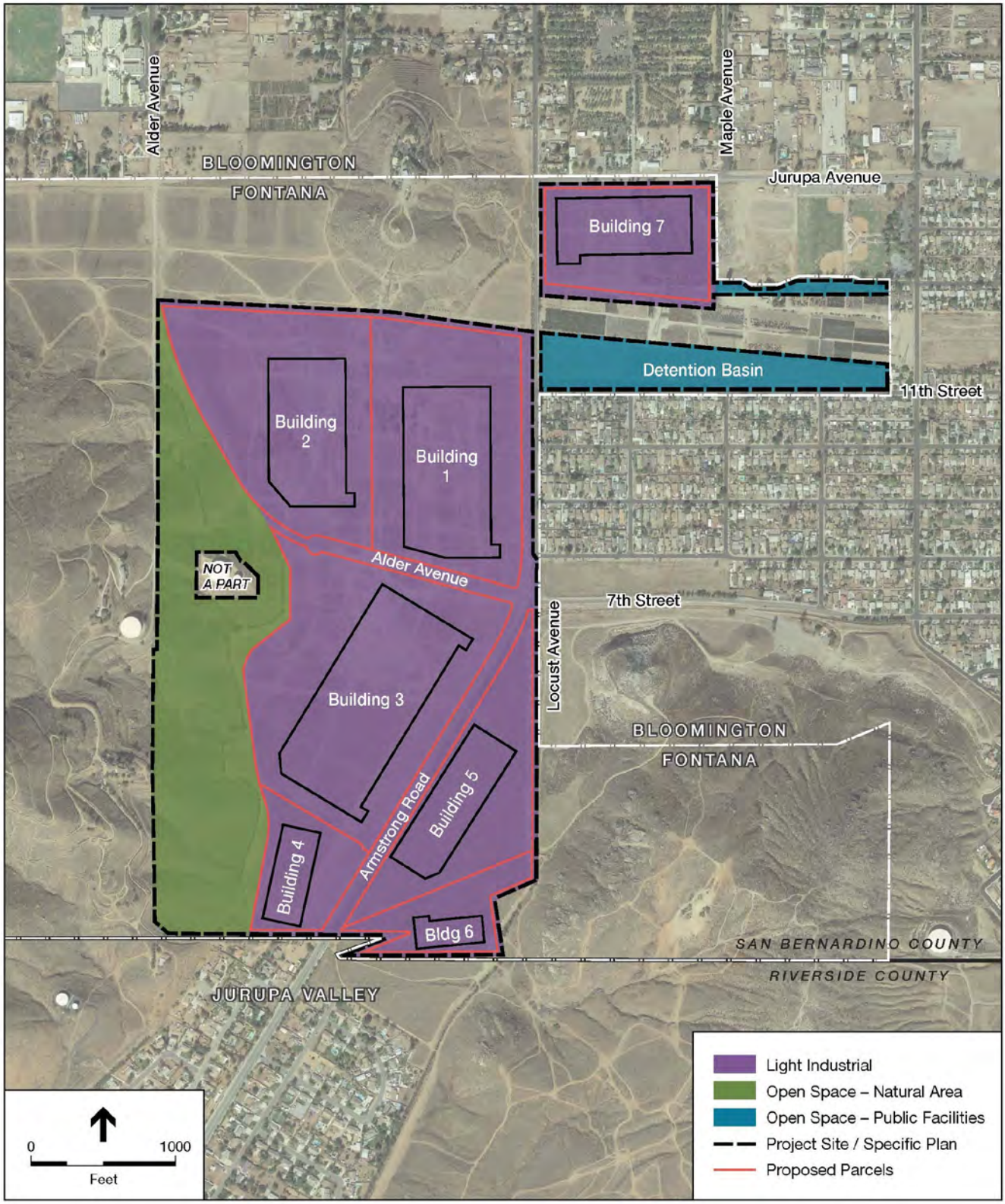
The WVLCSP would establish the planning concept, design framework, development regulations, design guidelines, and administrative procedures necessary to achieve a high-quality warehouse distribution environment in southeastern Fontana, consistent with the City of Fontana's General Plan, and would build 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.

3.4.2 Land Use Plan

The proposed WVLCSP provides for development of 212.11 acres of warehouse distribution use, along with 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 within the WVLCSP area. A breakdown of these land use designations and zoning districts is provided in Table 3-1 and depicted in Figure 3-2, Proposed Land Use Map. Descriptions of each zoning district, allowable uses, and general development standards for each are provided in the Specific Plan.

Table 3-1. Proposed Land Uses and Zoning Districts

Land Use Designation	Zoning District	Acres	Maximum Allowable Building Area (s.f.)
Development Area (Parcels 1–7)			
Light Industrial (I-L)	Light Industrial (LI)	191.87	3,053,690
Light Industrial (I-L)	Light Industrial (LI)	20.24	420,000
Open Space Area (Parcel 8)			
Open Space (OS)	Open Space – Natural Area (OS-NA)	55.23	-
Detention Basin Area (Detention Basin Area)			
Open Space (OS)	Open Space – Public Facilities (OS-PF)	14.93	-
Open Space (OS)	Open Space – Public Facilities (OS-PF)	1.54	-
Rights-of-Way (Entire Site)			
Roadway and access		7.5	
TOTAL		**291.31**	**3,473,690**



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Figure 3-2
Proposed Land Use Map
West Valley Logistics Center Specific Plan 2nd RDEIR

Source: West Valley Logistics Center Specific Plan, Metis Environmental Group (March 2017) and Tentative Parcel Map 19156, Thienes Engineering (March 2017).
Note: s.f. = square feet

Site development within the Specific Plan area is proposed to be kept within the lower elevations of the project site, allowing the higher, steeper portions of the site within the Jurupa Hills to be preserved as natural open space. The Specific Plan proposes development of seven buildings. As listed in Table 3-2, build out of the project would occur within a 212.11-acre area designated for warehouse distribution development, which would include up to 3,403,690 square feet of warehouse space and up to 70,000 square feet of supporting office space within the seven industrial buildings. In addition, 7.5 acres of right-of-way dedications are proposed to allow for parking and circulation within Parcels 1 through 7, as depicted on Figure 3-3, Conceptual Site Plan, which also illustrates proposed locations of each building within the project site. The 7.5 acres of roadway dedication areas include a private street (Alder Avenue) (3.53 acres), Armstrong Road (2.53 acres), Locust Avenue (0.83 acre), and Jurupa Avenue (0.61 acre).

Table 3-2. Proposed Buildings and Development Type

		Building Area (square feet)		
Building	**Site Area (net acres)**	**Total Building Area**	**Warehouse Uses**	**Support Office Uses (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, Metis Environmental Group (December 2017), Tentative Parcel Map 19156, Thienes Engineering (March 2017).
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.

3.4.3 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 (Locust Avenue and Armstrong Road), to be maintained by the City of Fontana, and a private road (Alder Avenue) to be maintained by a Property Owners' Association. Additionally, sidewalk construction along Locust Avenue, Jurupa Avenue, Armstrong Road, and Alder Avenue would be provided by the project to facilitate pedestrian access throughout the area. Sidewalks along Alder Avenue would be maintained by the Property Owners' Association, while sidewalks

along public streets would be maintained by the City of Fontana within the city limits and by the County of San Bernardino within unincorporated areas.

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.

Area Roadways

Locust Avenue

Locust Avenue runs in a north-south direction through the project site. From Jurupa Avenue, south almost to 11th Street, Locust Avenue forms the westerly boundary of the Specific Plan area. Between 11th and 7th Streets, Locust Avenue forms the site's easterly boundary. South of 7th Street, Locust Avenue becomes Armstrong Road and runs in a northeast to southwest direction through the site. 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 north of 7th Street.

Armstrong Road

Armstrong Road runs northeast to southwest as the extension of Locust Avenue through the southern half of the WVLCSP area. It is designated by the City's General Plan Circulation Element as a Modified Primary Highway with a right-of-way width of 92 feet, including sidewalks.

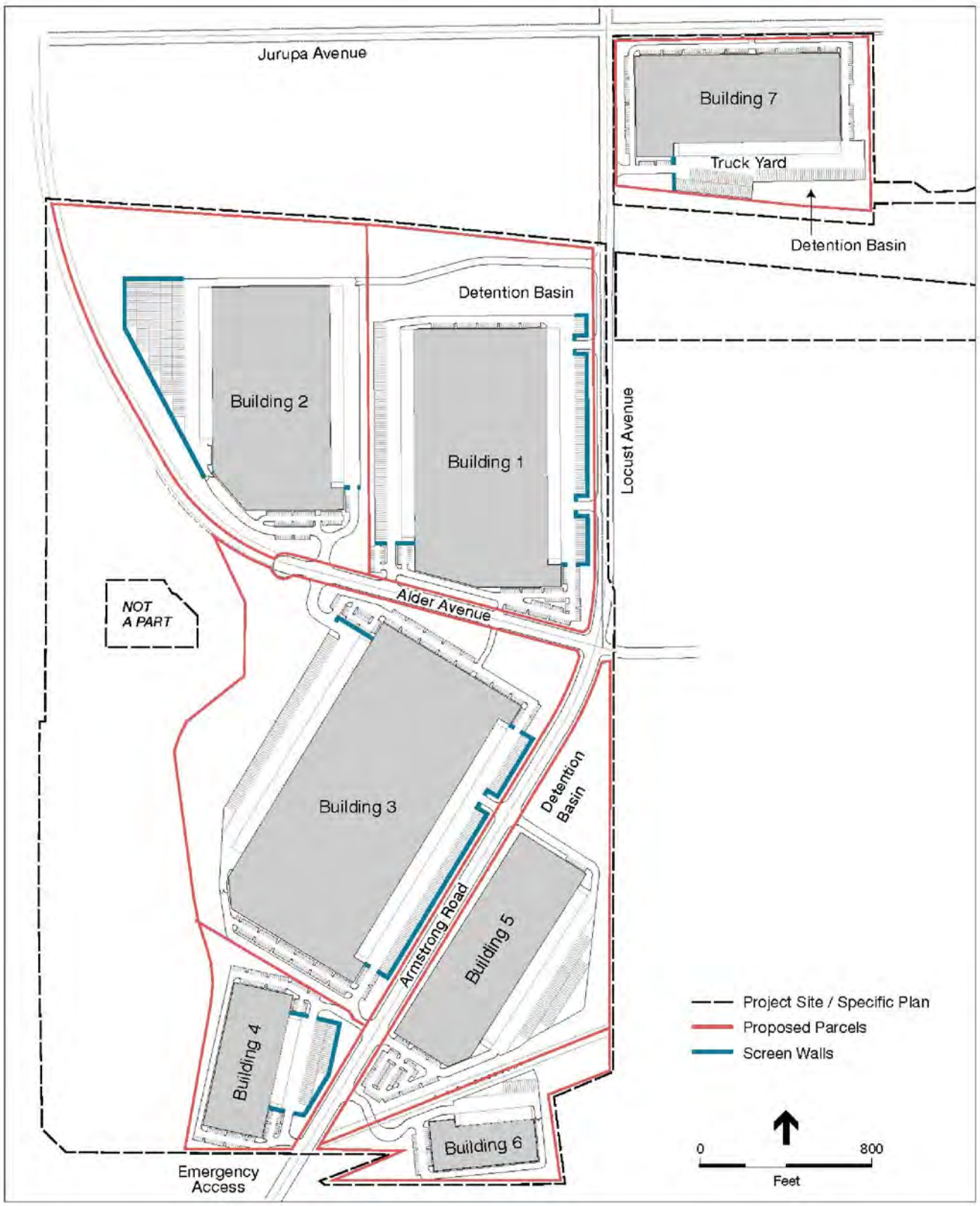
Jurupa Avenue

Jurupa Avenue runs in an east-west direction north of the project site. Due to the steep hillside located within the Jurupa Avenue right-of-way, a gap in the paved roadway exists west of Locust Avenue. 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.

Alder Avenue

Alder Avenue currently runs in a north-south direction off site from Jurupa Avenue north to Slover Avenue. Pavement and other existing improvements for Alder Avenue terminate north of Jurupa Avenue and an unimproved private access road runs southward along the eastern project boundary, providing access to water tanks, one of which is off site to the west, and the other of which is surrounded by, but not a part of, the Specific Plan area. 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.

Because of the steep hillside areas along the planned extension of Alder Avenue south of Jurupa Avenue through the project site, the WVLCSP proposes a General Plan Amendment to remove the portion of Alder Avenue through the site from the City's General Plan Circulation Element.



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Figure 3-3
Conceptual Site Plan
West Valley Logistics Center Specific Plan 2nd RDEIR

Truck Management Plan

The WVLCSP contains a truck management plan that proposes a combination of driveway and roadway improvements, signalization, signage, and truck dispatching to minimize the impacts of project-related truck traffic on nearby residential neighborhoods and adjacent communities.

Truck Routes

Truck access from the Specific Plan area to the north would be from I-10 at the Sierra Avenue and Cedar Avenue interchanges (see Figure 3-4). Access to the Specific Plan area from the south will be from SR-60 at the Rubidoux Boulevard and Market Street interchanges.

Proposed Truck Routes from the West Valley Logistics Center to I-10 Westbound (Sierra Avenue)

- North on Locust Avenue to Slover Avenue;
- West along Slover to Avenue Sierra Avenue; and
- North on Sierra Avenue to the I-10 interchange.

Proposed Truck Routes From the West Valley Logistics Center to I-10 Eastbound (Cedar Avenue)

Trucks will have the option of either:

- East on Jurupa Avenue; and
- North on Cedar Avenue to the I-10 interchange.

Or:

- North on Locust Avenue to Slover Avenue;
- East along Slover to Cedar Avenue; and
- North on Cedar Avenue to the I-10 interchange.

Proposed Truck Routes from the West Valley Logistics Center to SR-60 Westbound (Rubidoux Avenue)

- North on Locust Avenue to Jurupa Avenue;
- East on Jurupa Avenue to Cedar Avenue;
- South on Cedar Avenue, which becomes Rubidoux Boulevard; and
- South on Rubidoux Boulevard to the SR-60 interchange.

Proposed Truck Routes from the West Valley Logistics Center to SR-60 Eastbound (Rubidoux Avenue)

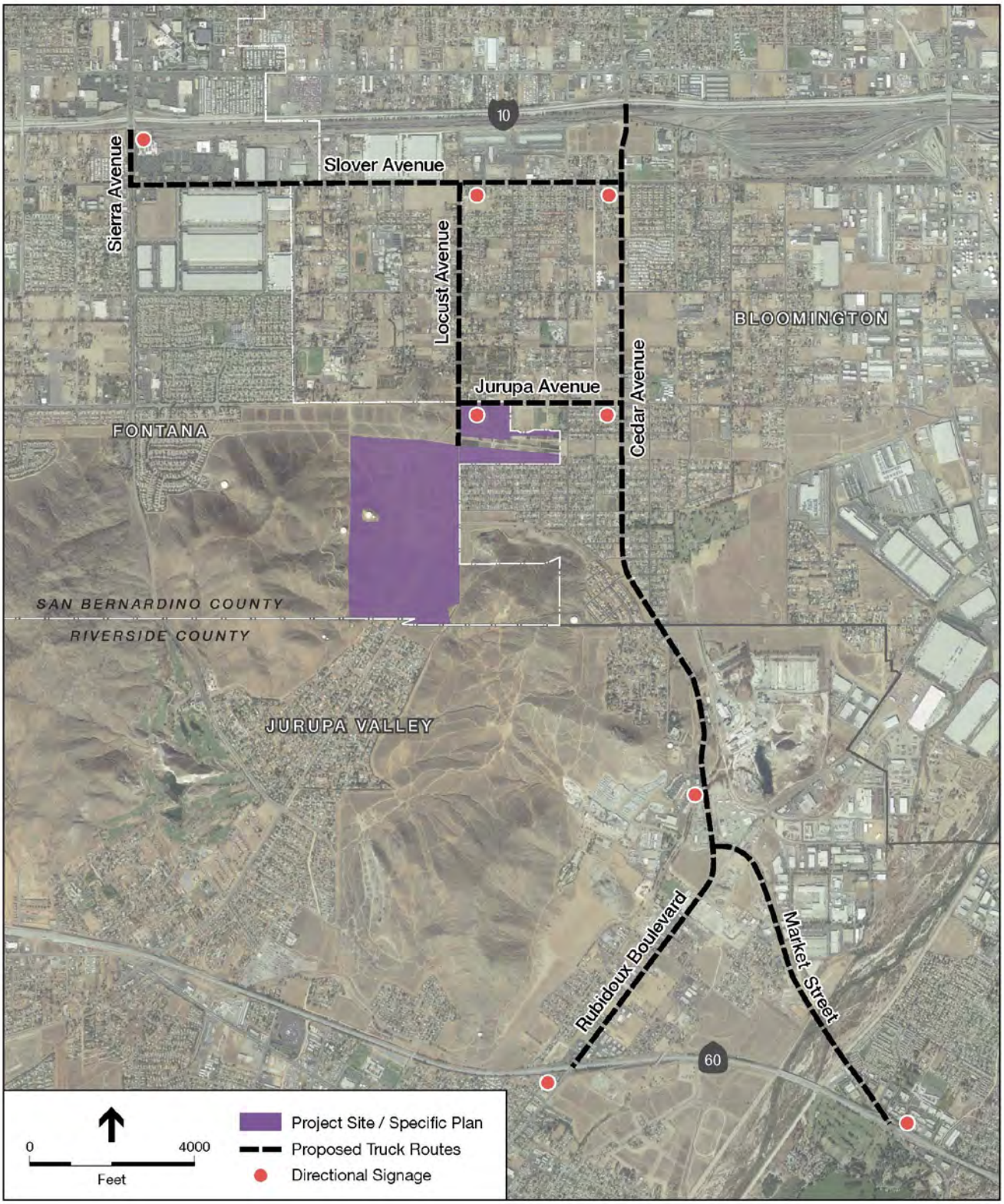
- North on Locust Avenue to Jurupa Avenue;
- East on Jurupa Avenue to Cedar Avenue;
- South on Cedar Avenue, which becomes Rubidoux Boulevard;
- South on Rubidoux Boulevard to Market Street; and
- South on Market Street to the SR-60 interchange.

Proposed Physical Improvements, Fair Share Payments, and Feasibility Studies to Accommodate WVLCSP Truck Traffic

To minimize impacts on the residential neighborhoods adjacent to the Specific Plan area, as well as those neighborhoods between the site and area freeways, the following physical improvements would be provided to direct truck traffic along the routes described above. In addition, Specific Plan development would contribute fair share payments for a series of other improvements described below to accommodate project-related traffic. Finally, the Specific Plan applicant is offering to the City of Jurupa Valley conducting a feasibility study for the Valley Way interchange on SR-60. Project-related automobile traffic would contribute to increased congestion at this interchange. However, there is no fee program into which a fair share payment can be made, and there is currently no plan outlining feasible improvements on which a mitigation fee program could be based.

Improvements within the Specific Plan Area

- Through the project site, Armstrong Road/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.
- Driveway access onto Armstrong Avenue for Buildings 3–6 would be designed to facilitate northbound truck turning movements and discourage southbound truck turning movements.
- Within the project site, Alder Avenue would be constructed as a private street from the intersection of Armstrong Road and 7th Street to a cul-de-sac adjacent to Parcel 2. Alder Avenue would be constructed with an 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.
- The intersection of Alder Avenue and Locust Avenue/Armstrong Road would be designed to facilitate northbound truck turning movements and discourage through truck movements onto 7th Street, as well as discourage southbound truck turning movements.
- Directional signage within the Specific Plan area would be placed as follows:
    - At driveway access points onto Armstrong Road for Buildings 3–6, a requirement for all trucks to turn northbound only onto Armstrong Road, prohibiting southbound truck turning movements.
    - On the eastbound approach of Alder Avenue to Locust Avenue, a requirement for all trucks to turn left (northbound) onto Locust Avenue, prohibiting through (eastbound) and right-turn (southbound) truck movements.
    - On the southbound approach of Locust Avenue to Alder Avenue, a prohibition of truck traffic south of Alder Avenue on Armstrong Road, except for local deliveries to Specific Plan Buildings 3–6.
    - On the northbound approach of Locust Avenue to Jurupa Avenue, trucks would be instructed to:
        - Continue north on Locust Avenue for I-10; or



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Figure 3-4
Proposed Truck Routes
West Valley Logistics Center Specific Plan 2nd RDEIR

- Turn right on Jurupa Avenue for SR-60.

Improvements and Traffic Management Measures along Truck Routes Outside of Specific Plan Area

- Widen Locust Avenue between Jurupa Avenue and Slover Avenue to provide four travel lanes with a pavement section adequate to support proposed truck traffic.
  - *Locust Avenue/Slover Avenue* intersection: provide northbound left-turn lane, westbound left-turn lane, and northbound right-turn lane.
- Provide full half-width roadway improvements along the south side of Jurupa Avenue from Locust Avenue to Kessler Park, where full half-width improvements along the south side of Jurupa Avenue are currently in place.
- Widen the westbound approach of Jurupa Avenue to Locust Avenue to accommodate a westbound left-turn pocket.
- Provide traffic signals at the following intersections:
  - Locust Avenue /Jurupa Avenue (construct)
  - Locust Avenue/11th Street (construct)
  - Locust Avenue/7th Street (construct)
  - Linden Avenue/Slover Avenue (pay full cost of signalization, installation to be undertaken by San Bernardino County as part of intersection improvements funded under the Development Mitigation Nexus Study)
  - Maple Avenue/Slover Avenue (pay full cost of signalization, installation to be undertaken by San Bernardino County)
- Payment of fair share fees
  - San Bernardino County Transportation Authority Development Mitigation Nexus Study
  - City of Fontana Development Impact Fee
  - To the County of San Bernardino for:
    - Alder Avenue/Slover Avenue (fair share payment for signalization that is not included as part of the Development Mitigation Nexus Study. Development within the Specific Plan will provide fair share payments at the same rate as the County is collecting from projects within the adjacent unincorporated area)
    - Cedar Avenue/Slover Avenue (fair share payment for intersection improvements)
  - To the City of Jurupa Valley for:
    - Rubidoux Boulevard/20th Street-Market Street (fair share of intersection improvements costs)
  - To the Western Riverside Council of Governments
    - Fair share payment for the shortfall between interchange costs and the maximum available under the County's Transportation Uniform Mitigation Fee program.

The Specific Plan applicant would voluntarily undertake preparation of a feasibility study at the Valley Way/SR-60 interchange for which no feasible improvements have been identified in

previous studies to date that would achieve satisfactory levels of service. As a consequence, no improvement program has been established to which a fair share payment for improvements can be made. The proposed feasibility study would aim to identify feasible improvements that could be undertaken at the interchange to improve existing and future levels of service, even if applicable service level standards could not be met.

- Work with the cities of Fontana and Jurupa Valley to bar truck traffic from Armstrong Road south of the southernmost West Valley Logistics Center driveway, including placement of appropriate signage along Armstrong Road prohibiting trucks except for local deliveries.
- Work with the California Department of Transportation to place signs along SR-60 indicating that trucks are not permitted on Armstrong Road north of the freeway, and directing eastbound trucks to exit at Rubidoux Boulevard and westbound trucks to exit at Market Street.
- Provide directional signage along routes between the Specific Plan area and area freeways. Directional signage would be placed as follows:
    - Northbound Locust Avenue approach to Santa Ana Avenue: requirement for all trucks to proceed north through the intersection; truck turning movements prohibited.
    - Northbound Locust Avenue approach to Slover Avenue: directional sign to guide I-10 westbound truck traffic to turn left and I-10 eastbound truck traffic to turn right.
    - Eastbound Jurupa Avenue approach to Cedar Avenue: directional sign to guide I-10 truck traffic to turn left and SR-60 truck traffic to turn right.
    - On the southbound approach of Rubidoux Boulevard to Market Street, trucks would be instructed to:
        - Continue south on Rubidoux Boulevard for SR-60 westbound; or
        - Turn left onto Market Street for SR-60 eastbound.

Property Owners' Association

A Property Owners' Association would be formed to guide project traffic to the regional transportation network along the routes identified above. The Property Owners' Association would be required to maintain a tenant-based system and set of regulations for monitoring and providing feedback for vehicles, specifically including truck traffic, entering and exiting the development. The Specific Plan requirement for a Transportation Management Committee to be formed as part of the Property Owners' Association is presented below.

The Transportation Management Committee would include a Transportation Management Committee that will, at a minimum, have the responsibility and obligation to:

- Require building owners/lessees to inform truck drivers of the approved routes to and from the West Valley Logistics Center;
- Require dispatchers to provide truck drivers leaving the building with verbal and written instructions regarding approved truck routes to area freeways;
- Implement and maintain a monitoring program to identify the actual routes trucks are taking to and from the West Valley Logistics Center;
- Enforce the use of approved truck routes. The Property Owners' Association would enter into a Declaration of Covenants, Conditions, and Restrictions (CC&Rs), which, among other things,

would require the formation of a Transportation Management Committee. This committee would continually review and determine truck traffic patterns in order to direct truck traffic from the property and minimize traffic impacts on adjacent residential neighborhoods. As part of this process, the committee would establish Traffic Guidelines, which would provide for ingress/egress schedules for trucks departing the project site, and establish the most feasible truck routes from the site, consistent with local traffic patterns and City-/County-designated truck routes. The CC&Rs would provide that the Association, any Owner, or the City as a third-party beneficiary shall have the right to enforce compliance "in any manner provided by law or in equity, or in bringing an action for damages, an action to enjoin the violation or to specifically enforce the provisions." In addition, the project site will be subject to Conditions of Approval, including compliance with a Truck Traffic Management Plan; and

- Provide quarterly reporting to the City of Fontana regarding the actual routes trucks are taking to and from the West Valley Logistics Center.

CC&Rs for the Specific Plan area would establish the City of Fontana as a third-party beneficiary of the Property Owners' Association Traffic Guidelines, and provide the City with the right to take over administration of the Traffic Guidelines if the Transportation Management Committee fails to discharge its obligations.

3.4.4 Public Facilities and Service Improvements

Water Facilities

The Specific Plan area is located in West Valley Water District's (WVWD) Zone 3 Pressure Zone. WVWD's infrastructure consists of reservoir tanks, booster pump stations, and a network of pipeline facilities to deliver water throughout its service area. Existing WVWD water facilities include a 12-inch water line running west from Locust Avenue along the alignment of 8th Street to an existing 4-million-gallon water tank in the western portion of the Specific Plan area. An existing 24-inch water line runs along the western boundary of the Specific Plan area from Jurupa Avenue to a 4-million-gallon water tank just west of the Specific Plan area (see Figure 3-5).

In order to provide an adequate water supply to the proposed project, the existing 12-inch water line running along the alignment of 8th Street would be realigned to run within the proposed Alder Avenue, and would be connected to the existing water tank west of the Alder Avenue cul-de-sac. A new 12-inch water line would be constructed within Alder Avenue, and run southeast-northwest beyond the Alder Avenue cul-de-sac to connect to the existing 24-inch water line along the western Specific Plan boundary. A new 12-inch water line would also be constructed within Armstrong Road/Locust Street from Building 4 in the southern portion of the Specific Plan area to an existing point of connection at the intersection of Locust Avenue and Jurupa Avenue.

The proposed project would also include the installation of recycled water pipeline for future use. Because recycled water is not currently available in the area, the recycled water system would be dry until recycled water becomes available. Final water supply line size would be determined, subject to approval by the 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 (see Figure 3-6).

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 via a new force main to be constructed as part of Specific Plan infrastructure 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

Runoff from the project site would be intercepted and conveyed via surface flow and a proposed storm drain system to existing and proposed on-site water quality/detention basins (see Figure 3-7).

Runoff from Buildings 1–6 would drain into a proposed public storm drain system to be constructed as part of the project in Locust Avenue. This storm drain would discharge runoff into a proposed water quality/detention basin at the northeast corner of 11th Street and Locust Avenue. The majority of the drainage would be detained in an existing basin north of 11th Street, to which the Specific Plan proposes upgrades.

Water quality/detention basins would be constructed within the Specific Plan area to treat and limit runoff from the Specific Plan area to less than that which occurs under existing conditions. The hillside areas in the western portion of the Specific Plan area would remain natural and do not, therefore, require drainage or detention facilities.

Detention sizing for the Specific Plan area would meet San Bernardino County requirements for 100-year peak flows to be reduced to 90 percent of the 25-year peak flow rate for existing conditions. Detention basins within the Specific Plan area would be designed such that the lower elevations of the basins are used for water quality purposes. The higher elevations of the basins would be used to limit the difference between pre- and post-development peak flow rates. For Building 4, water quality treatment would be achieved within Parcel 4 (via underground storage), and not in a detention basin.

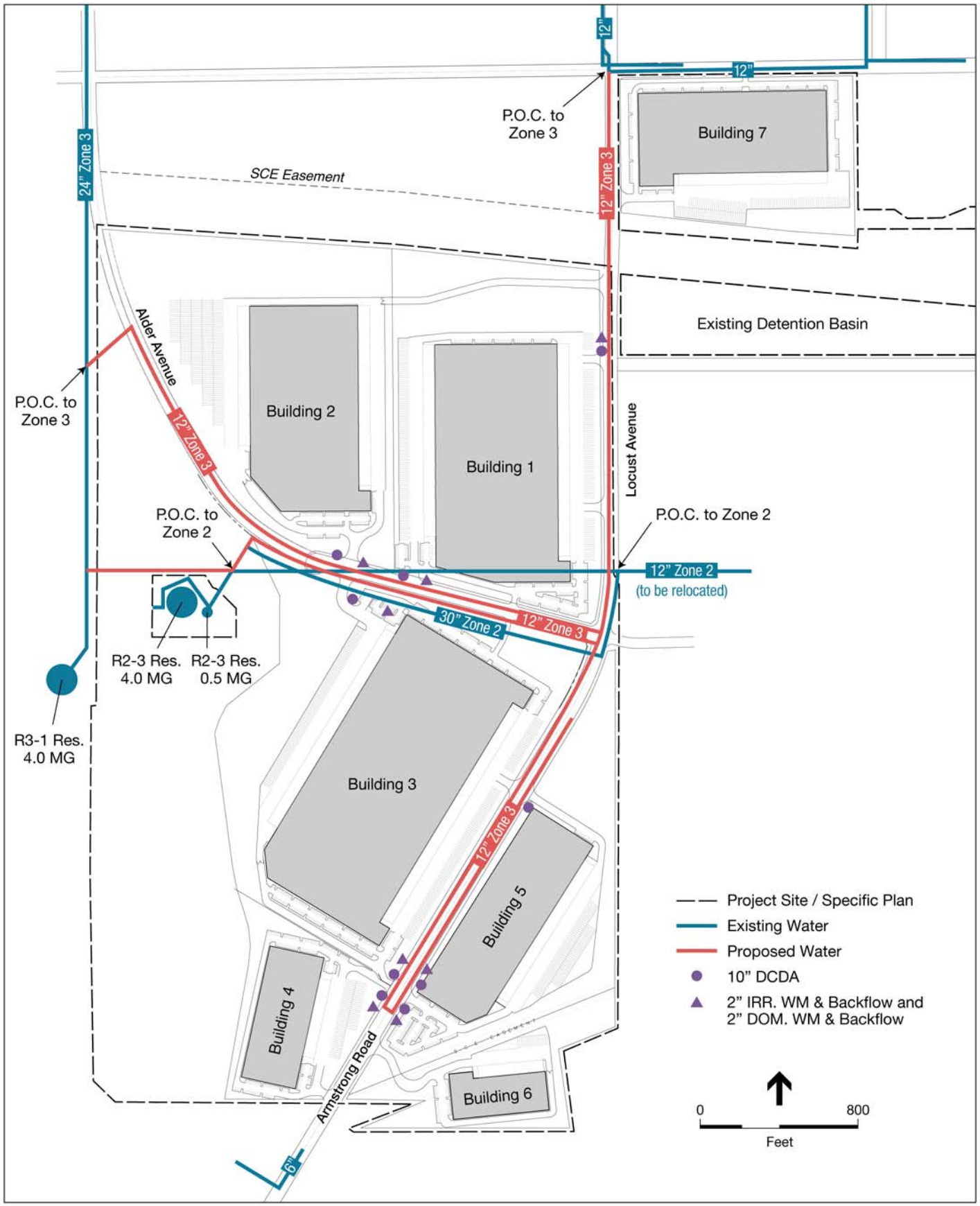
A maintenance district would be established at the start of the project prior to building occupancy and would be responsible for providing maintenance of the detention basins, drainage easements, and drainage facilities within the public road rights-of-way that are developed on site.

Utilities and Public Services

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

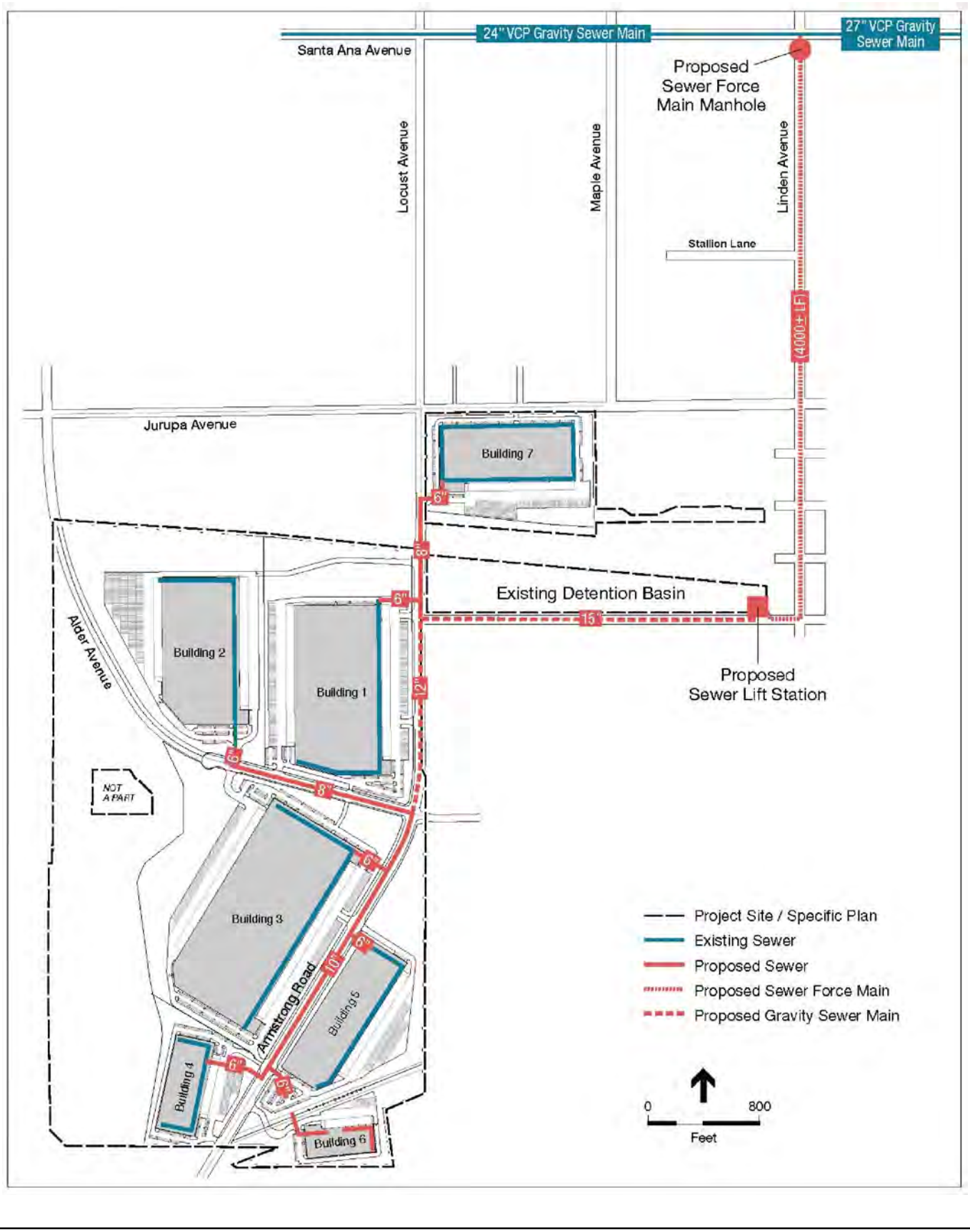
3.4.5 Sustainability Features

Several areas of sustainability are applicable to the WVLCSP, including green infrastructure, appropriate landscaping, building-level sustainability, resource conservation, and compliance with



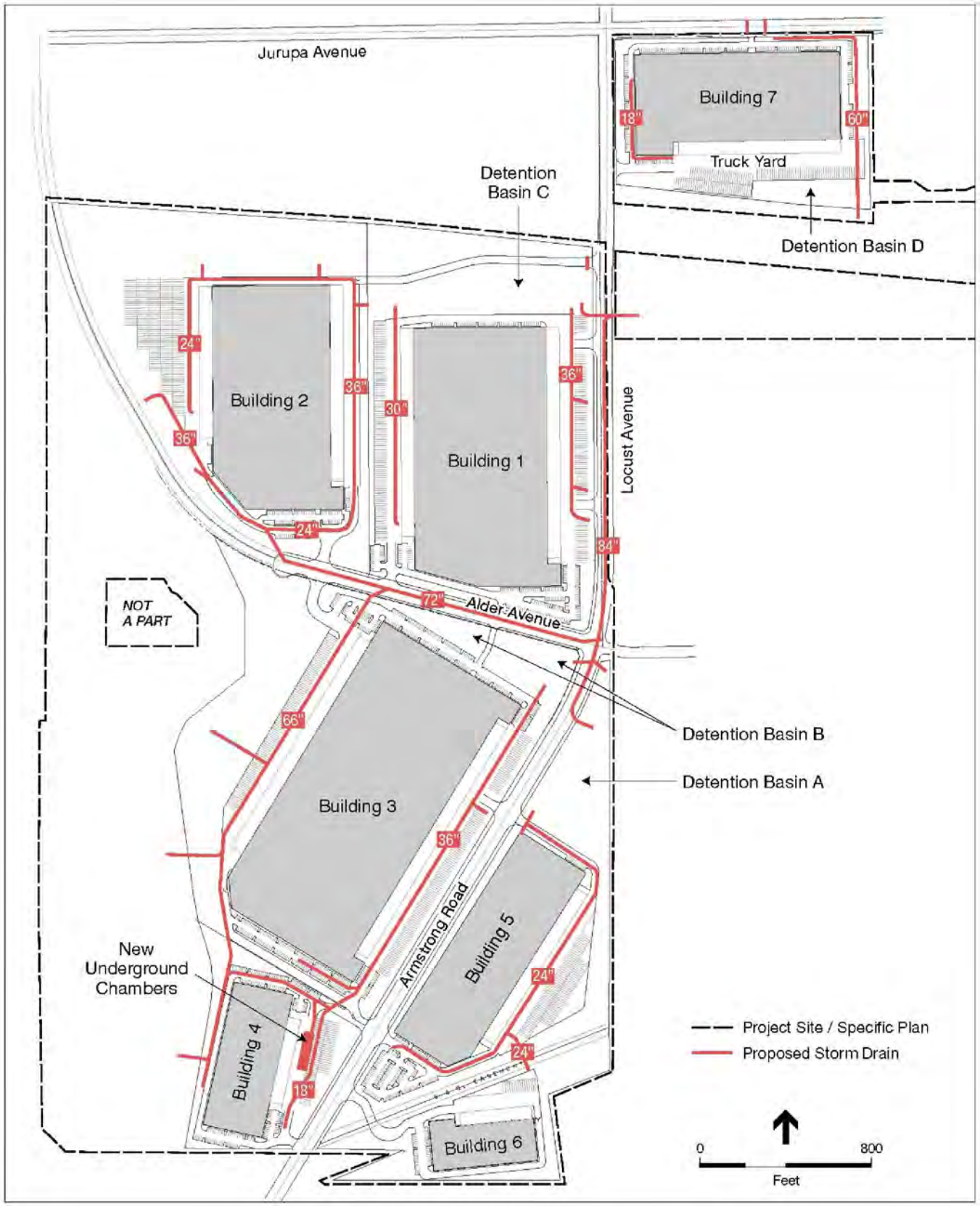
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Figure 3-5
Backbone Water System Improvements
West Valley Logistics Center Specific Plan 2nd RDEIR



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Figure 3-6
Backbone Sewer System Improvements
West Valley Logistics Center Specific Plan 2nd RDEIR



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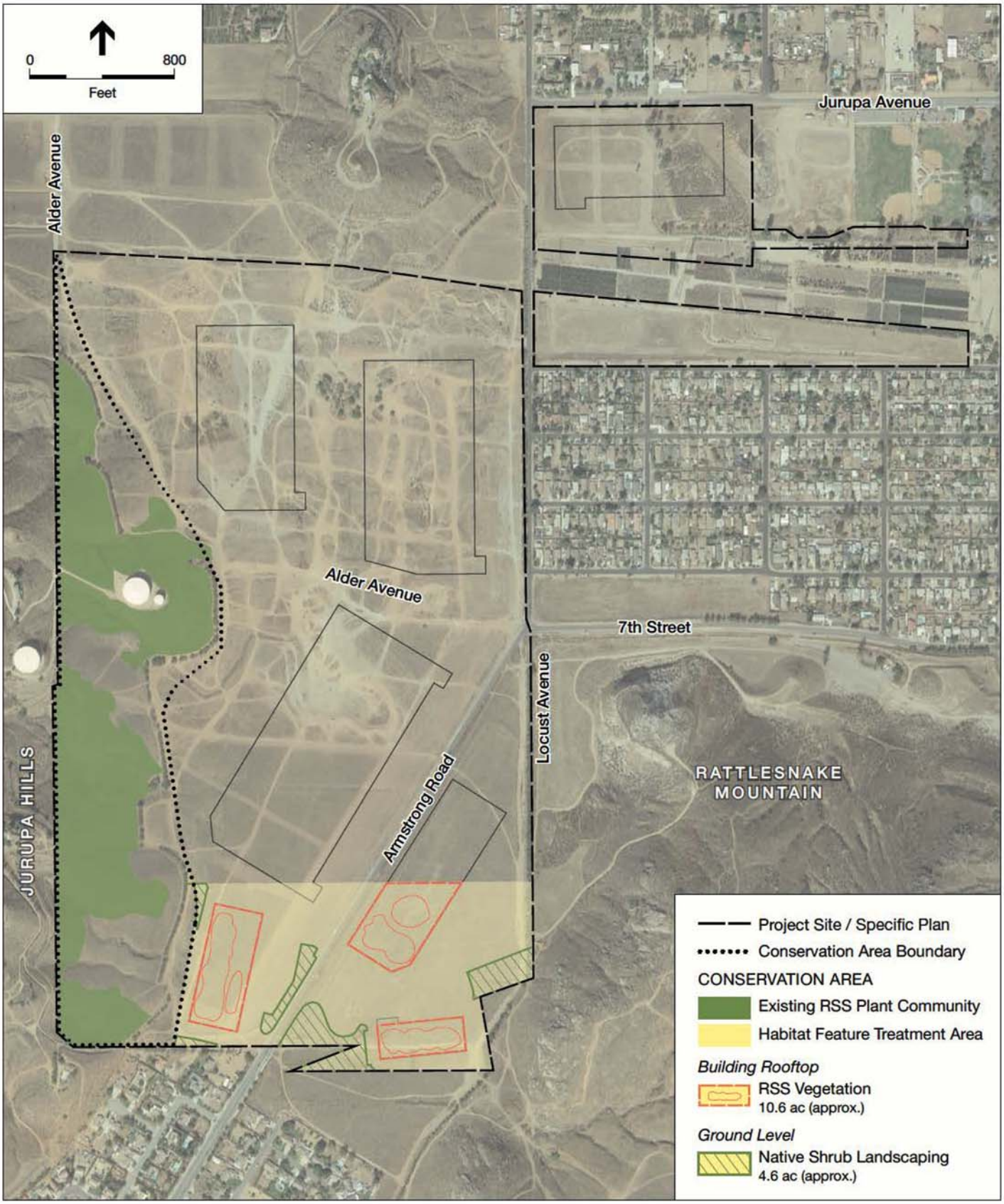
Figure 3-7
Backbone Stormwater Drainage System Improvements
West Valley Logistics Center Specific Plan 2nd RDEIR

building design regulations aimed at reducing greenhouse gas (GHG) emissions below "business as usual" conditions. The WVLCSP includes Chapter 7, *Sustainability*, to describe sustainability components of the proposed development, which are also described in Table 3-3, below. The sustainability features set forth in Table 3-3 will be included in the WVLCSP Mitigation Monitoring and Reporting Program (MMRP) along with EIR mitigation measures.

Table 3-3. Sustainability Features Included within the WVLCSP

Sustainability Areas	Project Component	Environmental Topic Areas
Resource Conservation	A total of 55.23 acres of open space and habitat areas would be preserved. An avian movement area would be created using ground level and roof top plantings to facilitate Coastal California gnatcatcher (CAGN) access to habitat on site and to move between Rattlesnake Mountain and the Jurupa Mountains (see Figure 3-8).	Biological Resources, Land Use
2013 Title 24 and CALGreen Standards: 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 non-residential buildings. Per CALGreen Building Standards Code, 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; roofing systems; windows; heating, ventilating, and air conditioning (HVAC); lighting; power systems; and building materials. The CALGreen standards are a key component of reducing GHG emissions below "business as usual" conditions and an important part of achieving GHG reduction targets for the WVLCSP.	Air Quality, GHG Emissions, Energy, Utilities, Service Systems, and Water Supply.
Building Design: Building-level Sustainability	Buildings would be designed with Leadership in Energy and Environmental Design (LEED) features so as to be eligible for certification as Gold buildings. Landscaping within the WVLCSP would meet LEED standards.	GHG Emissions, Energy, Utilities and Service Systems, and Water Supply
Building Design: Building-level Sustainability	Buildings not providing rooftop plantings to facilitate CAGN access would be designed to be capable of providing rooftop solar energy generation.	GHG Emissions, Energy, Utilities and Service Systems
Energy Efficient Lighting: Building-level Sustainability	Energy-efficient interior and exterior lighting (compliant with Title 24 standards) including light-emitting diodes (LED), T5 and T8 fluorescent lamps, or other lighting that is at least as efficient. Lighting would incorporate motion sensors that turn them off when not in use.	GHG Emissions, Energy, Utilities and Service Systems
Appropriate Landscaping and Building-Level Sustainability	Plants and landscaping within the WVLCSP would be designed to meet LEED Neighborhood Development standards for water conservation, in addition to providing landscape irrigation that meets the City's water conservation requirements.	Utilities and Service Systems, and Water Supply

Sustainability Areas	Project Component	Environmental Topic Areas
Efficient Irrigation: Resource Conservation	Water-efficient landscape irrigation would be installed, which meets the City's water conservation requirements.	Utilities and 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 and Service Systems, and Water Supply
Appropriate Landscaping and Building-Level Sustainability	Surface parking lots shall be well-landscaped to reduce heat island effect. Parking lot landscaping would be planted with 15-gallon trees with a low to very low water use rating, one per every four parking stalls. The trees may be clustered, but a minimum of one cluster shall be provided for each 100 feet of parking row. Trees shall be selected and placed to provide canopy and shade for the parking lots.	Climate Change, Aesthetics
Green Infrastructure and Building-level Sustainability	Electrical outlets would be provided in loading dock areas to power for trucks when refrigeration is proposed. 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
Electrical On-site Equipment: Green Infrastructure and Building-level Sustainability	All yard tractors and indoor forklifts would be required to be electrical or equivalent.	Air Quality, GHG Emissions
Building Efficiency: 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
Refrigeration: 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, Utilities and Service Systems
Title 13 of the California Code of Regulation: Operational Sustainability	Building operators (by contract specifications) would require that equipment, including heavy-duty equipment, motor vehicles, and portable equipment, be turned off when not in use for more than 5 minutes. Truck idling shall not exceed 5 minutes in time. All buildings would 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 would not be permitted.	Air Quality, GHG Emissions, Noise



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Figure 3-8
Avian Movement Area
West Valley Logistics Center Specific Plan 2nd RDEIR

Sustainability Areas	Project Component	Environmental Topic Areas
Particulate Matter Traps on All On-road Heavy-Duty Diesel Trucks: Operational Sustainability	Contractors and building operators would be requested, by contract specification, 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. This provision applies to truck traffic during both project construction and operations.	Air Quality, GHG Emissions
Ridesharing and Transit: Operational Sustainability	All buildings shall comply with the provisions of Development Code Article XIV, Transportation Demand Management and Trip Reduction Requirements. Building operators would participate in a Property Owners' Association that would support and encourage ridesharing and transit incentives for the employees by providing resources to organize rideshares, such as bulletin boards or email announcements. The construction contractor would also fully or partially subsidize transit fares or passes for the construction crew members who can feasibly use transit.	Air Quality, GHG Emissions, Traffic
Non-Motorized Transportation: Operational Sustainability	All streets within the Specific Plan area would be constructed as Class III bicycle routes.	Air Quality, GHG Emissions, Traffic
Non-Motorized Transportation: Operational Sustainability	All buildings would provide bicycle racks/storage, along with showers and changing rooms for employees.	Air Quality, GHG Emissions, Traffic
Recycling Program: Operational Sustainability	The Specific Plan would implement an operational recycling program that will include paper, cardboard, glass, plastic, and metals.	Utilities and Service Systems, GHG Emissions
Source: West Valley Logistics Center Specific Plan, Metis Environmental Group (December 2017)		

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 Leadership in Energy & Environmental Design (LEED) standards for future certification by building operators under the core and shell rating system.

3.4.6 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 be balanced within the project area, and would not require the import and export of material to or from off-site locations, as excavated soil would be reused throughout the project site. Potentially hazardous materials (e.g., construction wastes; automotive and household waste debris; and labeled and unlabeled containers illegally dumped on the project site) would be required to be remediated and removed by a licensed hazardous materials contractor prior to site development. Should any contaminated soils be encountered during site grading, work in the area would be immediately stopped for testing and a determination of the appropriate remediation technology would be made, which may result in some export of soil off site; should such soils be encountered on site, off-site disposal is determined to be the preferred remediation technology (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 Plan for review by the City.

A project-wide Stormwater Quality Management Plan (SWQMP) would be submitted to the City for approval prior to any grading activity commencing on site.

3.4.7 Phasing Plan

Implementation of the WVLCSP would be accomplished in four general areas (see Figure 3-9):

- North of Alder Avenue, west of Locust Avenue (Buildings 1 and 2)
- South of Alder Avenue, west of Locust Avenue (Buildings 3 and 4)
- South of Alder Avenue, east of Locust Avenue (Buildings 5 and 6)
- South of Jurupa Avenue, east of Locust Avenue (Building 7)

The development order of these areas is not chronologically fixed, and may occur in any order once Specific Plan-wide mass grading is completed. Individual building sites within each of these areas need not be constructed concurrently, and may occur in any order.[2]

The Specific Plan sets forth the following phasing requirements for development within the West Valley Logistics Center.

- Because of the interrelated nature of site grading, a mass grading program for the Specific Plan area is required. Therefore, the development areas for Buildings 1–6 within the WVLCSP would be graded and readied for construction at a single time.
- Once grading is completed and infrastructure is installed, development of individual building sites within the Specific Plan area may proceed in any order as the market demands.

[2] Because buildings within the project site could be constructed all at the same time or one at a time in any order over a number of years, any attempt at analyzing individual "phases" of development would require speculation as to the timing and order of development. Therefore, air quality, GHG, and noise modeling and analysis for project operations was undertaken for project buildout only.



Figure 3-9
Development Areas
West Valley Logistics Center Specific Plan 2nd RDEIR

- Prior to issuance of the first certificate of occupancy for Buildings 1–7, the following improvements shall be completed:
    - Roadway improvements along:
        - Jurupa Avenue
        - Locust Avenue
        - Off-site roadways connecting the West Valley Logistics Center to area freeways as specified in the West Valley Logistics Center Traffic Management Plan
    - All required water and sewer improvements outside of the Specific Plan
    - Detention basins necessary to retain runoff within the Specific Plan area
- Adequate water, sewer, drainage, and other utilities facilities shall be installed to serve each increment of development to the satisfaction of the City Engineer.
- Required streetscape improvements along Specific Plan roadways shall be installed concurrent with roadway improvements.
- Detention basins required to eliminate increased runoff from individual buildings sites shall be installed as part of the development of those individual buildings sites.
- Appropriate deed restrictions shall be recorded to ensure that the Open Space-Natural Area portion of the site is retained in permanent open space concurrent with recordation of Parcel Map 19156.

3.4.8 Required Approvals

Pursuant to 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 on this 2nd RDEIR to document potential impacts of full build-out of the WVLCSP and to determine whether the impacts may be avoided or mitigated to less-than-significant levels. This 2nd RDEIR may also be used by regulatory and responsible agencies such as county, state, and regional 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 amendments to the General Plan Land Use and Circulation Elements, approval of the WVLCSP, rescission of the Valley Trails Specific Plan, a zone change, development agreement, tentative parcel map, and a stormwater management plan, 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 light industrial use and open space designations, as well as an amendment to the City's Circulation Element to remove the extension of Alder Avenue as a public street between Jurupa Avenue and Locust Avenue. The existing residential and public land use designations on the site, which include: Residential Planned Community (R-PC), Medium Density Residential (R-M), Multi Family Residential (R-MF), Public Facilities (P-PF), and Recreational Facilities (P-R), are proposed to be changed 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 extended to the south then east, bisecting the project site to connect to 7th Street at its intersection with Armstrong Road/Locust Avenue. To avoid the biological resources and grading impacts of extending Alder Avenue as a Secondary Highway through the steep hillsides in the western portion of the project site, the applicant is proposing to construct Alder Avenue as a private street from the intersection of Armstrong Road/Locust Avenue and 7th Street, terminating the street at a cul-de-sac south of Parcel 2.

Specific Plan and Zone Change

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

Development Agreement

Along with the Specific Plan, the applicant is proposing a development agreement between the City of Fontana and the 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 Specific Plan applicant to the provision of certain public improvements, facilities, and services. The agreement constitutes a legal contract between the City and the Specific Plan 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, including a Transportation Management Committee.
- 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.
    - Conveyance to the City of Parcel 7 to the City, 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.
    - Payment of a public benefits fee.

Tentative Parcel Map

Along with the proposed WVLCSP, the applicant is requesting approval of Tentative Parcel Map No. 19156 to subdivide the approximately 291.31-acre site into nine parcels and one lettered lot, illustrated on Figure 3-10. Seven of the proposed parcels (Parcels 1 through 7) are intended for warehouse distribution 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.

Stormwater 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 the 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 utilizing alternative paving materials in select areas.
- Drain rooftops into pervious, swaled landscaped areas prior to discharge of overflow into storm drains.
- 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-lined systems) for conveying parking lot runoff into storm drains.
- 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 guidelines for development and open space preservation that would apply to the Specific Plan area, including provisions for sustainable practices to be incorporated into Specific Plan implementation. These standards and guidelines are based on the primary purpose of the Specific Plan, which is "to implement the City of Fontana General Plan by

providing clear, achievable plans and standards for development of a high-quality, state-of-the-art logistics center that will attract quality employers to the community."

3.5.1 Specific Plan Implementation

The WVLCSP would be in conformance with the General Plan, as it is proposed to be amended, and as required by state law and 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 are to be constructed in accordance with the approved site plan, design regulations, and development standards set forth in the Specific Plan. Any proposed changes to the Specific Plan that would substantially alter the site plan would require an amendment to the Specific Plan. The Planning Commission and City Council would be required to find, in approving or conditionally approving any amendment to the Specific Plan, that there is no conflict with the purpose and intent of the Specific Plan, and the amendment to the Specific Plan would be consistent with the City of Fontana General Plan. However, minor modifications of 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

A wide variety of project design features, including Specific Plan Requirements, Regulatory Requirements, and Standard City Requirements, would be implemented to prevent or lessen potentially significant environmental impacts. Any proposed development within the proposed Specific Plan area would be evaluated to ensure implementation of these project design features:

- **Specific Plan Requirements**. The WVLCSP includes project design considerations or features that would govern all development actions within the Specific Plan boundaries, as well as the provision of off-site infrastructure. These considerations would ensure that the Specific Plan area would be developed in accordance with the quality and character desired by the WVLCSP 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 WVLCSP 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 WVLCSP 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 WVLCSP will be subject.
- **Standard Requirements**. These include planning requirements that the City of Fontana would place on the proposed WVLCSP 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.



Figure 3-10
Tentative Parcel Map
West Valley Logistics Center Specific Plan 2nd RDEIR

All project design features would be included in the MMRP and would be monitored to ensure completion in the same manner as EIR mitigation measures.

3.6.1 Specific Plan Requirements

In addition to the sustainability measures set forth in Table 3-3, the following Specific Plan Requirements, listed by environmental topic area, have been included in the proposed WVLCSP to prevent or lessen potentially significant project-related environmental impacts and will be identified in the MMRP as Specific Plan Requirements.

Aesthetics

SP-A-1: Implement High-quality Development Standards and Design Guidelines. Chapter 3 of the West Valley Logistics Center 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. The Design Guidelines set forth in the West Valley Logistics Center Specific Plan explicitly address promoting compatibility with surrounding neighborhoods and employing high-quality architecture to define the site's character. 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 West Valley Logistics Center Specific Plan (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 16 feet, which would screen views of the project area, while retaining views of the hills and mountains in higher elevation background views. Walls may berm up to allow 18 feet of exposure on the inward-facing side.

SP-A-3: 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 maintain the privacy of residents and block views from ground levels.

SP-A-4: Light Spillage. Unless intended as part of a master lighting plan approved by the City of Fontana, no operation, activity, or lighting fixture shall create illumination exceeding 0.5 foot-candles on any adjacent property (0.25 foot-candles within residential properties), whether the illumination is direct or indirect light from the source. Lighting levels shall be measured with a photoelectric photometer, following standard spectral luminous efficiency curves adopted by the International Commission on Illumination.

- Exterior lighting shall be kept to the minimum required for safety; purely decorative lighting displays shall be prohibited.

- Project lighting shall be designed to control light energy and ensure that exterior lighting is directed downward and away from adjacent streets and buildings in a manner designed to minimize off-site light spillage.

SP A-5: Glare. All building exteriors within the West Valley Logistics Center Specific Plan area shall be composed of textured and other non-reflective materials, including high-performance tinted non-mirrored glass. Reflective materials on building exteriors that have a light reflectivity factor greater than 30 percent shall be limited to less than 25 percent of any wall area.

Air Quality

SP-AQ-1: Encourage Ridesharing and Transit Incentives. Each building operator will be required to support and encourage ridesharing and transit incentives for the construction crew by providing crews with the needed resources to organize rideshares, such 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.

SP-AQ-2: Erosion Control Plan. Prior to commencing grading operations, the applicant for any grading permit shall prepare an erosion control and sediment plan for approval by the City of Fontana. Access roads within the area being graded shall be kept wet while being used. Alternatively, uncovered soils shall be treated with oil, asphaltic concrete, concrete, or other similar material approved by the City of Fontana as a means of dust suppression.

SP-AQ-3: Request Contractors and Building Operators to Use Particulate Matter Traps on All On-road Heavy-Duty Diesel Trucks. The project will request contractors and building operators (by contract specifications) that on-road heavy-duty diesel trucks with a gross vehicle weight rating greater than 14,000 pounds have a 2010 model year engine or newer or are equipped with a particulate matter trap, as available.

SP-AQ-4: Odor Emissions. All uses shall be operated in a manner such that no offensive odor is perceptible at or beyond the property line of that use.

SP-AQ-5: Dust Control, Operations. Any operation or activity that might cause the emission of any smoke, fly ash, dust, fumes, vapors, gases, or other forms of air pollution, which can cause damage to human health, vegetation, or other forms of property, or can cause excessive soiling on any other parcel, shall conform to the requirements of the South Coast Air Quality Management District.

SP-AQ-6: Dust Control, Grading. Prior to commencing grading operations, the applicant for any grading permit shall prepare an erosion control and sediment plan for approval by the City of Fontana. Access roads within the area being graded shall be kept wet while being used. Alternatively, uncovered soils shall be treated with oil, asphaltic concrete, concrete, or other similar material approved by the City of Fontana as a means of dust suppression.

Biological Resources

SP-B-1: Open Space – Natural Area. The West Valley Logistics Center Specific Plan sets aside 55.23 acres of natural open space in the western portion of the West Valley Logistics Center Specific Plan area to protect existing habitat areas. No buildings are permitted within this area, and only uses consistent with the habitat conservation purpose of the area will be permitted.

SP-B-2: Habitat Management Plan. The *Riversidean Sage Scrub Habitat Mitigation and Monitoring Plan* prepared as part of the West Valley Logistics Center Specific Plan provides for the long-term management of the on-site Riversidean sage scrub (RSS) habitat. It preserves in perpetuity 44.8 acres of RSS habitat located on the eastern edge of the Jurupa Mountains.

SP-B-3: Avian Habitat Feature. An avian habitat feature will be created using ground-level native plantings and rooftop plantings of Riversidean sage scrub (RSS) habitat plant species to create vegetative substrate that could facilitate avian species' east-west dispersal between the proposed 55.23-acre on-site RSS conservation area and nearby undeveloped RSS habitats.

Greenhouse Gases

SP-GHG-1: Incorporate Water Conservation and Efficient Measures for Landscaping. The project will devise a comprehensive water conservation strategy in compliance with California Green Building Standards Code Water Efficiency Measures and Leadership in Energy and Environmental Design 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 recycled water for landscape irrigation within the project at such time as it can be made reasonably available. Install the infrastructure to deliver and use recycled water, as part of street improvements within the project site along Jurupa Avenue, Locust Avenue, Alder Avenue, and Armstrong Road as needed to provide recycled water for landscape irrigation when available.
- 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 of Fontana's Municipal Code Article IV, Landscaping and Water Conservation.

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

SP-GHG-3: Design CALGreen Compliant Buildings. Buildings will be designed to provide CALGreen Standards with Leadership in Energy and Environmental Design 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; lighting; and power systems.

SP-GHG-4: Provide Electrical Connections at 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-GHG-5: Utilize Energy-efficient Lighting. The project will utilize energy-efficient interior and exterior lighting, including light-emitting diodes, T5 and T8 fluorescent lamps, or other lighting that is at least as efficient. Lighting will incorporate motion sensors that turn lighting off when not in use.

SP-GHG-6: Select Efficient Refrigerants and Heating, Ventilating, and Air Conditioning (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 standards and/or per California Title 24 requirements.

SP-GHG-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 at a rate of one tree 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.

Hazards and Hazardous Materials

SP-HM-1: Sampling and Remediation. Prior to submittal of a grading permit for the West Valley Logistics Center Specific Plan area, a Phase II Environmental Site Assessment (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 Fontana Director of Community Development and the San Bernardino County Division of Environmental Health Services (DEHS) 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 International Standards.
- 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 shall provide verification whether any portions of the project site are contaminated and require remediation to achieve risk-based cleanup standards[3] of an acceptable

[3] 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 and environmental

excess cancer risk of 1 x 10^{-5} or as otherwise established by the Department of Toxic Substances Control (DTSC), Regional Water Quality Control Board (RWQCB), or DEHS for construction workers and workers within proposed uses on site. The applicant and project contractor(s) 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 applicable regulatory agency. If any hazardous materials are discovered, a plan for their proper remediation shall be prepared in accordance with applicable requirements of the California Division of Occupational Safety and Health and the County of San Bernardino Environmental Health Services. Should underground storage tanks be determined to remain on site, they shall be removed pursuant to the recommendations of the Phase II ESA and the applicable requirements of the City of Fontana, DTSC, RWQCB, and DEHS.

In the event that that the Phase II ESA identifies contamination on site, the following remediation measures may be employed (site specific recommendations and measures will be included in the Phase II ESA based on sampling results):

- 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 barbeque grill) to quickly and efficiently destroy contaminants; and
    - Bioremediation, which 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.

All grading within the boundaries of the former Crestmore Waste Disposal Site shall be in accordance with the requirements of California Code of Regulations Title 27, Environmental Protection.

Installation of Sub-slab Vapor Barriers. To minimize potential vapor intrusion into proposed new buildings within 1,000 feet of the Crestmore Waste Disposal Site footprint, sub-slab vapor barriers can be employed in the proposed project area as a passive option if methane testing conducted prior to issuance of building permits indicates the presence of methane or other volatile gases.

risk posed by contaminants in the ground or water. As a result, land uses where risks to the public health are higher (e.g., residential) will 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).

Additionally and prior to site construction, the applicant shall undertake the following actions in accordance with the performance standards provide herein to ensure safe conditions of the site.

Additional Air Pollutant and Greenhouse Gas Emissions Analysis. Should site remediation and/or soil excavation be required as part of implementation of this measure, additional analysis of the air quality and greenhouse gas emissions associated with such site remediation and/or soil excavation will be required.[4]

Asbestos and Lead Based-Paint Sampling. Sampling shall be undertaken to confirm the absence of asbestos and lead-based paint in the remnant construction debris on site. The soil sampling shall include applicable sampling procedures pursuant to the directives of the DEHS, and shall be subject to review by the DEHS.

Hydrology and Water Quality

SP-HW-1: Implement Best Management Practices for Water Quality Management. Site Design best management practices will be included in the project-wide Stormwater Quality Management Plan submitted to the City of Fontana and approved prior to the issuance of a grading permit (see **Regulatory Requirement RR-HW-2**). The best management practices, 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, swaled landscaped areas prior to discharge of overflow into storm drains.
- 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-lined systems) for conveying parking lot runoff into storm drains.
- 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.

[4] While this measure sets performance standards for safety in relation to hazardous materials, such air quality and greenhouse 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 Soil Management Plan or Remedial Action Plan undertaken prior to approval of a grading plan.

SP-HW-2: On-site Stormwater Detention: On-site detention basins will be designed and sized to reduce 100-year peak flows to 90 percent of the 25-year peak flow rate for existing conditions. Detention basins within the West Valley Logistics Center Specific Plan area will be designed such that the lower elevations of the basins are used for water quality purposes. The higher elevations of the basins will be used to limit the difference between pre- and post-development peak flow rates.

Noise and Vibration

SP-N-1: Noise Performance Standards: The noise standard for generation of noise from any stationary noise source as it affects adjacent properties shall be:

Residential	55 A-weighted decibels (dBA) (7:00 a.m.–10:00 p.m.)
	45 dBA (10:00 p.m.–7:00 a.m.)
Industrial	70 dBA any time

No person shall operate or cause the operation of any stationary source of noise at any location or allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, which causes the noise level, when measured on any other property, to exceed:

1. The noise standard specified above for the receiving land use for a cumulative period of more than 30 minutes in any hour.
2. The noise standard specified above for the receiving land use plus 5 dBA for a cumulative period of more than 15 minutes in any hour.
3. The noise standard specified above for the receiving land use plus 10 dBA for a cumulative period of more than 5 minutes in any hour.
4. The noise standard specified above for the receiving land use plus 15 dBA for a cumulative period of more than 1 minute in any hour.
5. The noise standard specified above for the receiving land use plus 20 dBA for any period of time.
6. If the noise exceeding the applicable noise standard or the ambient noise level consists entirely of impact noise or simple tone noise, each of the noise levels described above shall be reduced by 5 dBA.

The preceding performance standards do not apply to the following uses, each of which shall meet any applicable requirements of the City of Fontana:

- Motor vehicles;
- Emergency equipment, vehicles, devices, and activities; and
- Temporary construction, maintenance, or demolition activities conducted between the hours of 6:00 a.m. and 7:00 p.m.

SP-N-2: Installation of Sound Barriers on Site. Screen wall/noise barriers will be constructed near Buildings 1, 2, 3, 4, and 7, as shown on Exhibit 10-A of the West Valley Logistics Center Noise Impact Analysis, 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. Screen walls would be constructed from cement or concrete masonry units

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. 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 grade.

In addition, minimum 8-foot high temporary construction noise barriers will be installed at the project site boundaries adjacent to sensitive receivers, as shown in the West Valley Logistics Center Noise Study, for the duration of mobile-equipment construction activities for the duration of the site preparation and grading stages of project construction. The noise-control barriers must have a solid face from top to bottom. The noise-control barriers must meet the minimum height and be constructed as follows:

- The temporary noise barriers will provide a minimum transmission loss of 20 A-weighted decibels (Federal Highway Administration, Noise Barrier Design Handbook). The noise barrier is to be constructed using an acoustical blanket (e.g., vinyl acoustic curtains or quilted blankets) attached to the construction site perimeter fence or equivalent temporary fence posts.
- The noise barrier will be maintained and any damage promptly repaired. Gaps, holes, or weaknesses in the barrier or openings between the barrier and the ground will be promptly repaired.
- The noise control barrier and associated elements are to be completely removed and the site appropriately restored upon the conclusion of the construction activity.

Alternatively, the planned 14-foot-high permanent screen walls (noise barriers) at the eastern project site boundary adjacent to Locust Avenue, shown on Figure 3-3, if built prior to project construction, can replace the 8-foot-high temporary noise barriers intended to reduce the construction noise levels at homes on Locust Avenue between 11th and 8th Streets.

SP-N-3: Truck Idling. To reduce potential noise impacts related to truck idling during project operations, deed restrictions and parking lot signage shall limit the maximum number of trucks idling on the east side of Building 1 to 20 trucks during nighttime hours between 10:00 p.m. and 7:00 a.m. Proposed deed restrictions and parking lot signage will be submitted to the City of Fontana Community Development Department for review and approval prior to issuance of a certificate of occupancy.

SP-N-4: Vibration Performance Standard. No person shall create or cause the creation of any activity that causes a vibration that can be felt beyond the property line of any residentially zoned property with or without the aid of an instrument.

Public Services

SP-PS-1: Implement Crime Prevention through Environmental Design (CPTED) Measures. The West Valley Logistics Center Specific Plan (Specific Plan) complies with the City of Fontana's CPTED guidelines. As such, the Specific Plan incorporates 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; and
- 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.

SP-PS-2: Fire Protection through Implementation of Safety Design Measures. In order to address current plans by the Fontana Fire Protection District (FFPD) to move the fire station that is currently closest to the West Valley Logistics Center Specific Plan (Specific Plan) site to another location farther from the project site, such that the travel distance and running time from the relocated fire station to the project site would increase, the Specific Plan includes the following measures to provide for adequate fire protection and meet the requirements of the FFPD:

- Adequate off-site public and on-site private fire hydrants will be required; their number and location will be determined after FFPD reviews and approves the site plan.
- The proposed private street, along with any entry gates to individual building sites, will be built to City of Fontana (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 City's Municipal Code.
- Construction of public or private roadways in the proposed development will not exceed 15 percent 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. No dead-ending street or fire lane will be greater than 700 feet in length, unless approved by the FFPD.
- Secondary access will be required for Parcels 1 through 7.
- Fire lane widths will not be less than 20 feet. When a fire lane must accommodate the operation of an FFPD aerial ladder apparatus or where fire hydrants are installed, those portions will not be less than 28 feet wide.
- Where access for a given building requires accommodation of FFPD apparatus, the minimum outside radius of the paved surface will be 35 feet. An additional 6 feet of clear space must be maintained beyond the outside radius to a vertical point 13 feet 6 inches above the paved surface of the roadway.
- Where access for a given building requires accommodation of FFPD apparatus, overhead clearance will not be less than 14 feet.
- 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.
- Access for FFPD apparatus and personnel to and into all structures will be required.

- Provision of additional vehicular access where buildings exceed 28 feet in height as may be required by the FFPD.

Recreation

SP-R-1: Trail Access and Location Verification: The following measures are required by the West Valley Logistics Center Specific Plan:

- Final parcel map and grading plans shall identify the confirmed alignment of the Jurupa Hills Trail through the project site.
- Development of the West Valley Logistics Center Specific Plan shall retain access to the existing Jurupa Hills Trail and Southern California Edison Easement Trail.
- The Property Owners' Association shall be charged with ensuring that on-site operations are conducted so as to not cause deterioration of the Jurupa Hills Trail and Southern California Edison Easement Trail.

Transportation and Traffic

SP-TR-1: Truck Routing Plan. A plan for the routing of trucks between the project site and area freeways is set forth in the West Valley Logistics Center Specific Plan (Specific Plan) to minimize impacts on nearby residential neighborhoods. The truck routing plan also includes requirements for:

- Driveway designs and the geometrics of the intersection of Alder Avenue and Locust Avenue/Armstrong Road to direct trucks to the north and away from Valley Way;
- A comprehensive roadway and highway signage program to direct trucks along designated routes between the project site and area freeways (see Section 3.4.3, *Circulation Improvements*);
- Off-site improvements including roadway widening and signalization to accommodate project-related trucks (see Section 3.4.3, *Circulation Improvements*);
- Requirements for providing instruction to truck drivers regarding approved routes; and
- Requirements for the Transportation Management Committee of the Specific Plan Property Owners' Association to monitor truck traffic and enforce applicable Specific Plan regulations.

SP-TR-2: Feasibility Studies and Fair Share Payments. In addition to the physical improvements included in SP-TR-1, the West Valley Logistics Center Specific Plan (Specific Plan) includes the following requirements:

- Payment of fair share fees in addition to Nexus Study and Fontana Development Impact Fees to the County of San Bernardino for:
    - Alder Avenue/Slover Avenue (fair share payment for signalization that is not included as part of the Development Mitigation Nexus Study. Development within the Specific Plan will provide fair share payments at the same rate as the County of San Bernardino is collecting from projects within the adjacent unincorporated area); and
    - Cedar Avenue/Slover Avenue (fair share payment for intersection improvements).
- The Specific Plan will voluntarily prepare a feasibility study for the Valley Way/State Route 60 interchange for which no feasible improvements to achieve acceptable levels of operation have

been identified to date and, as a consequence, no improvement program has been established to which a fair share payment for improvements can be made. The proposed feasibility study would aim to identify feasible improvements that could be undertaken at the interchange to improve existing and future levels of service, even if applicable service level standards could not be met.

- Work with the cities of Fontana and Jurupa Valley to identify Armstrong Road south of the southernmost West Valley Logistics Center driveway as not a truck route and to place appropriate signage along Armstrong Road prohibiting trucks except for local deliveries.
- Work with the California Department of Transportation to place signs along State Route 60 indicating that trucks are not permitted on Armstrong Road north of the freeway, and directing eastbound trucks to exit at Rubidoux Boulevard and westbound trucks to exit at Market Street.

SP-TR-3: Property Owners' Association Responsibilities. A Property Owners' Association shall be formed by the applicant or its designee to implement the truck traffic management program set forth in the West Valley Logistics Center Specific Plan. The applicant or its designee will submit a proposed declaration of Covenants, Conditions, and Restrictions (CC&Rs) for City of Fontana (City) review prior to issuance of the first building permit for Parcels 1–7. The City's review shall be complete, and the proposed declaration of CC&Rs shall be approved by the City, prior to issuance of the certificate of occupancy for the first building. The Property Owners' Association will include a Transportation Management Committee that will, at a minimum, have the responsibility and obligation to:

- Require building owners/lessees to inform truck drivers of the approved routes to and from the West Valley Logistics Center;
- Require dispatchers to provide truck drivers leaving the building with verbal and written instructions regarding approved truck routes to area freeways;
- Implement and maintain a monitoring program to identify the actual routes trucks are taking to and from the West Valley Logistics Center;
- Enforce the use of approved truck routes[5]; and
- Provide quarterly reporting to the City regarding the actual routes trucks are taking to and from the West Valley Logistics Center.

SP-TR-4: 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-5: Install Bicycle Racks. Bicycle racks will be provided at appropriate locations on Parcels 1 through 7 (e.g., between buildings or in automobile parking areas) for employees who wish to bicycle.

[5] The CC&Rs would provide that the Association, any Owner, or the City as a third-party beneficiary, shall have the right to enforce compliance "in any manner provided by law or in equity, or in bringing an action for damages, an action to enjoin the violation or to specifically enforce the provisions." In addition, the project site will be subject to Conditions of Approval, including compliance with a Truck Traffic Management Plan.

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 around 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 Silver certification standards for water efficiency.

SP-UT-3: Incorporate Recycling Program. The project will be designed to incorporate an operational recycling program that will include 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 specification of the California Department of Health Services and San Bernardino County Health Department.

SP-UT-6: **Comply with West Valley Water District Water Master Plan.** Domestic water pipe alignments and sizes will be designed in accordance with design criteria outlined in West Valley Water District'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 include regulatory permitting requirements of the City of Fontana and other agencies to which the proposed WVLCSP 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 be 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-A-3: Limits on Length of Building Permits. Building permits for new commercial and industrial development are valid for a period of 18 to 24 months, which will ensure that construction activities will be temporary and not continue beyond a 24-month period for each increment of development.

Air Quality

RR-AQ-1: Comply with South Coast Air Quality Management District 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 South Coast Air Quality Management District 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 South Coast Air Quality Management District 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) shall be 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 South Coast Air Quality Management District (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 manufacturers of low/no-VOC paints is provided at the following SCAQMD website:

http://www.aqmd.gov/docs/default-source/planning/architectural-coatings/reporting-and-support-documents/rule-314-manufacturers.pdf?sfvrsn=4

All paints will be applied using either high volume low-pressure spray equipment or by hand application.

RR-AQ-5: Comply with Rule 1301 – General. This rule is intended to provide pre-construction review requirements to ensure that new or relocated facilities do not interfere with progress toward attainment of National Ambient Air Quality Standards, while future economic growth within the

South Coast Air Quality Management District 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.

RR-AQ-7: Require Equipment to Be Turned Off When Not in Use. Building operators will require (by contract specifications) that equipment, including heavy-duty equipment, motor vehicles, and portable equipment, 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 would not be permitted.

RR-AQ-8: Air Pollutant Emissions, General. Any operation or activity that might cause the emission of any smoke, fly ash, dust, fumes, vapors, gases, or other forms of air pollution, which can cause damage to human health, vegetation, or other forms of property, or can cause excessive soiling on any other parcel, shall conform to the requirements of the South Coast Air Quality Management District.

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 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: 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 subject to the provisions of the ordinance prior to issuance of a grading permit.

Cultural Resources

RR-C-1: City of Fontana Municipal Code Chapter 5, Buildings and Building Regulations, Article XIII: Preservation of Historic Resources, includes archaeological sites. The code states that this article is "adopted to implement the goals and policies of the general plan, which recognize the presence of archeological sites and buildings that have historic importance for the city. The city council finds and declares that historic, archeological 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, archeological and cultural resources within the city shall be governed by the provisions of this article."

RR-C-2: 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 (§7050.5; Public Resources Code §5097.98). The most likely descendant 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 Public Resources Code §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 (City). 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 the 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. 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 regulate worker exposure during construction activities that affect lead-based paint. The Interim Final Rule found in 29 Code of Federal Regulations, 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;
    - Cleanup 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.
    - The 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 California Division of Occupational Safety and Health must be notified of asbestos abatement activities.
- Asbestos abatement contractors must follow state regulations contained in 8 California Code of Regulations 1529 and 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 of Fontana'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; and
    - The most recently adopted version of the California Building Code adopted by the City of Fontana.
  - 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, the County of San Bernardino Fire Department will provide oversight in site cleanup and 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 the Occupational Safety and Health Administration's Safety and Health Standards 29 Code of Federal Regulations, Part 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 California Code of Regulations Title 27.

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.

RR-HM-4: 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 of Fontana (City) General Plan Safety Element, a fuel modification zone will be required in areas threatened by fire hazard. For the project, 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. 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.

Hydrology and Water Quality

RR-HW-1: Prepare and Implement a Stormwater Pollution Prevention Program (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 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 of Fontana engineer.

RR-HW-2: Submit a Stormwater Quality Management Plan (SWQMP) for City Approval. An SWQMP based on final design for each phase of the West Valley Logistics Center Specific Plan will be submitted to the Fontana Director of Public Works for approval prior to issuance of grading permits. The SWQMP will provide project-specific site design, source control, and treatment control best management practices (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 of Fontana's Municipal Storm Water Management Plan and the San Bernardino County Municipal Separate Storm Sewer System 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 San Bernardino County-wide Municipal Separate Storm Sewer System Permit and the City of Fontana's (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 (BMPs) for Water Quality Management. Site design BMPs will be included in the project-wide Stormwater Quality Management Plan submitted

to the City of Fontana 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 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 utilizing alternative paving materials in select areas.
- Drain rooftops into pervious, swaled landscaped areas prior to discharge of overflow into storm drains.
- 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-lined systems) for conveying parking lot runoff into storm drains.
- 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.

Noise

RR-N-1: Comply with the Construction Noise Municipal Code Exemption. The City of Fontana'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 Fees. Proposed commercial, industrial, and senior housing development projects, including the West Valley Logistics Center Specific Plan, are required to pay the established Colton Joint Unified School District school facilities impact fees per square foot of building area at the time of building permit issuance. Individual buildings within the West Valley Logistics Center Specific Plan will be required to pay school fees at the established rate at the time of building permit issuance.

RR-PS-2: Pay City of Fontana Impact Development 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 at the established rate at the time of building permit issuance. New development must also comply with the Fontana Police Department's Standard Building Security Specifications and the City of Fontana's Crime Prevention through Environmental Design guidelines.

RR-PS-3: Pay City of Fontana Impact Fees for Library Facilities. The proposed project will pay the City of Fontana's development impact fee at the established rate at the time of building permit issuance to support expansion of library services.

Transportation and Traffic

RR-TR-1: Pay San Bernardino County Nexus Fees and City of Fontana Development Impact Fees for Roadway Improvements. The West Valley Logistics Center Specific Plan will pay applicable fees per the San Bernardino County Nexus Study fee program and the City of Fontana's development impact fee for industrial land use at the established rates at the time of building permit issuance.

Utilities

RR-UT-1: City of Fontana Municipal Code, Chapter 27, Article III, requires undergrounding of utilities as part of new development that requires new/additional utility connections to the project site.

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.

Geology and Soils

SR-G-1: Develop and Implement an Erosion Control Plan. The applicant or developer will prepare and submit to the City of Fontana Department of Public Works 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 location of all soil-disturbing activities (including but not limited to sites involving new development or roadways), the location of all drainage structures that will be directly affected by soil-disturbing activities, and the location and type 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-GHG-1: Provide Waste Reduction and Recycling Education. The property operator will provide readily available information provided by the City of Fontana for employee education about reducing waste and available recycling services.

SR-GHG-2: 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 percent 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 percent of the project.

SR-GHG-3: Incorporate Energy-efficiency Measures for New Warehouse Buildings. Prior to the issuance of building permits, the West Valley Logistics Center Specific Plan will demonstrate the incorporation of the following project design features that will achieve a minimum of 15 percent reduction in greenhouse gas emissions from business-as-usual conditions, pursuant to the San Bernardino County Regional Greenhouse Gas Reduction Plan and Assembly Bill 32 and the greenhouse gas 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 percent 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 percent below the baseline required by the California Energy Commission, 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 diode 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 global warming potential hydrofluorocarbon refrigerants or natural refrigerants (ammonia, propane, carbon dioxide) 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 of Fontana.
- Design buildings to be water efficient. Install water-efficient fixtures and appliances (e.g., U.S. Environmental Protection Agency 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 stormwater and protect the environment. The project will retain stormwater runoff on site and construct basins to hold and filter water.
- Implement a comprehensive water conservation strategy through methods described in the West Valley Logistics Center Specific Plan 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 City of Fontana 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 5 minutes, including delivery and construction vehicles, per California Air Resources Board 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 West Valley Logistics Center Specific Plan 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).

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.

Hydrology and Water Quality

SR-HW-1: Maintain Stormwater Detention Basins and Biotreatment Areas during Project Operation. Final selection of best management practices (BMPs) will be subject to approval by the Santa Ana Regional Water Quality Control Board. The City of Fontana (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 Environmental Impact Report, 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 Storm Water 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.

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.

SR-N-4: Ensure Proper Operation and Maintenance of Operational Equipment. All on-site operating equipment under the control of the building user that is used in outdoor areas (including but not limited to trucks, tractors, forklifts, and hostlers) shall be operated with properly functioning and well-maintained mufflers. The City of Fontana may conduct periodic inspection at its discretion.

SR-N-5: Ensure Proper Maintenance of On-site Pavement. Quality pavement conditions free of vertical deflection (i.e., speed bumps) and potholes shall be maintained to minimize on-site operational truck noise. The City of Fontana may conduct periodic inspection at its discretion.

SR-N-6: Post Appropriate Notices. The truck access gates and loading docks within the truck court of Buildings 1–7 shall be posted with signs that state:

- Truck drivers shall turn off engines when not in use;
- Diesel trucks servicing the project shall not idle for more than 5 minutes; and
- Telephone numbers of the building facilities manager and the California Air Resources Board to report violations.

SR-N-7: Limitation on Construction Hours. Prior to approval of grading plans and/or issuance of building permits, plans shall include a note indicating that noise-generating project construction activities shall only occur between the hours of 7:00 a.m. and 6:00 p.m. on weekdays and between the hours of 8:00 a.m. and 5:00 p.m. on Saturdays.

- During all project site construction, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise-sensitive receptors nearest the project site.
- The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receivers nearest the project site (i.e., to the center) during all project construction.
- The construction contractor shall limit construction haul truck deliveries to the same hours specified for construction equipment (between the hours of 7:00 a.m. and 6:00 p.m. on weekdays and between the hours of 8:00 a.m. and 5:00 p.m. on Saturdays). The contractor shall design delivery routes to minimize the exposure of sensitive land uses or residential dwellings to delivery truck-related noise.

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 West Valley Logistics Center Specific Plan, 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 West Valley Logistics Center Specific Plan (West Valley Water District [WVWD], November 2013) include the following:

- The project will install water-efficient devices and landscaping according to the requirements of 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 applicant 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 this WSA, WVWD has the option to suspend the approval of the WSA.
- This project is not located 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 at such time as supplies become available. According to WVWD requirements, the project may be conditioned to construct a recycled water system physically

separated from the potable water system.[6] 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; however, no such requirements are known at this time. WVWD will determine 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 will 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 West Valley Logistics Center Specific Plan 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 WSA in the event of a potential increase in water demand by 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 Differences between the Proposed Project and the Previously Approved Valley Trails Specific Plan

Except for the addition of a 1.54-acre 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 Trails Specific Plan, the project area was sold to UST-CB Partners, LLP, which proposes to replace the Valley Trails Specific Plan with the West Valley Logistics Center Specific Plan and to develop the site with warehouse distribution uses in order to maximize the site's economic potential to the City and surrounding community while creating job growth. Due to this proposed change in permitted land uses for the site, the City determined that a new specific plan would need to be prepared to define land uses, regulations, and development standards to fit the needs of the proposed warehouse distribution development. A comparison of the two specific plans is provided below in Tables 3-4 and 3-5.

[6] 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 (West Valley Logistics Center Specific Plan)

	Valley Trails Specific Plan	West Valley Logistics Center Specific Plan
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 (December 2017); TPM 19156, Thienes Engineering (March 2017); Valley Trails Specific Plan (2007).

* 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

4.1 Introduction

Chapter 4, *Environmental Analysis of the Proposed Project*, contains a detailed environmental analysis of the existing conditions, project impacts, mitigation measures, and unavoidable adverse impacts.

4.2 Environmental Analysis of the Proposed Project

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, Specific Plan, or proposed project), including scenic vistas, scenic resources, and the overall visual quality of the project site and surrounding areas as seen from sensitive public 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 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 site).
    - *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 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 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 within the southeastern portion of suburban Fontana. The city of Jurupa Valley is to the south, and the unincorporated community of Bloomington in San Bernardino County is 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 and warehouse distribution 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, which are 25 to 30 miles or more from the project site, include:

- State Route (SR-) 243 south of Big Bear Lake in the San Bernardino Mountains northeast of the project site.
- SR-243 in Riverside County between SR-74 and the Banning city limit, southeast of the project site.
- SR-2 in Los Angeles County from the Los Angeles–San Bernardino county line west to the city of La Canada Flintridge.

The nearest eligible, but not officially designated, state scenic highways are 15 miles or more from the project site and include:

- SR-2, SR-138, and SR-330 within the San Bernardino Mountains to the north of the project area.

These roadways do not have views of the proposed project because of distance and intervening topography, development, infrastructure, and vegetation. Therefore, these state scenic highways would not be affected by the proposed project.

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 within 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, surrounded by low-lying vegetation in the slopes of the Jurupa Hills. Two of these reservoirs are just west of the project site; the third reservoir is surrounded by the proposed open space area within the western portion of the project site, although it is not a part of the proposed Specific Plan. 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 existing 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 has been disturbed over time and is 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. Because of 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. 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.

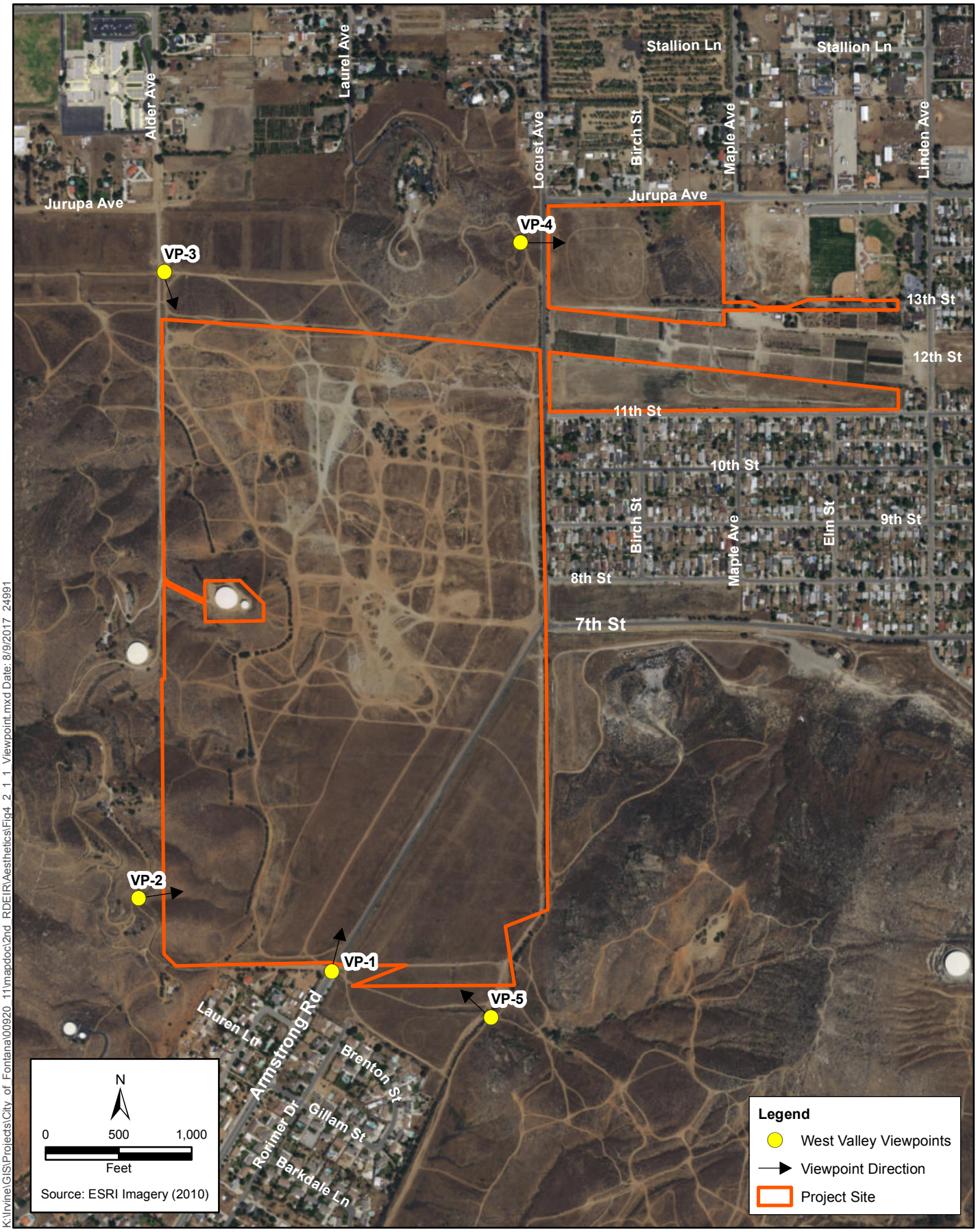


Figure 4.2.1-1
Viewpoint Locations Map
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Armstrong Road at Fontana/Jurupa Valley Line (VP-1)

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 because of 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 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, because of 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 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 transect 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 the 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 because of 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 view from VP-4 consists of 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 run 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.



VP-1. From Armstrong Road along the southern project boundary facing north.



VP-2. From the Jurupa Hills Trail along the eastern project boundary facing west.

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Figure 4.2.1-2a
Photos
West Valley Logistics Center Specific Plan 2nd RDEIR



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
Photos
West Valley Logistics Center Specific Plan 2nd RDEIR

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 toward 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 toward 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. Because of the lack of visual patterns in the foreground and middleground and the size and prominence of the terrain in the middleground, the Jurupa Hills are the most prominent element within this viewpoint. Views of open space areas on the project site are available on either side of Armstrong Road. Because of 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.

Lighting

The Specific Plan area is currently vacant, and there are no sources of nighttime lighting present.

Daytime Glare

Glare results from sharply reflected light caused by sunlight or artificial light reflecting from highly finished surfaces such as glass. The level of glare is measured using the “albedo” concept, which calculates the relative reflectivity of surfaces. For example, soil cover has an albedo of 0.17, which indicates that approximately 17 percent of solar radiation hitting a soil-covered ground would be reflected. Grass cover has an albedo of 0.20, indicating a solar reflectivity of approximately 20 percent, or slightly more glare than soil cover. In general, darker or mirrored glass would have a higher solar reflectivity—or glare—than clear glass.

High levels of glare can cause daytime interference with activities in sensitive land use areas (e.g., residential areas, parks), as well as public roadways where drivers could be temporarily blinded by glare, thus causing a safety concern. Glare can cause daytime interference with activities at sensitive land use areas.

The project site contains mainly soil cover and vegetation. Therefore, the project site’s reflectivity ranges from 17 percent in soil-covered areas to 20 percent in grass-covered areas.

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 designated or eligible state scenic highways within 15 miles of the proposed project site.

Local

City of Fontana General Plan

The City of Fontana General Plan Community Design Element (City of Fontana 2003) identifies important visual elements within the city that are valuable and worth preserving. 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 using views of the mountains and hills in Fontana when designing major community centers, parks, bikeways, and trails, as well as policies that state open spaces should contribute to visual contrast with the built environment.

In addition, the City of Fontana General Plan designates scenic corridor routes that are to receive special design treatments to maintain and enhance their scenic qualities. Designated scenic corridors that are closest to the project site are 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 has visual access to the project site as a result of intervening topography, existing residential and commercial development, infrastructure, and vegetation. Therefore, these scenic corridors within the city of Fontana would not be affected 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 (County of San Bernardino 2007a), which is 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 runs north-south about 0.75 mile east of the project site and affords views of the Jurupa Hills in the middleground; however, views onto the project site are limited from Cedar Avenue as a result of 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 General Plan

The Jurupa Valley General Plan Open Space and Conservation Element states that the city contains outstanding scenic resources, including natural landmarks, hills and mountain peaks, ridgelines, floodplains and stream channels, agricultural fields, mature trees and agricultural windbreaks, riparian woodlands, and other prominent or unusual landscape features. Scenic backdrops forming the city's visual setting include hillsides and ridges that rise above or adjacent to urban or rural areas or highways. Among the important visual and aesthetic resources cited in the Jurupa Valley General Plan are the Jurupa Mountains and hills, ridgelines, and scenic rock outcroppings. The



VP-5. From the southeastern portion of the project site facing northwest.

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Figure 4.2.1-2c
Photos
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nearest local scenic corridor identified in the Jurupa Valley General Plan is Granite Hills Drive, which is more than 2 miles south of the project site, adjacent to SR-60. Project site development would not be visible from that roadway.

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 3-3. 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 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 affected. Because of 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 CEQA 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 environmental impacts.

Specific Plan Requirements

SP-A-1: Implement High-quality Development Standards and Design Guidelines. Chapter 3 of the West Valley Logistics Center 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. The Design Guidelines set forth in the West Valley Logistics Center Specific Plan explicitly address promoting compatibility with surrounding neighborhoods and employing high-quality architecture to define the site's character. 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 West Valley Logistics Center Specific Plan (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 16 feet, which would screen views of the project area, while retaining views of the hills and mountains in higher elevation background views. Walls may berm up to allow 18 feet of exposure on the inward-facing side.

SP-A-3: Install Visual Barriers between Construction Work Areas and Residential Areas. The contractor will install fencing (such as chain link fencing with slats or fencing made of windscreen material) or other structures to obstruct undesirable views of ground-level construction activities from residences, recreation areas, and businesses that are adjacent to the construction site. The fencing will be a minimum of 6 feet high and help maintain the privacy of residents and block views from ground level.

SP-A-4: Light Spillage. Unless intended as part of a master lighting plan approved by the City of Fontana, no operation, activity, or lighting fixture shall create illumination exceeding 0.5 foot-candles on any adjacent property (0.25 foot-candles within residential properties), whether the illumination is direct or indirect light from the source. Lighting levels shall be measured with a photoelectric photometer, following standard spectral luminous efficiency curves adopted by the International Commission on Illumination.

- Exterior lighting shall be kept to the minimum required for safety; purely decorative lighting displays shall be prohibited.
- Project lighting shall be designed to control light energy and ensure that exterior lighting is directed downward and away from adjacent streets and buildings in a manner designed to minimize off-site light spillage.

SP A-5: Glare. All building exteriors within the West Valley Logistics Center Specific Plan area shall be composed of textured and other non-reflective materials, including high-performance tinted non-mirrored glass. Reflective materials on building exteriors that have a light reflectivity factor greater than 30 percent shall be limited to less than 25 percent of any wall area.

SP-B-1: Open Space – Natural Area. The West Valley Logistics Center Specific Plan sets aside 55.23 acres of natural open space in the western portion of the West Valley Logistics Center Specific Plan area to protect existing habitat areas. No buildings are permitted within this area, and only uses consistent with the habitat conservation purpose of the area will be permitted.

SP-B-3: Avian Habitat Feature. An avian habitat feature will be created using ground-level native plantings and rooftop plantings of Riversidean sage scrub (RSS) habitat plant species to create a vegetative substrate that could facilitate avian species' east–west dispersal between the proposed 55.23-acre on-site RSS conservation area and nearby undeveloped RSS habitats.

Regulatory Requirements

RR-A-1: Maintain Construction Sites. The Fontana Municipal Code (Article I, Chapter 5, Section 5-12) requires that all property be 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-A-3: Limits on Length of Building Permits. Building permits for new commercial and industrial development are valid for a period of 18 to 24 months, which will ensure that construction activities will be temporary and not continue beyond a 24-month period for each increment of development.

RR-B-2: 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 subject to the provisions of the ordinance prior to issuance of a grading permit.

RR-N-1: Comply with the Construction Noise Municipal Code Exemption.[1] The City of Fontana 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 have been identified in the vicinity of the Specific Plan area.[2] Furthermore, based on site visits and a reconnaissance of the project site, no locations with the likelihood for high viewer sensitivity

[1] Implementation of this regulatory requirement is included as an aesthetics-related measure because it will reduce the need for nighttime lighting during site construction.

[2] Although they are not formally designated as scenic vistas, views of the Jurupa Hills and Rattlesnake Mountain are an important part of community character in the area surrounding the Specific Plan area. Therefore, the proposed project's effects on views of the Jurupa Hills and Rattlesnake Mountain are addressed as part of Impact AES-3.

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.

Specific Plan Requirements and Regulatory Requirements

Because there are no identified scenic vistas that could be affected by construction or operation of the proposed project, impacts would be less than significant. Therefore, no Specific Plan requirements, regulatory requirements, or conditions of approval are necessary to address effects on scenic vistas. Although no scenic vistas would be adversely affected, **Specific Plan Requirements SP-A-1, SP-A-2**, **SP-A-3**, **SP-A-4**, **SP-A-5**, and **SP-B-1** as well as **Regulatory Requirements RR-A-1**, **RR-A-2**, **RR-A-3**, **RR-B-2**, and **RR-N-1** would be implemented.

Mitigation Measures

No mitigation is required.

Residual Impacts

No residual impacts would occur.

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 designated or eligible scenic highways per the California Scenic Highway Program within 15 miles of the proposed project site, and there are no designated scenic routes within the city of Fontana, San Bernardino County, or Riverside County that would be adversely affected 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 it. 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 nonetheless be required to comply with **Regulatory Requirement RR-B-2**, which would further reduce the project's less than significant impacts related to scenic resources.

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-2:** Obtain Permits for Removal of Heritage Trees.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

With implementation of **Regulatory Requirement RR-B-2**, 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, Armstrong Road, and a private street (Alder Avenue). Site grading activities would be undertaken at a single time for the Specific Plan's development area, which would reduce the length of time that aesthetic changes related to grading activities would occur; however, as construction commences for individual building sites, 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 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 of Fontana 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. However, the WVLCSP includes the installation of visual barriers between construction work areas and residential areas (see **Specific Plan Requirement SP-A-3**, 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 nighttime 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 **Specific Plan Requirement SP-A-3** and **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 Specific Plan includes guidelines related to visual screening along Armstrong Road, Locust Avenue, and 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 project 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 Specific Plan 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 Specific Plan requires the perimeter walls that would be visible from adjacent areas to be of high quality and compatible in terms of design and material with adjacent project buildings. The Specific Plan 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 16 feet, which would screen views of the project area, while providing adequate setbacks for screening walls to retain views of the hills and mountains in higher elevation background views.

The following are other visual screening measures required by the Specific Plan Design Guidelines and will therefore be implemented by the project:

- 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 adjacent residential and park uses.
- Utilitarian uses such as trash enclosures, compactors, truck loading areas, and outdoor storage would be located away from view from streets and adjacent residential and park uses 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 street or otherwise visible from a residential area would be screened by a combination of walls, dense landscaping including trees and shrubs, berming, and portions of the building.
- Parking areas adjacent to a roadway 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 landscaping, 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, with the exception of temporary construction to provide waterline connections to West Valley Water District's existing water system. The analysis below describes the anticipated visual changes that would occur on the project site from each of the five viewpoints surrounding the Specific Plan area.

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 visual screening between the project site and along Armstrong Road. Partial views of Buildings 3 and 4 and their 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 elevation 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 **Specific Plan Requirement SP-B-3** 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. Because of the existence of fencing, walls, and residential landscaping in backyards adjacent to the project site, and the addition of project landscaping features and required Specific Plan 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 they 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 Specific Plan 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 because of 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; these areas 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 because of 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 because of 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 Specific Plan 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. Because of 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 Specific Plan 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 Specific Plan 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. Because of the size and height (up to 75 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 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.

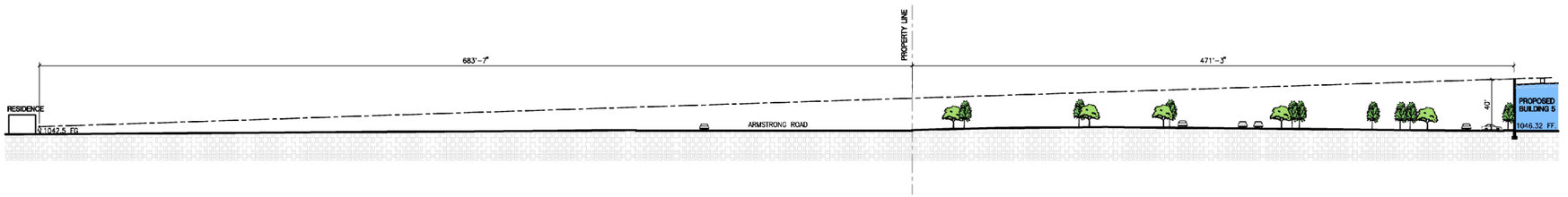
Line of Sight Analysis

In addition to the preceding analysis, a line of sight analysis was conducted from six 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.

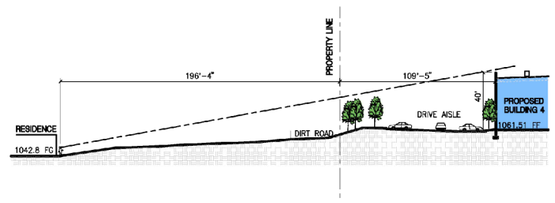
Line of Sight Sections 1A and 1B identify views of the project site from residential areas to the south. Line of Sight Section 1A identifies views of proposed Building 4 from the nearest residence, which is approximately 305 feet to the south of the building. As shown in Figure 4.2.1-3, landscaping within 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.

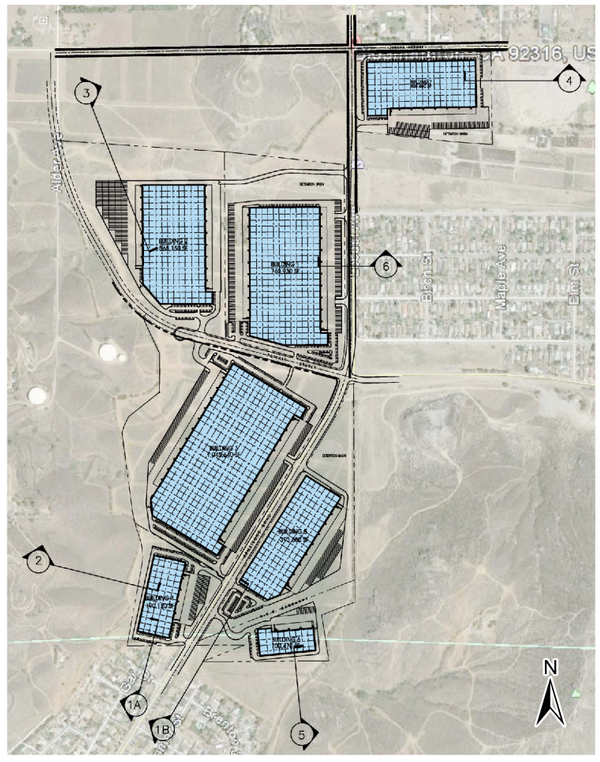


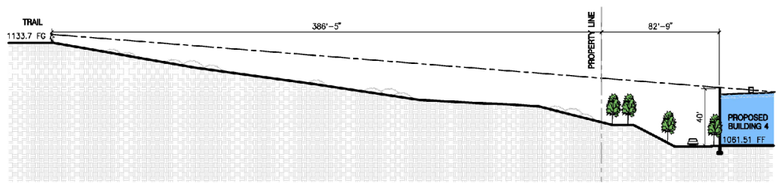
LINE OF SIGHT SECTION 1B
scale: 1" = 40'-0"



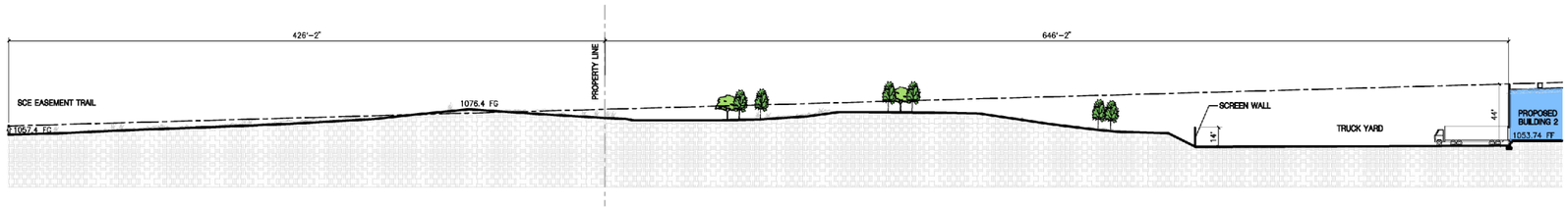
LINE OF SIGHT SECTION 1A
scale: 1" = 40'-0"

KEY MAP

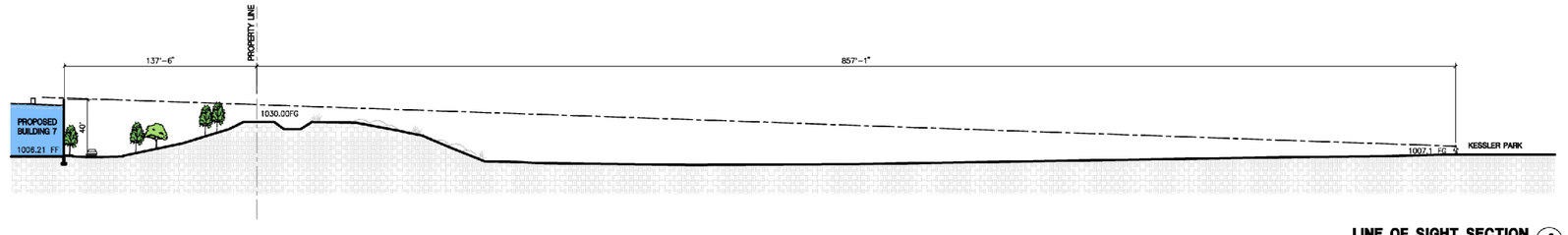




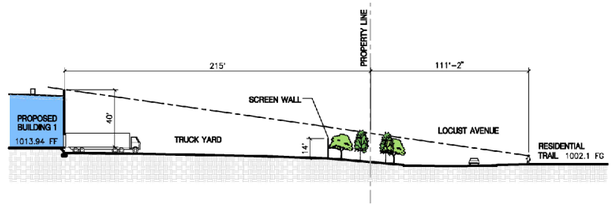
LINE OF SIGHT SECTION 2
scale: 1" = 40'-0"



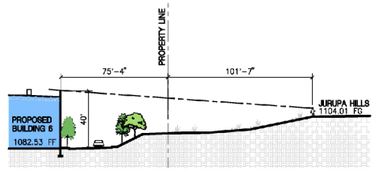
LINE OF SIGHT SECTION 3
scale: 1" = 40'-0"



LINE OF SIGHT SECTION 4
scale: 1" = 40'-0"



LINE OF SIGHT SECTION 6
scale: 1" = 40'-0"



LINE OF SIGHT SECTION 5
scale: 1" = 40'-0"

Source: HPA Architechture (2014)

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Figure 4.2.1-3
Line of Sight Analysis
West Valley Logistics Center Specific Plan 2nd RDEIR

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 project site's 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.

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 project site's 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 will 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 Development Standards and Design Guidelines.
- **SP-A-2:** Install Visual Barriers between Project Areas and Residential Areas.
- **SP-A-3:** Install Visual Barriers between Construction Work Areas and Residential Areas.
- **SP-B-3**: Avian Habitat Feature.
- **RR-A-1:** Maintain Construction Sites.
- **RR-A-2:** Maintain Signs.
- **RR-N-1:** Comply with the Construction Noise Municipal Code

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Aesthetic impacts would be less than significant with the incorporation of **Specific Plan Requirements SP-A-1, SP-A-2, SP-A-3**, and **SP-B-3**, and **Regulatory Requirements RR-A-1, RR-A-2**, and **RR-N-1**. 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 warehouse distribution 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 exist. Street improvements would include street lighting along interior streets, and buildings would have interior lighting that would contribute to nighttime lighting.

Project site development would increase daytime glare from any new building materials and exterior glass, with a high solar reflectivity index, as discussed below. Exterior building surfaces, including glass, would increase reflectivity of sunlight during daytime hours. In general, warehouse buildings do not include large areas of glass, and typically have non-reflective finishes, reducing the amount of daytime glare. New materials, including asphalt, trees, and concrete paving, would replace the existing soil and grass cover and would increase site reflectivity, although not to such a degree as to cause glare on area roadways and nearby residential neighborhoods. **Specific Plan Requirement SP-A-5** will limit the amount of glare emanating from buildings within the Specific Plan area by requiring use of textured and other non-reflective materials.

Specific Plan architectural guidelines specifically call for use of non-reflective glass. As a result of the project, truck and automobile parking for Buildings 1–7 would also introduce elements of glare to the area that are not currently present. Glare from project site parking areas on adjacent roadways and residential neighborhoods would be reduced by screen walls and landscaping. The result would be a less-than-significant impact in relation to glare.

Proposed Specific Plan area development would introduce nighttime lighting over a large portion of the Specific Plan area, which is currently dark at night. Nighttime lighting would be provided in the form of typical street lighting along Locust Avenue and Armstrong Road, Alder Avenue, and the southerly frontage of Jurupa Avenue between Locust Avenue and Kessler Park. Nighttime lighting of Parcels 1–7 would also be provided for security purposes.

To the extent that nighttime lighting might not be fully shielded and directed downward, views of stars in the nighttime sky could be affected. Light spillage from project site development could affect nearby residential neighborhoods.

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. In addition, **Specific Plan Requirement SP-A-4** establishes performance standards for lighting within the Specific Plan area to prevent spillover of lighting into nearby residential neighborhoods.

As such, project-related impacts associated with new sources of substantial light or glare are anticipated to be less than significant. In addition, compliance with City of Fontana 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 and Regulatory Requirement

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

- **SP-A-1:** Implement High-quality Development Standards and Design Guidelines.
- **SP-A-4:** Light Spillage.
- **SP-A-5:** Glare.
- **RR-N-1:** Compliance with the Construction Noise Municipal Code (no nighttime construction).

Mitigation Measures

Mitigation measures are not required.

Residual Impacts

Aesthetic impacts would be less than significant with the incorporation of **Specific Plan Requirements SP-A-1, SP-A-4,** and **SP-A-5** and **Regulatory Requirement RR-N-1**. 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: *West Valley Logistics Center, Air Quality Impact Analysis, City of Fontana* and in Appendix G: *West Valley Logistics Center, Health Risk Assessment, City of Fontana.*

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. Air basin boundaries are also influenced by jurisdictional boundaries (California Air Resources Board 2012a). California has 15 distinct air basins. The West Valley Logistics Center 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 (SCAQMD).
- **Attainment.** The California Air Resources Board (ARB) collects ambient air quality data from a network of air monitoring stations throughout the state. The purpose of the monitoring stations is to measure ambient concentrations of pollutants and determine whether the ambient air quality meets the National Ambient Air Quality Standards (NAAQS) set by the U.S. Environmental Protection Agency (EPA) or California Ambient Air Quality Standards (CAAQS) set by the California Environmental Protection Agency, which have been established to protect public health and the environment. An "attainment" status for a pollutant within a region means that the region meets either the NAAQS and/or the CAAQS over a designated period of time.
- **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 (O_3), carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and particulate matter (PM), which consists of PM that is 10 microns in diameter or less (PM_{10}) and PM that is 2.5 microns in diameter or less ($PM_{2.5}$).
- **Nonattainment.** The assignment of a "nonattainment" status for a pollutant within a region means that the pollutant concentrations monitored in that region consistently violated the NAAQS and/or CAAQS in question.
- **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 existing conditions related to air quality in the study area. Information below is drawn from the relevant oversight agencies, which are SCAQMD, ARB, and EPA.

South Coast Air Basin

The project site is in the SCAB, a 6,745-square-mile subregion of the SCAQMD, which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County. The larger SCAQMD boundary includes 10,743 square miles. The SCAB is bound by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east.

Regional Climate

The regional climate has a substantial influence on air quality in the SCAB. In addition, temperature, wind, humidity, precipitation, and amount of sunshine influence air quality.

Annual average temperatures throughout the SCAB vary from the low to middle 60s degrees Fahrenheit (°F). Due to a decreased marine influence, the eastern portion of the SCAB shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the SCAB, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the SCAB have recorded maximum temperatures above 100°F.

Although the climate of the SCAB can be characterized as semi-arid, the air near the land surface is moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of SCAB climate. Humidity restricts visibility in the SCAB, and the conversion of sulfur dioxide to sulfates is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SCAB is 71 percent along the coast and 59 percent inland. Because the ocean effect is dominant, periods of heavy early-morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast.

More than 90 percent of the SCAB's rainfall occurs from November through April. The annual average rainfall varies from approximately 9 inches in Riverside to 14 inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the SCAB with frequency being higher near the coast.

Due to its generally clear weather, about three-quarters of available sunshine is received in the SCAB. The remaining one-quarter is absorbed by clouds. The ultraviolet portion of this abundant radiation is a key factor in photochemical reactions. On the shortest day of the year, there are approximately 10 hours of possible sunshine, and on the longest day of the year there are approximately 14.5 hours of possible sunshine.

The importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also generally brings five to ten periods of strong, dry offshore winds, locally termed "Santa Anas," each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, wind flow is typified by a daytime onshore sea breeze and a nighttime offshore drainage wind.

In the SCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as a "lid" to pollutants over the entire SCAB.

A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter, when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as nitrogen oxides (NO_X) and CO from vehicles, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline.

Criteria and Other Air Pollutants of Concern

The federal and state governments have established NAAQS and CAAQS, respectively, for six criteria pollutants: O_3, CO, Pb, NO_2, SO_2, and PM_{10} and $PM_{2.5}$. Additionally, the CAAQS, which are generally more stringent than the NAAQS, incorporates additional standards for sulfates, hydrogen sulfide, visibility-reducing particles, and vinyl chloride.

Ozone and NO_2 are considered regional pollutants because they (or their precursors) affect air quality on a regional scale; NO_2 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, SO_2, 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 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 (O_3)

Ozone (smog) is a highly reactive and unstable gas that 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 O_3 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. Short-term exposure (lasting for a few hours) to ozone at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Elevated ozone levels are associated with increased school absences. In recent years, a correlation between elevated ambient ozone levels and increases in daily hospital admission rates, as well as mortality, has also been reported. An increased risk for asthma has been found in children who participate in multiple sports and live in communities with high ozone levels.

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. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone, motor vehicles operating at slow speeds are the primary source of CO in the SCAB. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections. 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.

Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of decreased oxygen supply to the heart. Inhaled CO has no direct toxic effect on the lungs, but exerts its effect on tissues by interfering with oxygen transport and competing with oxygen to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Therefore, conditions with an increased demand for oxygen supply can

be adversely affected by exposure to CO. Individuals most at risk include fetuses, patients with diseases involving heart and blood vessels, and patients with chronic hypoxemia (oxygen deficiency) as seen at high altitudes.

Reduction in birth weight and impaired neurobehavioral development have been observed in animals chronically exposed to CO, resulting in COHb levels similar to those observed in smokers. Recent studies have found increased risks for adverse birth outcomes with exposure to elevated CO levels; these include pre-term births and heart abnormalities.

Nitrogen Oxides (NO_X)

NO_2, a reddish brown gas, and NO, a colorless, odorless gas, are formed from fuel combustion under high temperature or pressure. These compounds are collectively 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). NO_2 decreases lung function and may reduce resistance to infection. The entire SCAB is designated as nonattainment for the state NO_2 standard and as an "Attainment/Maintenance" area under the federal NO_2 standard.

Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposure to NO_2 at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO_2 in healthy subjects. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups.

Sulfur Dioxide (SO_2)

SO_2 is a colorless irritating gas formed primarily from incomplete combustion of fuels containing sulfur. Industrial facilities also contribute to gaseous SO_2 levels. SO_2 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 SO_2 standards.

A few minutes of exposure to low levels of SO_2 can result in airway constriction in some asthmatics, all of whom are sensitive to its effects. In asthmatics, increase in resistance to air flow, as well as reduction in breathing capacity leading to severe breathing difficulties, are observed after acute exposure to SO_2. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO_2.

Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO_2 levels. In these studies, efforts to separate the effects of SO_2 from those of fine particles have not been successful. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.

Lead (Pb)

Lead is a heavy metal that is highly persistent in the environment. In the past, the primary source of lead in the air was emissions from vehicles burning leaded gasoline. As a result of the removal of lead from gasoline, there have been no violations at any of SCAQMD's regular air monitoring stations since 1982. Currently, emissions of lead are largely limited to stationary sources such as lead

smelters. 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. Fetuses, infants, and children are more sensitive than others to the adverse effects of lead exposure. Exposure to low levels of lead can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased lead levels are associated with increased blood pressure.

Lead poisoning can cause anemia, lethargy, seizures, and death, although it appears that there are no direct effects of lead on the respiratory system. Lead can be stored in the bone from early age environmental exposure, and elevated blood lead levels can occur due to breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland) and osteoporosis (breakdown of bony tissue). Fetuses and breast-fed babies can be exposed to higher levels of lead because of previous environmental lead exposure of their mothers.

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. The 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.

Volatile Organic Compounds (VOC)

Volatile organic compounds (VOCs) are hydrocarbon compounds that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form ozone to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include: carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. SCAQMD uses the terms VOC and ROG (see below) interchangeably.

Reactive Organic Gases (ROG)

Reactive organic gases (ROGs), also known as VOCs, are formed from the combustion of fuels and the evaporation of organic solvents. ROGs are not defined as criteria pollutants but are a prime component of the photochemical smog reaction. Consequently, ROG 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; 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. SCAQMD uses the terms ROG and VOC (see previous) interchangeably.

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 cardio-pulmonary 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 (H_2S)

Hydrogen sulfide (H_2S) 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 WVLCSP site 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 Hospital	6401 33rd St.	7,800 ft. from project's southern boundary
Sunnyslope Elementary School	7050 38th St.	9,100 ft. from project's southern boundary

Note: Distances are measured from the edge of the project site boundary to the edge of the sensitive land uses.

Local Air Quality

Relative to the project site, the nearest long-term air quality monitoring data for CO, O_3, NO_2, PM_{10}, and $PM_{2.5}$ were obtained from the Fontana-Arrow Highway monitoring station (SRA 34)[1], located approximately 6.15 miles northwest of the project site in Fontana.

The most recent 3 years of data available are shown in Table 4.2.2-2, and identifies the number of days ambient air quality standards were exceeded for the study area, which is considered to be representative of the local air quality at the project site. Additionally, data for SO_2 have been omitted as the air basin has been in attainment for SO_2 since 2010 (attainment status is verified every three years).

[1] http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-monitoring-network-plan/aaqmnp-fontana.pdf?sfvrsn=16

Table 4.2.2-2. Project Area Air Quality Monitoring Summary 2014-2016

Pollutant	Standard	Year		
		2014	2015	2016
Ozone (O_3)				
Maximum 1-Hour Concentration (ppm)	--	0.127	0.132	0.139
Maximum 8-Hour Concentration (ppm)	--	0.105	0.117	0.105
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	31	52	34
Number of Days Exceeding State 8-Hour Standard	> 0.07 ppm	52	79	52
Number of Days Exceeding Federal 1-Hour Standard	> 0.12 ppm	1	6	3
Number of Days Exceeding Federal 8-Hour Standard	> 0.070 ppm	52	78	49
Number of Days Exceeding Health Advisory	≥ 0.15 ppm	0	0	0
Carbon Monoxide (CO)				
Maximum 1-Hour Concentration (ppm)	--	3.0	2.8	1.0
Maximum 8-Hour Concentration (ppm)	--	1.2	1.2	1.7
Number of Days Exceeding State 1-Hour Standard	> 20 ppm	0	0	0
Number of Days Exceeding Federal / State 8-Hour Standard	> 9.0 ppm	0	0	0
Number of Days Exceeding Federal 1-Hour Standard	> 35 ppm	0	0	0
Nitrogen Dioxide (NO_2)				
Maximum 1-Hour Concentration (ppm)	--	0.074	0.089	0.072
Annual Arithmetic Mean Concentration (ppm)	--	0.020	0.018	0.0319
Number of Days Exceeding State 1-Hour Standard	> 0.18 ppm	0	0	0
Particulate Matter ≤ 10 Microns (PM_{10})				
Maximum 24-Hour Concentration (µg/m^3)	--	68	96	94
Annual Arithmetic Mean (µg/m^3)	--	39.7	37.8	12.04
Number of Samples	--	58	55	61
Number of Samples Exceeding State Standard	> 50 µg/m^3	13	13	15
Number of Samples Exceeding Federal Standard	> 150 µg/m^3	0	0	0
Particulate Matter ≤ 2.5 Microns ($PM_{2.5}$)				
Maximum 24-Hour Concentration (µg/m^3)	--	78.90	50.50	30.45
Annual Arithmetic Mean (µg/m^3)	--	13.18	11.05	12.04
Number of Samples Exceeding Federal 24-Hour Standard	> 35 µg/m^3	1	2	0

-- = data not available from SCAQMD or ARB

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 4.2.2-3 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 4.2.2-3. 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	0.070 ppm	0.070 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
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

Criteria Pollutant	Average Time	California Standards	National Standards [a]	
			Primary	Secondary
Lead	30-day average	1.5 μg/m³	None	None
	Calendar quarter	None	1.5 μg/m³	1.5 μg/m³
	3-month average	None	0.15 μg/m³	0.15 μg/m³
Sulfates	24-hour	25 μg/m³	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 SO_2 rule was signed June 2, 2010. The annual and 24-hour SO_2 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 percent DPM reduction by 2010 and 85 percent by 2020 (California Air Resources Board 1998).

California Clean Air Act

The California Clean Air Act, 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 4.2.2-3 summarizes the CAAQS, and Table 4.2.2-4 provides the SCAB attainment status with respect to NAAQS and CAAQS.

Table 4.2.2-4. Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
O_3 1-hour	Nonattainment	No Standard
O_3 8-hour	Nonattainment	Nonattainment (Extreme)
PM_{10}	Nonattainment	Attainment (Maintenance)
$PM_{2.5}$	Nonattainment	Nonattainment (Serious)
CO	Attainment	Attainment (Maintenance)
NO_2	Attainment	Attainment (Maintenance)
SO_2	Attainment	Attainment
Lead	Attainment*	Nonattainment (partial)*
All others	Attainment/Unclassified	N/A

Source: State/federal designations were taken from SCAQMD's 2016 AQMP (see Chapter 2).
N/A = not applicable
* All of the South Coast Air Basin is in attainment except for Los Angeles County.

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 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 each state to adopt an implementation plan outlining pollution control measures to attain 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 SCAQMD adopted the Final 2016 AQMP on March 3, 2017. The primary objective of the AQMP is to attain air quality in the south coast region that is healthy and in compliance with the ozone and $PM_{2.5}$ air quality standards. Recognizing that mobile sources are the predominant sources of emissions contributing to air quality issues in the south coast region, the AQMP stresses the need for coordination with other agencies, namely the ARB and EPA, as these agencies are chiefly responsible for mobile sources emissions. Thus, the AQMP accepts that focusing on emissions from mobile sources represents the best strategy for reducing emissions and the corresponding health impacts on residents in the region. The AQMP continues upon the effort of previous iterations of the plan to evaluate current integrated strategies and control measures to meet the NAAQS, as well as explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels.

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 three minutes in any 1 hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States 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.

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 2016.3.1—was used to estimate project-related mobile and stationary sources emissions in this analysis. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (NO_X, VOC, PM_{10}, $PM_{2.5}$, SO_X, and CO) and greenhouse gas (GHG) emissions from direct and indirect sources, as well as to quantify applicable air quality and GHG reductions achieved from mitigation measures.

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. An analysis of localized significance thresholds using dispersion modeling was conducted using project-specific information pertaining to construction and operational activities at the project site. An analysis of potential CO hotspots resulting from project implementation was conducted on a screening-level basis. 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 preparation and 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 onsite would result in localized exhaust emissions. The mass construction emissions resulting from the proposed project were estimated using the CalEEMod™ model (Version 2016.3.1).

The project could be built in increments or at a single time, depending on market conditions. This analysis assumes the more conservative scenario of the entire site being built at a single time. Site preparation (mass grading and/or fine grading) would be completed before other construction activities would occur. Table 4.2.2-5 lists the construction schedule based on project plans that was used in the CalEEMod™ model to estimate construction emissions. This construction schedule represents a "worst-case" analysis scenario should construction occur any time after the respective dates, because emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.[2] A detailed summary of construction, shown in Table 4.2.2-5, was estimated based on consultation with the applicant. The site-specific construction fleet may vary due to specific project needs at the time of construction. The duration of construction activity and associated equipment both represent a reasonable approximation of the expected construction fleet as required per California Environmental Quality Act (CEQA) Guidelines.

Dust is typically a major concern during rough grading activities. Because such emissions are not amenable to collection and discharge through a controlled source, they are called "fugitive emissions." Fugitive dust emissions rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). The CalEEMod™ model was utilized to calculate fugitive dust emissions resulting from this phase of activity. Based on consultation with the client, the project site would balance (would not require import/export of soil). The project site is currently vacant; therefore, no demolition is required.

Construction emissions for construction worker vehicles traveling to and from the project site, as well as vendor trips (construction materials delivered to the project site), were estimated based on information from the applicant and the CalEEMod™ model.

Table 4.2.2-5. Construction Schedule

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

Source: Appendix F, Project Plans and CalEEMod™.

Table 4.2.2-6 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.

[2] As shown in the CalEEMod™ User's Guide Version 2013.2, Table 3.4 "OFFROAD Equipment Emission Factors" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer, less-polluting equipment and new regulatory requirements.

Table 4.2.2-6. Construction Equipment Assumptions

Phase Name	Equipment Type	Number of Pieces of Equipment	Hours per day
Site Preparation	Rubber Tired Dozers	3	8
	Tractors/Loaders/Backhoes	4	8
Grading	Excavators	2	8
	Graders	4	8
	Water Trucks	2	8
	Rubber Tired Dozers	4	8
	Scrapers	4	8
	Tractors/Loaders/Backhoes	2	8
Building Construction	Cranes	2	8
	Forklifts	3	8
	Tractors/Loaders/Backhoes	3	8
	Welders	2	8
	Generator Sets	2	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
Architectural Coating	Air Compressors	3	8

Operations

Operational activities associated with the proposed project would result in emissions of VOC, NOx, CO, SOx, PM_{10}, and $PM_{2.5}$. The CalEEMod™ model was used to estimate the proposed project's operational emissions. The primary sources of emissions accounted for in the CalEEMod™ model include the following:

- **Area Source Emissions**
  - Architectural Coatings – Over a period of time the buildings that are part of the proposed project would be subject to emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings as part of proposed project maintenance.
  - Consumer Products – Consumer products include, but are not limited to detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds which when released in the atmosphere can react to form ozone and other photochemically reactive pollutants.
  - Landscape Maintenance Equipment – Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the proposed project.

- **Energy Source Emissions**
    - Combustion Emissions Associated with Natural Gas and Electricity – Electricity and natural gas are used by almost every project. Criteria pollutant emissions are emitted through the generation of electricity and consumption of natural gas. However, because electrical generating facilities for the proposed project area are located either outside the region (state) or offset through the use of pollution credits (RECLAIM)[3] for generation within the SCAB, criteria pollutant emissions from offsite generation of electricity is generally excluded from the evaluation of significance and only natural gas use is considered.
- **Mobile Source Emissions –**Mobile sources include workers commuting and trucks idling and hauling material to and from the proposed warehouse buildings. Based on trip generation factors, as described in the Traffic Impact Analysis in Appendix L, the proposed project is expected to generate a net total of 6,382 trip-ends per day (actual vehicles – automobiles and trucks), including 2,432 truck trip-ends per day, from the proposed buildings within the project site. Based on the results of the San Bernardino Transportation Analysis Model (SBTAM), which is the regional traffic model applicable for the proposed project, an average trip length of 38 miles for heavy trucks and 17.4 miles for all other vehicles (passenger cars, small trucks, motorcycles, etc.) was used to calculate the proposed project's mobile emissions.[4]

Health Risk Assessment

A Health Risk Assessment (HRA) was prepared to evaluate proposed project-related impacts to sensitive receptors (residential, schools) and adjacent workers as a result of exposure to DPM generated from heavy-duty diesel trucks accessing the site (Appendix G). Vehicle DPM emissions were calculated using emission factors for PM_{10} generated with the 2014 version of the Emission FACtor model (EMFAC) developed by the ARB. PM_{10} exhaust emissions were used as a surrogate

[3] It should be noted that the SCAQMD in its most recent 2016 AQMP has identified a goal for a long-term transition from the market-based RECLAIM program to a more traditional command-and-control compliance program. The 2016 AQMP continues to call for substantial additional emission reductions from the largest industrial facilities in RECLAIM, including refineries – a 35 percent further reduction, in addition to the 45 percent emission reduction previously approved by the SCAQMD's Governing Board in 2015.

[4] The truck trip length used in the analysis represents a reasonable worst case, because (1) it assumes that all truck trips to and from the project site are new and that no truck trips would redistributed from other locations to the project site, and (2) it is based on reasonable information (the regional transportation traffic model – specifically the truck component of the model).

As stated in the WVLC Air Quality Impact Analysis, vehicle miles traveled (VMT) for the proposed project was calculated by the total number of vehicle trips to and from the project site multiplied by the average trip length. This method of estimating VMT for use in calculating vehicle emissions likely results in the overestimation and double-counting of emissions because, for a distribution warehouse center such as the proposed project, the land use is likely to attract (divert) some existing vehicle trips that are already on the regional roadway system, as opposed to only generating new trips to the region. In this regard, the proposed project would, to a large extent, redistribute existing mobile-source GHG emissions rather than exclusively generate new and additional mobile source emissions. As such, the estimation of the project's vehicular-source emissions is likely overstated in that no credit for, or reduction in, emissions is assumed based on diversion of existing trips.

Furthermore, as noted in the Air Quality Impact Analysis, SCAQMD generally recommends the of a 40-mile one-way trip length for similar land use projects, which is within an order of magnitude of the trip length calculated in the regional traffic model for trucks and utilized for the WVLC project. Similarly, the Southern California Association of Governments (SCAG) maintains a regional transportation model. In its most recent (2008) transportation validation for the 2003 Regional Model, SCAG indicates that the average internal truck trip length for the SCAG region is 5.92 miles for Light Duty Trucks, 13.06 miles for Medium Duty Trucks, and 24.11 for Heavy Duty Trucks.

representative of DPM consistent with regulatory guidance. For the proposed project, annual average PM_{10} emission factors were generated by running EMFAC 2014 for vehicles within the County of San Bernardino at speeds that would be traveled within and in the vicinity of the proposed project. These vehicle travel speeds include:

- Idling – To account for on-site loading/unloading operations within the project site and at the site's truck gate;
- 5 miles per hour – To account for on-site vehicle movement including driving and maneuvering; and
- 25 miles per hour – To account for off-site vehicle movement including driving and maneuvering.

The average PM_{10} emission factors for each type of vehicle were calculated based on the annual average emission factors from different model years for various exposure periods associated with assumptions for evaluating exposure to different receptor populations (e.g., sensitive, offsite worker and resident, respectively):

- 70-year exposure: 2018 through 2087 (Residential Exposure Scenario)
- 40-year exposure: 2018 through 2057 (Worker Exposure Scenario)
- 9-yr exposure: 2018 through 2026 (School Child Exposure Scenario)

The vehicle emission factors generated for use in the HRA analysis accounted for the requirement pursuant to SP-AQ-2 that trucks used for the proposed project would be required to meet or exceed a 2010 model year engine standard. Using the applicable PM_{10} emission factors generated from EMFAC 2014 and the appropriate travel distances and number of daily vehicle trips estimated for the proposed project, both off-site and on-site running exhaust emissions along with on-site idling exhaust emissions were calculated for use in the dispersion modeling of the proposed project's DPM emissions.

The HRA analysis modeled each roadway as a line source (made up of multiple adjacent volume sources). The modeled truck travel routes included in the HRA analysis were based on the truck trip distributions (inbound and outbound) available from the proposed project's Traffic Impact Analysis (TIA). Per the TIA, the proposed project is expected to generate a net total of approximately 6,383 trip-ends per day (actual vehicles) with 438 AM peak hour trips and 476 PM peak hour trips. The net Project trip generation includes 2,432 truck trip-ends per day from the proposed buildings within the project site. The truck fleet mix that was utilized for the purposes of estimating the truck trip generation for the project site consisted of: 22.0% of the total trucks as 2-axle trucks, 17.7% of the total trucks as 3-axle trucks, and 60.3% of the total trucks as 4+-axle trucks.

Due to the project location, the truck routes were modeled several miles off-site to the Interstate 10 (I-10) Freeway to the north and State Route 60 (SR-60) Freeway to the south. On-site truck idling was estimated to occur as trucks enter and travel through the facility. Although the proposed project is required to comply with ARB's idling limit of 5 minutes, idling emissions were estimated for a 15-minute period as recommended by the SCAQMD. This accounts for on-site idling which occurs while the trucks are waiting to pull up to the truck bays, idling at the bays, and idling at check-in and check-out.

The mobile source HRA was prepared in accordance with the document, Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis. SCAQMD's required model parameters were used in the modeling, with meteorological data obtained from SCAQMD's Fontana monitoring station (SRA 34) located approximately 6 miles northwest of the project site. Universal Transverse Mercator (UTM) coordinates for North American Datum (NAD) 27 were used to locate the project boundaries, each volume source location, and receptor locations in the project site vicinity. Receptor locations were molded and placed at discrete residential and non-residential locations for the applicable residential and non-residential scenarios. Additionally, based on recommendations from SCAQMD, a receptor grid with 100 meter spacing was placed at residential and worker locations in order to ensure that the maximum impacts would be properly analyzed. Receptors were placed at applicable structure locations for residential and worker property and not the necessarily the boundaries of these uses. Discrete variants for daily breathing rates, exposure frequency, and exposure duration were obtained from relevant distribution profiles presented in the Office of Environmental Health Hazard Assessment's (OEHHA) Air Toxic Hot Spots Program Risk Assessment Guidelines, Part IV: Technical Support Document for Exposure Assessment and Stochastic Analysis guidance document along with guidance from SCAQMD. Table 4.2.2-7 summarizes the exposure parameters used in the HRA.

Cancer risk estimated in the HRA analysis is expressed in terms of expected incremental incidence per million population. SCAQMD has established a health-protective significance threshold of an incidence rate of 10 persons per million as the maximum acceptable incremental cancer risk due to diesel particulate matter exposure. A risk level of 10 in one million implies a likelihood that up to 10 persons, out of one million equally exposed people, would contract cancer if exposed continuously (24 hours per day) to the levels of toxic air contaminants over a specified period of time. This risk would be an excess cancer that is in addition to any cancer risk borne by a person not exposed to these air toxics.

Table 4.2.2-7. Exposure Assumptions for Individual Cancer Risk

	Units	Residential	Worker	School Child
Exposure Frequency	days/year	350	245	180
Exposure Duration	years	70	40	9
Daily Exposure Time	Hours/day	24	12	10
Inhalation Rate	L/kg-day	302	149	581

Notes:

To represent the unique characteristics of the school-based population, the assessment employed the U.S. Environmental Protection Agency's guidance to develop viable dose estimates based on reasonable maximum exposures (RME). RME's are defined as the "highest exposure that is reasonably expected to occur" for a given receptor population. As a result, lifetime risk values for the student population were adjusted to account for an exposure duration of 180 days per year for nine years. The 9-year exposure duration is also consistent with OEHHA Recommendations and consistent with the exposure duration utilized in school-based risk assessments for various schools within the Los Angeles Unified School District that have been accepted by the SCAQMD.

The residential breathing rate of 302 L/kg-day represents the 80th percentile breathing rate per ARB and consistent with SCAQMD Risk Assessment Procedures for Rules 1401 and 212, the worker breathing rate of 149 L/kg-day is also consistent with SCAQMD Risk Assessment Procedures for Rules 1401 and 212, the school child breathing rate of 581 L/kg-day represents the high end 95th percentile breathing rate.

An evaluation of the potential non-carcinogenic effects of chronic exposures was also conducted. Adverse health effects are evaluated by comparing a compound's annual concentration with its toxicity factor or Reference Exposure Level (REL). The REL for diesel particulates was obtained from OEHHA for this analysis. The chronic reference exposure level (REL) for DPM was established by OEHHA as 5 $\mu g/m^3$ (OEHHA Toxicity Criteria Database, http://www.oehha.org/risk/chemicaldb/index.asp).

Cumulative Health Risks

SCAQMD has conducted an in-depth analysis of the toxic air contaminants and their resulting health risks for Southern California, the "Multiple Air Toxics Exposure Study in the South Coast Air Basin, MATES IV." Because MATES IV is the most comprehensive dataset documenting the ambient air toxic levels and health risks associated with South Coast Air Basin emissions, it represents the baseline health risk for a cumulative analysis. Although none of the ten monitoring sites used in MATES IV within the local area of the project site, MATES-IV has extrapolated the excess cancer risk levels throughout the basin by modeling specific grids. MATES IV modeling predicted an excess cancer risk of 730.04 in one million for the project area. DPM is included in this cancer risk along with all other TAC sources. DPM accounts for 68% of the total risk shown in MATES IV.

Proximity to sources of toxics is critical to determining the impact. In traffic-related studies, the additional non-cancer health risk attributable to proximity was seen within 1,000 feet and was strongest within 300 feet. California freeway studies show about a 70-percent drop-off in particulate pollution levels at 500 feet. Based on ARB and SCAQMD emissions and modeling analyses, an 80-percent drop-off in pollutant concentrations is expected at approximately 1,000 feet from a distribution center.

The 1,000-foot evaluation distance is supported by research-based findings concerning TAC emission dispersion rates from roadways and large sources showing that emissions diminish substantially between 500 and 1,000 feet from emission sources.

For purposes of evaluating the proposed project's cumulative health risk effects, a one-quarter mile radius or 1,320 feet radius is utilized for determining potential cumulative impacts. This radius is more robust than, and provides a more health protective scenario for evaluation than the 1,000-foot impact radius identified above. Thus, based on the cumulative projects identified in the proposed project's TIA, projects with the potential to emit TACs that are located within the quarter-mile buffer of the project site and primary truck routes were assessed and their estimated health risks totaled. As a conservative measure to overstate rather than understate the potential risk impacts, the cumulative health risk analysis assumes that the maximum impact from each related cumulative project overlaps and would occur at the same location in the project site vicinity.

Long-Term Microscale (CO Hot-Spot) Analysis

An adverse CO concentration, known as a "hot spot," would occur if an exceedance of the state 1-hour standard of 20 parts per million (ppm) or the 8-hour standard of 9 ppm were to occur. At the time of the 1993 Handbook, the SCAB was designated nonattainment under the CAAQS and NAAQS for CO.

It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. In response, vehicle emissions standards have become increasingly stringent over the last 20 years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are

more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, the SCAB is now designated as attainment for CO. Also, CO concentrations in the project vicinity have steadily declined, as indicated by historical emissions data presented previously at Table 4.2.2-2.

To establish a more accurate record of baseline CO concentrations affecting the SCAB and establish a screening tool for CO concentrations in relation to traffic at an intersection, a CO "hot spot" analysis was conducted by the SCAQMD in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon time periods. Comparison of traffic at intersections with traffic generated by the WVLCSP to the heavily traveled intersections studied in Los Angeles was undertaken to determine whether the potential existing for WVLCSP-related traffic to contribute to a CO hot spot.

Similar considerations are also employed by other Air Quality Management Districts when evaluating potential CO concentration impacts. For example, the Bay Area Air Quality Management District concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact.

Localized Significance Thresholds

The analysis makes use of methodology included in the SCAQMD *Final Localized Significance Threshold Methodology*, 2003 (Methodology). SCAQMD has established that impacts on air quality are significant if there is a potential to contribute or cause localized exceedances of the NAAQS or CAAQS. Collectively, these are referred to as Localized Significance Thresholds (LSTs).

For the WVLCSP, the appropriate Source Receptor Area (SRA) for the LST analysis is the Central San Bernardino air monitoring station (SRA 34). LSTs apply to CO, NO_2, PM_{10}, and $PM_{2.5}$. SCAQMD produced look-up tables for projects less than or equal to 5 acres in size.

In order to determine the appropriate methodology for determining localized impacts that could occur as a result of project-related construction, the following process was undertaken:

- CalEEMod™ was utilized to determine the maximum daily on-site emissions that would occur during construction activity.
- SCAQMD's Fact Sheet for Applying CalEEMod™ to LSTs was used to determine the maximum site acreage that would be actively disturbed based on the construction equipment fleet and equipment hours as estimated in CalEEMod™.
- If the total acreage disturbed was less than or equal to 5 acres per day, then SCAQMD's screening look-up tables were utilized to determine if the WVLCSP would have the potential to result in a significant impact. The look-up tables establish a maximum daily emissions threshold in pounds per day that can be compared to CalEEMod™ outputs.
- If the total acreage disturbed would be greater than 5 acres per day, then SCAQMD recommends dispersion modeling to be conducted to determine the actual pollutant concentrations for applicable LSTs in the air. In other words, the maximum daily on-site emissions as calculated in CalEEMod™ are modeled via air dispersion modeling to calculate the actual concentration in the air (e.g., ppm or micrograms per cubic meter) in order to determine if any applicable thresholds are exceeded.

SCAQMD's Methodology clearly states that "off-site mobile emissions from the Project should NOT be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod™ "on-site" emissions outputs were considered.

Table 3-7 of the Air Quality Impact Analysis for the WVLCSP (Appendix F) was used to determine the maximum daily disturbed-acreage during site grading for purposes of modeling localized emissions. Based on that table, the proposed project would actively disturb approximately 8 acres per day during the grading phase of construction.

In order to estimate localized pollutant concentrations resulting from project construction, the SCAQMD-approved AERMOD dispersion model was utilized. The modeling approach utilized is detailed in the Air Quality Impact Analysis for the WVLCSP (Appendix F) and summarized below.

Sources

In order to model fugitive dust emissions (PM_{10} and $PM_{2.5}$) resulting from project grading activity, an area source of 8.0 acres was utilized. Per SCAQMD LST methodology, a ground-level release height and a 1-meter (approximately 3.28-foot) initial vertical dimension were utilized in order to account for the vertical spread of emissions.

In order to account for equipment exhaust emissions of PM_{10}, $PM_{2.5}$, NO_2, and CO, a total of 16 volume sources measuring 45 meters by 45 meters were spread over an area of approximately 8.0 acres. In order to represent equipment exhaust emissions, a release height of 5.0 meters was utilized, which is consistent with SCAQMD's LST guidance. The modeled emissions sources were placed on the project site's eastern boundary, immediately adjacent to the existing residential homes east of Locust Avenue.

Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, individuals with pre-existing respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. Structures that house these persons or places where they gather to exercise are defined as "sensitive receptors"; they are also known to be locations where an individual can remain for 24 hours. The nearest sensitive receptor land use (where an individual could remain for 24 hours) are the residential communities located immediately adjacent to the project site north of Jurupa Avenue from Building 7, east of Locust Avenue across from Building 1, and south of Building 4.

In order to account for meteorological conditions at the project site, data from the Fontana monitoring station were utilized, as this is the nearest station to the project site for which meteorological data are available.

Thresholds of Significance

Criteria for determining the significance of impacts related to air quality are based on criteria contained in Appendix G of the 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 Daily Emissions Significance Thresholds

Air Pollutant	Construction Phase	Operational Phase
VOCs	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
Lead[5]	3 lbs/day	3 lbs/day

Source: South Coast Air Quality Management District Significance Thresholds, March 2015.

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:

[5] Although the SCAQMD provides a threshold for emissions of lead, for purposes of this analysis, no lead emissions are calculated as there are no substantive sources of lead emissions proposed. Additionally, the air quality modeling program does not calculate any emissions of lead from typical construction or operational activities.

- 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 2008). 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 Tables 4.2.2-2 and 4.2.2-3. As discussed previously, LSTs only apply to CO, NO_2, PM_{10}, and $PM_{2.5}$. LSTs are based on the ambient concentrations of that pollutant within the project 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).

Health Risk Assessment Thresholds of Significance

Project Impacts

SCAQMD has established an incidence rate of 10 persons per million as the maximum acceptable incremental cancer risk due to DPM exposure. This threshold serves to determine whether or not a given project has a potentially significant development-specific as well as a considerable contribution to a significant cumulative impact. The 10-in-one-million standard is a very health-protective significance threshold. A risk level of 10 in one million implies a likelihood that up to 10 persons out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the levels of TACs over a specified duration of time. This risk would be an excess cancer that is in addition to any cancer risk borne by a person not exposed to these air toxics.

Cumulative Impacts

SCAQMD has established a significance threshold for incremental project-level TAC impacts. Specifically, if a given project would generate TACs resulting in or causing an increase in cancer risks of 10 or more incidents per million population, that project's incremental cancer risk would be considered significant. This same significance threshold (10 in one million) is applied by SCAQMD in determining whether a given project's incremental contribution to ambient TAC-source cancer risks is cumulatively considerable. The SCAQMD has not however established a significance threshold for ambient cumulative TAC impacts affecting the Basin. Likewise, the City of Fontana (City) does not have an adopted cumulative TAC impacts significance threshold.

Absent an established threshold for cumulative TAC impacts, the following discussion assesses whether, in the light of other available existing information, the ambient cumulative TAC-source impacts affecting the SCAB and the area encompassing the project site (or an increase in those levels) could be characterized as significant.

Comparing the ambient cumulative TAC-source cancer risk (730.04 per million locally) to SCAQMD's established threshold for project-level TAC-source cancer risks (10 in one million), the ambient cumulative TAC-source cancer risk is approximately 73 times greater than the incremental risk at which project-level TAC-source cancer risks would be considered significant.

Although there is not yet an established significance threshold for ambient cumulative TAC impacts, given the magnitude by which the ambient cumulative condition exceeds SCAQMD's established project-level significance threshold, the ambient cumulative condition would likely exceed whatever significance threshold may be established for cumulative impacts affecting the SCAB. On this basis, and absent a prevailing threshold adopted by the Lead or Responsible Agency, ambient cumulative TAC impacts are presumed to be significant.

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 environmental impacts.

Specific Plan Requirements

SP-AQ-1: Encourage Ridesharing and Transit Incentives. Each building operator will be required to support and encourage ridesharing and transit incentives for the construction crew by providing crews with the needed resources to organize rideshares, such 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.

SP-AQ-2: Erosion Control Plan. Prior to commencing grading operations, the applicant for any grading permit shall prepare an erosion control and sediment plan for approval by the City of Fontana. Access roads within the area being graded shall be kept wet while being used. Alternatively, uncovered soils shall be treated with oil, asphaltic concrete, concrete, or other similar material approved by the City of Fontana as a means of dust suppression.

SP-AQ-3: Require Contractors and Building Operators to Use 2010 or Better Model Year Engines. The project will require contractors and building operators (by contract specifications) to utilize on-road heavy-duty diesel trucks with a gross vehicle weight rating greater than 14,000 pounds with a 2010 model year engine or newer or to be equipped with a particulate matter trap, as available.

SP-AQ-4: Odor Emissions. All uses shall be operated in a manner such that no offensive odor is perceptible at or beyond the property line of that use.

SP-AQ-5: Dust Control, Operations. Any operation or activity that might cause the emission of any smoke, fly ash, dust, fumes, vapors, gases, or other forms of air pollution, which can cause damage to human health, vegetation, or other forms of property, or can cause excessive soiling on any other parcel shall conform to the requirements of the South Coast Air Quality Management District.

SP-AQ-6: Utilize Electric Cargo Handling Equipment. All on-site outdoor cargo-handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) and all on-site indoor forklifts will be powered by electricity.

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

SP-GHG-3: Design CalGreen Compliant Buildings. Buildings will be designed to provide CalGreen Standards with Leadership in Energy and Environmental Design 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; lighting; and power systems.

SP-GHG-4: Provide Electrical Connections at 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-GHG-5: Utilize Energy Efficient Lighting. The project will utilize energy-efficient interior and exterior lighting, including: light-emitting diodes, T5 and T8 fluorescent lamps, or other lighting that is at least as efficient. Lighting will incorporate motion sensors that turn lighting off when not in use.

Regulatory Requirements

RR-AQ-1: Comply with South Coast Air Quality Management District 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 U. S. Bureau of Mines.

RR-AQ-2: Comply with South Coast Air Quality Management District 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.

RR-AQ-3: Comply with South Coast Air Quality Management District 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 South Coast Air Quality Management District 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. A list of manufacturers of low/no-VOC paints is provided at the following SCAQMD website: http://www.aqmd.gov/docs/default-source/planning/architectural-coatings/reporting-and-support-documents/rule-314-manufacturers.pdf?sfvrsn=4

All paints will be applied using either high volume low-pressure spray equipment or by hand application.

RR-AQ-5: Comply with South Coast Air Quality Management District 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 National Ambient Air Quality Standards, while future economic growth within the South Coast Air Quality Management District 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.

RR-AQ-7: Require Equipment to be Turned Off When Not in Use. Building operators will require (by contract specifications) that equipment, including heavy-duty equipment, motor vehicles, and portable equipment, 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 five minutes. Nighttime (after 10:00 PM) truck idling would not be permitted.

RR-AQ-8: Air Pollutant Emissions, General. Any operation or activity that might cause the emission of any smoke, fly ash, dust, fumes, vapors, gases, or other forms of air pollution, which can cause damage to human health, vegetation, or other forms of property, or can cause excessive soiling on any other parcel shall conform to the requirements of the South Coast Air Quality Management District.

Impacts and Mitigation

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

In accordance with Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD's CEQA Air Quality Handbook (1993), a project's consistency with the AQMP is defined by the following two key indicators of consistency:

- Consistency Criterion No. 1: Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP; and
- Consistency Criterion No. 2: Whether the project will exceed the assumptions in the AQMP based on the year of project build-out phase.

The violations that Consistency Criterion No. 1 refers to are the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if regional significance thresholds or LSTs are exceeded. As subsequently discussed under Impact AQ-2 below, the project's construction emissions would exceed the applicable regional significance threshold for NOx emissions and the project's operational emissions would exceed the applicable regional significance thresholds for both VOC and NOx emissions, even with the incorporation of mitigation measures. However, as discussed under Impact AQ-4 below, both the project's construction and operational emissions would not exceed any of the applicable LSTs with implementation of Best Available Control Measures (BACMs) and mitigation measures. Nonetheless, because the regional significance threshold for NOx emissions would be exceeded from project construction and the regional significance thresholds for VOCs and NOx emissions would be exceeded from project operations, the proposed project would have the potential to conflict with the AQMP according to Consistency Criterion No. 1. On this basis, the proposed project is considered to be inconsistent with this first criterion.

With respect to Consistency Criterion No. 2, the 2016 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Since growth projections from local general plans adopted by cities under the jurisdiction of SCAQMD are provided to SCAG to develop regional growth forecasts that are then used to develop future air quality forecasts for the AQMP, development that is consistent with the growth projections in the City of Fontana General Plan is also considered to be consistent with the AQMP.

The City General Plan designates the project site with the following land use designations: Residential Planned Community (R-PC), Medium Density Residential (R-M), Recreation Facilities (P-R), Multi-Family Residential (R-MF), and Public Facilities (P-F). R-PC land uses allow for residential communities with a density range of 3.0 to 6.4 dwelling units per acre (du/acre); R-M land uses allow for P-R land uses allow for 5.1 to 7.6 du/acre for single-family detached types and 7.7-12 du/acre for single family attached or multi-family types; P-R land uses allow for regional and local parks and any recreational facility owned by a public/quasi-public agency; R-MF land uses allow for a range of 12.1 to 24 du/acre; and P-F land uses allow for public/quasi-public uses such as schools, City/County water or sewer districts, hospitals, and public institutions. The project site's current zoning designation is the Valley Trail Specific Plan, which is a master-planned community envisioned to contain a maximum of 1,154 residential units, an elementary school, and private and joint-use recreational facilities. However, the seven industrial warehouse buildings with a total of 3,746,997 square feet of building area that is proposed under the project would exceed the growth intensities currently allowed within the General Plan and would be inconsistent with the residential planned community and its zoning designations set forth in the current Valley Trails Specific Plan. The West Valley Logistics Center Specific Plan is proposed to replace the existing Valley Trails Specific Plan, and would thus require a general plan amendment and zoning amendment. As the general plan amendment is not included in the current AQMP, the proposed project is considered to be inconsistent with Consistency Criterion No. 2.

Overall, because the proposed project would have the potential to cause NAAQS or CAAQS violations and growth associated with the proposed project have not been accounted for in the current AQMP, the proposed project would have the potential to conflict with the AQMP and a potentially significant impact would result. Because this significant impact is inherent in the proposed General Plan Amendment to permit industrial warehouse use of the project site, no feasible mitigation is available for this impact. Thus, impacts associated with the proposed project's potential to conflict with or obstruct implementation of the 2016 AQMP would be significant and unavoidable.

Mitigation Measures

Because the significant impact identified in Impact AQ-1 is inherent in the proposed General Plan Amendment to permit industrial warehouse use of the site, there is no feasible mitigation for this impact.

Residual Impacts

Impacts would be significant and unavoidable.

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 sewer line connections, off-site roadway improvements, and on-site landscaping. While a construction schedule for the project's on-site facilities (i.e., seven warehouse distribution buildings and landscaping) has been established, a construction schedule for the project's off-site utility and infrastructure improvements has not been developed at this time. 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., PM_{10} 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 4.2.2-9 lists the emissions during project construction, without mitigation and conservatively assuming that the building construction and paving phases overlap. The emissions presented have taken into account the dust control measures required by SCAQMD Rule 403. It should be noted that because a specific schedule for the off-site utility and infrastructure improvements associated with

the proposed project is unknown at this time, the construction emissions associated with these activities have not been accounted for in Table 4.2.2-9. However, these off-site improvement activities would be less intensive than the project's on-site construction activities (i.e., construction of the seven warehouse distribution buildings) and would not overlap with the project's peak construction activity onsite. As such, the construction emissions shown in Table 4.2.2-9 below represents the worst-case daily emissions that would be generated by project construction.

Table 4.2.2-9. Short-Term Project Construction Emissions—Without Mitigation

	Emissions (pounds per day)					
Year	**VOC**	**NO_X**	**CO**	**SO_X**	**PM10**	**PM2.5**
2017	43.13	278.43	333.97	0.96	58.16	19.55
2018	174.19	255.32	296.43	0.94	57.20	18.65
Maximum Daily Emissions	174.19	278.43	333.97	0.96	58.16	19.55
SCAQMD Regional Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Threshold Exceeded?	**YES**	**YES**	**NO**	**NO**	**NO**	**NO**

The project's estimated construction emissions shown in Table 4.2.2-9 are those that would occur under the conservative scenario of the entire site built at a single time. However, the project would more likely be built in multiple increments with timing of individual building construction depending on market conditions. Nonetheless, under the conservative construction scenario analyzed for the proposed project, emissions of VOC and NOx would exceed the pollutant thresholds established by SCAQMD. As such, Mitigation Measures AQ-1 through AQ-9 have been recommended to reduce the project's construction emissions to the maximum extent feasible. In particular, Mitigation Measure AQ-2 requires the use of EPA Tier 4 construction equipment to be used for the project's construction activities and the use of EPA Tier 3 construction equipment only under conditions where Tier 4 equipment cannot be feasibly obtained in order to reduce the project's NOx emissions. Mitigation Measure AQ-3 would require the proposed project to use low-VOC paints that have been reformulated to exceed the regulatory VOC limits put forth by SCAQMD's Rule 1113. The project's mitigated construction emissions are shown in Table 4.2.2-10. It should be noted that the majority of NO_x emissions would occur due to building construction-related vendor and delivery trips that occur offsite. No feasible mitigation exists that could reduce the vendor and delivery trip-related emissions since these are based on CalEEMod™ defaults based on survey data which accounts for vendor and delivery trips associated with total square footage to be constructed. However, it should also be noted that SP-AQ-3 requires contractors and building operators (by contract specification) to utilize on-road heavy-duty diesel trucks with a gross vehicle weight rating greater than 14,000 pounds to have a 2010 model year engine or newer or be equipped with a particulate matter trap, as available. As a conservative measure, no credit was taken for this measure with respect to the construction emissions calculations and as such, the emissions presented in Tables 4.2.2-9 and 4.2.2-10 are over-estimated.

Table 4.2.2-10. Short-Term Project Construction Emissions—With Mitigation

	Emissions (pounds per day)					
Year	**VOC**	**NO_X**	**CO**	**SO_X**	**PM10**	**PM2.5**
2017	37.79	248.91	336.06	0.96	56.32	17.94
2018	33.91	233.91	299.79	0.94	55.94	17.59
Maximum Daily Emissions	37.79	248.91	336.06	0.96	56.32	17.94
SCAQMD Regional Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

As shown in Table 4.2.2-10, with implementation of feasible mitigation, the project design features, and regulatory requirements, NO_X emissions during construction 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 and unavoidable.

The South Coast Air Quality Management District provided a comment letter on the Notice of Preparation of a CEQA document for the proposed project, including reference to several sources to consider for purposes of mitigating significant air quality impacts. These sources and suggested mitigation measures were considered, and were addressed in the evaluation of "with mitigation" impacts as described below.

- **Chapter 11 of the SCAQMD *CEQA Air Quality Handbook* (Construction)**. The applicable mitigation measures listed in Chapter 11 (Tables 11-2, 11-3, and 11-4) of the SCAQMD *CEQA Air Quality Handbook* have been reviewed. Applicable portions of these measures have already been incorporated into the project mitigation measures.
- **Chapter 11 of the SCAQMD *CEQA Air Quality Handbook* (Operations)**. The applicable mitigation measures listed in Chapter 11 (Tables 11-6c and 11-7c) of the SCAQMD *CEQA Air Quality Handbook* have been reviewed. A few of the mitigation measures recommended here are already included in the Project, specifically: **MM AQ-10**, **MM AQ-11**, **MM AQ-12**, **MM AQ-13**, and **MM AQ-14** are consistent with several measures recommended by SCAQMD. However, none of the additional mitigation measures beyond those identified above would reduce the significant NOx impact to less than significant levels. It should be noted the SCAQMD *CEQA Air Quality Handbook* has not been updated since 2003. Additionally, several of the measures listed provide a negligible NOx reduction with a number designated by SCAQMD has having no quantified benefit or negligible benefit. Therefore, implementation of these measures would not avoid or substantially lessen mobile source NOx emissions attributable to the project.
- **SCAQMD CEQA Web Pages (Fugitive Dust)**. With application of BACMs and recommended mitigation measures, the project would not have a significant impact for construction or operational related PM10 or PM2.5 emissions. Therefore, no additional mitigation measures are required to reduce fugitive dust emissions.
- **SCAQMD CEQA Web Pages (Greenhouse Gases)**. See discussion of "CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures"* below.
- **SCAQMD CEQA Web Pages (Harbor Craft, Locomotives, Ocean Going Vessels)**. These mitigation measures not applicable to the proposed Project. It is not expected that the Project would include the use of a harbor craft, locomotives, or ocean going vessels.

- **SCAQMD CEQA Web Pages (Off-Road Engines)**. Mitigation measures that would apply to off-road engines have been reviewed. Notwithstanding, implementation of these measures would not avoid or substantially lessen mobile source NOx emissions attributable to the project. Additionally, pursuant to SP-AQ-6, as a requirement of the specific plan, the proposed project require on-site forklifts to be non-diesel powered.
- **SCAQMD CEQA Web Pages (On-Road Engines).** Pursuant to SP-AQ-3, the proposed project will require contractors and building operators to utilize on-road heavy-duty diesel trucks with a gross vehicle weight rating greater than 14,000 pounds to have a 2010 model year engine or newer or be equipped with a particulate matter trap, as available.
- **CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*.** All feasible and applicable mitigation measures listed in the Energy, Water, and Transportation sections (as shown in Chart 6-1 and Chart 6-2 of the CAPCOA document) have been applied to the analysis. However, these measures are aimed at reducing GHG emissions and implementation of these measures would not avoid or substantially lessen mobile source NOx emissions attributable to the project.
- **SCAQMD Rule 403**. As identified in BACM AQ-1 the proposed project will be required to comply with applicable SCAQMD Rules including, but not limited to Rule 403.
- **SCAQMD's Guidance Document for addressing Air Quality Issues in General Plans and Local Planning**. These measures are not applicable to the proposed project because the measures listed are aimed towards local governments as a guidance to reduce community exposure to source-specific air pollution impacts.

Off-Site Infrastructure Improvements

As noted above, a specific schedule of off-site utility and infrastructure improvements is unknown at this time. However, off-site improvement activities would not overlap the project's peak construction activity (either peak grading or building construction and paving), as agreed to by the applicant and specified in Mitigation Measure **MM AQ-9**. As such, impacts associated with off-site improvement activities are not expected to exceed the emissions identified for project-related construction activities. In addition, any off-site utility and infrastructure improvements that are needed would be less intense than the peak construction activities identified herein since the off-site utility and infrastructure improvements would be concentrated in a smaller area which would limit the amount of equipment and activity that could occur. As such, no impacts beyond what has already been identified in this report are expected to occur and any off-site utility and infrastructure improvement emissions would be lower than what is analyzed for the peak construction activities identified herein.

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 4.2.2-9, the unmitigated peak daily construction emissions are all under the SCAQMD thresholds of significance with the exception of VOCs, which is generated from the application of architectural coatings for the project's warehouse distribution buildings, and NO_X,

which is generated from diesel engine exhaust and primarily from the large number of haul trucks planned for use by the project. While implementation of feasible mitigation would reduce the project's VOC emissions to below SCAQMD's threshold of significance (75 lbs./day), NO_X emissions would be reduced but not to a level below SCAMQD's threshold of 100 lbs./day. Therefore, this impact associated with NOx emissions would be significant; implementation of **Specific Plan Requirements SP-AQ-3**, **Regulatory Requirements RR-AQ-1** through **RR-AQ-5, RR-AQ-7,** and **RR-AQ-8**, and **Mitigation Measures AQ-2 and AQ-4** through **AQ-9** would reduce but not eliminate significant and unavoidable impacts related to NO_X emissions.

Operations

Long-term air pollutant emission impacts during proposed project operations include area, energy, and mobile source emissions along with on-site equipment emissions.. Area source emissions include those generated from architectural coatings, consumer products, and landscaping maintenance. Energy sources include the use of electricity and natural gas for the proposed facilities. Mobile sources include workers commuting and trucks idling and hauling material to and from the warehouse buildings. Based on trip generation factors, as described in the Traffic Impact Analysis in Appendix L, the project is expected to generate a net total of 6,382 trip-ends per day (actual vehicles – automobiles and trucks), including 2,432 truck trip-ends per day, from the proposed buildings within the project site. Based on the results of the San Bernardino Transportation Analysis Model (SBTAM), which is the regional traffic model applicable for the proposed project, an average trip length of 38 miles for heavy trucks and 17.4 miles for all other vehicles (passenger cars, small trucks, motorcycles, etc.) was used to calculate the proposed project's mobile emissions.[6]

As the proposed project is a warehouse project, on-site equipment emissions would also be generated from cargo handling equipment that are required to move empty containers and empty chassis to and from the various areas that receive and distribute containers. The most common type of cargo-handling equipment is the yard truck, which is designed for moving cargo containers. Yard trucks are also known as yard goats, utility tractors (UTRs), hustlers, yard hostlers, and yard tractors. **Specific Plan Requirement SP-AQ-6** requires that all on-site outdoor cargo-handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site

[6] The truck trip length used in the analysis represents a reasonable worst case, because (1) it assumes that all truck trips to and from the project site are new and that no truck trips would redistributed from other locations to the project site, and (2) it is based on reasonable information (the regional transportation traffic model – specifically the truck component of the model).

As stated in the WVLC Air Quality Impact Analysis, vehicle miles traveled (VMT) for the proposed project was calculated by the total number of vehicle trips to and from the project site multiplied by the average trip length. This method of estimating VMT for use in calculating vehicle emissions likely results in the overestimation and double-counting of emissions because, for a distribution warehouse center such as the proposed project, the land use is likely to attract (divert) some existing vehicle trips that are already on the regional roadway system, as opposed to only generating new trips to the region. In this regard, the proposed project would, to a large extent, redistribute existing mobile-source GHG emissions rather than exclusively generate new and additional mobile source emissions. As such, the estimation of the project's vehicular-source emissions is likely overstated in that no credit for, or reduction in, emissions is assumed based on diversion of existing trips.

Furthermore, as noted in the Air Quality Impact Analysis, SCAQMD generally recommends the of a 40-mile one-way trip length for similar land use projects, which is within an order of magnitude of the trip length calculated in the regional traffic model for trucks and utilized for the WVLC project. Similarly, the Southern California Association of Governments (SCAG) maintains a regional transportation model. In its most recent (2008) transportation validation for the 2003 Regional Model, SCAG indicates that the average internal truck trip length for the SCAG region is 5.92 miles for Light Duty Trucks, 13.06 miles for Medium Duty Trucks, and 24.11 for Heavy Duty Trucks.

equipment) and all on-site indoor forklifts would be powered by electricity. Because there is no exhaust associated with the operation of the yard tractors and forklifts, no on-site equipment was modeled in this analysis.

Long-term operational emissions associated with the proposed project were calculated with the CalEEMod™ model,[7] which includes car and truck idling emissions; the project's summer and winter season operational emissions are shown in Tables 4.2.2-11a and 4.2.2-11b, respectively. As shown, VOC and, NO_X emissions associated with the project would exceed SCAQMD daily emission thresholds, which would result in a significant impact.

Table 4.2.2-11a. Long-Term Regional Project Summer Operational Emissions— Without Mitigation

	Pollutant Emissions, lbs/day					
Source	**VOC**	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Area Sources	72.87	0.0075	0.80	0.00006	0.00288	0.00288
Energy Sources	0.20	1.82	1.53	0.01	0.14	0.14
Mobile (Trucks)	27.97	504.85	204.16	2.69	88.39	29.16
Mobile (Autos, other)	8.12	11.8	164.3	0.5	52.64	14.14
Total Project Emissions	**109.16**	**518.48**	**370.79**	**3.20**	**141.17**	**43.44**
SCAQMD Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Significant?	**Yes**	**Yes**	**No**	**No**	**No**	**No**

Source: Appendix F.

Table 4.2.2-11b. Long-Term Regional Winter Project Operational Emissions— Without Mitigation

	Pollutant Emissions, lbs/day					
Source	**VOC**	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Area Sources	72.87	0.0075	0.80	0.00006	0.00288	0.00288
Energy Sources	0.20	1.82	1.53	0.01	0.14	0.14
Mobile (Trucks)	28.42	509.42	211.46	2.66	88.42	29.19
Mobile (Autos, other)	6.69	12.32	132.52	0.44	52.64	14.14
Total Project Emissions	**108.18**	**523.57**	**346.31**	**3.11**	**141.20**	**43.47**
SCAQMD Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Significant?	**Yes**	**Yes**	**No**	**No**	**No**	**No**

Source: Appendix F.

As shown in Tables 4.2.2-11a and 4.2.2-11b, these project-related operational emissions are almost entirely from mobile sources. **Mitigation Measures AQ-10** through **AQ-14**, including **Mitigation Measure AQ-10** for incorporation of SmartWay features, would reduce Project impacts to the extent feasible. However, these long-term regional project operation emissions of VOC and NOx would nonetheless remain significant and unavoidable even with implementation of mitigation.

[7] 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.

Although uses within the project would be required to utilize electric-powered forklifts and/or other interior vehicles, as described in **Specific Plan Requirement SP-AQ-6**, a worst case analysis was prepared using an assumption that CNG-fueled forklifts might be utilized that generate emissions. The default emissions shown in Tables 4.2.2-11a and 4.2.2-11b include four CNG-fueled forklifts**.**

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

Because the use of refrigerants is dependent on the specific businesses that will 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 percent of the warehouse buildings would install climate-controlled storage space, which would typically encompass 10 to 20 percent of total warehouse area in those buildings. To provide a worst-case analysis, it was assumed that 5 percent of trucks serving the project site and up to 5 percent of the warehouse area within the site would be climate controlled

In addition, as provided by **Specific Plan Requirement SP-GHG-4**, electrical outlets would 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. 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, as well as 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-10** through

AQ-14 would reduce the operational air quality impacts associated with VOC and NOx emissions; but not eliminate the significant and unavoidable impacts.

Operational Impacts Significance

As shown in Tables 4.2.2-11a and 4.2.2-11b, the unmitigated peak long-term operational emissions would exceed SCAQMD thresholds of significance for VOC and NO_X, which would be generated from diesel engine exhaust and primarily from the number of haul trucks planned for use by the project. No feasible mitigation measures beyond Mitigation Measures **MM AQ 10** through **MM AQ-14** exist that would reduce project-related emissions to levels that are less-than-significant. Project operational-source VOC and NOx emission exceedances of applicable SCAQMD regional thresholds are therefore considered significant and unavoidable. Moreover, and as also discussed previously, more than 90 percent of all operational-source emissions (by weight) would be generated by project-related mobile sources (traffic). Neither the Project Applicant nor the Lead Agency (City of Fontana) can substantively or materially affect reductions in project-related mobile-source emissions beyond the specific plan requirements, regulatory requirements, and mitigation measures identified herein. Therefore, the project's operational-source VOC and NOx emissions exceedances of applicable SCAQMD regional thresholds would be significant and unavoidable.

Specific Plan Requirements, Regulatory Requirements, and Standard Requirements

The applicant will implement the following Specific Plan Requirements, Regulatory Requirements, and Standard Requirements, as summarized below and specified in detail in Section 3.6 of the Project Description.

- **SP-AQ-3:** Require Contractors and Building Operators to Use 2010 or Better Model Year Engines
- **SP-AQ-6:** Utilize Electric Cargo Handling Equipment
- **RR-AQ-1:** Comply with South Coast Air Quality Management District Rule 401 – Visible Emissions
- **RR-AQ-2:** Comply with South Coast Air Quality Management District Rule 402 – Nuisance
- **RR-AQ-3:** Comply with South Coast Air Quality Management District Rule 403 – Fugitive Dust
- **RR-AQ-4:** Comply with South Coast Air Quality Management District Rule 1113 – Architectural Coatings
- **RR-AQ-5:** Comply with South Coast Air Quality Management District Rule 1301 – General
- **RR-AQ-6:** Comply with Title 24 – Building Energy Conservation
- **RR-AQ-7:** Require Equipment to be Turned Off When Not in Use
- **RR-AQ-8:** Air Pollutant Emissions, General
- **SP-GHG-4:** Provide Electrical Connections at Loading Docks

Mitigation Measures

Construction

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

- Revegetate disturbed areas.
- Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour.
- 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.
- Minimize at all times the area disturbed by clearing, grading, earthmoving, or excavation operations.

Mitigation Measure AQ-2: Utilize Tier 4 Construction Equipment. All non-road construction equipment greater than 50 horsepower the Construction Contractor shall meet EPA Tier 4 emission standards with the following exception. Equipment with an engine compliant with only Tier 3 emissions standards will be allowed on a case-by-case basis only when the applicant shows a good faith effort to procure Tier 4 equipment, and documents that no Tier 4 equipment is available for a particular equipment type within the County of San Bernardino within the scheduled construction period. Each case shall be documented with signed written or emailed correspondence by the appropriate construction contractor, along with documented correspondence from at least two construction equipment rental firms representing a good faith effort to locate engines that meet Tier 4 requirements, as applicable. Documentation will be submitted to City staff for review before Tier 3 equipment is used on the project.

Mitigation Measure AQ-3: Use Low-VOC Paints. The project shall utilize "Super-Compliant" low-VOC paints that have been reformulated to exceed the regulatory VOC limits put forth by SCAQMD's Rule 1113. Super-Compliant low-VOC paints shall be no more than 10 grams per liter of VOC. Alternatively, the applicant may utilize tilt-up concrete buildings that do not require the use of architectural coatings.

Mitigation Measure AQ-4: Use Electricity Rather than Internal Combustion Engines during Construction. The Construction Contractor shall require by contract specifications that construction operations rely on the electricity infrastructure surrounding the construction site, if available, rather than electrical generators powered by internal combustion engines.

Mitigation Measure AQ-5: Use Alternative Fueled Technology during Construction. The Construction Contractor shall 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-6: Require Proper Maintenance of Construction Equipment. The Construction Contractor shall 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 as per the manufacturer's specification. Maintenance records shall be available at the construction site for City verification.

Mitigation Measure AQ-7: 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 documenting the serial number, horsepower, age, and fuel of all on-site equipment.

The plan shall 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 as determined by the City of Fontana. Contractors shall also conform to any construction measures imposed by the SCAQMD as well as City of Fontana Community Development Planning Staff.

Mitigation Measure AQ-8: Require Construction Equipment to Turn Off When Not in Use. The Construction Contractor shall 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-9: Timing of Construction Activities. Construction activity associated with off-site utility and infrastructure improvements shall not occur concurrently with site preparation, grading, building construction, architectural coating, or paving phases of activity.

Operational

Mitigation Measure AQ-10: Incorporate EPA SmartWay features. The City shall require operators of the project to ensure that haul trucks incorporate EPA SmartWay features, as required by CARB. Project operators shall 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-11: Incorporate Energy Efficiency in Vendor Trucks. The City shall require operators of the proposed facilities to request that the vendor trucks incorporate energy efficiency improvement features through the voluntary Carl Moyer Program—including truck modernization, retrofits, and/or aerodynamic kits and low rolling resistance tires—to reduce fuel consumption.

Mitigation Measure AQ-12: Incorporate Electric Vehicle Charging Stations and Carpool Parking. The project shall 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-13: Provide Electric Interior Vehicles. All buildings shall be designed to provide infrastructure to support use of electric powered forklifts and/or other interior vehicles.

Mitigation Measure AQ-14: Provide Ridesharing and Transit Incentives. The project will reduce vehicle miles traveled and emissions associated with trucks and vehicles by implementing the following measures:

- Pedestrian and bicycle connections shall be provided to surrounding areas consistent with the City's General Plan.
- A Transportation Management Association (TMA) or similar mechanism shall be established by the project applicant. The TMA shall establish and coordinate a carpooling program. The TMA shall advertise its services to the building occupants. The TMA shall offer transit incentives to employees and shall provide shuttle service to and from public transit, should a minimum of five

(5) employees request and use such service from a transit stop at the same drop-off and/or pick-up time. The TMA shall distribute public transportation information to project site employees. The TMA shall provide message board space for coordination rides.

- Preferential parking for carpools and vanpools shall be provided on each warehouse site.

Residual Impacts

Construction

Implementation of **Specific Plan Requirement SP-AQ-3**, **Regulatory Requirements RR-AQ-1** through **RR-AQ-5**, **RR-AQ-7**, and **RR-AQ-8,** and **Mitigation Measures AQ-1** through **AQ-9** would reduce impacts related to VOC emissions to a less-than-significant level but would not eliminate significant and unavoidable impacts related to NO_X emissions. Thus, construction emissions of NOx would result in a significant and unavoidable impact.

Operation

With implementation of **Specific Plan Requirement SP-GHG-4**, **Regulatory Requirement AQ-6**, and **Mitigation Measures AQ-10** through **AQ-14,** operational air quality impacts would be reduced but not to a less-than-significant level for VOC and NOx emissions. Thus, operational emissions of VOC and NOx would be significant and unavoidable.

Health Effects of Significant Unavoidable Impacts Related to NO_X, VOC, 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.[8]

Accordingly, consistent with the current state-of-practice and published guidance by the California Air Pollution Control Officers Association (2009), OEHHA (2003), and ARB (2000), the analysis focuses only on those pollutants with the greatest potential to result in a significant, material impact

[8] 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.

on human health, which are (1) DPM[9] (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),[10] and (3) naturally occurring asbestos (discussed above).

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)

Currently, the SCAB is in nonattainment for PM_{10}, $PM_{2.5}$, and O_3. According to SCAQMD, if an individual project results in air emissions of criteria pollutants that exceed SCAQMD's recommended daily thresholds for project-specific impacts, then the project would also result in a cumulatively considerable net increase of these criteria pollutants for which the SCAB is in nonattainment.

As discussed under Impact AQ-2, the project's construction-source air pollutant emissions would exceed the SCAQMD regional thresholds for emissions of NOx, while the project's operational-source VOCs and NOx emissions will exceed applicable SCAQMD regional thresholds even with implementation of feasible mitigation measures. Thus, per SCAQMD significance guidance, project's NOx impacts during construction and VOC and NOx impacts during operations are considered cumulatively significant and would persist over the life of the proposed project. VOCs and NOx emissions are ozone precursors and would therefore contribute considerably to existing ozone non-attainment conditions within the SCAB. As such, the project's construction and operational-source emissions would be considered significant on a project-specific and cumulative basis.

Impact AQ-4. Expose sensitive receptors to substantial pollutant concentrations

Localized Significance Thresholds (LST)

SCAQMD has established that impacts on air quality are significant if there is a potential to contribute or cause localized exceedances of the NAAQS or CAAQS. Collectively, these are referred to as LSTs. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor, and apply to CO, NO_2, PM_{10}, and $PM_{2.5}$.

The significance of localized emissions impacts depends on whether ambient levels in the vicinity of any given project are above or below state standards. In the case of CO and NO_2, 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, then project emissions are considered significant if they increase ambient concentrations by a measurable amount. This would apply to PM_{10} and $PM_{2.5}$, both of which are non-attainment pollutants. For project's LST analysis, the SRA is the Central San Bernardino air monitoring station (SRA 34).

[9] 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.

[10] While SO_2 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.

Construction

As shown in Table 4.2.2-12, the maximum disturbed acreage during site grading would be 8 acres being actively disturbed daily. As the total acreage disturbed daily would be greater than five acres, dispersion modeling of the project's construction emissions was conducted to determine the actual pollutant concentrations that would occur at the nearest off-site sensitive receptors, in accordance with SCAQMD's LST methodology.

Table 4.2.2-13 identifies the localized impacts without BACMs and mitigation at the nearest receptor location in the vicinity of the project. The maximum impacts would occur immediately east of the site at the existing homes on the east of Locust Avenue. Table 4.2.2-13 shows that the project's emissions during the peak construction activity would exceed SCAQMD's localized thresholds of significance for PM_{10} and $PM_{2.5}$. This impact would be significant, requiring mitigation.

Table 4.2.2-12. Maximum Day Disturbed Acreage

	Equipment Type	Equipment Quantity	Acres graded per 8-hour day	Operating Hours per Day	Acres graded per day
Grading	Rubber Tired Dozers	4	0.5	8	2
	Crawler Tractors	0	0.5	8	0
	Graders	4	0.5	8	2
	Scrapers	4	1	8	4
Total acres graded per day during Grading					8

Table 4.2.2-13. Peak Construction Localized Significance Summary—Without Mitigation

	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
Peak Construction	**1 Hour**	**8 Hours**	**1 Hour**	**24 Hours**	**24 Hours**
Peak Day Localized Emissions	0.24	0.10	0.04	23.38	12.24
Background Concentration [A]	3.0	1.2	0.09	--	--
Total Concentration	**3.24**	**1.30**	**0.13**	**23.38**	**12.24**
SCAQMD Localized Significance Threshold	20	9	0.18	10.4	10.4
Threshold Exceeded?	No	No	No	Yes	Yes

[A] "Background concentration" refers to the highest concentration occurring in the last 3 years for which data is available. See Table 4.2.2-2. The background concentration of PM10 and PM2.5 are not provided as, in accordance with SCAQMD's LST Methodology, they would not be applicable for the LST analysis since their ambient levels already exceed the applicable state or federal standards.

Note: PM_{10} and $PM_{2.5}$ concentrations are expressed in $\mu g/m^3$. All others are expressed in ppm.

Table 4.2.2-14 identifies the localized impacts at the nearest receptor location in the vicinity of the project after the implementation of applicable BACMs and mitigation measures. As shown, the project's emissions during the peak construction activity would not exceed the SCAQMD's LST for any of the applicable pollutants. As such, localized air quality impacts generated during project construction would be reduced to a less-than-significant level.

Table 4.2.2-14. Peak Construction Localized Significance Summary—With Mitigation

	CO	NO_2	PM_{10}		$PM_{2.5}$
	Averaging Time				
Peak Construction	**1 Hour**	**8 Hours**	**1 Hour**	**24 Hours**	**24 Hours**
Peak Day Localized Emissions	0.24	0.10	0.02	9.09	4.85
Background Concentration [A]	3.0	1.2	0.09	--	--
Total Concentration	3.24	1.30	0.11	9.09	4.85
SCAQMD Localized Significance Threshold	20	9	0.18	10.4	10.4
Threshold Exceeded?	No	No	No	No	No

[A] "Background concentration" refers to the highest concentration occurring in the last 3 years for which data is available. See Table 4.2.2-2. The background concentration of PM10 and PM2.5 are not provided as, in accordance with SCAQMD's LST Methodology, they would not be applicable for the LST analysis since their ambient levels already exceed the applicable state or federal standards.

Note: PM_{10} and $PM_{2.5}$ concentrations are expressed in µg/m³. All others are expressed in ppm.

Operation

For operational LSTs, on-site passenger car and truck travel emissions[11] were modeled in AERMOD using emission factors for CO, NO_2, PM_{10}, and $PM_{2.5}$ generated with the 2014 version of the Emission Factor (EMFAC) model 2014, which was developed by ARB. The model was run based on the following assumptions:

- Idling—15 minutes of idling[12] per two-way vehicle trip for passenger cars and trucks
- 5 miles per hour for on-site vehicle movement including driving and maneuvering
- On-site vehicular idling was estimated to occur as vehicles enter and travel through the facility

Because the specific users of onsite buildings cannot be known at this time, onsite stationary emissions are also unknown at this time, and therefore have not been included in the LST modeling. However, on-site equipment would be electric and therefore not generate any on-site criteria pollutant emissions

Sensitive receptors used for the modeling were located adjacent to the project site, across Jurupa Avenue to the north, across Locust Avenue to the south, and adjacent to the project site's southerly boundary. Table 4.2.2-15 presents the pollutant concentrations at the nearest off-site sensitive receptor during project operations.

[11] Onsite passenger car movement includes vehicular movement from the street to parking areas. Onsite truck travel includes truck movement from the street to loading docks, positioning of trailers, and associated engine idling.

[12] Although the project is required to comply with ARB's idling limit of 5 minutes, staff at SCAQMD recommends that the on-site idling emissions should be estimated for 15 minutes of idling.

Table 4.2.2-15. Long-Term Operational LST Emissions

	CO		NO_2		PM_{10}		$PM_{2.5}$
	Averaging Time						
Operation	**1 Hour**	**8 Hours**	**1 Hour**	**Annual**	**24 Hours**	**Annual**	**24 Hours**
Peak Day Localized Emissions	0.016	0.011	0.022	0.004	0.68	0.22	0.62
Background Concentration	3.0	1.2	0.09	0.021			
Total Concentration	**3.02**	**1.201**	**0.11**	**0.025**	**0.68**	**0.22**	**0.62**
SCAQMD Localized Significance Threshold	**20**	**9**	**0.18**	**0.03**	**2.5**	**1**	**2.5**
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

As shown in Table 4.2.2-15, operational emissions would not exceed SCAQMD's LSTs for any criteria pollutant at the nearest sensitive receptor. Therefore, the project would have a less-than-significant localized impact during operational activity, and no mitigation is required.

Health Risk Assessment

ARB estimates that the average Californian is exposed to 1.2-1.8 μg/m^3 of DPM annually, which results in an average cancer risk of 360–540 in one million for the average Californian exposed to DPM.

A Health Risk Assessment was undertaken to evaluate project-related impacts on sensitive receptors (residential, schools) and adjacent workers as a result of heavy-duty diesel trucks accessing the site (Appendix G). Three types of exposure to project operations were examined, as follows:

- Residential, addressing exposure of area residents to project-related DPM at the site and along truck routes;
- Workers within and immediately adjacent to the project site; and
- School children at schools in the general area of the WVLCSP and related truck routes.

The Health Risk Assessment prepared for the proposed project was based on SCAQMD guidelines to produce conservative estimates of risk posed by exposure to DPM. The conservative nature of this analysis is due primarily to the following factors:

- The ARB-adopted diesel exhaust Unit Risk Factor (URF) of 300 in one million per μg/m^3 is based upon the upper 95th percentile of estimated risk for each of the epidemiological studies utilized to develop the URF. Using the 95th percentile URF represents a very conservative (health-protective) risk posed by DPM.
- The risk estimates assume sensitive receptors will be subject to DPM for 24 hours a day, 350 days a year. As a conservative measure, SCAQMD does not recognize indoor adjustments for residents; in other words, SCAQMD assumes that residents spend 100 percent of their time at home outdoors and SCAQMD does not factor in physical barriers (i.e., walls and housing

structures) that may prevent the infiltration of DPM into the home. Furthermore, based on empirical data, it is clear that the typical person spends the majority of their time indoors versus remaining outdoors for 24 hours a day, 350 days a year.[13]

- The emissions derived assume that every truck accessing the project site will idle for 15 minutes under the unmitigated scenario; this is an overestimation of actual idling times and thus conservative.[14] It should be noted that ARB's anti-idling requirements impose a 5-minute maximum idling time and therefore the analysis conservatively overestimates DPM emissions from idling by a factor of 3.

Proximity to sources of toxics is critical to determining the impact. In traffic-related studies, the additional non-cancer health risk attributable to proximity was seen within 1,000 feet and was strongest within 300 feet. California freeway studies show about a 70-percent drop-off in particulate pollution levels at 500 feet. Based on ARB and SCAQMD emissions and modeling analyses, an 80-percent drop-off in pollutant concentrations is expected at approximately 1,000 feet from a distribution center.

The 1,000-foot evaluation distance is supported by research-based findings concerning TAC emission dispersion rates from roadways and large sources showing that emissions diminish substantially between 500 and 1,000 feet from emission sources.

The ARB thus recommends as a "rule of thumb" that sensitive receptors be separated from distribution centers by 1,000 feet between unless a health risk assessment demonstrates a less than significant health impact. Because residential uses are located as close as across Jurupa Avenue, Locust Avenue, and adjacent to the southern boundary of the project site, a health risk assessment was prepared as described below (Appendix G).

Potential Project-Related DPM Source Cancer and Non-Cancer Risks[15]

Project-related DPM-source cancer and non-cancer risks for residential, worker, and school child exposure scenarios for the project are considered herein and are summarized as follows.

- **Residential Exposure Scenario**. The residential land use with the greatest potential exposure to project DPM source emissions is an existing residential home situated just south of 11th Street and east of Locust Avenue within the existing residential neighborhood situated across Locust

[13] In May, 1991 the ARB Research Division in association with the University of California, Berkeley published research findings titled *Activity Patterns of California Residents*. The findings of that study indicate that on average, adults and adolescents in California spent almost 15 hours per day inside their homes, and 6 hours in other indoor locations, for a total of 21 hours (87% of the day). About 2 hours per day were spent in transit, and just over 1 hour per day was spent in outdoor locations.

[14] Although the project is required to comply with ARB's idling limit of 5 minutes, staff at SCAQMD recommends that the on-site idling emissions should be estimated for 15 minutes of truck idling (personal communication, in person, with Jillian Wong, December 22, 2016), which would take into account on-site idling that occurs while the trucks are waiting to pull up to the truck bays, idling at the bays, idling at check-in and check-out, etc.

[15] SCAQMD guidance does not require assessment of the potential health risk to on-site workers. Excerpts from the OEHHA document *Air Toxics Hot Spots Program Risk Assessment Guidelines—The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* (OEHHA 2003) also indicate that it is not necessary to examine the health effects on on-site workers unless required by the Resource Conservation and Recovery Act/Comprehensive Environmental Response, Compensation, and Liability Act or the worker resides on site.

Avenue adjacent to the project site. At the maximally exposed individual receptor (MEIR[16]), the maximum incremental cancer risk attributable to project DPM source emissions is calculated to be 3.79 in one million, which is less than the SCAQMD threshold of 10 in one million. At this same location immediately across Locust Avenue, non-cancer risks were calculated to be 0.002, which would not exceed the applicable threshold of 1.0. As such, the project would not cause a significant human health or cancer risk to adjacent residences.

- **Worker Exposure Scenario**. The worker receptor land use with the greatest potential exposure to project-related DPM source emissions is located immediately adjacent to the northeast corner of the project site. The maximum incremental cancer risk impact at this location is 0.53 in one million, which is less than the threshold of 10 in one million. At this same location, non-cancer risks were calculated to be 0.002, which would not exceed the applicable threshold of 1.0. As such, the project would not cause a significant human health or cancer risk to adjacent workers.
- **School Child Exposure Scenario**. The school site land use with the greatest potential exposure to project-related DPM source emissions is the Walter Zimmerman Elementary School at 11050 Linden Avenue in unincorporated San Bernardino County community of Bloomington, which is approximately 1,600 feet northeast of the project site. It should be noted that the Walter Zimmerman Elementary School is estimated to have the greatest potential exposure to DPM emissions due to truck travel patterns and meteorological conditions, and that there are no other schools located within 1,000 feet of the project site. While there may be other schools located more than 1,000 feet from the project, any impacts at other schools would be less than that analyzed for the Walter Zimmerman Elementary School. The maximum incremental cancer risk impact at this location is 0.05 in one million, which is less than the threshold of 10 in one million. Maximum non-cancer risks at this same location were estimated to be 0.0002, which would not exceed the applicable threshold of 1.0. As such, the project would not cause a significant human health or cancer risk to any school children[17].

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

Health Risk Cumulative Analysis

In addition to the MATES IV cumulative TAC-source cancer risk, other new or proposed potential TAC-generating projects (related projects) within 1,320 feet of the project site and its proposed truck routes were identified and are reflected in this cumulative TAC analysis.

The primary TAC-source emission associated with the cumulative projects would be diesel particulate emissions associated with any truck trips accessing the cumulative projects and traveling on roadways in the study area. As such, the estimated health risks from these cumulative projects was totaled. The total maximum estimated cancer risk associated with the cumulative projects identified above is estimated to be 24.68 in one million. This estimate is based on based on the proposed square footage of all industrial-related land uses and previously completed environmental documentation. It is important to note that the risk value of 24.68 from related

[16] The MEIR is representative of the maximum impact at any individual residence, impacts at homes other than the MEIR would be less than or equal to the impact at the MEIR.

[17] Kessler Park, which is located east of the project site and other parks in the vicinity of the project site would not be more adversely impacted than at Walter Zimmerman Elementary School since the exposure duration at any park location would be minimal in nature relative to the exposure periods considered in the analysis of maximum exposure at the school.

projects is likely very conservative in relation to the actual risk that is likely to occur at any given location. As a conservative measure to overstate rather than understate the potential risk impacts, this analysis assumes that the maximum impact from each related project overlaps and would occur at the same location in the project vicinity, even though each project would have different routing of trucks.

Project-source TACs would incrementally increase the background cancer risk by a maximum of 3.79 incidents per million population. The applicable SCAQMD significance threshold for project-level TAC-source cancer risk impacts is 10 incidents per million population. Similarly, SCAQMD significance thresholds state that project contributions to cumulative TAC-source cancer risks would be cumulatively considerable if greater than 10 incidents per million population would occur. The 3.79 incidents per million population increment resulting from the project is therefore not significant, nor cumulatively considerable.

CO "Hot Spot" Analysis

An adverse CO concentration, known as a "hot spot," would occur if an exceedance of the state 1-hour standard of 20 ppm or the 8-hour standard of 9 ppm were to occur. At the time of the 1993 Handbook, the SCAB was designated nonattainment under the CAAQS and NAAQS for CO.

It has long been recognized that CO hot spots are caused by vehicular emissions, primarily when idling at congested intersections. In response, vehicle emissions standards have become increasingly stringent. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SCAB is now designated as attainment. Also, CO concentrations in the project vicinity have steadily declined, as indicated by historical emissions data presented previously in Table 4.2.2-2.

To establish a more accurate record of baseline CO concentrations affecting the SCAB, SCAQMD conducted a CO "hot spot" analysis in 2003 at four busy intersections in Los Angeles at the peak morning and afternoon time periods as shown in Table 4.2.2-16. This "hot spot" analysis did not predict any violation of CO standards at the four intersections. The traffic volumes at these four busy intersections, which are shown in Table 4.2.2-17, are well in excess of those that would occur under Cumulative (2040) with project conditions for the proposed WVLCSP, which are shown in Table 4.2.2-18.

Table 4.2.2-16. CO Model Results for High-Volume Intersections

	Carbon Monoxide Concentrations (ppm)		
Intersection Location	**Morning 1-hour**	**Afternoon 1-hour**	**8-hour**
Wilshire-Veteran	4.6	3.5	4.2
Sunset-Highland	4	4.5	3.9
La Cienega-Century	3.7	3.1	5.8
Long Beach-Imperial	3	3.1	9.3

Table 4.2.2-17. Peak Hour Traffic for High-Volume Intersections Evaluated for CO Hot Spots

Intersection Location	Peak Traffic Volumes (vph)				
	Eastbound (AM/PM)	Westbound (AM/PM)	Southbound (AM/PM)	Northbound (AM/PM)	Total (AM/PM)
Wilshire-Veteran	4,954/2,069	1,830/3,317	721/1,400	560/933	8,062/7,719
Sunset-Highland	1,417/1,764	1,342/1,540	2,304/1,832	1,551/2,238	6,614/5,374
La Cienega-Century	2,540/2,243	1,890/2,728	1,384/2,029	821/1,674	6,634/8,674
Long Beach-Imperial	1,217/2,020	1,760/1,400	479/944	756/1,150	4,212/5,514

Table 4.2.2-18. Project Peak Hour Traffic for West Valley Logistics Center Area Intersections

Intersection Location	Peak Traffic Volumes (vph)				
	Northbound (AM/PM)	Southbound (AM/PM)	Eastbound (AM/PM)	Westbound (AM/PM)	Total (AM/PM)
Sierra Ave/Valley Blvd	2,363/2,582	1,430/1,804	638/1,045	1,095/1,378	5,524/6,809
Sierra Ave/I-10 ramps	2,065/2,868	2,179/2,636	1,557/1,440	1,020/1,134	6,822/8,078
Sierra Ave/Slover Ave	1,624/1,957	1,861/2,314	669/1,326	1,032/1,851	5,186/7,448
Cedar Ave/Valley Blvd	1,849/2,047	1,517/1,202	934/1,258	743/701	5,043/5,208

Source: West Valley Logistics Center Traffic Impact Analysis (Urban Crossroads 2017).

Based on SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak CO concentrations in the SCAB were a result of unusual meteorological and topographical conditions and not a result of traffic volumes and congestion at a particular intersection. As evidence of this, for example, 9.3 ppm 8-hour CO concentration measured at the Long Beach Boulevard and Imperial Highway intersection (highest CO-generating intersection within the "hot spot" analysis), only 0.7 ppm was attributable to the traffic volumes and congestion at this intersection; the remaining 8.6 ppm were due to the ambient air measurements at the time the 2003 AQMP was prepared. In contrast, the ambient 8-hour CO concentration within the project study area is estimated at 1.4 ppm–1.6 ppm. Therefore, even if the traffic volumes for the proposed project were double or even triple of the traffic volumes generated at the Long Beach Boulevard and Imperial Highway intersection analyzed by SCAQMD, coupled with the ongoing improvements in ambient air quality, the project would not be capable of resulting in a CO "hot spot" at any study area intersections.

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact.

Traffic volumes generating the CO concentrations for the "hot spot" analysis in the 2003 AQMP are shown in Table 4.2.2-17. The busiest intersection evaluated was at Wilshire Boulevard and Veteran Avenue, which has a daily traffic volume of approximately 100,000 vehicles per day. The 2003 AQMP estimated that the 1-hour concentration for this intersection was 4.6 ppm; this indicates that,

should the daily traffic volume increase four times to 400,000 vehicles per day, CO concentrations (4.6 ppm x 4= 18.4 ppm) would still not likely exceed the most stringent 1-hour CO standard (20.0 ppm).[18] At buildout of the WVLCSP, the highest daily traffic volumes generated at the roadways within the vicinity of the project are expected to generate less than the highest daily traffic volumes generated at the busiest intersection in the 2003 AQMP's CO "hot spot" analysis. As such, the project would not exceed the most stringent 1-hour CO standard.

Since the proposed project would not produce the volume of traffic required to generate a CO "hot spot" either in the context of the 2003 Los Angeles "hot spot" study or based on representative Bay Area Air Quality Management District CO threshold considerations, it is determined through this screening analysis that the proposed project would not generate a sufficient concentration of traffic to create a CO hot spot. As such, detailed modeling of project-specific CO "hot spots" would not be needed. Therefore, CO "hot spots" are not an environmental impact of concern for the proposed project. Localized air quality impacts related to mobile-source CO emissions would therefore be less than significant.

Specific Plan Requirements, Regulatory Requirements, and Standard Requirements

The applicant will implement the following Specific Plan Requirements, Regulatory Requirements, and Standard Requirements, as summarized below and specified in detail in Section 3.6 of the Project Description.

- **SP-AQ-2:** Erosion Control Plan.
- **SP-AQ-5:** Dust Control, Operations.
- **RR-AQ-1:** Comply with South Coast Air Quality Management District Rule 401 – Visible Emissions
- **RR-AQ-2:** Comply with South Coast Air Quality Management District Rule 402 – Nuisance
- **RR-AQ-3:** Comply with South Coast Air Quality Management District Rule 403 – Fugitive Dust
- **RR-AQ-7:** Require Equipment to be Turned Off When Not in Use
- **RR-AQ-8:** Air Pollutant Emissions, General

Mitigation Measures

Implementation of **Mitigation Measures AQ-1** through **AQ-10** that were proposed to address Impact AQ-2, "Violate any air quality standard or contribute substantially to an existing or projected air quality violation," will also reduce the significant PM_{10} and $PM_{2.5}$ LST construction impacts identified above. The effectiveness of these measures is addressed in the following section.

Residual Impacts

With the exception of the localized air quality impact identified for PM_{10} and $PM_{2.5}$ emissions during project construction, impacts associated with other air pollutants and DPM would be less than significant. Implementation of **Specific Plan Requirement SP-AQ-2 and SP-AQ-5**, **Regulatory Requirements RR-AQ-1** through **RR-AQ-3**, **RR-AQ-7**, and **RR-AQ-8,** and **Mitigation Measures AQ-1** through **AQ-9** would reduce the significant localized PM_{10} and $PM_{2.}5$ emissions generated during project construction to a less-than-significant level as indicated in Table 4.2.2-14.

[18] Based on the ratio of the CO standard (20.0 ppm) and the modeled value (4.6 ppm).

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 are not 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.

Specific Plan Requirements, Regulatory Requirements, and Standard Requirements

The applicant will implement the following Specific Plan Requirements, Regulatory Requirements, and Standard Requirements, as summarized below and specified in detail in Section 3.6 of the Project Description.

- **RR-AQ-2:** Comply with South Coast Air Quality Management District Rule 402 – Nuisance

Mitigation Measures

No mitigation is required because impacts would be less than significant.

Residual Impacts

Impacts would be less than significant.

4.2.3 Biological Resources

Introduction

This section describes the environmental and regulatory setting for biological resources, and identifies 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 direct observations made in the field during site surveys that covered the entire site boundary and the off-site areas along Locust Avenue and Jurupa Avenue in the project vicinity, as presented in the 2017 *West Valley Logistics Center Habitat Assessment* included in Appendix D of this Second Recirculated Draft Environmental Impact Report (2nd RDEIR).

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**. This term refers to all areas where ground disturbance or permanent removal of vegetation would occur, including the entirety of the proposed development area shown in Figure 4.2.3-1 as well as the perimeter of the 55.23-acre conservation area, which would experience disturbance associated with construction of temporary and permanent barrier fencing to protect the habitat. In addition, the entirety of the area within the 5.2-acre water pipeline construction footprint shown in Figure 4.2.3-2 would be temporarily disturbed and then restored. Off-site areas of disturbance occur within existing roadway right-of-way along Locust Avenue and Jurupa Avenue for roadway widening, as well as off-site sewer lines and a lift station within existing roadway right-of-way (see Figures 3.2, *Proposed Land Use Map*, and 3.6, *Backbone Sewer System Improvements*).
- **Special-Status Species.** Plant and animal species that have special federal or State regulatory or management status are referred to as special-status species. 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. Field surveys were conducted in 2014, and a supplemental habitat assessment was prepared in August 2014. Additional surveys of

the site were conducted in February 2017, and the results of that most recent survey are included in the updated Habitat Assessment included in Appendix D.

Physical Conditions

Land Uses

The Specific Plan's proposed 55.23-acre conservation area in the western portion of the project site supports native substrate and habitats, and is contiguous with sage scrub habitats and undeveloped lands to the west, within the Jurupa Hills, beyond the site boundary. The Specific Plan development area primarily consists of vacant, undeveloped but heavily disturbed land.

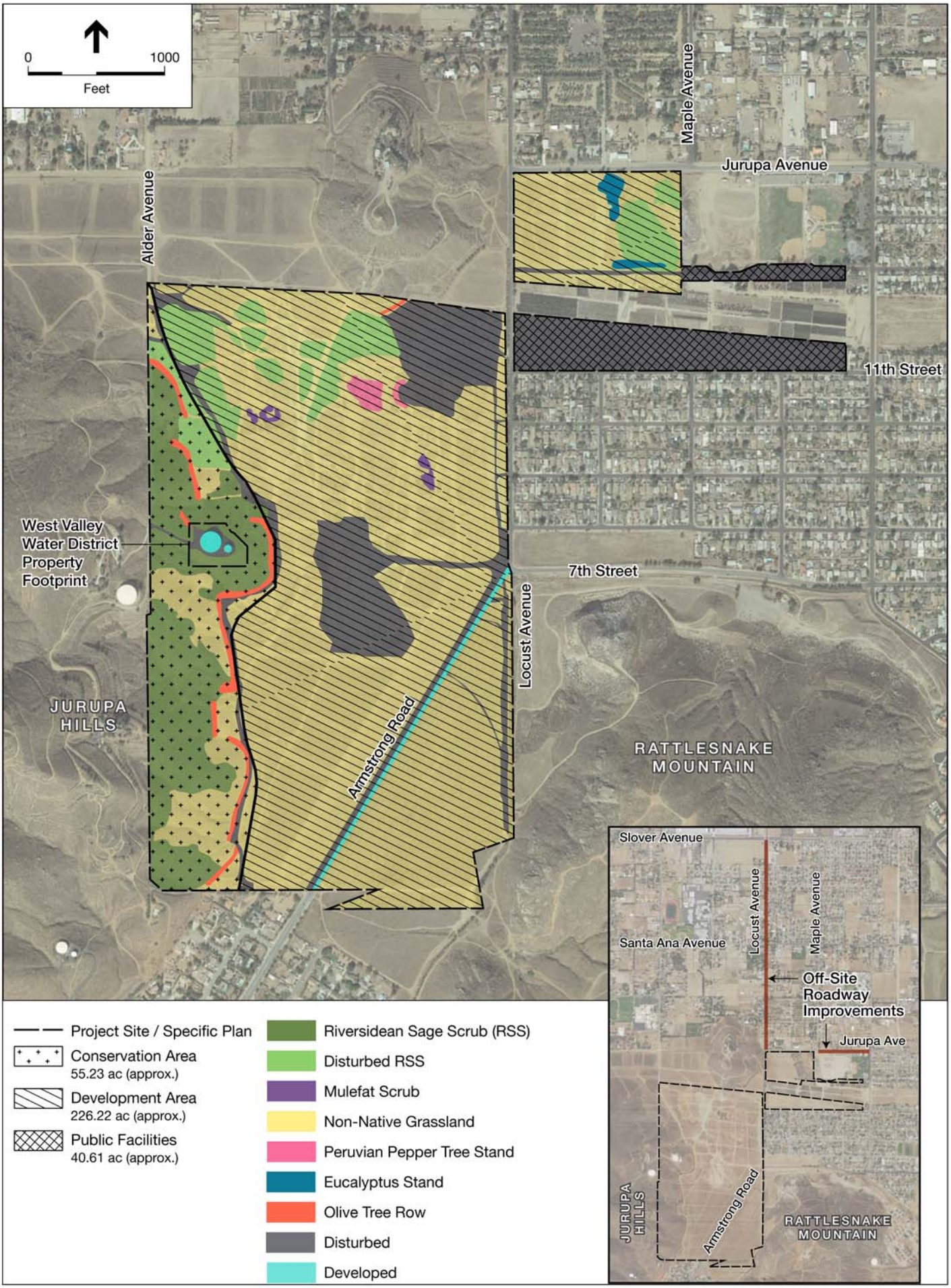
Historically, much of the site's proposed development area was used for agriculture, and was also a borrow site where materials have been removed from the site. More recently, the property has been fallow, but has also been subjected to various other human disturbances, including annual weed abatement, unauthorized horseback riding, extensive off-road vehicle use, and illegal dumping of trash and debris. The Specific Plan area also includes an existing detention basin north of 11th Street, shown in Figure 3-7, which accommodates runoff during storm events. There is a Southern California Edison (SCE) easement located along the northern boundary of the project site (north of Parcels 1 and 2 and Lot A, and south of Parcel 7) as well as an SCE easement running through the southeastern portion of the site between proposed Buildings 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 field surveys included temperatures in the high 60s to low 70s (degrees Fahrenheit).

Topography and Soils

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), Cieneba sandy loam (9–15 % slopes), and Delhi fine sand (Figure 4.2.3-3). Other areas of the site are characterized as quarries and pits (the site of the former Crestmore Landfill) and Cieneba-rock outcrop complex (at the highest point of the Jurupa Hills on site). The past agricultural land uses, routine disking, and unauthorized recreational uses have severely disturbed surface soils, resulting in the removal of native soils from the project site. While very little native soil substrate remains within the proposed development area, native substrate remains intact within the sloping western portions of the site that are included in the proposed conservation area.



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Figure 4.2.3-1
Proposed Development and Conservation Areas with Vegetation Communities
West Valley Logistics Center Specific Plan 2nd RDEIR

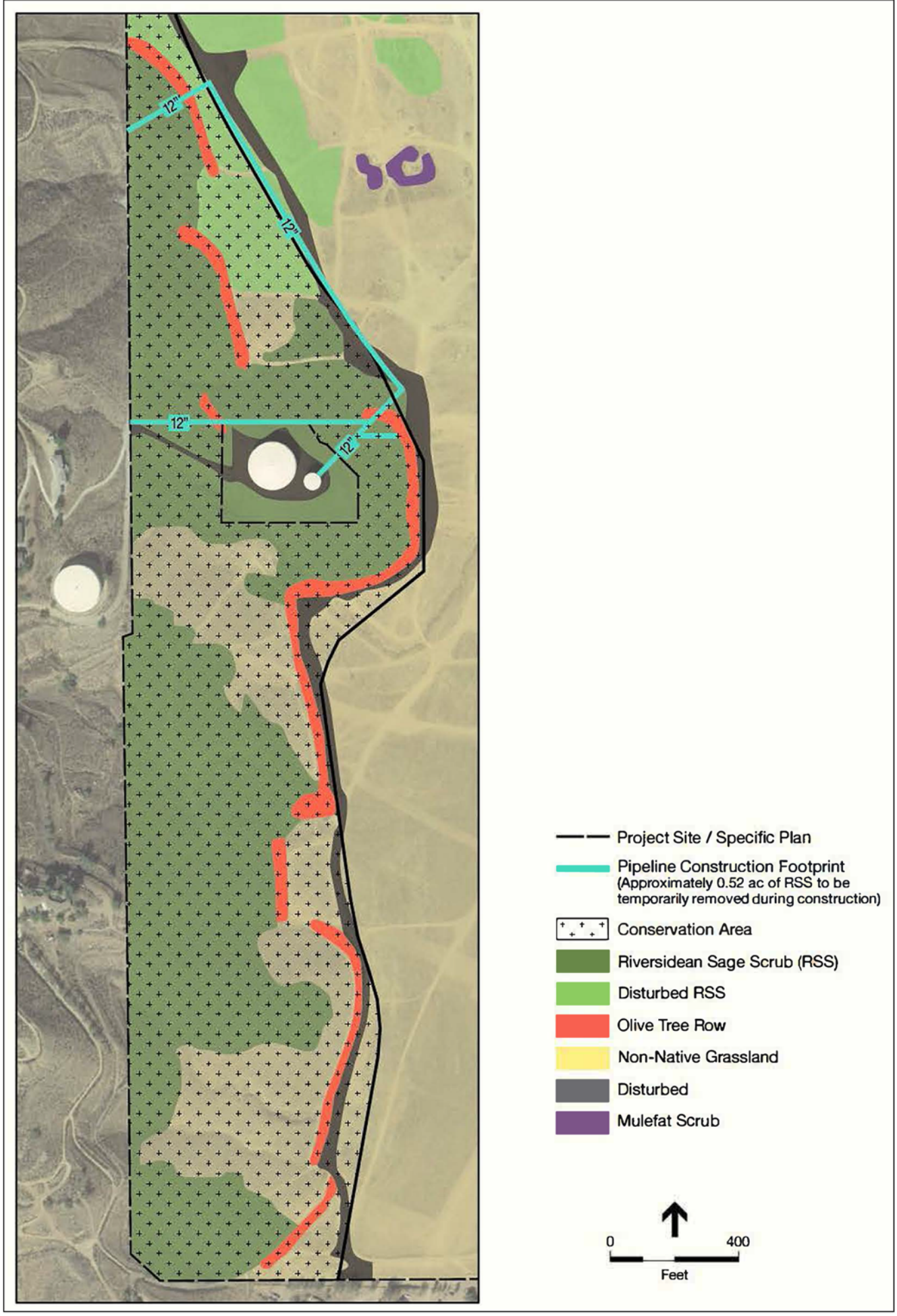
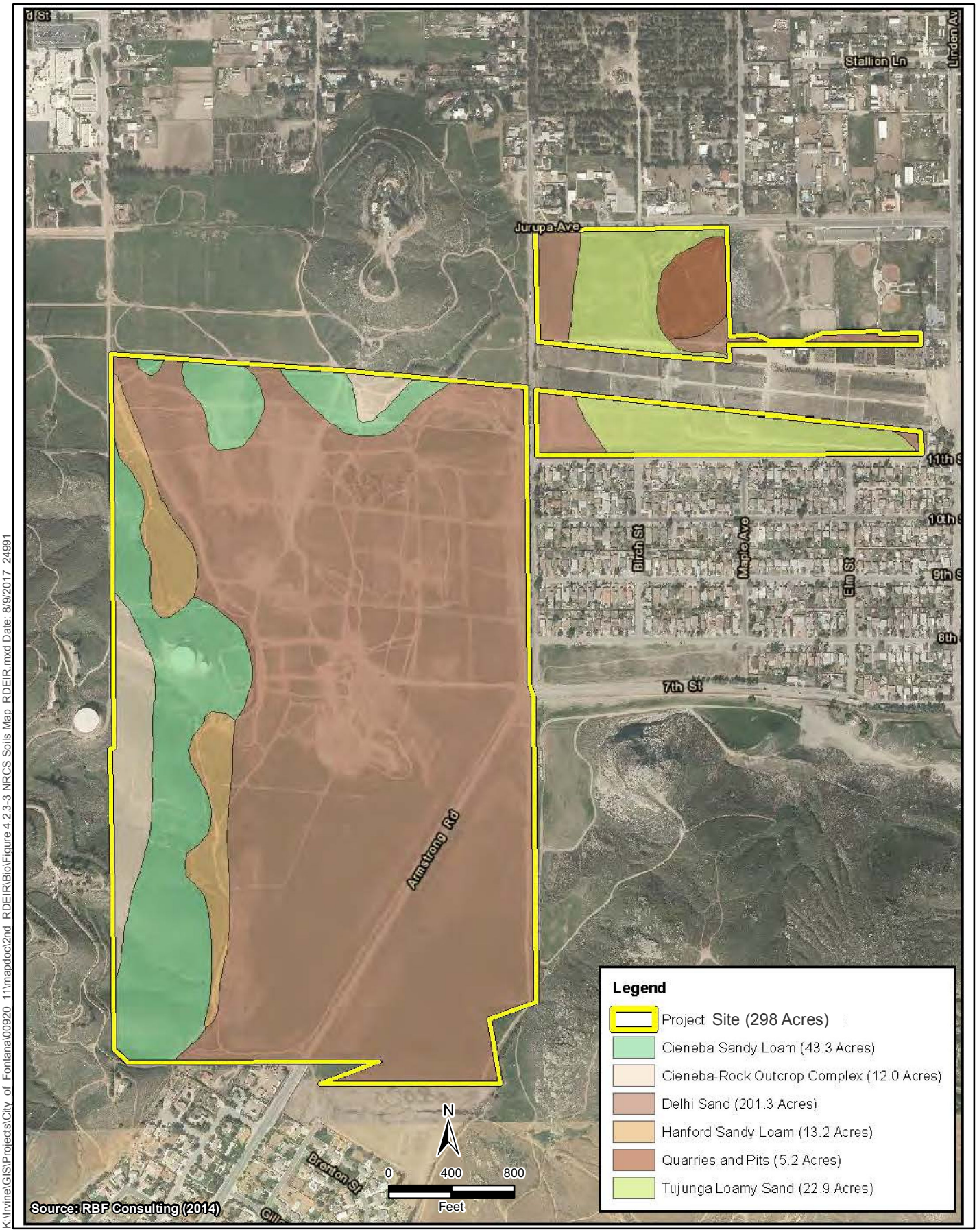


Figure 4.2.3-2
Water Pipeline Construction Footprint
West Valley Logistics Center Specific Plan 2nd RDEIR



K:\Irvine\GIS\Projects\City_of_Fontana\00920_11\mapdoc\2nd_RDEIR\Bio\Figure 4.2.3-3 NRCS Soils Map_RDEIR.mxd Date: 8/9/2017 24991

Figure 4.2.3-3
NRCS Soils Map
West Valley Logistics Center Specific Plan 2nd RDEIR

Biological Conditions

Vegetation Communities

Three plant communities occur within the boundaries of the project site: Riversidean sage scrub (RSS), disturbed RSS, and mulefat scrub. Additional cover types that occur on site are classified as non-native grasslands, Peruvian pepper tree stand, eucalyptus stand, olive tree row, disturbed, and developed (Figure 4.2.3-4). These plant communities and land cover types and their approximate acreages are summarized in Table 4.2.3-1. Very little vegetation is present within the footprint of proposed off-site roadway improvements. This area consists of highly disturbed substrate with very little plant cover, and is not addressed further. Figure 4.2.3-4 shows the distribution of the plant communities and cover types as they presently occur at the project site within the conservation and development areas.

Table 4.2.3-1. Plant Communities and Cover Types

Community/Cover Type	Acreage	Percentage
Riversidean Sage Scrub	33.6	11.3
Disturbed Riversidean Sage Scrub	20.7	6.9
Mulefat Scrub	0.7	0.2
Non-native Grassland	181.7	61.1
Disturbed	53.4	17.9
Developed	2.1	0.7
Olive Tree Row	3.4	1.1
Peruvian Pepper Tree Stand	1.3	0.4
Eucalyptus Stand	1.2	0.4
Total	298.1	100%

Riversidean Sage Scrub (RSS and Disturbed RSS)

The RSS plant community is found locally on the foothills of the Jurupa Hills directly adjacent and upslope to the west from the project site boundary. This plant community extends into the property boundary within the conservation area, creating nearly contiguous shrub vegetation cover along the western site boundary. Brittlebush (*Encelia farinosa*) is the dominant species present. Other plant species observed within this plant community include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), common fiddleneck (*Amsinckia intermedia*), and deerweed (*Acmispon glaber*) with an understory supporting non-native grasses (i.e., bromes).

The disturbed RSS plant community is found within the northwestern portion of the proposed development area as shown in Figure 4.2.3-4. Disturbed RSS is poorer quality compared to RSS, because this plant community has been subject to a high level of human disturbances. Dominant plants include California buckwheat with small patches of brittlebush and California sagebrush. The disturbed RSS is also characterized by a greater density of horseweed (*Erigeron bonariensis*), red-stemmed filaree (*Erodium cicutarium*), and other non-native grasses found in disturbed areas on site.

Mulefat Scrub

A small, isolated mulefat scrub vegetation community, dominated by mulefat (*Baccharis salicifolia*), is found in a low-lying area 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*) (refer to complete plant list included in Appendix D).

Site Cover Types

The following land cover types, while not constituting plant communities, include remnant features from the site's use for agricultural purposes and as a rural residence. Please also see Figure 4.2.3-4, which includes a graphic depiction of these communities as they currently occur (Michael Baker International 2017).

Non-native Grassland

The dominant plant community within the project site is non-native grassland. Historical land uses and existing disturbances have resulted in the removal of most of the native plants on the project site and have allowed non-native grasslands to become established. The dominant plant species in the non-native grassland included red brome (*Bromus madritensis*), ripgut (*Bromus diandrus*), wild oat (*Avena barbata*), Mediterranean grass (*Schismus barbatus*), and cheat grass (*Bromus tectorum*). This cover type is interspersed with bare ground.

Disturbed

Disturbed areas are found throughout the project site and consist of areas that have been exposed to a high level of human activities (i.e., illegal off-road vehicle use, dirt access roads). These areas are generally devoid of vegetation and are composed of compact dirt surfaces. However, early successional and non-native weedy plant species have established in portions of these disturbed areas. Plant species observed within on-site disturbed areas include jimsonweed (*Datura wrightii*), milk thistle (*Silybum marianum*), short-podded mustard (*Hirschfeldia incana*), tree tobacco (*Nicotiana glauca*), London rocket (*Sisymbrium irio*), and Russian thistle (*Salsola tragus*).

Developed

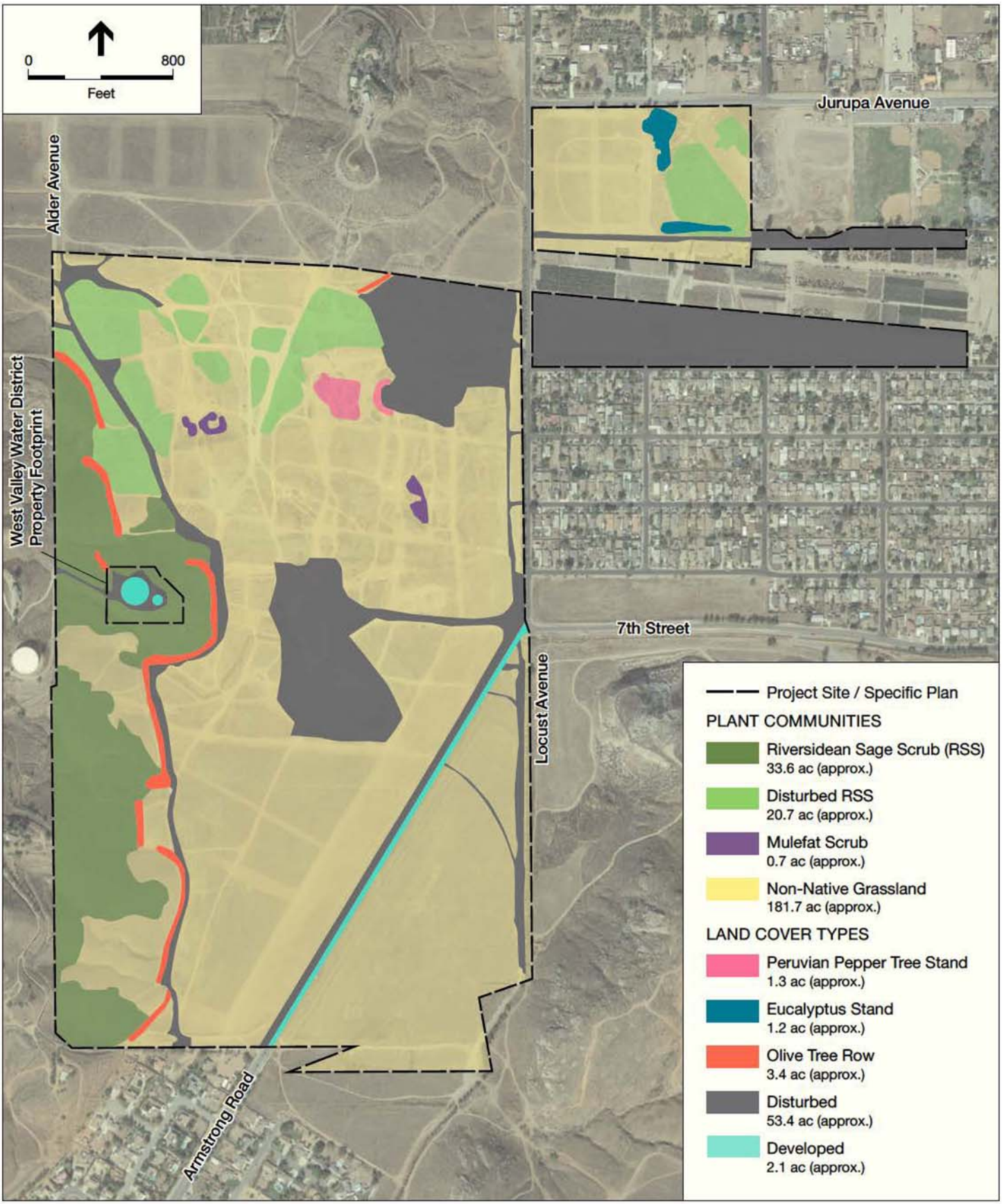
Developed areas within the project site generally consist of paved roads (Armstrong Road and Locust Avenue) and water reservoir tanks.

Olive Tree Row

Olive trees (*Olea europaea*) planted in rows can be found in the western portion of the project site located to the west of Locust Avenue, and separate the non-native grassland habitat from the RSS habitat on the foothills of the Jurupa Mountains. In addition, there is an olive tree row on the western shoulder of Locust Avenue, south of Jurupa Avenue and north of 7th Street within the project site (see Figure 4.2.3-4).

Peruvian Pepper Tree Stand

A stand of Peruvian pepper trees (*Schinus molle*) was observed on the northern portion of the project site west of Locust Avenue. This stand of Peruvian pepper trees is associated with a remnant housing structure, and is surrounded by disturbed areas and non-native grassland.



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Figure 4.2.3-4
Vegetation Communities
West Valley Logistics Center Specific Plan 2nd RDEIR

Eucalyptus Stand

Stands of eucalyptus (*Eucalyptus* sp.) were observed within the northeastern portion of the project site east of Locust Avenue, directly south of Jurupa Avenue. These stands of eucalyptus occur on the banks of the jurisdictional drainage feature found on this portion of the project site, and abut non-native grassland and disturbed RSS habitats.

Wildlife

The most common animals detected within the project site were birds. A complete list of the birds observed on site is included in Appendix D. 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 (*Psaltriparus minimus*), red-tailed hawk (*Buteo jamaicensis*), northern mockingbird (*Mimus polyglottos*), California towhee (*Melozone crissalis*), Say's phoebe (*Sayornis saya*), yellow-rumped warbler (*Setophaga coronata*), western meadowlark (*Sturnella neglecta*), Cassin's kingbird (*Tyrannus vociferans*), turkey vulture (*Cathartes aura*), northern flicker (*Colaptes auratus*), mountain bluebird (*Sialia currucoides*), great egret (*Ardea alba*), killdeer (*Charadrius vociferus*), and white-crowned sparrow (*Zonotrichia leucophrys*). The next most common species detected were mammals and included Audubon's cottontail (*Sylvilagus audubonii*), Botta's pocket gopher (*Thomomys bottae*), and California ground squirrel (*Otospermophilus beecheyi*). There were also small mammal burrows noted throughout the project site. The only reptile observed was western fence lizard (*Sceloporus occidentalis*). There is no suitable habitat for fish or amphibian species within the project site.

Special-status Species

Special-status species are biological resources such as plants, animals, or specialized habitats that are afforded protection under federal, State or local laws including the FESA, CESA, and California Fish and Game Code. Species identified as *Endangered*, *Threatened*, or *Proposed for Listing* or considered to be Species of Concern are of special status. For the purposes of meeting California Environmental Quality Act (CEQA) criteria, locally rare species are also considered and referred to as special-status species (i.e., Watchlist species). Species with the potential to occur within the region are presented in Table 4.2.3-2 along with summarized conclusions regarding the potential for on-site occurrence of listed and sensitive plant and wildlife species. The summaries included in the table are taken from Appendix D, and are based on species' known distribution, habitat requirements, and existing conditions observed at the site.

Special-status Plants

Fourteen special-status plant species have been recorded in the California Natural Diversity Database (CNDDB) and by the CNPS to occur in the Fontana U.S. Geological Survey (USGS) 7.5-minute quadrangle (refer to Appendix C in Appendix D). No special-status plant species were observed on site during the habitat assessment(s). The majority of the project site has been disturbed by human activities, which have almost eliminated the natural plant communities that once occurred within the project site. However, due to the relatively undisturbed condition of the substrate and vegetation in the western portion of the project site, the RSS plant community retains the potential to provide suitable habitat for Plummer's mariposa-lily (*Calochortus plummerae*), Parry's spineflower (*Chorizanthe parryi* var. *parryi*), and paniculate tarplant (*Deinandra paniculata*). All other special-status plant species are not expected to occur and are presumed to be absent from the project site (Michael Baker International 2017).

Special-status Wildlife

Thirty-eight special-status wildlife species have been reported in the Fontana USGS 7.5-minute quadrangle (refer to Appendix C in Appendix D). Cooper's hawk (*Accipiter cooperii*) and western burrowing owl (*Athene cunicularia*) were the only special-status wildlife species observed on site during the habitat assessment(s). In addition, Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), olive-sided flycatcher (*Contopus cooperi*), and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) were observed on site during a 2014 California gnatcatcher (CAGN) focused survey. Based on habitat requirements for specific special-status wildlife species and the availability and quality of habitats needed by each species, it was determined that the project site has a high potential to support great blue heron (*Ardea herodias*), a moderate potential to support CAGN, and a low potential to support California glossy snake (*Arizona elegans occidentalis*), Bell's sage sparrow (*Artemisiospiza belli belli*), orange-throated whiptail (*Aspidoscelis hyperythra*), Costa's hummingbird (*Calypte costae*), northern harrier (*Circus cyaneus*), San Diego banded gecko (*Coleonyx variegatus abbotti*), red-diamond rattlesnake (*Crotalus ruber*), San Bernardino ringneck snake (*Diadophis punctatus modestus*), loggerhead shrike (*Lanius ludovicianus*), and coast horned lizard (*Phrynosoma blainvillii*). All remaining special-status wildlife species are presumed to be absent from the project site based on habitat requirements, availability and quality of habitat needed by each species, and known distributions (Michael Baker International 2017).

Table 4.2.3-2. Suitable Habitats and Potentially Occurring Sensitive Plant and Wildlife Species

Scientific Name Common Name	**Status**		**Habitat**	**Observed On Site**	**Potential to Occur**
SPECIAL-STATUS WILDLIFE SPECIES					
Accipiter cooperii Cooper's hawk	Fed: CA:	None WL	Generally found in forested areas up to 3,000 feet in elevation, especially near edges and rivers. Prefers hardwood stands and mature forests, but can be found in urban and suburban areas where there are tall trees for nesting. Common in open areas during nesting season.	Yes	**Present**. This species was observed on site during the 2017 habitat assessment included in Appendix D.
Accipiter striatus sharp-shinned hawk	Fed: CA:	None WL	Primarily occurs in coniferous forests, but is also found in boreal mixed conifer-birch-aspen forests. Less common in other woodland types, except in mountainous areas. Open areas are used for foraging, but not for nesting.	No	**Presumed absent.** No suitable habitat is present on site.
Agelaius tricolor tricolored blackbird	Fed: CA:	None SSC	Range is limited to the coastal areas of the Pacific coast of North America, from Northern California to upper Baja California. 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 [*Schoenoplectus* sp.]), and either flooded or thorny or spiny vegetation and suitable foraging space providing adequate insect prey.	No	**Presumed absent.** No suitable habitat is present on site.
Aimophila ruficeps canescens Southern California rufous-crowned sparrow	Fed: CA:	None WL	Typically found between 3,000 and 6,000 feet in elevation. Breed in sparsely vegetated shrublands on hillsides and canyons. Prefers coastal sage scrub dominated by California sagebrush (*Artemisia californica*), 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 is present in RSS conservation area.
Anniella pulchra pulchra silvery legless lizard	Fed: CA:	None SSC	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 close vicinity of logs, rocks, old boards, and the compacted debris of woodrat nests.	No	**Presumed absent.** No suitable habitat is present on site.
Aquila chrysaetos golden eagle	Fed: CA:	None FP; WL	Occupies nearly all terrestrial habitats of the western states except densely forested areas. Favors secluded cliffs with overhanging ledges and large trees for nesting and cover. Hilly or mountainous country where takeoff and soaring are supported by updrafts is generally preferred to flat habitats. Deeply cut canyons rising to open mountain slopes and crags are ideal habitat.	No	**Presumed absent.** No suitable habitat is present on site.

Scientific Name Common Name	**Status**		**Habitat**	**Observed On Site**	**Potential to Occur**
Ardea herodias great blue heron	Fed: CA:	None None	Fairly common all year throughout most of California, in shallow estuaries and fresh and saline emergent wetlands. Less common along riverine and rocky marine shores, in croplands, pastures, and in mountains about foothills.	No	**High.** The project site provides suitable foraging habitat.
Arizona elegans occidentalis California glossy snake	Fed: CA:	None SSC	Inhabits arid scrub, rocky washes, grasslands, and chaparral habitats.	No	**Low.** Suitable habitat is present within the project site.
Artemisiospiza belli belli Bell's sage sparrow	Fed: CA:	None WL	Occurs in chaparral dominated by fairly dense stands of chamise. Also found in coastal sage scrub in south of range.	No	**Low.** Suitable habitat is present on the western portion of the project site.
Aspidoscelis hyperythra orange-throated whiptail	Fed: CA:	None WL	Inhabits low-elevations coastal scrub, chamise-redshank chaparral, mixed chaparral, and valley-foothill hardwood habitats. Semi-arid brushy areas typically with loose soil and rocks, including washes, streamsides, rocky hillsides, and coastal chaparral.	No	**Low.** Suitable habitat is present on the western portion of the project site.
Aspidoscelis tigris stejnegeri coastal whiptail	Fed: CA:	None SSC	Found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage—chaparral, woodland, and riparian areas.	No	**Presumed absent.** No suitable habitat is present on site.
Athene cunicularia burrowing owl	Fed: CA:	None SSC	Primarily a grassland species, but it persists and even thrives in some landscapes highly altered by human activity. Occurs in open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. The overriding characteristics of suitable habitat appear to be burrows for roosting and nesting and relatively short vegetation with only sparse shrubs and taller vegetation.	Yes	**Present**. This species was observed on site during the 2017 habitat assessment.
Bombus crotchii Crotch bumble bee	Fed: CA:	None None	Exclusive to coastal California east toward the Sierra-Cascade Crest; less common in western Nevada.	No	**Presumed absent.** No suitable habitat is present on site.
Calypte costae Costa's hummingbird	Fed: CA:	None None	Desert and semi-desert, arid brushy foothills and chaparral. A desert hummingbird that breeds in the Sonoran and Mojave Deserts. Departs desert heat moving into chaparral, scrub, and woodland habitats.	No	**Low.** Some suitable habitat is present on the project site.
Catostomus santaanae Santa Ana sucker	Fed: CA:	**THR** None	Occur in the watersheds draining the San Gabriel and San Bernardino Mountains of Southern California. Steams 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 is present on site.

Scientific Name Common Name	**Status**		**Habitat**	**Observed On Site**	**Potential to Occur**
Chaetodipus fallax fallax northwestern San Diego pocket mouse	Fed: CA:	None SSC	Occurs in desert and coastal habitats in Southern California, Mexico, and northern Baja California, from sea level to at least 1,400 meters above mean sea level. Found in a variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. Requires low growing vegetation or rocky outcroppings, as well as sandy soils for burrowing.	No	**Presumed absent.** No suitable habitat is present on site.
Cicindela tranquebarica viridissima greenest tiger beetle	Fed: CA:	None None	Occurs in a few small colonies within the Santa Ana River watershed.	No	**Presumed absent.** No suitable habitat is present on site.
Circus cyaneus northern harrier	Fed: CA:	None SSC	Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Mostly found in flat, or hummocky, open areas of tall, dense grasses moist or dry shrubs, and edges for nesting, cover, and feeding.	No	**Low.** The project site provides suitable foraging habitat.
Coleonyx variegatus abbotti San Diego banded gecko	Fed: CA:	None SSC	Prefers rocky areas in coastal sage and chaparral within granite or rocky outcrops. Occurs in coastal and cismontane Southern California from interior Ventura County south.	No	**Low.** Suitable habitat is present on the western portion of the project site.
Contopus cooperi olive-sided flycatcher	Fed: CA:	None SSC	Uncommon to common, summer resident in a wide variety of forest and woodland habitats below 9,000 feet throughout California exclusive of the deserts, the Central Valley, and other lowland valleys and basins. Preferred nesting habitats include mixed conifer, montane hardwood-conifer, Douglas-fir, redwood, red fir, and lodgepole pine.	No	**Low.** Observed on site in 2014. No suitable nesting habitat is present on site.
Crotalus ruber red-diamond rattlesnake	Fed: CA:	None SSC	It can be found from the desert, through dense chaparral in the foothills (it avoids the mountains above around 4,000 feet), to warm inland mesas and valleys, all the way to the cool ocean shore. It is 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	**Low.** Suitable habitat is present on the western portion of the project site.
Diadophis punctatus modestus San Bernardino ringneck snake	Fed: CA:	None None	Common in open, relatively rocky areas within valley-foothill, mixed chaparral, and annual grass habitats.	No	**Low.** Suitable habitat is present within the project site.

Scientific Name Common Name	**Status**		**Habitat**	**Observed On Site**	**Potential to Occur**
Dipodomys merriami parvus San Bernardino kangaroo rat	Fed: CA:	**END** SSC	Primarily found in alluvial fan sage scrub and sandy loam soils, alluvial fans and flood plains, and along washes with nearby sage scrub. May occur at lower densities in upland sage scrub, chaparral and grassland in uplands and tributaries in proximity to alluvial fan sage scrub habitats. Tend to avoid rocky substrates and prefer sandy loam substrates for digging of shallow burrows.	No	**Presumed absent.** No suitable habitat is present on site.
Eumops perotis californicus western mastiff bat	Fed: CA:	None SSC	Primarily a cliff-dwelling species, roost generally under exfoliating rock slabs. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least three meters below the entrance for flight. In California, it is most frequently encountered in broad open areas. Its foraging habitat includes dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas.	No	**Presumed absent.** No suitable habitat is present on site.
Gila orcuttii arroyo chub	Fed: CA:	None SSC	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. They are found both in slow-moving and fast-moving sections, but generally deeper than 40 centimeters.	No	**Presumed absent.** No suitable habitat is present on site.
Icteria virens yellow-breasted chat	Fed: CA:	None SSC	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. It winters south in Central America.	No	**Presumed absent.** No suitable habitat is present on site.
Lanius ludovicianus loggerhead shrike	Fed: CA:	None SSC	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.** The project site provides suitable foraging habitat.
Lasiurus xanthinus western yellow bat	Fed: CA:	None SSC	Roosts in palm trees in foothill riparian, desert wash, and palm oasis habitats with access to water for foraging.	No	**Presumed absent.** No suitable habitat is present on site.
Lepus californicus bennettii San Diego black-tailed jackrabbit	Fed: CA:	None SSC	Found in diverse habitats, but primarily is found in arid regions supporting shortgrass habitats. Openness of open scrub habitat is preferred over dense chaparral.	No	**Low.** Observed on site in 2014; potential habitat in RSS conservation area.
Nyctinomops femorosaccus pocketed free-tailed bat	Fed: CA:	None SSC	Often found in pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis.	No	**Presumed absent.** No suitable habitat is present on site.

Scientific Name Common Name	**Status**		**Habitat**	**Observed On Site**	**Potential to Occur**
Pandion haliaetus osprey	Fed: CA:	None WL	Occurs in a variety of plant communities in association with riparian habitats including shrublands, grasslands, swamps, and coniferous and deciduous forests. In California, ospreys are primarily associated with ponderosa pine (*Pine ponderosa*) and mixed-conifer types.	No	**Presumed absent.** No suitable habitat is present on site.
Perognathus longimembris pacificus Pacific pocket mouse	Fed: CA:	**END** SSC	Occur on fine-grain, sandy, or gravelly substrates in the immediate vicinity of the Pacific Ocean. Known to occur on coastal strand, coastal dunes, river alluvium, and coastal sage scrub habitats on marine terraces.	No	**Presumed absent.** No suitable habitat is present on site.
Phrynosoma blainvillii coast horned lizard	Fed: CA:	None SSC	Found in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. In inland areas, this species is restricted to areas with pockets of open microhabitat, created by disturbance (i.e. fire, floods, roads, grazing, fire breaks). 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	**Low.** Suitable habitat is present within the project site.
Polioptila californica californica coastal California gnatcatcher	Fed: CA:	**THR** SSC	Obligate resident of sage scrub habitats that are dominated by California sagebrush. This species generally occurs below 750 feet elevation in coastal regions and below 1,500 feet inland. It prefers habitat with more low-growing vegetation.	No	**Moderate.** Suitable habitat is present on the western portion of the project site.
Rhaphiomidas terminatus abdominalis Delhi Sands flower-loving fly	Fed: CA:	**END** None	Delhi Sands flower-loving fly habitat is limited to areas that include Delhi fine sand, an aeolian (wind-deposited) soil type. The highest density of Delhi Sands flower-loving fly have been found in habitat that includes a variety of plants including California buckwheat, California croton, deerweed, and telegraph weed.	No	**Presumed absent.** This species was not observed during protocol surveys.
Setophaga petechia yellow warbler	Fed: CA:	None SSC	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 is present on site.
Spea hammondii western spadefoot	Fed: CA:	None SSC	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washed, 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 is present on site.

Scientific Name Common Name	**Status**		**Habitat**	**Observed On Site**	**Potential to Occur**
Vireo bellii pusillus least Bell's vireo	Fed: CA:	**END** **END**	Primarily occupy Riverine riparian habitat that typically feature dense cover within 1–2 meters of the ground and a dense, stratified canopy. Typically it is associated with southern willow scrub, cottonwood-willow forest, mule fat scrub, sycamore alluvial woodlands, coast live oak riparian forest, arroyo willow riparian forest, or mesquite in desert localities. It uses habitat which is limited to the immediate vicinity of water courses, 2,000 feet elevation in the interior.	No	**Presumed absent.** No suitable habitat is present on site.
SPECIAL-STATUS PLANT SPECIES					
Arenaria paludicola marsh sandwort	Fed: CA: CNPS:	**END** **END** 1B.1	Grows mainly in wetlands and freshwater marshes in arid climates. The plant can grow in saturated acidic bog soils and soils that are sandy with a high organic content. Found at elevations ranging from 33 to 558 feet. Blooming period is from May to August.	No	**Presumed absent.** No suitable habitat is present on site.
Berberis nevinii Nevin's barberry	Fed: CA: CNPS:	**END** **END** 1B.1	Grows in sandy or gravelly soils within chaparral, cismontane woodland, coastal scrub, and riparian scrub habitats. Found at elevations ranging from 230 to 2,707 feet. The blooming period is from February to June.	No	**Presumed absent.** No suitable habitat is present on site.
Calochortus plummerae Plummer's mariposa-lily	Fed: CA: CNPS:	None None 4.2	Prefers openings in chaparral, foothill woodland, coastal sage scrub, valley and foothill grasslands, cismontane woodland, lower montane coniferous forest and yellow pine forest. Often found on dry, rocky slopes and soils and brushy areas. Can be very common after a fire. From 328 to 5,577 feet in elevation. Blooming period is from May to July.	No	**Low.** Suitable habitat is present in the RSS conservation area.
Chloropyron maritimum* ssp. *maritimum salt marsh bird's-beak	Fed: CA: CNPS:	**END** **END** 1B.2	Upper terraces and higher edges of coastal salt marshes where tidal inundation is periodic. Found at elevations ranging from 0 to 99 feet. Blooming period is from May to October.	No	**Presumed absent.** No suitable habitat is present on site.
Chorizanthe parryi* var. *parryi Parry's spineflower	Fed: CA: CNPS:	None None 1B.2	Occurs on sandy and/or rocky soils in chaparral, coastal sage scrub, and sandy openings within alluvial washes and margins. Found at elevations ranging from 951 to 3,773 feet. Blooming period is from April to June.	No	**Low.** Suitable habitat is present on the western portion of the project site.
Deinandra paniculata paniculate tarplant	Fed: CA: CNPS:	None None 4.2	Occurs in coastal scrub, vernal pools, valley and foothill grassland habitats. Found at elevations ranging from 82 to 3,084 feet. Blooming period is from April to November.	No	**Low.** Some suitable habitat present in RSS conservation area.
Eriastrum densifolium* ssp. *sanctorum Santa Ana River woollystar	Fed: CA: CNPS:	**END** **END** 1B.1	Grows in sandy or gravelly soils within chaparral and coastal scrub habitat. Found at elevations ranging from 299 to 2,001 feet. Blooming period is from April to September.	No	**Presumed absent.** No suitable habitat is present on site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On Site**	**Potential to Occur**
Horkelia cuneata* var. *puberula mesa horkelia	Fed: None CA: None CNPS: 1B.1	Occurs on sandy or gravelly soils in chaparral, woodlands, and coastal scrub plant communities. Found at elevations ranging from 230 to 2,657 feet. Blooming period is from February to September.	No	**Presumed absent.** No suitable habitat is present on site.
Juglans californica Southern California black walnut	Fed: None CA: None CNPS: 4.2	Found in chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats. Found at elevations ranging from 164 to 2,953 feet. Blooming period is from March to August.	No	**Presumed absent.** No suitable habitat is present on site.
Lepidium virginicum* var. *robinsonii Robinson's pepper-grass	Fed: None CA: None CNPS: 4.3	Dry soils on chaparral and coastal sage scrub. Found at elevations ranging from 3 to 2,904 feet. Blooming period is from January to July.	No	**Presumed absent.** No suitable habitat is present on site.
Lycium parishii Parish's desert-thorn	Fed: None CA: None CNPS: 2B.3	Habitats include coastal scrub. Found at elevations ranging from 443 to 3,281 feet. Blooming period is from March to April.	No	**Presumed absent.** No suitable habitat is present on site.
Monardella pringlei Pringle's monardella	Fed: None CA: None CNPS: 1A	Prefers sandy soils within coastal scrub habitat. Found at elevations ranging from 984 to 1,312 feet. Blooming period is from May to June.	No	**Presumed absent.** No suitable habitat is present on site.
Senecio aphanactis chaparral ragwort	Fed: None CA: None CNPS: 2B.2	Habitats include chaparral, cismontane woodland, and coastal scrub. Found at scrub and Sonoran desert elevations ranging from 49 to 2,626 feet. Blooming period is from January to May.	No	**Presumed absent.** No suitable habitat is present on site.
Sphenopholis obtusata prairie wedge grass	Fed: None CA: None CNPS: 2B.2	Prefers cismontane woodland, meadows and seeps. Found at elevations ranging from 984 to 6,562 feet. Blooming period is from April to July.	No	**Presumed absent.** No suitable habitat is present on site.
SPECIAL-STATUS PLANT COMMUNITIES				
Riversidean Alluvial Fan Sage Scrub	CDFW Sensitive Habitat	Occur 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. Is 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.** There are no sandy alluvial drainages on site and suitable habitat for the species is not present.
Riversidean Sage Scrub	Fed: None CA: None CNPS: None	Local sage scrub habitat that has no formal designation; included in table because the plant community is potential habitat for listed species. Brittlebush (*Encelia farinosa*) is the dominant species present; includes California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), common fiddleneck (*Amsinckia intermedia*), and deerweed (*Acmispon glaber*) with an understory supporting non-native grasses.	Yes	**Present.** Occurs along the western site boundary.

Focused Survey Results

Focused surveys utilize agency-recommended methods that are more extensive than reconnaissance-level site visits, and are intended to confirm presence or absence of a species due to the more intensive nature of the survey effort. Based on the habitats identified during reconnaissance surveys, and evaluation of the species that could occur within the on-site habitats, biologists determined that focused surveys for rare plants, coastal California gnatcatcher (*Polioptila californica*), western burrowing owl, and Delhi sands flower-loving fly (DSFLF; *Rhaphiomidas terminatus abdominalis*) were warranted. The results of focused survey efforts are summarized below, and the individual survey reports are included in more detail in Appendix D

Rare Plants Focused Survey Results

The rare plant focused survey was conducted in April and May of 2013 by RBF Consulting following the California Department of Fish and Wildlife (CDFW) *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2009) and the U.S. Fish and Wildlife Service (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, there remains a low potential for six rare plant species to occur within the proposed conservation area in the western portion of the project site: 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*). These plants are not listed as threatened or endangered, but meet the CEQA criteria for consideration due to their designation by the CNPS as a sensitive species. No individuals of the rare plant species listed above were found on the project site during focused plant surveys, and are all presumed absent. For more detail regarding the surveys including timing and methodology, please refer to Appendix D.

Coastal California Gnatcatcher Focused Survey Results

While the RSS habitat within the conservation area located along the western boundary of the project site provides suitable habitat for CAGN, the species was not observed during reconnaissance surveys of that area, nor was it observed in the disturbed RSS located within the conservation area in 2013, during 2013 focused survey efforts, or during the 2014 focused survey effort. The species was also not observed on site during 2017 reconnaissance surveys. Nevertheless, the RSS plant community located along the western portion of the project site is considered suitable habitat for CAGN, and the species has a moderate potential to occur within the conservation area RSS habitat along the western boundary of the project site.

Delhi Sands Flower-loving Fly Focused Survey Results

DSFLF habitat occurs in areas where the soil substrate is defined and mapped as Delhi fine sand, an aeolian (wind-deposited) soil type. As described in Appendix D, the majority of the soils within the development area have been mapped by the Natural Resources Conservation Service as Delhi Series soils. However, suitable DSFLF habitat is further defined as 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 highest density DSFLF populations have been found in undisturbed Delhi fine sands that support a variety of plants including California buckwheat, California croton (*Croton californicus*), and telegraph weed (*Heterotheca grandiflora*), as described in Appendix D. 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); the project site occurs within the Jurupa Recovery Unit. These recovery units are defined as large geographic areas based on geographic proximity, similarity of habitat, and potential genetic exchange. In addition, the Western Riverside County Multiple Species Habitat Conservation Plan (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 located within the MSHCP plan area. The soils and substrate within the development area and the off-site roadway rights-of-way have been altered by human activities including soil borrow, off-road vehicle use, illegal dumping, and past mining and filling, which indicates that habitat is not suitable to support the species and it is not likely to occur. Delhi fine sand substrate does not occur within the proposed conservation area.

According to USFWS protocol, 2 consecutive years of negative surveys are required to demonstrate absence of DSFLF from a project site. As described in Appendix D, 6 years of consecutive protocol surveys conducted for DSFLF between 2003 and 2009 did not detect this species. Consecutive focused surveys in 2011, 2012, 2013, and 2015 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

The western 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 use a wide variety of arid and semi-arid environments with well-drained, level to gently sloping areas characterized by sparse vegetation and bare ground (Haug and Didiuk 1993; Dechant et al. 1999). 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.

The project site provides open foraging habitat and line-of-sight opportunities for burrowing owls. Furthermore, the project site provides fossorial mammal burrows (greater than 4 inches in diameter) with the potential to provide suitable nesting opportunities for burrowing owl. One burrowing owl was observed on site approximately 0.15 mile west of Locust Avenue (refer to Exhibit 8 in Appendix D, Burrowing Owl Location) during surveys conducted for the 2017 Habitat Assessment. Burrowing owls were not observed on site during prior survey efforts. Because the surveys were conducted at the beginning of the avian breeding season for the species, it is possible that the burrowing owl observed on site is not a resident, but rather a migratory bird that may leave the site prior to the peak breeding season.

Wildlife Corridors and Linkages

The Jurupa Hills and associated RSS plant communities extend from locations within Riverside County into portions of San Bernardino County, including the area directly adjacent to the project site conservation area (See Appendix D, Exhibit 3). The Western Riverside County 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 may migrate north and south between Riverside and San Bernardino Counties. The project site conservation area occurs directly adjacent to the Jurupa Hills just north of the MSHCP boundary. Approximately 44.8 acres of intact RSS habitat occur within the project's conservation area located along the project site's western boundary, contiguous with existing RSS habitat areas in the Jurupa Hills along the San Bernardino and Riverside County boundary, which also delineates the boundary of the MSHCP.

As part of the CEQA analysis for the WVLCSP, the potential for the east-west movement of CAGN across the development area of the project site between the Jurupa Hills and the nearby undeveloped portions of Rattlesnake Mountain was evaluated (Appendix D, Exhibit 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 that could be used by wildlife including avian species as cover while crossing the development area as it exists currently. Existing vegetation that occurs within the development area between the Jurupa Hills and Rattlesnake Mountain is currently lacking and is composed of disturbed dirt fields subject to a high degree of human disturbance.

Avian species, including the CAGN, have been documented migrating through the RSS and chaparral habitats within the Jurupa Hills adjacent to the west of the conservation area portion of the project site. As described above in *Physical Conditions*, the proposed development area within the project site is heavily disturbed and no longer supports large blocks of native habitat that would accommodate habitat for CAGN, with the exception of the relatively undisturbed RSS habitat block within the conservation area located along the western boundary of the project site. As noted in Table 4.2.3-2, CAGN have been observed within the conservation area during focused surveys that occurred between 2004 and 2008, but were not detected during 2013 or 2014 surveys focused surveys. Because 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 if suitable shrubs and low-growing native plant habitat were planted within the project site it could be used for movement by this species as a means of attaining access to and from the RSS in the project conservation area adjacent to the Jurupa Hills and the Rattlesnake Mountain area's undeveloped lands.

The existing SCE easement located adjacent to the project site along the northern boundary is identified as restorable habitat in the Jurupa Recovery Plan (USFWS 1997) for the DSFLF. This easement area is outside of the project site, and would not be disturbed as part of project site development. The SCE easement between proposed Buildings 5 and 6 would not serve as a movement corridor due to the proposed buildings that would constrict potential movement into a narrow passage that lacks suitable cover for wildlife movement.

Jurisdictional Water Resources

Surface water and adjacent vegetation serve important biological functions including a drinking water source for animals, cover from predators, foraging opportunities, and nesting habitat. The soils and hydrologic regimes associated with permanent or seasonal surface water features create conditions suitable for specialized plants collectively referred to as *wetland vegetation*. Vegetation that occurs along a stream, drainage, creek, or river is referred to as *riparian vegetation*.

Biologists conducted a systematic review of the site to identify the presence of any existing surface waters, permanent, seasonal or ephemeral drainages, and the extent to which adjacent, associated riparian vegetation occurs. A total of three ephemeral drainages were documented within the project site boundary. These features are mapped, and the methodology used to identify, classify, and delineate these on-site features is included in a wetland delineation report (see Appendix D). In each case, these drainages are not connected to off-site surface waters or any sub-surface flows, and therefore, were determined to be isolated,. Within the project site these drainage features account for approximately 0.27 acre (2,564 linear feet) of area. In addition to the ephemeral drainages, biologists identified an area of approximately 0.05 acre in size that appears to be seasonally inundated and supports adjacent riparian vegetation, (i.e., mulefat scrub), which is a sensitive plant community.

The distribution and approximate acreage of each of these resources within the project site have been reviewed and verified by the U.S. Army Corps of Engineers (USACE), the federal agency with jurisdiction over Section 404 resources (File No. No. SPL-2013-00403). USACE concluded the site lacks waters of the U.S. or any other jurisdictional features addressed in Section 404 of the federal Clean Water Act (CWA). Table 4.2.3-3 presented below summarizes the approximate acreage of the jurisdictional features that fall within agency jurisdiction. Details pertaining to specific agencies and their criteria for establishing jurisdiction over these areas are included in Appendix D and in the text below under the heading *Regulatory Setting*.

Table 4.2.3-3. Jurisdictional Areas (in acres)

Jurisdictional Feature	USACE (Section 404)	RWQCB (Porter-Cologne)	CDFW (Fish and Game Code 1600)
Drainage A	0.00	0.09	0.09
Drainage A1	0.00	0.005	0.005
Drainage B	0.00	0.11	0.11
Drainage B1	0.00	0.005	0.005
Wetland 1	0.00	0.05	0.26*
Total	**0.00**	**0.27**	**0.47**

Source: Michael Baker International 2017.
*0.21 acre is adjacent riparian vegetation composed of mulefat scrub.

Regulatory Setting

This section summarizes federal, State, and local regulations applicable to the biological resources that occur within the approximately 298-acre WVLCSP.

Federal

Federal Endangered Species Act

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 the nation's waters, including wetlands, requires authorization from USACE pursuant to Section 404 of the CWA. USACE takes jurisdiction of open water referred to as "waters of the U.S." and special aquatic sites including wetlands. For open water areas and wetlands that meet 404 criteria, USACE oversees issuance of permits for proposed placement of fill for construction or flood control or other types of development. USACE implements the 404-permitting process including verifying existing conditions on the ground, issuing jurisdictional determinations, reviewing and approving proposed mitigation, and establishing monitoring regimes, and has the authority to deny project approvals should 404 conditions and requirements not be met.

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. Regulatory authority under Section 401 has been granted to the State, and is exercised by the State Regional Water Quality Control Board (RWQCB).

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 that has a defined bed and bank and extends out to the drip-line of the riparian canopy. 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 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 RWQCB 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. The RWQCBs regulate 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.

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 south of the project site. The MSHCP allows for the County of Riverside and cities within the MSHCP area to manage local land-use decisions, while addressing the requirements of the State and federal Endangered Species Acts. 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 southern edge of 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 (*Dipodomys merriami parvus*), and Los Angeles pocket mouse (*Perognathus longimembris brevinasus*). The project site does not occur within the boundaries of 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*), deodar 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. *Permanent impacts* include ground-disturbing activities on the entirety of the development area, including site preparation activities, removal of any existing vegetation and grading of all soils or substrate to facilitate construction of buildings, loading and parking areas, ornamental landscaping, and roadways and sidewalks. Site development activity that would occur within the 55.23-acre conservation area would be limited to fencing of the area, restoration, and biological monitoring activities. Within the public utilities area, the existing detention basin would be modified to increase capacity to accept runoff from the proposed WVLCSP development area. Temporary impacts include ground-disturbing activities associated with water line construction on West Valley Water District property to connect to an existing water tank within the conservation area portion of the site, where biological resources would be restored following construction.

In addition, direct, indirect, and cumulative impacts are evaluated. *Direct effects* are those effects that can be expected from direct removal of habitats, or direct loss or mortality of a special-status species. *Indirect effects* 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 non-native animals and plants. Indirect effects are those that

would 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.

The impact analysis and identification of mitigation measures presented in this section are based on a review of existing literature, database searches, direct observations and surveys of the site, and on findings prepared by biologists familiar with the project site and the surrounding area conducted over a period spanning 2013–2017, as presented in the 2017 Habitat Assessment and project site focused surveys included in 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 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.

Specific Plan Requirements

SP-B-1: Open Space – Natural Area. The West Valley Logistics Center Specific Plan sets aside 55.23 acres of natural open space in the western portion of the West Valley Logistics Center Specific Plan area to protect existing habitat areas. No buildings are permitted within this area, and only uses consistent with the habitat conservation purpose of the area will be permitted.

SP-B-2: Habitat Management Plan. The *Riversidean Sage Scrub Habitat Mitigation and Monitoring Plan* prepared as part of the West Valley Logistics Center Specific Plan provides for the long-term management of the on-site Riversidean sage scrub (RSS) habitat. It preserves in perpetuity 44.8 acres of RSS habitat located on the eastern edge of the Jurupa Mountains.

SP-B-3: Avian Habitat Feature. An avian habitat feature will be created using ground-level native plantings and rooftop plantings of Riversidean sage scrub (RSS) habitat plant species to create vegetative substrate that could facilitate avian species' east-west dispersal between the proposed 55.23-acre on-site RSS conservation area and nearby undeveloped RSS habitats (Figure 4.2.3-5).

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 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: 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 subject to the provisions of the ordinance prior to issuance of a grading permit.

Impacts and Mitigation

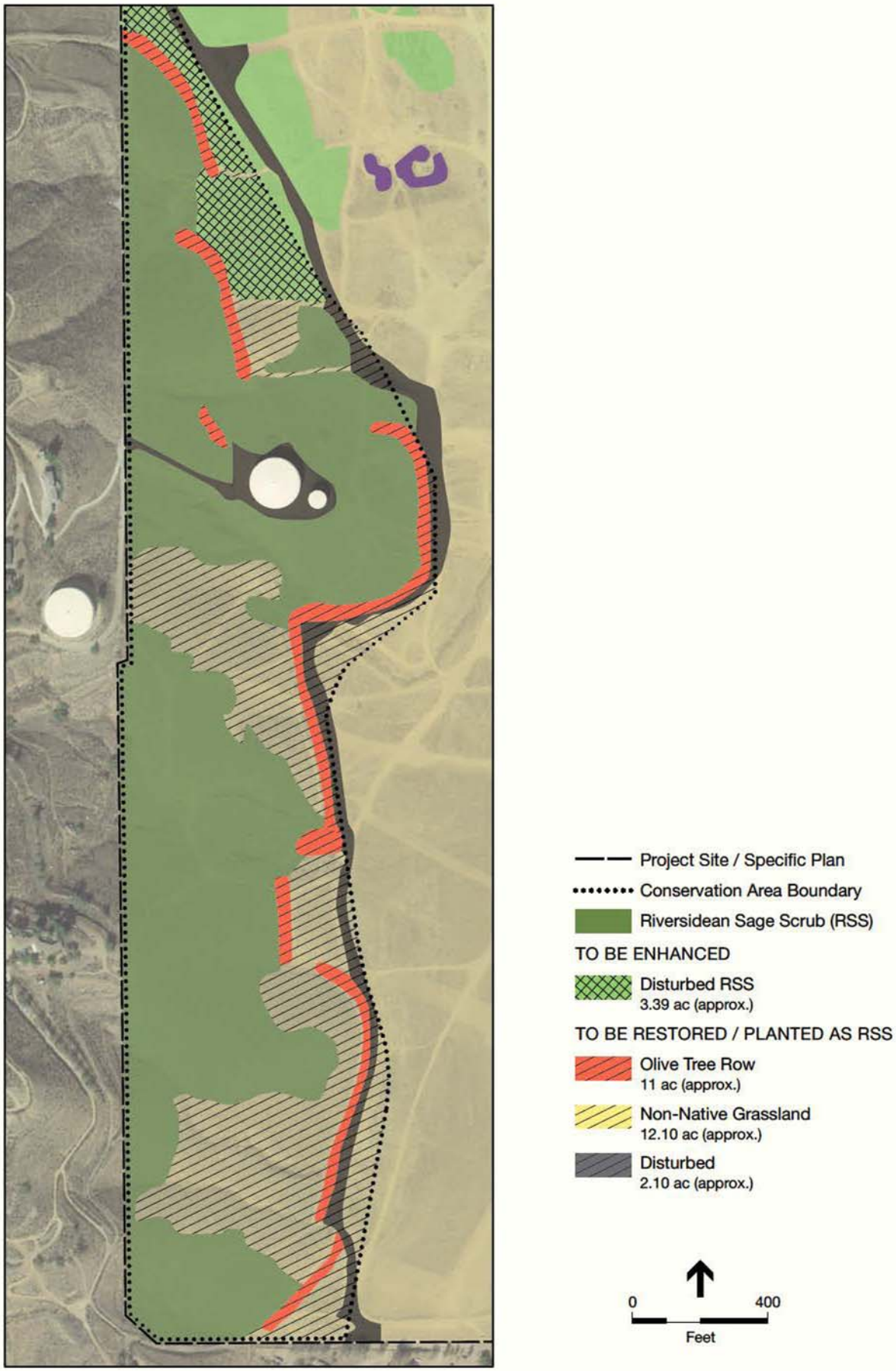
Impact BIO-1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service

Special-status species with the potential to occur on the site are associated with RSS habitat within the portion of the project site that is planned for conservation and include the CAGN (federally listed as endangered) and the San Diego black-tailed jackrabbit (a California species of special concern). If project construction resulted in ground disturbance within or adjacent to the RSS habitat, removal of the RSS plant community, or impacts on individuals of the special-status species listed above, a significant impact would result.

In 2017, the western burrowing owl, a California Species of Special Concern, was detected on site within the development area (Appendix D). Although the species was not detected in previous years, burrowing owls are highly mobile and there is a potential for additional burrowing owls to colonize the project site prior to construction. Should burrowing owls colonize any portion of the site planned for development prior to the start of construction, site grading and construction activities within the WVLCSP would disturb occupied burrowing owl burrows, and a significant impact would result.

Existing trees on site within the development area have the potential to support nesting birds protected under the MBTA and California Fish and Game Code. Direct impacts on nesting birds during vegetation removal or site grading would be considered a significant impact under CEQA.

The habitat assessment for rare plants in 2017 determined that there was a low potential for the RSS in the conservation lands to provide suitable habitat for Plummer's mariposa lily, Parry's



ICF

Figure 4.2.3-5
RSS Conservation Area Enhancement and Restoration
West Valley Logistics Center Specific Plan 2nd RDEIR

spineflower, and paniculate tarplant. However, because focused surveys for these species have not been performed in the conservation area, presence of the species cannot be ruled out. The temporary impacts associated with the construction of the water pipeline would remove special-status plants (if present) that may occur in the conservation area. Impacts on one or more of these species (if present) would be significant under CEQA.

As described in Appendix D, the project site occurs within Unit 10 of the federally designated Critical Habitat mapped for CAGN. The existing undisturbed RSS habitat on site that meets the Critical Habitat definition occurs exclusively within the proposed conservation area and would not be affected by activities occurring in the development area. However, approximately 5.2 acres of RSS within the proposed conservation area would be temporarily affected during trenching and construction of a proposed water pipeline within the proposed 55.23-acre conservation area (see **Specific Plan Requirements SP-B-1** and **SP-B-2**; see also Figure 4.2.3-2). Impacts on undisturbed RSS habitat within the conservation area that would occur during construction of a water pipeline would be significant under CEQA.

Permanent loss of approximately 16 acres of disturbed RSS habitat that in its current condition does not meet the definition of Critical Habitat but meets the CEQA definition of locally rare (refer to Figure 4.2.3-4) would occur due to site grading and construction of buildings. Loss of disturbed RSS habitat in the development footprint would be considered a significant impact under CEQA.

Specific Plan Requirements and Regulatory Requirements

The applicant will implement the following Specific Plan Requirements and Regulatory Requirements, as summarized below and specified in detail in Section 3.6 of the Project Description.

- **SP-B-1:** Open Space – Natural Area
- **SP-B-2:** Habitat Management Plan

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, within the RSS conservation area, and within the development area would be avoided and/or minimized.

Mitigation Measure BIO-1: Pre-construction Focused Surveys of Proposed Conservation Area and Development Area to Confirm Absence of Special-Status Species.

Focused Survey for Coastal California Gnatcatcher within 300 feet of the Conservation Area Construction Fence. 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 RSS habitat within 300 feet of the location where the conservation area fencing will be installed.

If CAGN are found to occur within 300 feet of the conservation area construction fence line or water pipeline construction area, an avoidance buffer no less than 300 feet shall be established around the occupied nest(s). All work within 300 feet of the active nest will be prohibited until all young have fledged and the nest is confirmed by a qualified biologist to be no longer active. If avoidance is not feasible, consultation with USFWS will be necessary to determine whether an Individual Take Permit is required.

Preconstruction Surveys within the Proposed Conservation Area for San Diego Black-tailed Jackrabbit. At least 48 hours prior to initiation of water pipeline construction activities, the 5.2-acre construction area shall be surveyed to confirm the absence of San Diego black-tailed jackrabbits. If individuals of the species are observed within the construction footprint, their movements shall be monitored until it can be confirmed that each individual has left the pipeline construction area. After that, exclusion fencing shall be established to prevent individuals of the species from re-entering the construction area during construction.

Pre-construction Survey within the Proposed Development Area for Western Burrowing Owl. The project applicant shall retain a qualified biologist to conduct preconstruction surveys for burrowing owls no fewer 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 to occupied burrows during nesting season). Any active avoidance measures during the breeding season must to be coordinated with CDFW.

Pre-construction Nesting Bird Survey of the Proposed Development Area. 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 pre-construction 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.

Pre-construction Surveys for Special-Status Plants: Prior to construction, or any other project site development-related ground disturbance activities including vegetation removal within RSS habitat that would occur during water pipeline construction, the applicant shall conduct pre-construction presence/absence surveys for Plummer's mariposa lily, Parry's spineflower, and paniculate tarplant by a qualified botanist. Surveys shall be conducted in accordance with CNPS and CDFW rare plant survey guidelines and shall be conducted during the flowering period when each species is most readily identifiable. A botanist shall determine the blooming period for each species and verify blooming during the growing season by visiting a reference site to observe if the target species is flowering or otherwise identifiable. A species-specific survey may be required for each special-status plant depending upon the blooming period.

Any special-status plant populations shall be mapped in the field. If the presence of any special-status plant species is confirmed, a copy of the survey results shall be forwarded to CDFW for entry into the CNDDB. In the event that special-status plants are not identified within the WVLCSP development areas, including areas used for construction, no further action is required.

If special-status species are determined to be present within the RSS habitat, then prior to issuance of project grading permit, a 5-year on-site restoration mitigation and monitoring

program shall be developed and implemented for any planting areas established to mitigate impacts on special-status plant species. Restoration success criteria shall include:

1) Establishment of mitigation site(s) within the conservation area, where plant restoration will occur.

2) Identification by a qualified botanist of an appropriate plant palette and restoration methodology compatible with the specific affected special-status species. Mitigation sites could include existing RSS habitat areas in the preservation area, depending on site conditions and locations of special-status plants found.

Mitigation Measure BIO-2: Installation of Environmentally Sensitive Area Fencing to Prevent Encroachment into the 55.23-acre Conservation Area during Construction. At or before the start of construction, including pre-construction establishment of staging areas and/or initiation of grading activities, Environmentally Sensitive Area fencing shall be installed along the western limits of disturbance to prevent encroachment into preserved lands. Educational signage shall also be posted to inform workers and area residents 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. Implementation of this measure would not be required should the permanent fencing or barrier called for in **Mitigation Measure BIO-5** be constructed prior to the start of construction.

Mitigation Measure BIO-3: Habitat Mitigation and Monitoring Plan. In coordination with the CDFW Streambed Alteration Agreement, a habitat mitigation and monitoring plan (HMMP) and up to 5 years of post-restoration monitoring and reporting will be established for the 55.23-acre conservation area. The HMMP must include the following key actions to protect the conservation area RSS habitat:

- Document the baseline conditions within the 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, disposing of weed species annually, reseeding, and bi-annual monitoring of the site to document treatment actions.
- Remove olive trees and pepper trees within the conservation area and implement restoration of RSS in their place.
- Create vegetated areas along the southern boundary of the project site to accommodate potential avian movement between Rattlesnake Mountain and the Jurupa Hills regions.
- 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.
- Eliminate signs of human disturbance through annual cleanup.

Mitigation Measure BIO-4: On-site Restoration of 16 Acres of RSS within the Proposed Conservation Area. A minimum of 16 acres of area shall be restored to establish additional RSS plant community within the conservation area (see Figure 4.2.3-5). Appendix D includes a detailed plant palette that would be utilized for restoration of the RSS plant community within the conservation area. Restoration of RSS would occur in the portions of the conservation area that currently support non-native grasslands, disturbed areas, or non-native trees and those portions would be graded, planted, and seeded with RSS plant community species listed in Appendix D. As described in the HMMP (**Mitigation Measure BIO-3**), and in coordination with CDFW as part of the

Streambed Alteration Agreement, a monitoring plan and up to 5 years of post-restoration monitoring and reporting will be established for the restored area within the 55.23-acre conservation area.

Mitigation Measure BIO-5: On-site restoration of 5.2 acres of RSS Disturbed by Water Pipeline Construction within the Proposed Conservation Area. Immediately following conclusion of construction of the water pipeline, the 5.2-acre pipeline construction footprint shall be planted and seeded with RSS plants consistent with the plant palette included in Appendix D. As described in the HMMP (**Mitigation Measure BIO-3**), and in coordination with CDFW as part of the Streambed Alteration Agreement, a monitoring plan and up to 5 years of post-restoration monitoring and reporting will be established for this area that occurs within the conservation area on site.

Mitigation Measure BIO-6: Post-Construction Long-term Management and Protection of Proposed Conservation Area. A permanent fence or barrier shall be erected to protect the 55.23-acre conservation area, the RSS habitat, and restored RSS habitat proposed to occur there. 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 during 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 Property Owners' Association is established that will assume such responsibility in perpetuity.

Residual Impacts

Implementation of **Mitigation Measure BIO-1** would (1) determine whether special-status species are present within the proposed conservation area and within 300 feet of the limits of disturbance prior to construction activities, (2) avoid indirect impacts on nesting CAGN, and (3) determine whether consultation with USFWS would be necessary. Impacts on special-status species including CAGN, San Diego black-tailed jackrabbit, western burrowing owl, migratory birds, and special-status plants would be reduced to a less-than-significant level through implementation of **Mitigation Measure BIO-1**.

The fenced and protected 55.23-acre conservation area to be established at the time of site development (**Specific Plan Requirement SP-B-1**) would ensure there are no future indirect impacts on special-status species from operation of the proposed project. Implementation of the fencing, management, and post-restoration monitoring of the conservation area (**Mitigation Measures BIO-1**, **BIO-3**, and **BIO-6**) would preserve RSS habitat for special-status species and could result in the establishment of nesting CAGN in the RSS within the conservation area, which is not currently occurring. Implementation of **Mitigation Measure BIO-5** would restore impacts caused by pipeline construction that needs to occur within the proposed conservation area, and implementation of **Mitigation Measure BIO-4** would restore 16 acres of RSS within the conservation area. With implementation of **Specific Plan Requirements SP-B-1** and **SP-B-2**, **Regulatory Requirement RR-B-1**, and **Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-4, BIO-5,**

and **BIO-6**, impacts on RSS habitat and special-status species dependent upon that habitat would be reduced to a less-than-significant level.

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 U.S. Fish and Wildlife Service

CNDDB records indicate that one recognized special-status plant community has been reported in the Fontana USGS 7.5-minute quadrangle: Riversidean Alluvial Fan Sage Scrub. Riversidean Alluvial Fan Sage Scrub was not observed on site during the 2017 habitat assessment and is presumed absent from the project site (Appendix D). No impacts on this sensitive natural community would occur.

The mulefat scrub habitat on site is considered to be a sensitive plant community and falls within CDFW jurisdiction, as this habitat is considered riparian vegetation and is regulated under the California Fish and Game Code Section 1602 Streambed Alteration Agreement. Loss or removal of any of the State-regulated wetland habitats identified in the project area would be significant due to the adoption of *no net loss of wetlands, or lake and streambed* policies by RWQCB and CDFW.

Regulatory Requirement

The applicant will implement the following Regulatory Requirement, as summarized below and specified in detail in Section 3.6 of the Project Description.

- **RR-B-1:** Obtain Permits for Jurisdictional Waters of the State and State Streambeds

Mitigation Measures

Mitigation Measure BIO-7: Replacement of Affected Wetland Areas. At a minimum, compensation at a 1:1 ratio for the loss of 0.27 acre of waters of the State and 0.47 acre of area that meets the CDFW jurisdictional definition would occur off site through the purchase of credits at a local mitigation bank.

The in-lieu fee program or off-site mitigation bank credits purchased shall be documented and included in the CDFW Streambed Alteration Agreement required to be provided to the City prior to initiation of site grading activities.

Residual Impacts

With the incorporation of a minimum 1:1 mitigation ratio as provided in **Mitigation Measure BIO-7** and **Regulatory Requirement RR-B-1** committing the applicant to obtaining permits and approvals from RWQCB for Waters of the State and CDFW jurisdictional areas, impacts on state-regulated wetlands would be reduced to a less-than-significant level.

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

The ephemeral drainages and an isolated wetland feature on the project site account for approximately 0.26 acre of total area (see Appendix D). USACE confirmed that the isolated nature of the ephemeral drainage and wetland features on the project site do not meet the criteria to establish them as jurisdictional features pursuant to Section 404 of the CWA. Therefore, USACE jurisdiction

does not apply to the project site and there would be no impacts on federally protected wetlands as a result of development of the project site as proposed (File No. SPL 2013 0040).

Regulatory Requirement

The applicant shall implement the following Regulatory Requirement, as summarized below and specified in detail in Section 3.6 of the Project Description.

- **RR-B-1:** Obtain Permits for Jurisdictional Waters of the State and State Streambeds

Mitigation Measures

No mitigation measures are required.

Residual Impacts

With the incorporation of **Regulatory Requirement RR-B-1** committing the applicant to obtaining permits and approvals from RWQCB for Waters of the State and CDFW jurisdictional areas, impacts on state-regulated wetlands would be reduced to a less-than-significant level.

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

Avian Movement

The RSS plant community found on the foothills of the Jurupa Hills extends into the western boundary of the project site, which the Specific Plan has proposed to be preserved as a 55.23-acre conservation area. The RSS in the Jurupa Hills and the proposed conservation area RSS habitat provide suitable habitat for avian species to move north and south between Riverside and San Bernardino Counties. However, the balance of the project site, as it presently exists between the conservation area and Armstrong Road to the east, has been heavily disturbed by ongoing human uses. The vegetation that remains at the site that occurs outside of the conservation area does not provide sufficient cover for avian species such as CAGN to move east to west from the Jurupa Hills (and the proposed RSS conservation area) to the undeveloped RSS habitat in the Rattlesnake Mountains located east of the site and Armstrong Road. The proposed development area as it currently exists does not represent an opportunity for avian movement between undeveloped areas in the Jurupa Hills and Rattlesnake Mountain, and the project site in its current condition does not provide an east-west movement corridor for avian species. Development of the Specific Plan Area would not remove or affect avian movement or movement corridors compared to existing conditions and there would be no impact on avian movement as a result of project build-out.

Specific Plan Requirement SP-B-1 commits the applicant to the establishment of a 55.23-acre conservation area to preserve RSS habitat along the lower slopes of the Jurupa Hills. **Specific Plan Requirement SP-B-3** would provide an avian habitat feature in the form of vegetation suitable to support the potential for east-west avian movement between the Jurupa Hills, including the proposed on-site RSS conservation area, and the Rattlesnake Mountains to the east. This avian habitat feature would form a non-contiguous corridor of at-grade native plantings and rooftop RSS habitat creation totaling approximately 15 acres of native and RSS vegetation in the southern portion of the project site. The location of this feature represents the most direct route between the proposed 52.23-acre RSS conservation area adjacent to the Jurupa Hills and the undeveloped RSS habitat in the Rattlesnake Mountain area. Avian species potentially moving east and west between

undeveloped habitat areas could utilize the proposed avian habitat feature as a means of dispersal. The rooftop and native shrub plantings proposed in the southern portion of the project site would create the potential for avian movement between the Jurupa Hills and Rattlesnake Mountain, compared to existing conditions in which avian movement is constrained or nonexistent. This project design feature is included in the EIR Project Description and is shown in Figure 3-8.

Terrestrial Movement

It is expected that raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), and potentially other small mammals occur within the project area and region. Terrestrial wildlife movement may occur between the east and west sides of Armstrong Road, as there are no physical barriers to local wildlife across the roadway or the disturbed areas of the project site. It is probable that these common local wildlife species move between adjacent residential areas, the project site, and the undeveloped areas in the Jurupa Hills and Rattlesnake Mountain, and that they utilize the disturbed lands on the project site adjacent to Armstrong Road. The local resident terrestrial species such as raccoons and striped skunks are likely to continue to use the project site to move between developed and undeveloped areas, even if logistics center buildings occupy the site. In addition, because these species are well adapted to developed areas and may be attracted to the project site by trash left by humans, the increase in the ingress and egress of trucks may also increase mortality of individual terrestrial mammals.

Development of the project site may result in an increase in mortality of common terrestrial mammals such as raccoons and skunks crossing Armstrong Road. These species are not special status and direct loss of individuals would not be considered a significant impact under CEQA.

Specific Plan Requirements

The applicant will implement the following Specific Plan Requirements, as summarized below and specified in detail in Section 3.6 of the Project Description.

- **SP-B-1:** Open Space – Natural Area
- **SP-B-3:** Avian Habitat Feature

Mitigation Measures

No mitigation measures are required.

Residual Impact

With incorporation of **Specific Plan Requirement SP-B-1**, 55.23 acres of natural open space will be set aside to protect existing habitat areas. The rooftop and native shrub plantings proposed in the southern portion of the project site (**Specific Plan Requirement SP-B-3**) would create the potential for avian movement between the Jurupa Hills and Rattlesnake Mountain, compared to existing conditions in which avian movement is constrained or nonexistent. Impacts would be less than significant with the incorporation of these requirements.

Impact BIO-5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance

There are olive and eucalyptus trees on the project site that qualify as heritage trees under the City of Fontana Tree Preservation Ordinance. The olive trees and eucalyptus trees on the project site

would be removed permanently by the proposed project to accommodate site development and on-site restoration of the RSS plant community within the conservation area.

Removal of these heritage trees would be in conflict with the Tree Preservation Ordinance and would be a significant impact.

Regulatory Requirements

The applicant will implement the following Regulatory Requirement, as summarized below and specified in detail in Section 3.6 of the Project Description.

- **RR-B-2:** Obtain Permits for Removal of Heritage Trees

Mitigation Measures

Mitigation Measure BIO-8: 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

Adherence to the City's ordinance through acquisition of the tree removal permit described in the Specific Plan and **Regulatory Requirement RR-B-2**, and also included in **Mitigation Measure BIO-8**, would ensure there are no residual impacts on these trees. With implementation of the mitigation measures and regulatory requirement, potential impacts on heritage trees would be less than significant.

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 project site is outside of the boundaries of the MSHCP; however, it abuts the MSHCP's boundary. The project site is not addressed in the MSHCP, nor is it addressed by or does it fall within the boundary of any other adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state HCP. Therefore, the proposed project would

not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP. No impacts would occur as a result of build-out of the project site as proposed in the Specific Plan.

Specific Plan Requirement

The applicant shall implement the following Specific Plan Requirement, as summarized below and specified in detail in Section 3.6 of the Project Description.

- **SP-B-1:** Open Space – Natural Area

Mitigation Measures

No mitigation measures are required.

Residual Impacts

With implementation of **Specific Plan Requirement SP-B-1**, impacts would be less than significant.

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 conditions of approval 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 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 relative to the current date. 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 [PRC], Section 5024.1; 14 California Code of Regulations [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 Specific Plan 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 that was historically occupied by the Gabrieleno Indians after 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 seasonal and 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 Gorgonio 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 become 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, 324–325; also see Appendix E).

San Bernardino County was established in 1853, 5 years after the United States acquired California and other Mexican territory with the signing of the Treaty of Guadalupe Hidalgo, 3 years after California was admitted to the Union, and 3 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. 2002:329–330; 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 animal 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, 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 PRC and maintains the California Historic Resources Inventory (California PRC 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 or make it exempt from CEQA evaluation.

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.
- Has a special and particular quality, such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

The 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.
- 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 may have a significant effect on the environment (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 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

PRC Section 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.
- 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.

Assembly Bill (AB) 52 (Chapter 532, Statutes of 2014) establishes a formal consultation process between lead agencies under CEQA and California Native American tribes as part of CEQA, and equates significant impacts on "tribal cultural resources" with significant environmental resources (new PRC Section 21-84.2). Although it became effective on January 1, 2015, AB 52 applies only to projects that had a notice of preparation or notice of negative declaration/mitigated negative declaration filed on or after July 1, 2015.[1]

The legislative intent for AB 52 notes that tribes may have expertise in tribal history, land, and tribal resources that should be included in the environmental evaluations of projects that may have a significant impact on those resources. Under AB 52, CEQA analyses are required to consider tribal cultural resources, including tribal cultural values, in addition to scientific and archaeological values when determining impacts and mitigation.

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 (General Plan) goals, policies, and strategies. Cultural resources are addressed in the General Plan Open Space and 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).

[1] The Notice of Preparation for the West Valley Logistics Center was filed on July 17, 2012.

Impact Analysis

Methodology

Record Search and Field Survey

A record search was undertaken by BCR Consulting to identify 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 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 and 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 two 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 (LACM) 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 (SBCM) 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 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 Section 15064.5.

CUL-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 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 CEQA statutes define significant resources as described in the *Regulatory Setting* section.

Project Design Features

The following cultural resource related project design features, which include regulatory requirements, would prevent or reduce potentially significant environmental impacts on unknown cultural resources.

Regulatory Requirements

RR-C-1: City of Fontana Municipal Code Chapter 5, Buildings and Building Regulations, Article XIII: Preservation of Historic Resources, includes archaeological sites. The code states that this article is "adopted to implement the goals and policies of the general plan, which recognize the presence of archeological sites and buildings that have historic importance for the city. The city council finds and declares that historic, archeological 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, archeological and cultural resources within the city shall be governed by the provisions of this article."

RR-C-2: 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 (Section 7050.5; Public Resources Code Section 5097.98). The most likely descendant 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 Public Resources Code Section 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 (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052).

Impacts and Mitigation

Impact CUL-1. Cause a substantial adverse change in the significance of a historical resource, as defined in Section 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, it was determined that 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 impact on portions of the San Bernardino/Sonora Road historic resource within the project site, and would not impact 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 affect 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 within the Southern California Edison easement to improve accessibility, would not result in significant indirect visual impacts on the historic transmission line resource (Appendix E). In addition, **Regulatory Requirement RR-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.

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**: 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

With incorporation of **Regulatory Requirement RR-C-1**, 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 Section 15064.5

As noted above, a Sacred Lands File search conducted through the NAHC did not reveal any Native American resources within 0.5 mile of the project site. Requests for information sent in certified letters and follow-up emails to representatives of 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 did not result in responses containing specific information on cultural resources at the project site. The response from the Gabrielino/Tongva

Nation recommended Native American monitoring by the Gabrielino/Tongva Nation. The response from 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.

As described above in the *Archaeological Sites* section, 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, including 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. The proposed project would also involve surface disturbance required for the widening of (1) Locust Avenue north of the Specific Plan area and (2) improvements to Jurupa Avenue between Locust Avenue and Kessler Park.

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 Requirements

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**: City of Fontana Municipal Code Chapter 5, Buildings and Building Regulations, Article XIII, Section 5-351: Preservation of Historic Resources.
- **RR-C-2**: Comply with Requirements if Unanticipated Discovery of Human Remains Occurs.

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, as well as requests by the Gabrielino/Tongva San Gabriel Band of Mission Indians and the Soboba Band of Luiseno Indians, qualified archaeological monitor(s) shall be retained by the applicant after

consultation with representatives of the two tribes 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(s) 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(s) 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(s) 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 to implement the project Monitoring Plan.

Mitigation Measure CUL-2: Unanticipated Discovery of Cultural Resources. 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 applicant shall retain a qualified archaeologist to prepare an Archaeological Monitoring Plan. The Monitoring Plan shall be prepared for review and approval by the City of Fontana Director of Community Development. The Monitoring Plan 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.
- 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 CRHR. If a resource is not eligible, avoidance is not necessary.

Disturbance and other adverse effects on any resource determined to be eligible for listing in the CRHR, shall be avoided. Should avoidance be infeasible, adverse effects shall 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.

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 Requirements RR-C-1** and **RR-C-2**, 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 at shallow depths would not result in a significant impact on paleontological resources, and paleontological monitoring would not be required as provided in **Mitigation Measure CUL-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. Destruction of fossils of significant scientific interest shall be avoided. 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 a Paleontological Monitoring Plan to be prepared by a qualified paleontological consultant for review and approval by the City of Fontana. The paleontology monitor shall have the authority to reduce monitoring if, in his or her professional opinion, sediments being monitored were previously disturbed. Monitoring may also be reduced by the paleontological monitor 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-2**) 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-2** 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-2**: 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-2**, residual impacts related to discovery of human remains, including those interred outside of formal cemeteries, would be less than significant.

4.2.5 Energy Resources

Introduction

This section assesses the significance of the use of energy, including electricity, natural gas, gasoline and diesel fuels, which would result from the proposed West Valley Logistics Center Specific Plan (WVLCSP or project). This section of the 2nd Recirculated Draft Environmental Impact Report is intended to address the requirements set forth in the California Environmental Quality Act (CEQA) Guidelines Appendix F.[1]

Refer to Section 4.2.7, *Greenhouse Gas Emissions*, for a discussion of the relationship between energy consumption and greenhouse gas (GHG) emissions, and Section 4.2.16, *Utilities and Service Systems*, for a discussion of water consumption.

The *Existing Conditions* and *Impact Analysis* sections below utilize information contained in the following technical studies provided in the Second Recirculated Draft Environmental Impact Report appendices: (1) the Will-Serve letters submitted by utility providers included within Appendix M; and (2) energy use and vehicle miles traveled calculations prepared for the GHG and air quality analyses (Appendices I and F, respectively). Additional reference materials as noted in this section were also reviewed.

Existing Conditions

The project site is currently vacant and therefore, does not consume or generate any energy resources.

Electricity

Southern California Edison (SCE) provides electrical power to the City of Fontana (City). SCE provides daily power to over 15 million people, 180 cities, 15 counties, 5,000 large businesses, and 280,000 small businesses within a 50,000-square-mile service area in Southern and Central California. This power is provided to users via 103,000 miles of distribution and transmission lines, 16 utility interconnections, over 700 distribution substations, and nearly 5,000 different transmission and distribution circuits. SCE identifies itself as the nation's largest purchaser of renewable energy, buying and delivering approximately 82,849 million kWh in 2014 (SCE 2017a).

[1] 2016 CEQA Guidelines Appendix F, Energy Conservation, states that environmental impact reports (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 4.2.7, *Greenhouse Gas Emissions*, contains energy and water conservation regulations, including but not limited to the 2016 California Green Building Code (California Code of Regulations, Title 24, Part II) that includes the Energy Code (Title 24, part 6).

Total electricity consumption in SCE's service area was 99,243 gigawatt-hours (GWH) in 2013 and is forecasted to increase to 113,612 GWH in 2024 (CEC 2014). One GWH is equivalent to one million kilowatt-hours. Sources of electricity sold by SCE in 2013, the latest year for which data are available, were from renewable sources consisting mostly of geothermal and wind (24 percent); large hydroelectric (3 percent); natural gas (27 percent); nuclear (6 percent); and unspecified sources (40 percent) that were not traceable to specific sources (SCE 2017a). SCE employs over 16,500 people in Southern and Central California (SCE 2013a, 2017a).

In June 2013, SCE announced the permanent retirement of the San Onofre Nuclear Generating Station in northern San Diego County, California, 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 2013b, 2017b).

Natural Gas

Headquartered in Los Angeles, Southern California Gas Company (SoCalGas) provides natural gas service to residents and businesses within the City. A regulated subsidiary of Sempra Energy, SoCalGas is the nation's largest natural gas distribution utility, serving 21.6 million people through 5.9 million gas meters in more than 500 communities. Their service territory encompasses approximately 20,000 square miles in Central and Southern California. (SoCalGas 2017.)

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 decrease at a rate of 0.6 percent per year from 2016 to 2035. The decline in throughput demand is due to modest economic growth, California Public Utilities Commission (CPUC)-mandated energy efficiency (EE) standards and programs, renewable electricity goals, the decline in commercial and industrial demand, and conservation savings linked to Advanced Metering Infrastructure. Residential gas demand is expected to decrease at an annual average rate of 0.5 percent. Demand in the commercial and industrial markets are expected to decline at an annual rate of 0.24 percent. Aggressive energy efficiency programs make a significant impact in managing growth in the residential, commercial, and industrial markets.

Under an average-temperature condition and a normal hydro year, gas demand for the state is projected to average 6,072 million cubic feet equivalent (MMcf) per day in 2016 decreasing to 4,626 MMcf/day by 2035, a decline of 1.35 percent per year. In 2016, southern California is projected to require an additional 4.0 percent of supply to meet demand under the high scenario condition. (California Gas & Utilities 2016).

SoCalGas projects that demand for all of its market sectors will contract at an annual average rate of approximately 0.212 percent 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 2016 California Gas Report predicts that the total capacity available will remain constant at 3,875 MMcf/day through 2035 and that gas supply taken will be 2,681 MMcf/day in 2016 and 2,3821 MMcf/day in 2030 (California Gas & Utilities 2016).

Regulatory Setting

Federal

Energy Independence and Security Act, Corporate Average Fuel Efficiency Standards

The Energy Independence and Security Act of 2007 (the "Act"; Public Law 110-140) seeks to provide the nation with greater energy independence and security by increasing the production of clean renewable fuels; improving vehicle fuel economy; and increasing the efficiency of products, buildings, and vehicles. It also seeks to improve the energy performance of the federal government. The Act sets increased Corporate Average Fuel Economy (CAFE) Standards; the Renewable Fuel Standard; appliance energy efficiency standards; building energy efficiency standards; and accelerated research and development tasks on renewable energy sources (e.g., solar energy, geothermal energy, and marine and hydrokinetic renewable energy technologies), carbon capture, and sequestration.

Additional provisions of the Act address energy savings in government and public institutions, promoting research for alternative energy, additional research in carbon capture, international energy programs, and the creation of green jobs.

State

California Public Utilities Commission Plans and Programs

CPUC has authority to set electric rates, regulate natural gas utility service, protect consumers, promote energy efficiency, and ensure electric system reliability. CPUC has established rules for the planning and construction of new transmission facilities, distribution facilities, and substations. Utility companies are required to obtain permits to construct certain power line facilities or substations. CPUC also has jurisdiction over the siting of natural gas transmission lines.

CPUC regulates distributed energy generation policies and programs for both customers and utilities. This includes incentive programs (e.g., California Solar Initiative) and net energy metering policies. Net energy metering allows customers to receive a financial credit for power generated by their on-site system and fed back to the utility. CPUC is involved with utilities through a variety of energy procurement programs, including the Renewables Portfolio Standard (RPS) program.

In 2008, CPUC adopted the Long-Term Energy Efficiency Strategic Plan, which is a road map to achieving maximum energy savings in California through 2020. Consistent with California's energy policy and electricity "loading order," the Energy Efficiency Strategic Plan indicates that energy efficiency is the highest priority resource in meeting California's energy needs. CPUC also adopted energy goals that require all new residential construction in California to be zero net energy by 2020. The net zero energy goal means new buildings must use a combination of improved efficiency and distributed renewable energy generation to meet 100 percent of their annual energy need. In addition to the zero net energy goals for residential buildings by 2020, CPUC has adopted goals that all new commercial construction in California will be zero net energy by 2030 and 50 percent of existing commercial buildings will be retrofit to zero net energy by 2030.

CPUC also regulates privately owned electric, telecommunications, natural gas, water, and transportation companies, in addition to household goods movers and rail safety. The CPUC 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 Green Building Standards Code, California Code of Regulations Title 24

The 2016 California Green Building Standards Code ("CALGreen" California Code of Regulations, Title 24, Part 11) took effect January 1, 2017. These comprehensive regulations are designed to achieve major reductions in GHG emissions, energy consumption, and water use. CALGreen requires every new building constructed in California to: reduce water consumption by 20 percent; divert 65 percent of construction waste from landfills; and install low-pollutant-emitting materials. It also requires separate water meters for non-residential buildings' indoor and outdoor water use, with a requirement for moisture-sensing irrigation systems for larger landscape projects and mandatory inspections of energy systems (e.g., heat furnace, air conditioner, and mechanical equipment) for non-residential buildings larger than 10,000 square feet to ensure that all are working at maximum capacity and according to design efficiencies.

Clean Energy and Pollution Reduction Act of 2015

The Clean Energy and Pollution Reduction Act of 2015 (Senate Bill [SB] 350) requires that the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources be increased from 33 percent to 50 percent by December 31, 2030, thereby doubling energy efficiency within the state. SB 350 revised the California RPS program and to certain other requirements on public utilities and publicly owned electric utilities. SB 350 also requires local publicly owned electric utilities to establish annual targets for energy efficiency savings and demand reduction consistent with a statewide goal established by CPUC, and provides incentives for electrification of rail facilities. Local utilities would be required to develop more detailed strategies and incentives for use of renewable energy sources, resulting in an increased demand for renewable energy generation.

SB 350 emphasizes the important role of electric vehicles in California's overall scheme to combat climate change, declaring that "[d]eploying electric vehicles should assist in grid management, integrating generation from eligible renewable energy resources, and reducing fuel costs for vehicle drivers...." The bill promotes the development of additional electric vehicle charging infrastructure to encourage greater use of electric cars, and requires electrical utilities to include expansion of electrical vehicle charging facilities as part of their strategies and incentives for reducing overall energy consumption.

SB 350 does not establish specific development standards for warehouse projects such as the WVLCSP.

Assembly Bill 1007 (Pavley, Chapter 371, Statutes of 2005)

Assembly Bill 1007 required the California Energy Commission (CEC) to prepare a state plan (State Alternative Fuels Plan) to increase the use of alternative fuels in California. CEC prepared the State Alternative Fuels Plan in partnership with the California Air Resources Board and in consultation with other state, federal, and local agencies. The final State Alternative Fuels Plan, published in

December 2007, attempts to achieve an 80 percent reduction in GHG emissions associated with personal transportation, even as California's population increases. Measures proposed that would reduce petroleum fuel use include:

1. Lowering the energy needed for personal transportation by tripling the energy efficiency of on-road vehicles by 2050 through:
    a. Conventional gas, diesel, and flexible fuel vehicles (FFVs) averaging more than 40 miles per gallon (mpg).
    b. Hybrid gas, diesel, and FFVs averaging almost 60 mpg.
    c. All electric and plug-in hybrid electric vehicles (PHEVs) averaging well over 100 mpg (on a GHG equivalents [GGE] basis) on the electricity cycle.
    d. Fuel cell vehicles (FCVs) averaging over 80 mpg (on a GGE basis).
2. Moderating growth in per capita driving, reducing today's average per capita driving miles by about 5 percent or back to 1990 levels.
3. Changing the energy sources for transportation fuels from the current 96 percent petroleum-based to approximately:
    a. 30 percent from gasoline and diesel from traditional petroleum sources or lower GHG emission fossil fuels such as natural gas.
    b. 30 percent from transportation biofuels.
    c. 40 percent from a mix of electricity and hydrogen.
4. Producing transportation biofuels, electricity, and hydrogen from renewable or very low carbon-emitting technologies that result in, on average, at least 80 percent lower lifecycle GHG emissions than conventional fuels.
5. Encouraging more efficient land uses and greater use of mass transit, public transportation, and other means of moving goods and people.

Performance Standard for Baseload Power Generation

SB 1368 (Chapter 598, Statutes of 2006) required CPUC to establish a GHG emissions performance standard for "baseload" generation from investor-owned utilities of 1,100 pounds of carbon dioxide (CO_2) per megawatt-hour (MWh). CEC established a similar standard for local publicly owned utilities. All electricity provided to California, including imported electricity, must be generated from plants that meet or exceed this standard.

Renewables Portfolio Standard

The California RPS was established in 2002 under SB 1078 and was amended in 2006 and 2011. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase the use of eligible renewable energy resources to 33 percent of total procurement by 2020. CPUC is required to provide quarterly progress reports on progress toward RPS goals. This has accelerated the development of renewable energy projects throughout the State. Based on the 3rd quarter 2014 report, the three largest retail energy utilities provided an average of 20.9 percent of its supplies from renewable energy sources. Since 2003, 8,248 megawatts (MW) of renewable energy projects have started operations (CPUC 2014). SB 350 (de Leon), was signed into

law September 2015 and establishes tiered increases to the RPS—40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures.

Executive Order S-03-05

Executive Order S-03-05 mandates that California emit 80 percent fewer GHGs in 2050 than it emitted in 1990. Energy efficiency and reduced vehicle miles traveled would play important roles in achieving this aggressive goal.

Executive Orders S-14-08 and S-21-09

Since 2006, California has had a mandate to increase the use of renewable generation to 20 percent of retail electricity sales by 2010 (see description of SB 1078, above, and SB 107). In November 2008, Governor Schwarzenegger signed Executive Order S-14-08, which raised California's renewable energy goals to 33 percent by 2020. This enhanced target is intended to help California meet statewide GHG emission reduction targets. This has been reiterated by California Executive Order S-21-09 which charges the California Air Resources Board (ARB), by July 31, 2010, to establish a regulation consistent with this 33 percent target by 2020. This is a further increase in RPS over SB 1078 and SB 107.

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.

SmartWay Program

The SmartWay Program is a public-private initiative between the U.S. Environmental Protection Agency (EPA), large and small trucking companies, rail carriers, logistics companies, commercial manufacturers, retailers, and other federal and state agencies. Its purpose is to improve fuel efficiency and the environmental performance (reduction of both GHG emissions and air pollution) of the goods movement supply chains. SmartWay is composed of four components:

1. SmartWay Transport Partnership: A partnership in which freight carriers and shippers commit to benchmark operations, track fuel consumption, and improve performance annually.
2. SmartWay Technology Program: A testing, verification, and designation program to help freight companies identify equipment, technologies, and strategies that save fuel and lower emissions.
3. SmartWay Vehicles: A program that ranks light-duty cars and small trucks and identifies superior environmental performers with the SmartWay logo.
4. SmartWay International Interests: Guidance and resources for countries seeking to develop freight sustainability programs modeled after SmartWay.

SmartWay effectively refers to requirements geared toward reducing fuel consumption. Most large trucking fleets driving newer vehicles are compliant with SmartWay design requirements. Moreover, over time, all heavy-duty trucks will have to comply with the ARB Greenhouse Gas Regulation that is designed with the SmartWay Program in mind, to reduce GHG emissions by making them more fuel efficient. For instance, in 2015, 53-foot or longer dry vans or refrigerated trailers equipped with a combination of SmartWay-verified low-rolling resistance tires and SmartWay-verified aerodynamic devices would obtain a total of 10 percent or more fuel savings over traditional trailers.

Through the SmartWay Technology Program, EPA has evaluated the fuel saving benefits of various devices through grants, cooperative agreements, emissions and fuel economy testing, demonstration projects, and technical literature review. As a result, EPA has determined the following types of technologies provide fuel-saving and/or emission-reducing benefits when used properly in their designed applications, and has verified certain products:

- Idle reduction technologies—less idling of the engine when it is not needed would reduce fuel consumption.
- Aerodynamic technologies minimize drag and improve airflow over the entire tractor-trailer vehicle. Aerodynamic technologies include gap fairings that reduce turbulence between the tractor and trailer, side skirts that minimize wind under the trailer, and rear fairings that reduce turbulence and pressure drop at the rear of the trailer.
- Low rolling resistance tires can roll longer without slowing down, thereby reducing the amount of fuel used. Rolling resistance (or rolling friction or rolling drag) is the force resisting the motion when a tire rolls on a surface. The wheel will eventually slow down because of this resistance.
- Retrofit technologies include things such as diesel particulate filters, emissions upgrades (to a higher tier), etc., which would reduce emissions.
- Federal excise tax exemptions.

Tractor-Trailer Greenhouse Gas Regulation

The tractors and trailers subject to this regulation must either use EPA SmartWay certified tractors and trailers, or retrofit their existing fleet with SmartWay-verified technologies. The regulation applies primarily to owners of 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and owners of the heavy-duty tractors that pull them on California highways. These owners are responsible for replacing or retrofitting their affected vehicles with compliant aerodynamic technologies and low rolling resistance tires. Sleeper cab tractors model year 2011 and later must be SmartWay certified. All other tractors must use SmartWay-verified low rolling resistance tires. There are also requirements for trailers to have low rolling resistance tires and aerodynamic devices.

Local

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, in cooperation with 21 cities within the County (including the City of Fontana), 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* (San Bernardino Associated Governments 2014). For a more detailed discussion of the countywide GHG Reduction Plan, see Section 4.2.7, *Greenhouse Gas Emissions*.

The *San Bernardino County Regional Greenhouse Gas Reduction Plan* includes several reduction energy-related 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 percent more stringent than the 2008 Title 24 standards for nonresidential buildings. The standards will be periodically updated between 2014 and 2020.
- **State-6:** Assembly Bill (AB) 1493 (Pavley): AB 1493 will reduce GHG emissions from automobiles and light duty trucks by 30 percent from 2002 levels by the year 2016. The regulations affect 2009 models and newer. The "Advanced Clean Cars" regulations introduce new standards for model years 2017–2025, and will reduce GHG emissions from automobiles and light duty trucks by 34 percent from 2017 levels by 2025. The Low Carbon Fuel Standard reduces GHG emissions by requiring a low carbon intensity of transportation fuels sold in California by at least 10 percent 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.
- **Energy-5:** Solar Installations for New Commercial/Industrial Development: Encourage new businesses to install rooftop solar using Power Purchase Agreements 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.
- **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 Power Purchase Agreement companies. Establish a goal such that all new warehousing projects install solar to provide a minimum of 25 percent or more of the project's new on-site energy needs. This goal could be supported through non-financial incentives or streamlined permitting.

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 the City; and the provision of public utilities at a reasonable cost.

City of Fontana Municipal Code

Chapter 27, Utilities, provides requirements for utility undergrounding and utility underground districts.

Refer also to Section 4.2.7, *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, and the draft Fontana Climate Action Plan (CAP).

City of Fontana Draft Climate Action Plan

The City of Fontana released a draft CAP in August 2015. The CAP contains guidance on the City of Fontana's GHG Inventory reduction goals, policies, guidelines, and implementation programs. The purpose of the CAP is to provide guidance on how to analyze GHG emissions and determine significance during the CEQA review of proposed development projects within the City of Fontana (City of Fontana 2015a). The CAP builds upon the countywide GHG Reduction Plan to address City-specific information and City-specific GHG reduction measures. To address the state's requirement to reduce GHG emissions, the City prepared its CAP with the goal of reducing GHG emissions within the City by 15 percent below 2008 levels by the year 2020. The City's target is consistent with the AB 32 target and ensures that the City of Fontana will be providing GHG reductions locally that will complement state efforts to reduce GHG emissions.

As part of the CAP, the City of Fontana published a guidance document titled "Greenhouse Gas Emissions, Screening Tables" (City of Fontana 2015b). As part of this guidance, the City determined the size of development that is too small to be able to provide the level of GHG emission reductions expected from the Screening Tables or an alternate emissions analysis method. The City's analysis determined that the 3,000 metric tons of CO_2 equivalent per year value be used in defining small projects that are considered less than significant and do not need to use the Screening Tables or alternative calculations.

If the project exceeds the 3,000 metric tons of CO_2 equivalent per year threshold, then project emissions would need to achieve a minimum of 85 points pursuant to the CAP Screening Tables or alternatively reduce mitigated project 2020 emissions by 22 percent over unmitigated project year 2020 emissions levels. The screening tables also allow developers to tailor their mitigation measures to the project's needs, rather than have them be subject to one-size-fits-all mitigation measures that may be too stringent for them.

The draft Fontana CAP has not been adopted as of this writing.

Impact Analysis

Methodology

The potential impacts associated with the WVLCSP are evaluated on a quantitative and qualitative basis through coordination with respective service agencies. Impacts are assessed through significance criteria from the 2016 CEQA Guidelines, Appendix F. Technical studies for air quality and GHG emissions included energy calculations used for this analysis. Also, local utility agencies were contacted to gather information on existing facilities and their capacities to determine potential impacts on electricity and natural gas systems and services. These studies, communications with agencies, and Will Serve letters provide the basis for the analysis below and are referenced accordingly.

Thresholds of Significance

Appendix F of the 2016 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. Thus, the project would have a significant effect on the environment if it were to:

EN-1 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.

EN-2 Result in the use of large amounts of energy, or the use of energy in a wasteful manner during construction.

EN-3 Use vehicular fuel in a wasteful manner from vehicle trips associated with project operations.

Project Design Features

The following energy-related project design features, including specific plan requirements, regulatory requirements, and standard requirements would prevent or reduce potentially significant environmental impacts on energy resources.

Specific Plan Requirements

SP-AQ-1: Encourage Ridesharing and Transit Incentives. Each building operator will be required to support and encourage ridesharing and transit incentives for the construction crew by providing crews with the needed resources to organize rideshares, such 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.

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

SP-GHG-3: Design CALGreen Compliant Buildings. Buildings will be designed to provide CALGreen Standards with Leadership in Energy and Environmental Design 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; lighting; and power systems.

SP-GHG-4: Provide Electrical Connections at 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-GHG-5: Utilize Energy-efficient Lighting. The project will utilize energy-efficient interior and exterior lighting, including light-emitting diodes, T5 and T8 fluorescent lamps, or other lighting that is at least as efficient. Lighting will incorporate motion sensors that turn lighting off when not in use.

SP-GHG-6: Select Efficient Refrigerants and Heating, Ventilating, and Air Conditioning (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 standards and/or per California Title 24 requirements.

SP-GHG-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 at a rate of one tree 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-5: Install Bicycle Racks. Bicycle racks will be provided at appropriate locations on Parcels 1 through 7 (e.g., between buildings or in automobile parking areas) for employees who wish to bicycle.

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 Silver certification standards for water efficiency.

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

Regulatory Requirements

RR-AQ-7: Require Equipment to Be Turned Off When Not in Use. Building operators will require (by contract specifications) that equipment, including heavy-duty equipment, motor vehicles, and portable equipment, 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 would not be permitted.

Standard Requirements

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

Impacts and Mitigation

Impact EN-1. 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 regional energy utility service or system infrastructure or the expansion of existing infrastructure, the construction of which could cause significant environmental effects

Implementation of the project 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.

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 the resource would be consumed. The proposed 3,473,690 square feet of warehouse development at buildout would consume approximately 29,338 MWh per year of electricity, and 32,685.5 million British thermal units (MBTU) per year (32,044,118 cubic feet) of natural gas.[2]

Natural gas and electricity infrastructure are available to the proposed project, and both SoCal Gas and SCE have issued Will Serve letters for natural gas and electricity service to the project, stating that they have infrastructure in the project vicinity (Alamillo 2013; Fiedler 2013; Sherman 2017; see Appendix M). Both companies have also stated that they each have sufficient capacity to serve the project. 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).

Even though the project would increase the consumption of electricity and natural gas resources, the project would not increase demand such that SoCalGas and SCE would need to plan for new regional electricity or natural gas facilities, the construction of which could cause significant environmental effects.

The Specific Plan Requirements, Regulatory Requirements, and Standard Requirements cited above would reduce the amount of project-related energy consumption so that the project would not result in wasteful, inefficient, or unnecessary consumption of energy. These measures include: building design and fixtures to be compliant with or exceed 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. Therefore, the project would not result in the need for construction of new regional energy utility services and infrastructure and impacts would be less than significant**.**

Specific Plan Requirements, Regulatory Requirement, and Standard Requirement

The applicant will implement the following Specific Plan Requirements, Regulatory Requirement, and Standard Requirement as summarized below and specified in detail in Section 3.6 of the Project Description.

- **SP-AQ-1:** Encourage Ridesharing and Transit Incentives.
- **SP-GHG-2:** Design Building Components to Meet 2013 Title 24 Standards.

[2] Per the analyses conducted for the project's air quality and GHG impacts (Appendices F and I, respectively).

- **SP-GHG-3:** Design CALGreen Compliant Buildings.
- **SP-GHG-4:** Provide Electrical Connections at Loading Docks.
- **SP-GHG-5:** Utilize Energy-efficient Lighting.
- **SP-GHG-6:** Select Efficient Refrigerants and Heating, Ventilating, and Air Conditioning (HVAC) Systems.
- **SP-GHG-7:** Provide Landscaped Parking Lots.
- **SP-TR-5:** Install Bicycle Racks.
- **SP-UT-2:** Incorporate Water-efficient Building Designs.
- **SP-UT-3:** Incorporate Recycling Program.
- **RR-AQ-7:** Require Equipment to Be Turned Off When Not in Use.
- **SR-GHG-1:** Provide Waste Reduction and Recycling Education.

Mitigation Measures

No mitigation is required.

Residual Impacts

With implementation of the Specific Plan Requirements, Regulatory Requirement, and Standard Requirement identified above, impacts would be less than significant.

Impact EN-2. Result in the use of large amounts of energy; use energy in a wasteful manner during project construction

Construction of the project would involve the use of electricity for a variety of construction activities, including but not limited to: the operation of hand tools, air compressors, temporary construction offices and security lighting; diesel fuel for grading and other construction equipment, delivery trucks and earth hauling trucks; and gasoline for construction worker commute vehicles. Construction of local energy infrastructure needed to serve the proposed on-site warehouse development would also require the use of fuels and electricity to power construction equipment and vehicles. If soil remediation is required (refer to discussion in Section 4.2.9, *Hazards and Hazardous Materials*), energy would also be required to conduct that work. However, the energy consumed to return the site to a safe and healthy condition would not, therefore, be wasteful, but rather a necessary and mandatory commitment of energy resources.

The amount of energy and fuel use anticipated by the project's construction are typical for the type of construction proposed because there are no aspects of the project's proposed construction process that are unusual or energy-intensive. Project construction equipment would conform to the applicable ARB emissions standards, acting to promote equipment fuel efficiencies. In addition, demand for construction-related electricity and fuels would be spread out over the life of the construction phases of the project but would not require a permanent commitment of energy or diesel fuel resources for this purpose.

With the implementation of energy reduction measures set forth in the Specific Plan Requirements, Regulatory Requirements, and Standard Requirements set forth above, along with implementation of applicable Air Quality **Mitigation Measures AQ-2** through **AQ-7** and **Mitigation Measure AQ-9** and **Mitigation Measure EN-1**, the project would not use energy in a wasteful manner during construction and impacts would be less than significant.

Specific Plan Requirements, Regulatory Requirement, and Standard Requirement

The applicant will implement the following Specific Plan Requirements, Regulatory Requirement, and Standard Requirement, as summarized below and specified in detail in Section 3.6 of the Project Description.

- **SP-AQ-1:** Encourage Ridesharing and Transit Incentives.
- **SP-GHG-2:** Design Building Components to meet 2013 Title 24 Standards.
- **SP-GHG-3:** Design CALGreen Compliant Buildings.
- **SP-GHG-4:** Provide Electrical Connections at Loading Docks.
- **SP-GHG-5:** Utilize Energy-efficient Lighting.
- **SP-GHG-6:** Select Efficient Refrigerants and Heating, Ventilating, and Air Conditioning (HVAC) Systems.
- **SP-GHG-7:** Provide Landscaped Parking Lots.
- **SP-TR-5:** Install Bicycle Racks.
- **SP-UT-2:** Incorporate Water-efficient Building Designs.
- **SP-UT-3:** Incorporate Recycling Program.
- **RR-AQ-7:** Require Equipment to Be Turned Off When Not in Use.
- **SR-GHG-1:** Provide Waste Reduction and Recycling Education.

Mitigation Measures

- **Mitigation Measure AQ-2:** Utilize Tier 4 Construction Equipment
- **Mitigation Measure AQ-3:** Use Low VOC Paints
- **Mitigation Measure AQ-4:** Use Electricity Rather than Internal Combustion Engines during Construction
- **Mitigation Measure AQ-5:** Use Alternative Fueled Technology during Construction.
- **Mitigation Measure AQ-6:** Require Proper Maintenance of Construction Equipment
- **Mitigation Measure AQ-7:** Submit Construction Plans
- **Mitigation Measure AQ-9:** Encourage Ridesharing and Transit Incentives

Mitigation Measure EN-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.

In addition, Mitigation Measures AQ-2 through AQ-7, and AQ-9, specified in Sections 4.2.2 and 4.2.6 to reduce project-related air quality and GHG impacts, will also reduce project-related energy use.

Residual Impacts

With the implementation of **Mitigation Measures AQ-2** through **AQ-7, AQ-9**, and **EN-1**, impacts would be less than significant.

Impact EN-3. Use vehicular fuel from vehicle trips associated with the proposed project operations in a wasteful manner

Operation of the project 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. Energy that would be consumed by project-generated traffic is a function of total vehicle miles traveled and the estimated vehicle fuel economies of vehicles accessing the project site. Table 4.2.5-1 summarizes the estimated annual operational fuel consumption for vehicles.

Table 4.2.5-1. Project-Related Annual Fuel Consumption

Vehicle Type	Daily Vehicle Trips	Average Trip Length	Daily Vehicle Miles Traveled	Annual Vehicle Miles Traveled	Annual fuel Consumption (gallons)
Passenger Cars	4,137	15.95	65,985	24,084,525	916,810
2-Axle Trucks	384	15.95	6,125	2,235,625	174,795
3-Axle Trucks	515	15.95	8,214	2,998,110	368,365
4-Axle Trucks	1,362	30.40	41,405	15,112,825	2,651,375
TOTAL	**6,398**		**121,729**	**44,431,085**	**4,411,345**

Source: West Valley Logistics Center air quality, GHG, and traffic studies (Appendices F, I, and L, respectively).
Notes:
Assumes 365 annual work days.

Although the project would result in additional fuel consumption by project-related traffic, the 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 Requirements SP-AQ-1** and **SP-TR-4**, **Regulatory Requirement RR-AQ-7**, and air quality **Mitigation Measures AQ-9** through **AQ-11**.

Specific Plan Requirements and Regulatory Requirement

The applicant will implement the following Specific Plan Requirements and Regulatory Requirement, as summarized below and specified in detail in Section 3.6 of the Project Description.

- **SP-AQ-1:** Encourage Ridesharing and Transit Incentives.
- **SP-TR-5:** Install Bicycle Racks.
- **RR-AQ-7:** Require Equipment to Be Turned Off When Not in Use.

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 for complete text of these measures:

- **Mitigation Measure AQ-9:** Energy Efficiency in Vendor Trucks
- **Mitigation Measure AQ-10:** Electrical Vehicle Charging Stations and Carpool Parking
- **Mitigation Measure AQ-11:** EPA Smartway Features

Residual Impacts

Impacts would be reduced to less than significant with implementation of the Specific Plan Requirements, Regulatory Requirement, and air quality Mitigation Measures noted above.

4.2.6 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 conditions of approval 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 contain water-absorbing minerals that expand as they take in water. These soils can damage buildings because of 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 strong earthquake-induced ground shaking. 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). 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.

The Peninsular Range Province is characterized by elongated, northwest/southeast-trending geologic structures. It 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 3 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 no active or potentially active faults 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 substantial seismic ground-shaking hazards (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. According to Peak Horizontal Ground Acceleration (PHGA) analysis conducted for the project site, the San Jacinto Fault could produce an earthquake with a maximum magnitude of 6.7 and PHGA of 0.31g[1] (Appendix H). The 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). Its fault zone crosses the northern portion of the city. The Cucamonga Fault is capable of producing an earthquake with a maximum magnitude of 7.0 at the epicenter. The Cucamonga Fault's closest point to the proposed project is approximately 9 miles to the north-northwest.

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 event, occurred in 1918 on the southerly portion of the fault, which is northeast of the project site. The seismic potential of the San Jacinto Fault, and its potential to affect the site and future residents, is based on an estimated strain rate 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.

[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.

[2] Because of its proximity and potential for strong ground shaking on-site, the San Jacinto Fault was used as the design fault in evaluating California Building Code seismic parameters for the project. However, this does not preclude the possibility of strong ground shaking associated with an event on the San Andreas or Cucamonga Fault.

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 within 20 miles of the project area to the southwest. The last major event on 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 (Ebherhart 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 suggest 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 that has been mapped as potentially liquefiable in the San Bernardino County Geologic Hazard Overlay for the Fontana Quadrangle. Furthermore, 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 percent slopes), Tujunga loamy sand (0–5 percent slopes), Cieneba sandy loam (9–15 percent slopes), and Delhi fine sand (found on the 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).

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 the in-place weathering of underlying bedrock. It is typically present on the tops and flanks of natural slopes. Colluvial soil is generally shallow on the flanks of hillsides but thickens toward the base of natural slopes. Colluvium is generally expected to be several feet thick, consisting of clayey, sandy soil that is porous. It may contain varying amounts of organic debris (Appendix H).

Alluvium

Alluvium covers the majority of the lower elevations of the site that were not affected 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. The test pits that were excavated during investigations on the site indicate that surficial vegetation was removed prior to the placement of fill. 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).

A comparison of historic and current aerial photos indicates that undocumented fill was derived from and placed on the 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 (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 surficial mils and weathered bedrock. Within the area of planned development (as shown in the site plan, Figure 3-3), dense bedrock with moderate rippability potential was encountered on the 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 the site, although some oversize material may be encountered in the uncontrolled fill previously placed on the site. In addition, oversize material may be generated from cuts 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 ground shaking, 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 (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 of Fontana (City) can minimize risks and respond to events through 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 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.

Impact Analysis

Methodology

The analysis of geology and soils focuses on the potential for impacts on people and structures due to 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 the 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 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 WVLCSP 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 San Bernardino County 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, 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. Seismically 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 Uniform Building Code (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 geology- and soils-related project design features listed below, which include regulatory requirements and a standard requirement, would prevent or reduce potentially significant environmental 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 will 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 (City). 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 the CBC.

RR-HW-1: Prepare and Implement a Stormwater Pollution Prevention Program (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 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 of Fontana engineer.

RR-HW-2: Submit a Stormwater Quality Management Plan (SWQMP) for City Approval. An SWQMP, based on final design for each phase of the West Valley Logistics Center Specific Plan, will be submitted to the Fontana Director of Public Works for approval prior to issuance of grading permits. The SWQMP will provide project-specific site design, source control, and treatment control best management practices (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 of Fontana's Municipal Storm Water Management Plan and the San Bernardino County Municipal Separate Storm Sewer System Permit.

Standard Requirements

SR-G-1: Develop and Implement an Erosion Control Plan. The applicant or developer will prepare and submit to the City of Fontana Department of Public Works 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 location of all soil-disturbing activities (including but not limited to sites involving new development or roadways), the location of all drainage structures that will be directly affected by soil-disturbing activities, and the location and type 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-HW-1: Maintain Stormwater Detention Basins and Biotreatment Areas during Project Operation. Final selection of best management practices (BMPs) will be subject to approval by the Santa Ana Regional Water Quality Control Board. The City of Fontana (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 Environmental Impact Report, 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 Storm Water 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 entail primarily 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 by pruning and weeding, and treat with preventative and low-toxicity methods.
- Check that mulch is maintained at an appropriate depth and replenish as necessary.

Impacts and Mitigation

Impact 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. Seismically related ground failure, including liquefaction.

iv. Landslides.

According to the Leighton and Associates geotechnical reports (Appendix H), no known active or potentially active faults traverse the site, and the project site is not within an Alquist-Priolo Earthquake Fault Zone. Surface rupture is generally limited to the immediate vicinity of an active

fault and, therefore, 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.

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 belowground structures. Although the San Jacinto Fault was used as the design fault, strong ground shaking associated with an event originating from the San Andreas or Cucamonga Faults could also occur and potentially affect the project area. Therefore, earthquake-induced ground shaking due to seismic activity on the San Jacinto Fault, or any the regional faults, has the potential to result in substantial damage to structures, potentially resulting in significant impacts. 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.

The implementation of proper seismic design specifications and techniques, pursuant to the requirements of the CBC, as set forth in the Fontana Municipal Code, would allow structures to withstand intense ground shaking without collapse. Structures within the proposed WVLCSP would be designed and constructed to meet the CBC building standards in effect at the time building permits are issued, including requirements for seismic and structural safety. Implementation of **Regulatory Requirement RR-G-1** and **Mitigation Measures GEO-1** and **GEO-2**, provided below, would reduce any potential impacts related to strong seismic shaking to less-than-significant levels.

Although the site is located in an area with the potential for seismic activity (due to active faults in the project's vicinity), the site is not located in an area characterized as potentially liquefiable. Liquefaction occurs when saturated, low-density, loose materials (e.g., sand or silty sand) are weakened and transformed from a solid to a near-liquid state as a result of increased pore water pressure. The increase in pressure is caused by strong ground motion from an earthquake. Liquefaction more often occurs in areas underlain by silts and fine sands and where shallow groundwater exists. The regional depth of groundwater is 150 feet. On-site groundwater levels have been recorded at a depth of 64 feet in the site-specific geotechnical studies (Appendix H). Depth of on-site groundwater makes the potential for liquefaction unlikely. Liquefaction impacts are therefore less than significant.

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, however. 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) slope or flatter. No significant fracture or foliation patterns (foliation is a characteristic of metamorphosed rocks in which minerals are aligned in one direction so that the rock can readily be split into thin layers) were observed within the bedrock that would indicate proposed manufactured slopes would be unstable from a gross stability standpoint. As future development of the site does not propose to construct graded slopes 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. However, implementation of **Mitigation Measures GEO-1** and **GEO-2** would further reduce potential impacts related to shallow surficial slides and debris flows (considered minor). 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 (CBC).

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 site-specific final geotechnical study for each construction site within the Specific Plan area 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 Public Works 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 Second 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 the CBC and local requirements.

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 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 construction activities, consistent with the conclusions and recommendations presented in the final geotechnical studies required (per **Mitigation Measure GEO-1**) for development within the project area. 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

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. In addition, the geotechnical studies and testing required by **Mitigation Measures GEO-1** and **GEO-2** would set site-specific design requirements for on-site structures to ensure their safety. Therefore, with implementation of **Mitigation Measures GEO-1** and **GEO-2** and **Regulatory Requirement RR-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 to occur. Construction activities also have potential to induce soil compaction and wind conditions that could result in soil erosion and/or loss of topsoil. However, future development in the WVLCSP would comply with the County's approved Construction General Permit, the San Bernardino SWPPP and MS4 Permit, local stormwater ordinances, and other related water quality regulatory requirements included in the WVLCSP. The proposed project would be required to adhere to **Regulatory Requirements RR-HW-1** and **RR-HW-2** and **Standard Requirements SR-G-1** and **SR-HW-1** (from Section 4.2.8, *Hydrology and Water Quality*) as listed below. In addition, preparation of final geotechnical studies, per **Mitigation Measure GEO-1**, would reduce potential impacts related to soil erosion and loss of topsoil to less-than-significant levels.

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-G-1:** Comply with Fontana Municipal Code, Chapter 5, Article III, 2013 Edition of the California Building Code (CBC).
- **RR-HW-1:** Prepare and Implement a Stormwater Pollution Prevention Program (SWPPP).
- **RR-HW-2:** Submit a Final Stormwater Quality Management Plan (SWQMP) for City Approval.
- **SR-G-1:** Develop and Implement an Erosion Control Plan.
- **SR-HW-1**: Maintain Stormwater Detention Basins and Biotreatment Areas during Project Operation.

Mitigation Measures

Implement **Mitigation Measure GEO-1**.

Residual Impacts

With implementation of **Mitigation Measure GEO-1**, **Standard Requirements SR-G-1** and **SR-HW-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 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) and, therefore, impacts could be significant and would require mitigation. Implementation of **Mitigation Measure GEO-1** is required and would be expected to address the potential for unsuitable fill material on-site.

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 for structures within the Specific Plan area would be based on the most current CBC in place at the time building permits are issued, 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**.

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. Furthermore, the proposed project would comply with CBC requirements and **Mitigation Measures GEO-1** and **GEO-2**. Impacts would be less than significant.

As mentioned under Impact GEO-1 iv, landslides are not expected and should not constrain proposed development at the proposed project site. Therefore, potential landslide impacts are not considered significant. Shallow surficial slides and debris flows have the potential to occur; however, potential impacts would be considered minor, and implementation of **Mitigation Measures GEO-1** and **GEO-2** would further reduce potential impacts. 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 (CBC).

Mitigation Measures

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**, residual 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 the soils report included in 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, which would help further characterize the on-site soil expansion potential. As soils are considered to have low expansive qualities (based on prior studies), 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 (CBC).

Mitigation Measures

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**, residual 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.

4.2.7 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 *West Valley Logistics Center Greenhouse Gas Analysis, City of Fontana* (Urban Crossroads 2017) 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 n.d.).
- **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 n.d.).
- **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 (CO_2e) (California Air Resources Board n.d.).
- **Greenhouse Gas.** GHG refers to gases that absorb and emit radiation within the thermal infrared range, which is the fundamental cause of man's contribution to the greenhouse effect. The most prevalent GHG is carbon dioxide (CO_2), along with methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).
- **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 CO_2 and other gases into the atmosphere increases the greenhouse effect and contributes to global warming (California Air Resources Board n.d.).

- **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°F ± 0.32°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 CO_2 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]

- Carbon dioxide (CO_2
- Methane (CH_4)
- Nitrous oxide (N_2O)
- Chlorofluorcarbons (CFCs)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur hexafluoride (SF_6)

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 CO_2, CH_4, and N_2O, some gases, like HFCs, PFCs, and SF_6 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 CO_2, 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 CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of CO_2e. Table 4.2.7-1 shows the GWPs for each type of GHG. For example, SF_6 is 23,900 times more potent at contributing to climate change than CO_2.

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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 CO_2, CH_4, and N_2O 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 4.2.7-1. Global Warming Potential of Greenhouse Gases

Greenhouse Gases	Global Warming Potential (100 years)	Lifetime (years)
CO_2 (ppm)	1	50–200
CH_4 (ppb)	25	9–15
N_2O (ppb)	298	120
HFC-23 (ppt)	14,800	264
HFC-134a (ppt)	1,430	14.6
HFC-152a (ppt)	124	1.5
SF_6 (ppt)	22,800	3,200

Source: Table 2.14 of the IPCC Fourth Assessment Report, 2007

The following discussion summarizes the characteristics of the six primary GHGs.

Carbon Dioxide

In the atmosphere, carbon generally exists in its oxidized form, as CO_2. Natural sources of CO_2 include the respiration (breathing) of humans and animals, volcanic outgassing, decomposition of organic matter, and evaporation from the oceans. Human-caused sources of CO_2 include the combustion of fossil fuels and wood, waste incineration, mineral production, and deforestation. The Earth maintains a natural carbon balance; when concentrations of CO_2 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 CO_2 to the atmosphere. Since the industrial revolution began in the mid-1700s, human activities that increase GHG emissions have increased dramatically. Data from the past 50 years suggest a corollary increase in CO_2 levels and concentrations. As an example, prior to the industrial revolution, CO_2 concentrations were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30 percent. Left unchecked, the concentration of CO_2 in the atmosphere is projected to increase to a minimum of 540 ppm by 2100 as a direct result of anthropogenic sources. Natural removal processes, such as photosynthesis by land- and ocean-dwelling plant species, cannot keep pace with this extra input of human-made CO_2; consequently, the gas is building up in the atmosphere.

Methane

Methane is an extremely effective absorber of radiation, though its atmospheric concentration is less than CO_2 and its lifetime in the atmosphere is brief (10–12 years), compared to other GHGs. CH_4 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 CH_4 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 CH_4 in California. CH_4 accounted for approximately 8 percent of gross climate change emissions (CO_2e) in California in 2012 (California Air Resources Board 2012a). It is estimated that over 60 percent of global methane emissions are

related to human-related activities (U.S. Environmental Protection Agency 2010). As with CO_2, the major removal process of atmospheric CH_4—a chemical breakdown in the atmosphere—cannot keep pace with source emissions, and CH_4 concentrations in the atmosphere are increasing.

Nitrous Oxide

N_2O, also known as laughing gas, is produced naturally by a wide variety of biological sources, particularly microbial action in soils and water. In small doses, it is considered harmless. However, in some cases, heavy and extended use can cause Olney's Lesions (brain damage).

Tropical soils and oceans account for the majority of natural source emissions. N_2O is a product of the reaction that occurs between nitrogen and oxygen during fuel combustion. Both mobile and stationary combustion emit N_2O, 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 N_2O emissions in California. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used as an aerosol spray propellant, i.e., in whipped cream bottles. It is also used in potato chip bags to keep chips fresh. It is used in rocket engines and in race cars. N_2O emissions accounted for 2.9 percent of human-made GHG emissions (CO_2e) in California in 2012 (California Air Resources Board 2012b).

Chlorofluorocarbons

CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane (C_2H_6) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs are no longer being used; therefore, it is not likely that health effects would be experienced. Nonetheless, in confined indoor locations, working with CFC-113 or other CFCs is thought to result in death by cardiac arrhythmia (heart frequency too high or too low) or asphyxiation.

CFCs have no natural source, but were first synthesized in 1928. They were used for refrigerants, aerosol propellants, and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone (O_3), a global effort to halt their production was undertaken and was extremely successful, so much so that levels of the major CFCs are now remaining steady or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years.

Hydrofluorocarbons

HFCs are synthetic, man-made chemicals that are primarily used as substitutes for CFCs and O_3-depleting substances regulated under the Montreal Protocol.[3] HFCs are one of three groups of GHGs with the highest GWP. The HFCs with the largest measured atmospheric abundances are (in order), HFC-23 (CHF3), HFC-134a (CF3CH2F), and HFC-152a (CH3CHF2). Prior to 1990, the only significant emissions were of HFC-23. HFC-134a emissions are increasing due to its use as a refrigerant. The U.S. Environmental Protection Agency (EPA) estimates that concentrations of HFC-23 and HFC-134a

[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.

are now about 10 parts per trillion (ppt) each, and that concentrations of HFC-152a are about 1 ppt. No health effects are known to result from exposure to HFCs, which are manmade for applications such as automobile air conditioners and refrigerants.

Perfluorocarbons (PFCs)

PFCs are emitted from various industrial processes, including aluminum smelting, semiconductor manufacturing, electric power transmission and distribution, and magnesium casting. Although there is no aluminum or magnesium production in California, the rapid growth in the semiconductor industry, which is active in California, leads to greater use of PFCs, which do not break down through chemical processes in the lower atmosphere, and have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF4) and hexafluoroethane (C2F6). The U.S. EPA estimates that concentrations of CF4 in the atmosphere are over 70 ppt.

Sulfur Hexafluoride (SF_6)

SF_6 is an inorganic, odorless, colorless, nontoxic, nonflammable gas that accounted for 0.1 percent of total emissions, and other halogenated gasses constituted approximately 4 percent of human-made GHG emissions (CO_2e) in California in 2012 (California Air Resources Board 2012b). It also has the highest global warming potential (GWP) of any gas evaluated (23,900). SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection. In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing. SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Effects of Climate Change in California

Public Health

Higher temperatures may increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation could increase from 25 to 35 percent under the lower warming range to 75 to 85 percent under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances, depending on wind conditions. The Climate Scenarios report indicates that large wildfires could become up to 55 percent more frequent if GHG emissions are not significantly reduced.

Water Resources

A vast network of man-made reservoirs and aqueducts captures and transports water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could reduce spring snowpack, increasing the risk of summer water shortages.

If temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, reducing the Sierra Nevada spring snowpack. Under the lower warming range scenario, snowpack losses could be only half as large as those possible if temperatures were to rise to the higher warming range. How much snowpack could be lost depends

in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack could pose challenges to water managers and hamper hydroelectric power generation.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater could degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta – a major fresh water supply.

Agriculture

Although higher CO_2 levels can stimulate plant production and increase plant water-use efficiency, California's farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate O_3 pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops; rising temperatures could worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits and nuts.

In addition, continued global climate change could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion could occur in many species while range contractions may be less likely in rapidly evolving species with significant populations already established. Should range contractions occur, new or different weed species could fill the emerging gaps.

Rising Sea Levels

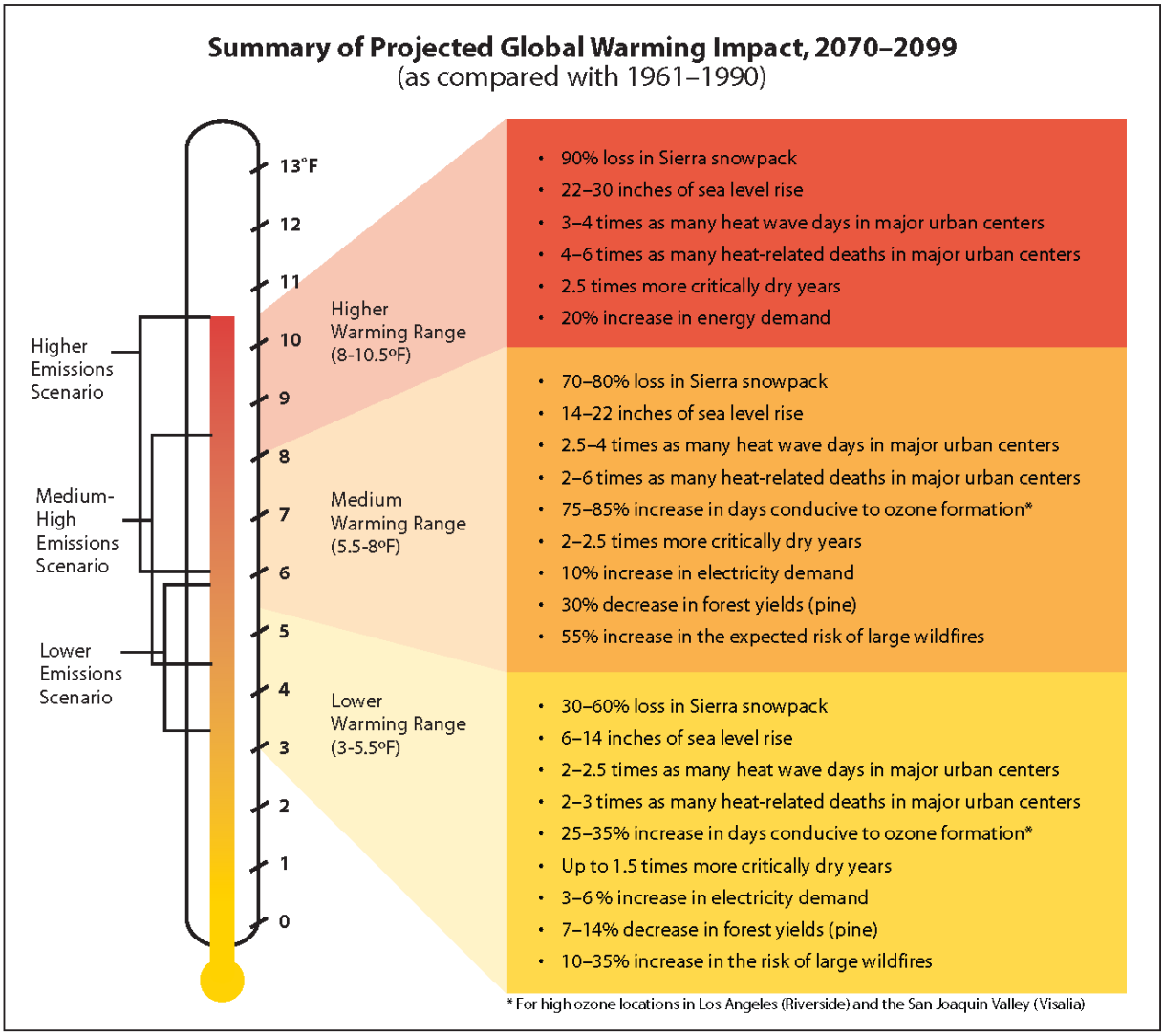
Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the state's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate low-lying coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12-14 inches.

Figure 4.2.7-1 presents the potential impacts of global warming.

Existing Project Site GHG Emissions

The project site is currently vacant and does generate any GHG.

Figure 4.2.7-1. Summary of Projected Global Warming Impact



Regulatory Setting

This section summarizes federal, state, and local regulations related to GHG emissions and climate change that are applicable to the project.

Federal

Clean Vehicles

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 CO_2 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.

Mandatory Reporting of Greenhouse Gases

The Consolidated Appropriations Act of 2008 requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, EPA issued the Final Mandatory Reporting of Greenhouse Gases Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the United States, and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions are required to submit annual reports to EPA.

New Source Review

EPA issued a final rule on May 13, 2010 that establishes thresholds for GHGs that define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. This final rule "tailors" the requirements of these CAA permitting programs to limit which facilities will be required to obtain Prevention of Significant Deterioration and Title V permits. In the preamble to the revisions to the federal code of regulations, EPA states:

> This rulemaking is necessary because without it the Prevention of Significant Deterioration and Title V requirements would apply, as of January 2, 2011, at the 100 or 250 tons per year levels provided under the Clean Air Act, greatly increasing the number of required permits, imposing undue costs on small sources, overwhelming the resources of permitting authorities, and severely impairing the functioning of the programs. EPA is relieving these resource burdens by phasing in the applicability of these programs to greenhouse gas sources, starting with the largest greenhouse gas emitters. This rule establishes two initial steps of the phase-in. The rule also commits the agency to take certain actions on future steps addressing smaller sources, but excludes certain smaller sources from Prevention of Significant Deterioration and Title V permitting for greenhouse gas emissions until at least April 30, 2016.

EPA estimates that facilities responsible for nearly 70 percent of the national GHG emissions from stationary sources will be subject to permitting requirements under this rule. This includes the nation's largest GHG emitters—power plants, refineries, and cement production facilities.

Cap and Trade

Cap and trade refers to a policy tool where emissions are limited to a certain amount and can be traded, or provides flexibility on how the emitter can comply. Successful examples in the United States include the Acid Rain Program and the nitrogen oxide (NO_X) Budget Trading Program and Clean Air Interstate Rule in the northeast. There is no federal GHG cap-and-trade program currently; however, some states have joined to create initiatives to provide a mechanism for cap and trade.

The Regional Greenhouse Gas Initiative is an effort to reduce GHGs among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. Each state caps CO_2de emissions from power plants, auctions CO_2 emission allowances, and invests the proceeds in strategic energy programs that further reduce emissions, save consumers money, create jobs, and build a clean energy economy. The Initiative began in 2008.

The Western Climate Initiative partner jurisdictions have developed a comprehensive initiative to reduce regional GHG emissions to 15 percent below 2005 levels by 2020. The partners were originally California, British Columbia, Manitoba, Ontario, and Quebec. However, Manitoba and Ontario are not currently participating. California linked with Quebec's cap-and-trade system January 1, 2014 and joint offset auctions have taken place in 2015.

SmartWay Program

The SmartWay Program is a public-private initiative between EPA, large and small trucking companies, rail carriers, logistics companies, commercial manufacturers, retailers, and other federal and state agencies. Its purpose is to improve fuel efficiency and the environmental performance (reduction of both GHG emissions and air pollution) of the goods movement supply chains. SmartWay is composed of four components:

- SmartWay Transport Partnership: A partnership in which freight carriers and shippers commit to benchmark operations, track fuel consumption, and improve performance annually.
- SmartWay Technology Program: A testing, verification, and designation program to help freight companies identify equipment, technologies, and strategies that save fuel and lower emissions.
- SmartWay Vehicles: A program that ranks light-duty cars and small trucks and identifies superior environmental performers with the SmartWay logo.
- SmartWay International Interests: Guidance and resources for countries seeking to develop freight sustainability programs modeled after SmartWay.

SmartWay effectively refers to requirements geared toward reducing fuel consumption. Most large trucking fleets driving newer vehicles are compliant with SmartWay design requirements. Moreover, over time, all heavy-duty trucks will have to comply with the California Air Resources Board (ARB) Greenhouse Gas Regulation that is designed with the SmartWay Program in mind, to reduce GHG emissions by making them more fuel-efficient. For instance, in 2015, 53-foot or longer dry vans or refrigerated trailers equipped with a combination of SmartWay-verified low-rolling resistance tires and SmartWay-verified aerodynamic devices would obtain a total of 10 percent or more fuel savings over traditional trailers.

Through the SmartWay Technology Program, EPA has evaluated the fuel saving benefits of various devices through grants, cooperative agreements, emissions and fuel economy testing, demonstration projects, and technical literature review. As a result, EPA has determined the following types of technologies provide fuel-saving and/or emission-reducing benefits when used properly in their designed applications, and has verified certain products:

- Idle reduction technologies—less idling of the engine when it is not needed would reduce fuel consumption.
- Aerodynamic technologies minimize drag and improve airflow over the entire tractor-trailer vehicle. Aerodynamic technologies include gap fairings that reduce turbulence between the tractor and trailer, side skirts that minimize wind under the trailer, and rear fairings that reduce turbulence and pressure drop at the rear of the trailer.
- Low rolling resistance tires can roll longer without slowing down, thereby reducing the amount of fuel used. Rolling resistance (or rolling friction or rolling drag) is the force resisting the motion when a tire rolls on a surface. The wheel will eventually slow down because of this resistance.
- Retrofit technologies include things such as diesel particulate filters, emissions upgrades (to a higher tier), etc., which would reduce emissions.
- Federal excise tax exemptions.

State

Assembly Bill 1493

California Assembly Bill (AB) 1493 (Pavley), enacted on July 22, 2002, required ARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the U.S. District Court for the District of Columbia in 2011.

The standards phase in during the 2009 through 2016 model years. When fully phased in, the near-term (2009–2012) standards will result in about a 22 percent reduction compared with the 2002 fleet, and the mid-term (2013–2016) standards will result in about a 30 percent reduction. Several technologies stand out as providing significant reductions in emissions at favorable costs. These include discrete variable valve lift or camless valve actuation to optimize valve operation rather than relying on fixed valve timing and lift as has historically been done; turbocharging to boost power and allow for engine downsizing; improved multi-speed transmissions; and improved air conditioning systems that operate optimally, leak less, and/or use an alternative refrigerant.

The second phase of the implementation for the Pavley bill was incorporated into Amendments to the Low-Emission Vehicle Program referred to as LEV III or the Advanced Clean Cars program. The Advanced Clean Car program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. The regulation will reduce GHGs from new cars by 34 percent from 2016 levels by 2025. The new rules will clean up gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid electric vehicles and hydrogen fuel cell cars. The package will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California.

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 percent of sales, with an aggregate goal of 20 percent by 2017. This goal was subsequently accelerated, requiring utilities, including Southern California Edison (SCE), to

obtain 20 percent 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 (CPUC), as of 2013, SCE generated 21.6 percent of its sales from renewable energy sources (California Public Utilities Commission 2014).

Assembly Bill 32

The California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. "Greenhouse gases" as defined under AB 32 include CO_2, CH_4, NO_X, HFCs, PFCs, and SF_6. Since AB 32 was enacted, a seventh chemical, nitrogen trifluoride, has also been added to the list of GHGs. The California ARB is the state agency charged with monitoring and regulating sources of GHGs. AB 32 states the following:

> Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

ARB approved the 1990 GHG emissions level of 427 million metric tons of CO_2 equivalent ($MMTCO_2e$) on December 6, 2007 (ARB 2007). Therefore, emissions generated in California in 2020 are required to be equal to or less than 427 $MMTCO_2e$. Emissions in 2020 in a "business-as-usual" (BAU) scenario were estimated to be 596 $MMTCO_2e$, which do not account for reductions from AB 32 regulations (ARB 2008). At that level, a 28.4 percent reduction was required to achieve the 427 $MMTCO_2e$ 1990 inventory. In October 2010, ARB prepared an updated 2020 forecast to account for the recession and slower forecasted growth. The forecasted inventory without the benefits of adopted regulation is now estimated at 545 $MMTCO_2e$. Therefore, under the updated forecast, a 21.7 percent reduction from BAU is required to achieve 1990 levels.

Progress in Achieving AB 32 Targets and Remaining Reductions Required

The State has made steady progress in implementing AB 32 and achieving targets included in EO S-3-05. The progress is shown in updated emission inventories prepared by ARB for 2000 through 2012 (Appendix I). The State has achieved the EO S-3-05 target for 2010 of reducing GHG emissions to 2000 levels. As shown below, the 2010 emission inventory achieved this target.

- 1990: 427 $MMTCO_2e$ (AB 32 2020 target)
- 2000: 463 $MMTCO_2e$ (an average 8-percent reduction needed to achieve 1990 base)
- 2010: 450 $MMTCO_2e$ (an average 5-percent reduction needed to achieve 1990 base)

ARB has also made substantial progress in achieving its goal of achieving 1990 emissions levels by 2020. As described earlier, ARB revised the 2020 BAU inventory forecast to account for new lower growth projections, which resulted in a new lower reduction from BAU to achieve the 1990 base. The previous reduction from 2020 BAU needed to achieve 1990 levels was 28.4 percent and the latest reduction from 2020 BAU is 21.7 percent.

- 2020: 545 $MMTCO_2e$ BAU (an average 21.7-percent reduction from BAU needed to achieve 1990 base)

ARB Scoping Plan

ARB's Climate Change Scoping Plan (Scoping Plan) contains measures designed to reduce the State's emissions to 1990 levels by the year 2020 to comply with AB 32 (ARB 2008). The Scoping Plan identifies recommended measures for multiple GHG emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a different emission reduction target. Most of the measures target the transportation and electricity sectors. As stated in the Scoping Plan, the key elements of the strategy for achieving the 2020 GHG target include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a statewide renewables energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard (LCFS); and
- Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.

ARB approved the First Update to the Scoping Plan (Update) on May 22, 2014. The Update identifies the next steps for California's climate change strategy. The Update shows how California continues on its path to meet the near-term 2020 GHG limit, but also sets a path toward long-term, deep GHG emission reductions. The report establishes a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050. The Update identifies progress made to meet the near-term objectives of AB 32 and defines California's climate change priorities and activities for the next several years. The Update does not set new targets for the State, but describes a path that would achieve the long-term 2050 goal of EO S-05-03 for emissions to decline to 80 percent below 1990 levels by 2050.

Forecasting the amount of emissions that would occur in 2020 if no actions are taken was necessary to assess the amount of reductions California must achieve to return to the 1990 emissions level by 2020 as required by AB 32. The no-action scenario is known as BAU. ARB originally defined the BAU scenario as emissions in the absence of any GHG emission reduction measures discussed in the Scoping Plan.

As part of California Environmental Quality Act (CEQA) compliance for the Scoping Plan, ARB prepared a Supplemental Functional Equivalent Document (FED) in 2011. The FED included an updated 2020 BAU emissions inventory projection based on current economic forecasts (i.e., as influenced by the economic downturn) and emission-reduction measures already in place, replacing its prior 2020 BAU emissions inventory. ARB staff derived the updated emissions estimates by projecting emissions growth, by sector, from the state's average emissions from 2006–2008. The new BAU estimate includes emission reductions for the million-solar-roofs program, the AB 1493 (Pavley I) motor vehicle GHG emission standards, and the LCFS. In addition, ARB factored into the 2020 BAU inventory emissions reductions associated with 33-percent Renewables Portfolio

Standard (RPS) for electricity generation. The updated BAU estimate of 507 $MMTCO_2e$ by 2020 requires a reduction of 80 $MMTCO_2e$, or a 16-percent reduction below the estimated BAU levels to return to 1990 levels (i.e., 427 $MMTCO_2e$) by 2020.

In order to provide a BAU reduction that is consistent with the original definition in the Scoping Plan and with threshold definitions used in thresholds adopted by lead agencies for CEQA purposes and many climate action plans, the updated inventory without regulations was also included in the Supplemental FED. The ARB 2020 BAU projection for GHG emissions in California was originally estimated to be 596 $MMTCO_2e$. The updated ARB 2020 BAU projection in the Supplemental FED is 545 $MMTCO_2e$. Considering the updated BAU estimate of 545 $MMTCO_2e$ by 2020, ARB estimates a 21.7-percent reduction below the estimated statewide BAU levels is necessary to return to 1990 emission levels (i.e., 427 $MMTCO_2e$) by 2020, instead of the approximate 28.4-percent BAU reduction previously reported under the original Climate Change Scoping Plan (2008).

2017 Climate Change Scoping Plan Update

In November 2017, ARB released the final 2017 Scoping Plan Update, which identifies the State's post-2020 reduction strategy. The 2017 Scoping Plan Update reflects the 2030 target of a 40 percent reduction below 1990 levels, set by Executive Order B-30-15 and codified by Senate Bill 32 (SB 32). Key programs that the proposed Second Update builds upon include the Cap-and-Trade Regulation, the Low Carbon Fuel Standard, and much cleaner cars, trucks and freight movement, utilizing cleaner, renewable energy, and strategies to reduce methane emissions from agricultural and other wastes.

The 2017 Draft Scoping Plan establishes a new emissions limit of 260 MMTCO2e for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030.

California's climate strategy will require contributions from all sectors of the economy, including the land base, and will include enhanced focus on zero- and near-zero-emission (ZE/NZE) vehicle technologies; continued investment in renewables, including solar roofs, wind, and other distributed generation; greater use of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (methane, black carbon, and fluorinated gases); and an increased focus on integrated land use planning to support livable, transit-connected communities and conservation of agricultural and other lands. Requirements for direct GHG reductions at refineries will further support air quality co-benefits in neighborhoods, including in disadvantaged communities historically located adjacent to these large stationary sources, as well as efforts with California's local air pollution control and air quality management districts (air districts) to tighten emission limits on a broad spectrum of industrial sources. Major elements of the 2017 Scoping Plan framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing ZEV buses and trucks.
- Low Carbon Fuel Standard (LCFS), with an increased stringency (18 percent by 2030).
- Implementing SB 350, which expands the Renewables Portfolio Standard (RPS) to 50 percent RPS and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks.

- Implementing the proposed Short-Lived Climate Pollutant Strategy (SLPS), which focuses on reducing methane and hydroflurocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by year 2030.
- Continued implementation of SB 375.
- Post-2020 Cap-and-Trade Program that includes declining caps.
- 20 percent reduction in GHG emissions from refineries by 2030.
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

In addition to the statewide strategies listed above, the 2017 Draft Scoping Plan also identifies local governments as essential partners in achieving the State's long-term GHG reduction goals and identifies local actions to reduce GHG emissions. As part of the recommended actions, CARB recommends that local governments achieve a community-wide goal to achieve emissions of no more than 6 MTCO2e or less per capita by 2030 and 2 MTCO2e or less per capita by 2050. For CEQA projects, CARB states that lead agencies may develop evidenced-based bright-line numeric thresholds—consistent with the Scoping Plan and the State's long-term GHG goals—and projects with emissions over that amount may be required to incorporate on-site design features and mitigation measures that avoid or minimize project emissions to the degree feasible; or, a performance-based metric using a climate action plan or other plan to reduce GHG emissions is appropriate.

According to research conducted by the Lawrence Berkeley National Laboratory and supported by ARB, California, under its existing and proposed GHG reduction policies, is on track to meet the 2020 reduction targets under AB 32 and could achieve the 2030 goals under SB 32. The research utilized a new, validated model known as the California LBNL GHG Analysis of Policies Spreadsheet (CALGAPS), which simulates GHG and criteria pollutant emissions in California from 2010 to 2050 in accordance to existing and future GHG-reducing policies. The CALGAPS model showed that GHG emissions through 2020 could range from 317 to 415 MTCO2e per year, "indicating that existing state policies will likely allow California to meet its target [of 2020 levels under AB 32]." CALGAPS also showed that by 2030, emissions could range from 211 to 428 MTCO2e per year, indicating that "even if all modeled policies are not implemented, reductions could be sufficient to reduce emissions 40 percent below the 1990 level [of SB 32]." CALGAPS analyzed emissions through 2050 even though it did not generally account for policies that might be put in place after 2030. Though the research indicated that the emissions would not meet the State's 80 percent reduction goal by 2050, various combinations of policies could allow California's cumulative emissions to remain very low through 2050.

Senate Bill 97

To assist public agencies in analyzing the effects of GHGs under CEQA, SB 97 (Chapter 185, 2007) required the Governor's Office of Planning and Research 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 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:
- The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting.
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- 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 off-site 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 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 4.2.7-2, the regional emissions reduction goal for Southern California is 8 percent by 2020 and 13 percent by 2035, compared to 2005 emissions levels.

Table 4.2.7-2. 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 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 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 percent of their energy from renewable resources by the year 2020. This bill supersedes the 20 percent by 2020 RPS created by EO S-14-08 that Governor Arnold Schwarzenegger previously signed. Senate Bill 32, Assembly Bill 197

On September 8, 2016, Governor Jerry Brown signed the SB 32 and its companion bill, AB 197. SB 32 requires the State to reduce statewide GHG emissions to 40 percent below 1990 levels by 2030, a reduction target that was first introduced in EO B-30-15. The new legislation builds upon the AB 32 goal of 1990 levels by 2020 and provides an intermediate goal to achieving S-3-05, which sets a statewide GHG reduction target of 80 percent below 1990 levels by 2050. AB 197 creates a legislative committee to oversee regulators to ensure that ARB is not only responsible to the Governor, but also the Legislature.

Cap and Trade

The Scoping Plan identifies a Cap-and-Trade Program as one of the key strategies for California to reduce GHG emissions. According to ARB, a cap-and-trade program will help put California on the path to meet its goal of reducing GHG emissions to 1990 levels by the year 2020 and ultimately achieving an 80-percent reduction from 1990 levels by 2050. Under cap and trade, an overall limit on GHG emissions from capped sectors is established, and facilities subject to the cap will be able to trade permits to emit GHGs within the overall limit.

ARB adopted a California Cap-and-Trade Program pursuant to its authority under AB 32. See 17 CCR §§ 95800 to 96023. The Cap-and-Trade Program is designed to reduce GHG emissions from major sources (deemed "covered entities") by setting a firm cap on statewide GHG emissions and employing market mechanisms to achieve AB 32's emission-reduction mandate of returning to 1990 levels of emissions by 2020. The statewide cap for GHG emissions from the capped sectors (e.g., electricity generation, petroleum refining, and cement production) commenced in 2013 and will decline over time, achieving GHG emission reductions throughout the program's duration.

Covered entities that emit more than 25,000 $MTCO_2e$ per year must comply with the Cap-and-Trade Program. Triggering of the 25,000 $MTCO_2e$ per year "inclusion threshold" is measured against a subset of emissions reported and verified under the California Regulation for the Mandatory Reporting of Greenhouse Gas Emissions.

Under the Cap-and-Trade Program, ARB issues allowances equal to the total amount of allowable emissions over a given compliance period and distributes these to regulated entities. Covered entities are allocated free allowances in whole or part (if eligible), and may buy allowances at auction, purchase allowances from others, or purchase offset credits. Each covered entity with a compliance obligation is required to surrender "compliance instruments" (30) for each $MTCO_2e$ of GHG they emit. There also are requirements to surrender compliance instruments covering 30 percent of the prior year's compliance obligation by November of each year. For example, in November 2014, a covered entity was required to submit compliance instruments to cover 30 percent of its 2013 GHG emissions.

The Cap-and-Trade Program provides a firm cap, ensuring that the 2020 statewide emission limit will not be exceeded. An inherent feature of the Cap-and-Trade Program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on an accumulative basis. As summarized by ARB in the First Update:

> The Cap and Trade Regulation gives companies the flexibility to trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies that emit more have to turn in more allowances or other compliance instruments. Companies that can cut their GHG emissions have to turn in fewer allowances. But as the cap declines, aggregate emissions must be reduced. In other words, a covered entity theoretically could increase its GHG emissions every year and still comply with the Cap and Trade Program if there is a reduction in GHG emissions from other covered entities. Such a focus on aggregate GHG emissions is considered appropriate because climate change is a global phenomenon, and the effects of GHG emissions are considered cumulative (Urban Crossroads 2018).

The Cap-and-Trade Program works with other direct regulatory measures and provides an economic incentive to reduce emissions. If California's direct regulatory measures reduce GHG emissions more than expected, then the Cap-and-Trade Program will be responsible for relatively fewer emissions reductions. If California's direct regulatory measures reduce GHG emissions less than expected, then the Cap-and-Trade Program will be responsible for relatively more emissions reductions. Thus, the Cap-and-Trade Program ensures that California will meet its 2020 GHG emissions reduction mandate:

> The Cap and Trade Program establishes an overall limit on GHG emissions from most of the California economy—the "capped sectors." Within the capped sectors, some of the reductions are being accomplished through direct regulations, such as improved

> building and appliance efficiency standards, the LCFS, and the 33 percent RPS. Whatever additional reductions are needed to bring emissions within the cap is accomplished through price incentives posed by emissions allowance prices. Together, direct regulation and price incentives assure that emissions are brought down cost-effectively to the level of the overall cap. The Cap and Trade Regulation provides assurance that California's 2020 limit will be met because the regulation sets a firm limit on 85 percent of California's GHG emissions. In sum, the Cap and Trade Program will achieve aggregate, rather than site specific or project-level, GHG emissions reductions. Also, due to the regulatory architecture adopted by ARB in AB 32, the reductions attributed to the Cap and Trade Program can change over time depending on the State's emissions forecasts and the effectiveness of direct regulatory measures (Urban Crossroads 2018).

As of January 1, 2015, the Cap-and-Trade Program covered approximately 85 percent of California's GHG emissions. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are covered by the Cap-and-Trade Program.

The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the program's first compliance period. While the Cap-and-Trade Program technically covered fuel suppliers as early as 2012, they did not have a compliance obligation (i.e., they were not fully regulated) until 2015. The Cap-and-Trade Program covers the GHG emissions associated with the combustion of transportation fuels in California, whether refined in-state or imported. The point of regulation for transportation fuels is when they are "supplied" (i.e., delivered into commerce). Accordingly, as with stationary source GHG emissions and GHG emissions attributable to electricity use, virtually all, if not all, of GHG emissions from CEQA projects associated with vehicle miles traveled (VMT) are covered by the Cap-and-Trade Program (Urban Crossroads 2018).

In addition, the Scoping Plan differentiates between "capped" and "uncapped" strategies. "Capped" strategies are subject to the proposed Cap-and-Trade Program. The Scoping Plan states that the inclusion of these emissions within the Cap-and-Trade Program will help ensure that the year 2020 emission targets are met despite some degree of uncertainty in the emission reduction estimates for any individual measure. Implementation of the capped strategies is calculated to achieve a sufficient amount of reductions by 2020 to achieve the emission target contained in AB 32. "Uncapped" strategies that will not be subject to the cap-and-trade emissions caps and requirements are provided as a margin of safety by accounting for additional GHG emission reductions.[4]

[4] On March 17, 2011, the San Francisco Superior Court issued a final decision in *Association of Irritated Residents v. California Air Resources Board* (Case No. CPF-09-509562). While the Court upheld the validity of the ARB Scoping Plan for the implementation of AB 32, the Court enjoined ARB from further rulemaking under AB 32 until ARB amends its CEQA environmental review of the Scoping Plan to address the flaws identified by the Court. On May 23, 2011, ARB filed an appeal. On June 24, 2011, the Court of Appeal granted ARB's petition staying the trail court's order pending consideration of the appeal. In the interest of informed decision-making, on June 13, 2011, ARB released the expanded alternatives analysis in a draft Supplement to the AB 32 Scoping Plan Functional Equivalent Document. The ARB Board approved the Scoping Plan and the CEQA document on August 24, 2011.

SB 350 Clean Energy and Pollution Reduction Act of 2015

In October 2015, the legislature approved and the Governor signed SB 350, which reaffirms California's commitment to reducing GHG emissions and addressing climate change. Key provisions include an increase in the RPS, higher energy-efficiency requirements for buildings, initial strategies toward a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33 percent to 50 percent by 2030, with interim targets of 40 percent by 2024, and 25 percent by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through CPUC, CEC, and local publicly owned utilities.
- Reorganize the Independent System Operator to develop more regional electricity transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States (California Leginfo 2015).

Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce GHGs through the use of Executive Orders. Although not regulatory, they set the tone for the State and guide the actions of State agencies.

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 percent below 1990 levels by 2050.[5] 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.

Executive Order S-01-07

The Governor signed Executive Order S-01-07 (Low Carbon Fuel Standard) on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. In particular, the Executive Order established a Low Carbon Fuel Standard and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission, the ARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. This analysis supporting development of the protocols was included in the

[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.

State Implementation Plan for alternative fuels (State Alternative Fuels Plan adopted by California Energy Commission on December 24, 2007) and was submitted to ARB for consideration as an "early action" item under AB 32. The ARB adopted the Low Carbon Fuel Standard on April 23, 2009.

The Low Carbon Fuel Standard was challenged in the U.S. District Court in Fresno in 2011. The court's ruling issued on December 29, 2011, included a preliminary injunction against ARB's implementation of the rule. The Ninth Circuit Court of Appeals stayed the injunction on April 23, 2012, pending final ruling on appeal, allowing ARB to continue to implement and enforce the regulation. The Ninth Circuit Court's decision, filed September 18, 2013, vacated the preliminary injunction. In essence, the court held that Low Carbon Fuel Standards adopted by ARB were not in conflict with federal law. On August 8, 2013, the Fifth District Court of Appeal (California) ruled ARB failed to comply with CEQA and the Administrative Procedure Act (APA) when adopting regulations for Low Carbon Fuel Standards. In a partially published opinion, the Court of Appeal reversed the trial court's judgment and directed issuance of a writ of mandate setting aside Resolution 09-31 and two executive orders of ARB approving Low Carbon Fuel Standards (LCFS) regulations promulgated to reduce GHG emissions. However, the court tailored its remedy to protect the public interest by allowing the LCFS regulations to remain operative while ARB complies with the procedural requirements it failed to satisfy.

To address the Court ruling, ARB was required to bring a new LCFS regulation to tits Board for consideration in February 2015. The proposed LCFS regulation was required to contain revisions to the 2010 LCFS as well as new provisions designed to foster investments in the production of the low-carbon intensity (low-CI) fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. The second public hearing was held on September 24 and September 25, 2015, where the LCFS Regulation was adopted. The Final Rulemaking Package adopting the regulation was filed with Office of Administrative Law (OAL) on October 2, 2015. OAL had until November 16, 2015 to make a determination (Urban Crossroads 2018).

Executive Order S-13-08

EO S-13-08 states that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources." Pursuant to the requirements in the order, the 2009 California Climate Adaptation Strategy (California Natural Resources Agency 2009) was adopted, which is the "first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

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" to require a 33 percent by 2020 renewable energy procurement mandate for most retail sellers of electricity in California (California Air Resources Board 2010b).

Executive Order B-30-15

On April 29, 2015, Governor Brown issued an executive order to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor's executive order aligns California's GHG reduction targets with those of leading international governments ahead of the United Nations Climate Change Conference in Paris in late 2015. The executive order sets a new interim statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050 and directs ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of $MMTCO_2e$. The executive order also requires the State's climate adaptation plan to be updated every 3 years and for the State to continue its climate change research program, among other provisions. As with EO S-3-05, this executive order is not legally enforceable for local governments and the private sector. Legislation that would update AB 32 to make post 2020 targets and requirements a mandate is in process in the State Legislature.

California Regulations and Building Codes

Title 20 Appliance Efficiency Standards

CCR, Title 20: Division 2, Chapter 4, Article 4, Sections 1601–1608: Appliance Efficiency Regulations regulates the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances. Twenty-three categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the state and those designed and sold exclusively for use in recreational vehicles or other mobile equipment (Urban Crossroads 2018).

Title 24 Energy Efficiency Standards and California Green Building Standards

CCR Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy-efficient technologies and methods. Energy-efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The newest version of Title 24 was adopted by CEC in 2016 and became effective on January 1, 2017.

CEC indicates that the 2016 Title 24 standards will reduce energy consumption by 5 percent for nonresidential buildings above that achieved by the 2013 Title 24 (Urban Crossroads 2018).

California Code of Regulations, Title 24, Part 11: California Green Building Standards Code (CALGREEN) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect January 1, 2011 administered by the California Building Standards Commission. The code is updated on a regular basis, with the most recent update consisting of the 2016 California Green Building Code Standards that became effective January 1, 2017. Local jurisdictions are permitted to adopt more stringent requirements, as state law provides methods for local enhancements. The Code recognizes that many jurisdictions have developed existing construction and demolition ordinances, and defers to them as the ruling guidance provided they establish a minimum 50-percent diversion requirement. The code also provides exemptions for

areas not served by construction and demolition recycling infrastructure. The State Building Code provides the minimum standard that buildings must meet in order to be certified for occupancy, which is generally enforced by the local building official. CALGREEN requires:

- Short-term bicycle parking. If a commercial project is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of visitor motorized vehicle parking capacity, with a minimum of one two-bike capacity rack.
- Long-term bicycle parking. For new buildings with 10 or more tenant-occupants, provide secure bicycle parking for 5 percent of tenant-occupied motorized vehicle parking capacity, with a minimum of one space.
- Designated parking. Provide designated parking in commercial projects for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles.
- Recycling by Occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of nonhazardous materials for recycling.
- Construction waste. A minimum 65-percent diversion of construction and demolition waste from landfills, increasing voluntarily to 80 percent for new homes and commercial projects (5.408.1, A5.408.3.1 [nonresidential], A5.408.3.1 [residential]). All (100 percent) of trees, stumps, rocks and associated vegetation and soils resulting from land clearing shall be reused or recycled.
- Wastewater reduction. Each building shall reduce the generation of wastewater by one of the following methods:
    - The installation of water-conserving fixtures, or
    - Using non-potable water systems.
- Water use savings. 20-percent mandatory reduction in indoor water use with voluntary goal standards for 30, 35 and 40-percent reductions (nonresidential).
- Water meters. Separate water meters for buildings in excess of 50,000 square feet or buildings projected to consume more than 1,000 gallons per day.
- Irrigation efficiency. Moisture-sensing irrigation systems for larger landscaped areas.
- Materials pollution control. Low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particleboard.
- Building commissioning. Mandatory inspections of energy systems (i.e., heat furnace, air conditioner, mechanical equipment) for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity according to their design efficiencies.

Model Water Efficient Landscape Ordinance

The Model Water Efficient Landscape Ordinance (Ordinance) was required by AB 1881, the Water Conservation Act. The bill required local agencies to adopt a local landscape ordinance at least as effective in conserving water as the Model Ordinance by January 1, 2010. Reductions in water use of 20 percent consistent with (SBX-7-7) 2020 mandate are expected upon compliance with the ordinance. Governor Brown's Drought Executive Order of April 1, 2015 (EO B-29-15) directed Department of Water Resources (DWR) to update the Ordinance through expedited regulation. The

California Water Commission approved the revised Ordinance on July 15, 2015 effective December 15, 2015. New development projects that include landscape areas of 500 square feet or more are subject to the Ordinance. The update requires:

- More efficient irrigation systems;
- Incentives for graywater usage;
- Improvements in on-site stormwater capture;
- Limiting the portion of landscapes that can be planted with high water use plants; and
- Reporting requirements for local agencies.

ARB Refrigerant Management Program

ARB adopted a regulation in 2009 to reduce refrigerant GHG emissions from stationary sources through refrigerant leak detection and monitoring, leak repair, system retirement and retrofitting, reporting and recordkeeping, and proper refrigerant cylinder use, sale, and disposal. The regulation is set forth in sections 95380 to 95398 of Title 17, California Code of Regulations. The rules implementing the regulation establish a limit on statewide GHG emissions from stationary facilities with refrigeration systems with more than 50 pounds of a high GWP refrigerant. The refrigerant management program is designed to (1) reduce emissions of high-GWP GHG refrigerants from leaky stationary, non-residential refrigeration equipment; (2) reduce emissions from the installation and servicing of refrigeration and air-conditioning appliances using high-GWP refrigerants; and (3) verify GHG emission reductions.

Tractor-Trailer Greenhouse Gas Regulation

The tractors and trailers subject to this regulation must either use EPA SmartWay certified tractors and trailers, or retrofit their existing fleet with SmartWay verified technologies. The regulation applies primarily to owners of 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and owners of the heavy-duty tractors that pull them on California highways. These owners are responsible for replacing or retrofitting their affected vehicles with compliant aerodynamic technologies and low rolling resistance tires. Sleeper cab tractors model year 2011 and later must be SmartWay certified. All other tractors must use SmartWay-verified low rolling resistance tires. There are also requirements for trailers to have low rolling resistance tires and aerodynamic devices.

Phase I and 2 Heavy-Duty Vehicle GHG Standards

ARB has adopted a new regulation for greenhouse gas (GHG) emissions from heavy-duty trucks and engines sold in California. It establishes GHG emission limits on truck and engine manufacturers and harmonizes with the U.S. EPA rule for new trucks and engines nationally. Existing heavy-duty vehicle regulations in California include engine criteria emission standards, tractor-trailer GHG requirements to implement SmartWay strategies (i.e., the Heavy-Duty Tractor-Trailer Greenhouse Gas Regulation), and in-use fleet retrofit requirements such as the Truck and Bus Regulation. In September 2011, the U.S. EPA adopted their new rule for heavy-duty trucks and engines. The U.S. EPA rule has compliance requirements for new compression and spark ignition engines, as well as trucks from Class 2b through Class 8. Compliance requirements begin with model year (MY) 2014 with stringency levels increasing through MY 2018. The rule organizes truck compliance into three groupings, which include a) heavy-duty pickups and vans; b) vocational vehicles; and c) combination tractors. The U.S. EPA rule does not regulate trailers.

ARB staff has worked jointly with the U.S. Environmental Protection Agency (U.S. EPA) and the National Highway Traffic Safety Administration (NHTSA) on the next phase of federal greenhouse gas (GHG) emission standards for medium- and heavy-duty vehicles, called federal Phase 2. The federal Phase 2 standards were built on the improvements in engine and vehicle efficiency required by the Phase 1 emission standards and represent a significant opportunity to achieve further GHG reductions for 2018 and later model year heavy-duty vehicles, including trailers.

U.S. EPA and NHTSA issued a Notice of Proposed Rulemaking for Phase 2 in June 2015, and published the final rule in October 2016. ARB staff plans to bring a proposed California Phase 2 program before the Board in early 2018. ARB staff remains committed to a strong national program which will support California's GHG reduction commitments.

Local

South Coast Air Quality Management District (SCAQMD)

The South Coast Air Quality Management District (SCAQMD) is the agency responsible for air quality planning and regulation in the South Coast Air Basin. For GHGs, the agency addresses the impacts on climate change of projects subject to SCAQMD permit as a lead agency if it is the only agency having discretionary approval for the project and a responsible agency when a land use agency must also approve discretionary permits for the project. SCAQMD acts as an expert commenting agency for impacts on air quality. This expertise carries over to GHG emissions, so the agency helps local land use agencies through the development of models and emission thresholds that can be used to address GHG emissions.

In 2008, SCAQMD formed a Working Group to identify greenhouse gas emissions thresholds for land use projects that could be used by local lead agencies in the SCAB. The Working Group developed several different options that are contained in the SCAQMD Draft Guidance Document – Interim CEQA Greenhouse Gas Significance Threshold that could be applied by lead agencies. The working group has not provided additional guidance since release of the interim guidance in 2008. The SCAQMD Board has not approved the thresholds; however, the Guidance Document provides substantial evidence supporting the approaches to significance of GHG emissions that can be considered by the lead agency in adopting its own threshold. The current interim thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a greenhouse gas reduction plan. If a project is consistent with a qualifying local greenhouse gas reduction plan, it does not have significant greenhouse gas emissions.
- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant:
    - Residential and commercial land use types: 3,000 $MTCO_2e$ per year
    - Based on land use type: residential: 3,500 $MTCO_2e$ per year; commercial: 1,400 $MTCO_2e$ per year; or mixed use: 3,000 $MTCO_2e$ per year

- Tier 4 has the following options:
  - Option 1: Reduce BAU emissions by a certain percentage; this percentage is currently undefined.
  - Option 2: Early implementation of applicable AB 32 Scoping Plan measures
  - Option 3, 2020 target for service populations (SP), which includes residents and employees: 4.8 $MTCO_2e$/SP/year for projects and 6.6 $MTCO_2e$/SP/year for plans;
  - Option 3, 2035 target: 3.0 $MTCO_2e$/SP/year for projects and 4.1 $MTCO_2e$/SP/year for plans
- Tier 5 involves mitigation offsets to achieve target significance 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 as a 2020 target, and 3.0 $MTCO_2e$ per service population 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 2013). 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.

The *San Bernardino County Regional Greenhouse Gas Reduction Plan* specifies that cities select a goal to reduce their community's GHG emissions. The City of Fontana selected the goal of reducing GHG emissions to a level that is 15 percent below its 2008 GHG emissions by 2020[6] (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 percent reduction from the BAU projection and a reduction that exceeds the City's 15 percent goal. The 24 percent 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 Sustainable Communities Strategy (Transportation-1).

6 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.

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 percent 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 percent 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 percent 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 percent 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 percent 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 percent 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 which is a certain percentage below BAU 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 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.
- **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 Power Purchase Agreement companies. Establish a goal such that all new warehousing projects install solar to provide a minimum of 25 percent 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; installation of water-efficient appliances and plumbing fixtures. This would result in a 30–40 percent reduction over BAU conditions in indoor water use, and a 55-60 percent 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 percent 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 4.2.7-3.

Table 4.2.7-3. 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.
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.

Goal/Policy
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

Impact Analysis

Methodology

CEQA Guidelines Section 15064.4(b)(1) states that a lead agency may use a model or methodology to quantify GHG emissions associated with a project. On October 14, 2016, SCAQMD, in conjunction with the California Air Pollution Control Officers Association and other California air districts, released the California Emissions Estimator Model™ (CalEEMod™) v2016.3.1. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (NO_X, volatile organic compound, particulate matter 10 microns or less in diameter, PARTICULATE matter 2.5 microns or less in diameter, sulfur oxides, and carbon monoxide) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (California Air Pollution Control Officers Association 2006). Accordingly, the latest version of CalEEMod™ has been used for this project to determine construction and operational GHG emissions. Output from the model runs for both construction and operational activity are provided in Appendix I. The CalEEMod™ model includes GHG emissions from the following source categories: construction, area, energy, mobile, waste, and water.

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 4.2.7-3.

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, on-site 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 increments or at a single time, depending on market conditions. This analysis assumes the more conservative scenario of the entire site being built at a single time. Site preparation (mass grading and/or fine grading) would be completed before other construction activities would occur. Table 4.2.7-4 lists the construction schedule based on this conservative assessment of possible project build-out. It is also conservatively assumes that the building construction and paving phases overlap.

Table 4.2.7-4. Construction Schedule

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

Table 4.2.7-5 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 4.2.7-5. Construction Equipment Assumptions

Phase Name	Equipment Type	Number of Pieces of Equipment	Hours per day
Site Preparation	Rubber Tired Dozers	3	8
	Tractors/Loaders/Backhoes	4	8
Grading	Excavators	2	8
	Graders	4	8
	Water Trucks	2	8
	Rubber Tired Dozers	4	8
	Scrapers	4	8
	Tractors/Loaders/Backhoes	2	8
Building Construction	Cranes	2	8
	Forklifts	3	8
	Tractors/Loaders/Backhoes	3	8
	Welders	2	8
	Generator Sets	2	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
Architectural Coating	Air Compressors	3	8

Construction activities associated with the proposed project would result in emissions of CO_2 and CH_4. For construction phase emissions, GHGs are quantified and amortized over the life of the project. To amortize the emissions over the life of the project, SCAQMD recommends calculating the total GHG emissions for the construction activities, dividing it by a 30-year project life, and then adding that figure to the annual operational GHG emissions. As such, the proposed project's estimated construction emissions were amortized over a 30-year period and added to the annual operational GHG emissions.

In addition, while a construction schedule for the project's on-site facilities (i.e., seven warehouse distribution buildings and landscaping) has been established, a construction schedule for the project's off-site utility and infrastructure improvements has not been developed at this time. To account for offsite improvements[7], the project's calculated peak day construction emissions based on the equipment assumptions shown in Table 4.2.7-5 was doubled for the purpose of this analysis. This doubling of emissions during is conservative because it assumes that off-site construction improvements would be as intense as the peak day construction activities occurring at the entire project site. In reality, off-site infrastructure improvements would be at a much smaller scale on a

[7] Project-related offsite improvements include off-site sewer lines and a lift station within an existing roadway right-of-way, as well as off-site roadway improvements. These improvements are described in EIR Section 3.2.1.

daily basis than the construction activities (i.e., grading and building construction) within the entire project site.

Operation

Operational activities associated with the proposed project would result in emissions of CO_2, CH_4, and N_2O. The CalEEMod™ model was used to estimate the proposed project's operational GHG emissions. The primary sources of emissions that were accounted for in the CalEEMod™ model include the following:

- **Area Source Emissions**
  - Landscape Maintenance Equipment – Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the proposed project.
- **Energy Source Emissions**
  - Combustion Emissions Associated with Natural Gas and Electricity – GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO_2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building. GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. Unless otherwise noted, CalEEMod™ default parameters were used in this analysis.

- **Mobile Source Emissions –** Mobile sources include workers commuting and trucks idling and hauling material to and from the proposed warehouse buildings. Based on trip generation factors, as described in the Traffic Impact Analysis in Appendix L, the proposed project is expected to generate a net total of 6,382 trip-ends per day (actual vehicles – automobiles and trucks), including 2,432 truck trip-ends per day, from the proposed buildings within the project site. Based on the results of the San Bernardino Transportation Analysis Model (SBTAM), which is the regional traffic model applicable for the proposed project, an average trip length of 38 miles for heavy trucks and 17.4 miles for all other vehicles (passenger cars, small trucks, motorcycles, etc.) was used to calculate the proposed project's mobile GHG emissions.[8]
- **Solid Waste Emissions** – Industrial land uses will result in the generation and disposal of solid waste. A large percentage of this waste will be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted will be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste associated with the proposed project were calculated by the CalEEMod™ model using default parameters.
- **Water Supply, Treatment, and Distribution** – Indirect GHG emissions result from the production of electricity used to convey, treat and distribute water and wastewater. The amount of electricity required to convey, treat and distribute water depends on the volume of water as well as the sources of the water. Unless otherwise noted, CalEEMod™ default parameters were used in this analysis.
- **On-Site Equipment Emissions** – It is common for an industrial warehouse project to require cargo handling equipment to move empty containers and empty chassis to and from the various areas that receive and distribute containers. The most common type of cargo handling equipment is the yard truck which is designed for moving cargo containers. Yard trucks are also known as yard goats, utility tractors (UTRs), hustlers, yard hostlers, and yard tractors. As part of

[8] The truck trip length used in the analysis represents a reasonable worst case, because (1) it assumes that all truck trips to and from the project site are new and that no truck trips would redistributed from other locations to the project site, and (2) it is based on reasonable information (the regional transportation traffic model – specifically the truck component of the model).

As stated in the WVLC Air Quality Impact Analysis, vehicle miles traveled (VMT) for the proposed project was calculated by the total number of vehicle trips to and from the project site multiplied by the average trip length. This method of estimating VMT for use in calculating vehicle emissions likely results in the overestimation and double-counting of emissions because, for a distribution warehouse center such as the proposed project, the land use is likely to attract (divert) some existing vehicle trips that are already on the regional roadway system, as opposed to only generating new trips to the region. In this regard, the proposed project would, to a large extent, redistribute existing mobile-source GHG emissions rather than exclusively generate new and additional mobile source emissions. As such, the estimation of the project's vehicular-source emissions is likely overstated in that no credit for, or reduction in, emissions is assumed based on diversion of existing trips.

Furthermore, as noted in the Air Quality Impact Analysis, SCAQMD generally recommends the of a 40-mile one-way trip length for similar land use projects, which is within an order of magnitude of the trip length calculated in the regional traffic model for trucks and utilized for the WVLC project. Similarly, the Southern California Association of Governments (SCAG) maintains a regional transportation model. In its most recent (2008) transportation validation for the 2003 Regional Model, SCAG indicates that the average internal truck trip length for the SCAG region is 5.92 miles for Light Duty Trucks, 13.06 miles for Medium Duty Trucks, and 24.11 for Heavy Duty Trucks.

the proposed project's design (SP-AQ-7), all on-site outdoor cargo handling equipment (CHE) (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) and all on-site indoor forklifts will be powered by electricity. Since there is no exhaust associated with the operation of the yard tractors and forklifts, for the purposes of this analysis, no on-site equipment was modeled. Notwithstanding, since the indirect electricity consumption from on-site equipment may not be accounted for by the default CalEEMod calculations for energy demand, as a conservative measure, 50 percent of the energy demand calculated by CalEEMod is assumed to be required for on-site equipment operations.

Thresholds of Significance

Criteria for determining the significance of impacts related to GHG emissions are based on criteria contained in Appendix G of the 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.

The evaluation of an impact under CEQA requires measuring data from a project against both existing conditions and a "threshold of significance." With regard to establishing a significance threshold, the Office of Planning and Research's amendments to the CEQA Guidelines Section 15064.7(c) state that "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

CEQA Guidelines Section 15064.4(a) further states, "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 …; or (2) Rely on a qualitative analysis or performance based standards."

CEQA Guidelines Section 15064.4 provides that a lead agency may take into account the following three considerations in assessing the significance of impacts from GHG emissions:

- **Consideration #1**: The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting.
- **Consideration #2**: Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- **Consideration #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. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of GHG 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.

Center for Biological Diversity v. California Department of Fish and Wildlife ("Newhall Ranch")

On November 30, 2015, the California Supreme Court published its Opinion in *Center for Biological Diversity v. California Department of Fish and Wildlife* ("*Newhall Ranch*"), which invalidated the GHG analysis for a large master planned residential development in Los Angeles County consisting of over 20,000 residential dwelling units and other uses. The Court determined that the GHG significance finding was "not supported by a reasoned explanation based on substantial evidence." However, the Court upheld: (1) use of the statewide emissions reduction goal in AB 32 as a significance criterion (pp. 15–19), (2) use of the Scoping Plan's BAU model "as a comparative tool for evaluating efficiency and conservation efforts" of the project (pp. 18–19), and (3) a comparison of the project's expected emissions to a BAU model rather than a baseline of pre-project conditions (pp. 15–19).

The Court invalidated the GHG analysis because the "administrative record discloses no substantial evidence that the Newhall Ranch's project-level reduction of 31 percent in comparison to [BAU] is consistent with achieving AB 32's statewide goal of a 29 percent reduction from [BAU]…." (p. 19, see also p. 23 ("Nor is Justice Corrigan correct that our analysis 'assumes project-level reduction in greenhouse gas emissions must be greater than the reduction California is seeking to achieve statewide.' [internal citations omitted] …[W]e only hold that [the California Department of Fish and Wildlife] erred in failing to substantiate its assumption that the Scoping Plan's statewide measure of emissions reduction can also serve as the criterion for an individual land use project.").

In so doing, the Court questioned whether "a greater degree of reduction may be needed" from new versus existing development to achieve the statewide goal set forth in AB 32 (p. 20). The Court also stated that the EIR failed to contain sufficient evidence to conclude that the "land use density" assumptions used in the EIR's GHG emissions model relate to the land use density assumptions used in the Scoping Plan's BAU model (p. 21–22). Because this information was not contained in the *Newhall Ranch* EIR, the Court determined that the record did not contain substantial evidence supporting the findings.

The Court outlined "potential pathways to compliance" that future EIRs could use to determine if GHG emissions from a given project are significant. Specifically, the Court advised that:

- **Substantiation of Project Reductions from BAU**. A lead agency may use a BAU comparison based on the Scoping Plan's methodology if it also substantiates the reduction a particular project must achieve to comply with statewide goals. The Court suggested a lead agency could examine the "data behind the Scoping Plan's business-as-usual model" to determine the necessary project-level reductions from new land use development at the proposed location.
- **Compliance with Regulatory Programs or Performance-Based Standards**. A lead agency "might assess consistency with AB 32's goal in whole or part by looking to compliance with regulatory programs designed to reduce greenhouse gas emissions from particular activities (see Final Statement of Reasons, supra, at p. 64 [greenhouse gas emissions 'may be best analyzed and mitigated at a programmatic level.']). To the extent a project's design features comply with or exceed the regulations outlined in the Scoping Plan and adopted by the Air Resources Board or other state agencies, a lead agency could appropriately rely on their use as showing compliance with 'performance based standards' adopted to fulfill 'a statewide . . . plan for the reduction or mitigation of greenhouse gas emissions.' (CEQA Guidelines § 15064.4(a)(2), (b)(3); see also id., § 15064(h)(3) [determination that impact is not cumulatively considerable may rest on compliance with previously adopted plans or regulations, including 'plans or regulations for the reduction of greenhouse gas emissions'].)"

- **Compliance with GHG Reduction Plans or Climate Action Plans (CAPs)**. A lead agency may utilize "geographically specific GHG emission reduction plans" such as CAPs or GHG emission reduction plans to provide a basis for the tiering or streamlining of project-level CEQA analysis.
- **Compliance with Local Air District Thresholds**. A lead agency may rely on "existing numerical thresholds of significance for greenhouse gas emissions" adopted by, for example, local air districts.

Therefore, consistent with CEQA Guidelines Appendix G, the three factors identified in CEQA Guidelines Section 15064.4, and the *Newhall Ranch* opinion, the following thresholds are considered in determining the significance of impacts from GHG:

- **Would the project generate direct or indirect greenhouse gas emissions that would result in a significant impact on the environment (see Impact GHG-1)?**
    - The City of Fontana has not formally adopted a numeric threshold of significance for determining impacts with respect to GHG emissions. The SCAQMD's adopted numerical threshold of 10,000 $MTCO_2e$ per year for industrial stationary source emissions is typically selected as the significance criterion. However, the City has determined that the SCAQMD's draft threshold of 3,000 MTCO2e per year is more conservative and appropriate for industrial and warehouse land use development projects. The 3,000 MTCO2e threshold is based on the SCAQMD staff's proposed GHG screening threshold for stationary source emissions for non-industrial projects, as described in the SCAQMD's Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans ("SCAQMD Interim GHG Threshold"). The SCAQMD Interim GHG Threshold identifies a screening threshold to determine whether additional analysis is required. This threshold is also consistent with the SCAQMD's draft interim threshold Tier 3.
- **Would the project conflict with the ARB Scoping Plan and regulations adopted for the purpose of reducing emissions of GHGs (see Impact GHG-2)?**
- Analysis under Impact GHG-2 involves a qualitative analysis of the proposed project's consistency with the ARB's Scoping Plan and with GHG emission reducing regulations. The Scoping Plan (and its adopted regulations) are considered a statewide plan, policy, or regulation adopted by a public agency to reduce GHG emissions that may be used to assess consistency with AB 32.

Project Design Features

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

Specific Plan Requirements

SP-GHG-1: Incorporate Water Conservation and Efficient Measures for Landscaping. The project will devise a comprehensive water conservation strategy in compliance with California Green Building Standards Code Water Efficiency Measures and Leadership in Energy and Environmental Design 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 at such time as it can be made reasonably available. Install the infrastructure to deliver and use reclaimed water, as part of street improvements within the project site along Jurupa Avenue, Locust Avenue, Alder Avenue, and Armstrong Road as needed to provide reclaimed water for landscape irrigation when available.
- 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 of Fontana's Municipal Code Article IV, Landscaping and Water Conservation.

SP-GHG-2: Design Building Components to Meet 2016 Title 24 Standards. The project will design building shells and building components, such as windows; roof systems: electrical and lighting systems: and heating, ventilating, and air conditioning systems to meet 2016 Title 24 Standards, which are 5 percent more stringent than the 2013 Title 24 Standards, which were in turn 30 percent more stringent than the 2008 Title 24 Standards for nonresidential buildings.

SP-GHG-3: Design CALGreen-Compliant Buildings. Buildings will be designed to provide CALGreen Standards with Leadership in Energy and Environmental Design 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; lighting; and power systems.

SP-GHG-4: Provide Electrical Connections at 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-GHG-5: Utilize Energy Efficient Lighting. The project will utilize energy-efficient interior and exterior lighting, including light-emitting diodes, T5 and T8 fluorescent lamps, or other lighting that is at least as efficient. Lighting will incorporate motion sensors that turn lighting off when not in use.

SP-GHG-6: Select Efficient Refrigerants and Heating, Ventilating, and Air Conditioning (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 standards and/or per California Title 24 requirements.

SP-GHG-7: Provide Landscaped Parking Lots. Surface parking lots will be well landscaped to reduce heat island effect. Parking lot landscaping will be planted with 15-gallon trees, at a rate of 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-GHG-8: Recycling Program: Operational Sustainability. The Project shall implement a recycling program in order to meet a 50 percent minimum waste diversion goal, consistent with Section 24-2 of the City's Municipal Code.

SP-AQ-1: Encourage Ridesharing and Transit Incentives. Each building operator will be required to support and encourage ridesharing and transit incentives for the construction crew by providing crews with the needed resources to organize rideshares, such 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.

SP-AQ-6: Electric Cargo Handling Equipment. All on-site outdoor cargo-handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) and all on-site indoor forklifts will be powered by electricity.

Standard Requirements

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

SR-GHG-2: 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 percent 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 percent of the project.

SR-GHG-3: Incorporate Energy-Efficiency Measures for New Warehouse Buildings. Prior to the issuance of building permits, the West Valley Logistics Center Specific Plan will demonstrate the incorporation of the following project design features that will achieve a minimum of 15 percent reduction in greenhouse gas emissions from business-as-usual conditions, pursuant to the San Bernardino County Regional Greenhouse Gas Reduction Plan and Assembly Bill 32 and the greenhouse gas 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 percent 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 percent below the baseline required by the California Energy Commission, 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 diode 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 global warming potential hydrofluorocarbon refrigerants or natural refrigerants (ammonia, propane, carbon dioxide) 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., U.S. Environmental Protection Agency 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 stormwater and protect the environment. The project will retain stormwater runoff on site and construct basins to hold and filter water.
- Implement a comprehensive water conservation strategy through methods described in the West Valley Logistics Center Specific Plan 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 City 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 5 minutes, including delivery and construction vehicles, per California Air Resources Board 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 West Valley Logistics Center Specific Plan 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).

Impacts and Mitigation

Impact GHG-1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment

Project-Related GHG Emissions

The latest version of CalEEMod™ v2016.3.1 was used to determine project-related construction and operational GHG emissions. The CalEEMod™ model includes GHG emissions from construction, area, energy, mobile, waste, and water sources.

As discussed previously, the proposed project's estimated construction emissions were amortized over a 30-year period and added to the annual operational GHG emissions. In addition to onsite construction emissions, GHG emissions associated with off-site utility and infrastructure improvements were also accounted for by doubling the calculated amortized GHG emissions associated with the project's on-site construction activities. The proposed project's operational GHG emissions were calculated for the following primary sources:

- Area Source Emissions
- Energy Source Emissions

- Mobile Source Emissions
- Solid Waste
- Water Supply, Treatment, and Distribution
- On-site Equipment emissions

The total GHG emissions generated from project construction and operations are shown in Table 4.2.7-6. As shown, the proposed project (for opening year 2018 conditions) would result in approximately 6,649.79 $MTCO_2e$ per year from construction, area, energy, waste, and water usage. In addition, the project has the potential to result in an additional 53,981.53 $MTCO_2e$ per year from mobile sources if the assumption is made that all vehicle trips to and from the project are "new" trips resulting from the development of the project. When all emissions sources are taken together, the project has the potential to generate a total of approximately 60,631.32 $MTCO_2e$ per year.

Table 4.2.7-6. Project Greenhouse Gas Emissions (Annual)

	Emissions (metric tons per year)			
Emission Source	**CO_2**	**CH_4**	**N_2O**	**Total CO_2e**
Annual construction-related emissions amortized over 30 years	613.9	0.04	0.00	614.94
Area	0.19	5.30E-04	0.00	0.20
Energy from Building Envelope	2,565.61	0.14	0.03	2,578.89
Energy from On-Site Equipment	1,282.81	0.07	0.015	1,289.45
Mobile (Trucks)	46,480.22	1.73	0.00	46,523.55
Mobile (Passenger Cars)	7,453.45	0.18	0.00	7,457.98
Waste	662.82	39.17	0.00	1,642.11
Water Usage	395.58	3.98	0.10	524.20
Total CO_2e (All Sources)		**60,631.32**		

Source: Appendix I

Because GHG emissions from the proposed project would exceed the SCAQMD's recommended numeric threshold of 3,000 MTCO2e, the proposed project would result in a cumulatively considerable impact with respect to GHG emissions. In addition to the project design features (i.e., SP-GHG-1 through SP-GHG-8, SP-AQ-1, SP-AQ-6, and SR-GHG-1 through SR-GHG-3), Mitigation Measure GHG-1 is also recommended to reduce the project's GHG emissions by requiring all buildings at the project site to be designed to be "solar ready" to facilitate the future installation of solar energy systems except in rooftop areas where avian habitat feature areas would be created. Additionally, Mitigation Measures AQ-1 through AQ-4, which aims to reduce criteria pollutant emissions during both project construction and operation, would also serve to reduce the project's GHG emissions. It should be noted that because approximately 89 percent of the project's operational-source emissions (by weight) would be generated by the project's mobile sources (traffic), neither the project Applicant nor the Lead Agency (City of Fontana) would be able to substantively or materially affect reductions in the project's mobile-source emissions beyond the regulatory requirements. As such, although Mitigation Measure GHG-1, Mitigation Measures AQ-1 through AQ-14, and specific plan measures would be implemented to reduce the project's GHG emission impacts to the maximum extent feasible, project operational-source GHG emissions exceedances of applicable SCAQMD numeric thresholds would be significant and unavoidable.

Specific Plan Requirements and Regulatory Requirements

The applicant will implement the following Specific Plan requirements and regulatory requirements, as summarized below and specified in detail in Section 3.6 of the Project Description.

- **SP-GHG-1:** Incorporate Water Conservation and Efficient Measures for Landscaping.
- **SP-GHG-2:** Design Building Components to Meet 2016 Title 24 Standards.
- **SP-GHG-3:** Design CALGreen-Compliant Buildings.
- **SP-GHG-4:** Provide Electrical Connections at Loading Docks.
- **SP-GHG-5:** Utilize Energy Efficient Lighting.
- **SP-GHG-6:** Select Efficient Refrigerants and Heating, Ventilating, and Air Conditioning (HVAC) Systems**.**
- **SP-GHG-7:** Provide Landscaped Parking Lots.
- **SP-GHG-8:** Recycling Program: Operational Sustainability
- **SP-AQ-1:** Encourage Ridesharing and Transit Incentives.
- **SP-AQ-6:** Utilize Electric Cargo Handling Equipment.
- **SR-GHG-1:** Provide Waste Reduction and Recycling Education.
- **SR-GHG-2:** Incorporate More Energy-Efficient Measures Related to Construction and Building Materials.
- **SR-GHG-3:** Incorporate Energy-Efficiency Measures for New Warehouse Buildings.

Mitigation Measures

Mitigation Measure GHG-1: Provide Solar-Ready Roofs: All buildings shall be designed to be "solar ready" to facilitate the future installation of solar energy systems except in rooftop areas where avian habitat feature areas will be created using rooftop plantings of Riversidean sage scrub (RSS) habitat plant species to create vegetative substrate that could facilitate avian species' access east-west dispersal between to the proposed 55.23-acre on-site RSS conservation area and nearby undeveloped RSS habitats.

Mitigation Measures **MM AQ-1** through **MM AQ-14**.

Residual Impacts

No feasible mitigation measures exist that would reduce project-related emissions to levels that are less-than-significant (<3,000 MTCO2e). Project operational-source GHG emissions exceedances of applicable SCAQMD numeric threshold are therefore considered significant and unavoidable. Moreover, approximately 89 percent of all operational-source emissions (by weight) would be generated by mobile sources (traffic). Neither the project applicant nor the City of Fontana can substantively or materially affect reductions in project-related mobile-source emissions beyond the regulatory requirements. As such, although mitigation measures (**MM AQ-1** through **MM AQ-14 and MM GHG -1**), Specific Plan Requirements (**SP-GHG-1** through **SP-GHG-8, SP-AQ-1,** and **SP-AQ-6**), and Standard Requirements (**SR-GHG 1** through **SR-GHG-3**) would reduce impacts to the maximum extent feasible, project operational-source GHG emissions exceedances of applicable SCAQMD numeric thresholds would be significant and unavoidable.

Impact GHG-2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases

Substantial Evidence Supporting Scoping Plan Regulatory Program Consistency Threshold for 2020 GHG Emissions

Impact GHG-2 assesses the project's consistency with the overarching goals of AB 32 and the strategies of ARB's 2008 Scoping Plan as well as the regulatory measures adopted to further AB 32's goals. This section also evaluates the SB 32 requirements and the 2017 Climate Change Scoping Plan Update

CEQA allows lead agencies to consider whether regulatory programs are adequate to reduce a project's potentially significant environmental effects. Under AB 32, the State's emission inventory must be reduced to 1990 levels by 2020. One of the questions in the CEQA Guidelines checklist regarding GHG asks whether a project conflicts with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. The ARB Scoping Plan and its implementing regulations provide the regulatory framework for the State to achieve its target and to track its progress. Moreover, *Newhall Ranch* describes that a lead agency may assess consistency with AB 32's goal in whole or in part by looking to compliance with regulatory programs designed to reduce GHG emissions from particular activities (Newhall, p. 25). *Newhall Ranch* further describes that "[t]o the extent a project's design features comply with or exceed the regulations outlined in the Scoping Plan and adopted by the Air Board or other state agencies, a lead agency could appropriately rely on their use as showing compliance with 'performance based standards' adopted to fulfill 'a statewide . . . plan for the reduction or mitigation of greenhouse gas emissions.' (CEQA Guidelines § 15064.4(a)(2), (b)(3); see also id., § 15064(h)(3) [determination that impact is not cumulatively considerable may rest on compliance with previously adopted plans or regulations, including 'plans or regulations for the reduction of greenhouse gas emissions'].)"

An important underlying assumption when making a significance determination based on compliance with regulations is that the regulations are adequate to reduce the impact to a less-than-significant level. If compliance with regulations is sufficient to mitigate the impact to a less-than-significant level, then a project is not required to provide any additional mitigation to further reduce the impact. If, however, regulations are only partially effective in mitigating the impacts, or if the regulatory program is not fully implemented, there may be a gap between the amount that can be reasonably claimed from regulation and the amount needed to achieve the less-than-significant target.

The CARB 2008 Scoping Plan includes a regulatory strategy that will result in the State achieving the AB 32 target by 2020, accounting for growth projected by 2020. The measures in the 2008 Scoping Plan have all been in place since 2012. In the 2014 Scoping Plan Update that was adopted in May 2014, however, CARB confirmed that the State had now adopted sufficient laws and regulations to achieve the AB 32 target and no new measures or targets were identified.

Measures of Plan Consistency or Conflict

Determining project consistency with GHG plans presents unique challenges because the impact is global and inherently cumulative in nature and the solutions require global and local action. A single state or nation or project cannot solve the problem and there are no binding international agreements in place that will achieve the amount of reductions scientists estimate will be required to prevent catastrophic climate change. California recognized this and decided to identify reduction

targets for itself in AB 32 that would lead to California providing its fair share of reductions regardless of what other states or the federal government or other countries do to reduce their fair share. This leadership by example is hoped to spur other governments to take action to reduce their GHG impacts. California through AB 32 set its fair share reduction at the amount required to reduce emissions to 1990 levels by 2020.

The analysis below qualitatively examines the measures contained in the applicable plans and subsequent adopted regulations and how they interrelate with the project to achieve the State's goals.

Applicable Plans

The Scoping Plan provides the State's overall strategy in the form of measures that apply to emission sectors that compose the State's GHG emission inventory. The Scoping Plan is the State's view from 30,000 feet for achieving the AB 32 mandates. The State's on-the-ground implementation strategy primarily takes the form of source specific regulations adopted by State agencies such as ARB and CEC. The State has adopted regulations described earlier in this section to implement the Scoping Plan measures and achieve the emission reductions required. The Scoping Plan envisions a limited role for local government in implementing the State's GHG reduction strategy focusing on local government's authority over land use and some transportation projects.

Relating Plans to Projects

The ARB Scoping Plan examines California's GHG profile in two ways—emissions-based and end use (demand side)-based. While it is possible to illustrate the inventory different ways, no chart or graph can fully display how diverse economic sectors fit together. California's economy is a web of activity where seemingly independent sectors and subsectors operate interdependently and often synergistically. For example, reductions in water use reduce the need to pump water, directly lowering electricity use and associated GHG emissions. Similarly, reducing the generation of waste reduces the need to transport the waste to landfills—lowering transportation emissions and, possibly, landfill CH_4 emissions. Increased recycling or reuse reduces the carbon emissions embedded in products—it takes less energy to make a soda can from recycled aluminum than from virgin feedstock.

Development projects are assessed for direct emissions from combustion of fuels for heating buildings and indirect emissions for fuel use from transportation activities associated with the project. Development projects are also end users of electricity that is often generated by power plants that are located far from the project site. Project emissions from electricity consumption are based on the projected use and the average emission rate for the electric utility serving the project.

The regulations implementing the Scoping Plan apply directly to the project in regard to energy efficiency of the buildings, water conservation, and refrigerant usage. Scoping Plan measures regarding motor vehicle fuel efficiency apply to vehicle manufacturers, but result in lower emissions from vehicles accessing the project site. The RPS applies to electric utilities, but reduces emissions related to electricity used by the project. Transportation sector measures from the Scoping Plan are also implemented through SB 375, the Sustainable Communities and Climate Protection Act of 2008, which targets emissions from the transportation system through actions that make transportation more efficient at the regional level. Individual development projects have no direct requirements from SB 375 but may benefit from being within "Transit Priority Areas" and from system-wide infrastructure improvements that reduce congestion and improve traffic flow for all system users.

Development projects are constructed to accommodate California's population and economic growth accounted for by the Scoping Plan. As described above, the regulations implementing the Scoping Plan touch many of the operations of the buildings and the day-to-day activities of people that will work and shop at the project. Most of the GHG regulations apply behind the scenes so that they are not noticed by end users of the project except to the extent that the types of cars available for purchase are more fuel efficient. The developer is directly affected by building energy efficiency and conservation regulations that must be followed during building construction. The cost of the efficiency measures is built into the construction cost of the building and rents but the owners and tenants benefit from lower energy bills and water bills resulting from the increased energy efficiency.

The Scoping Plan includes measures that reduce emissions from the following sectors:

- Transportation
- Electricity and Natural Gas
- Water
- Green Building
- Industry
- Recycling and Waste Management
- Forests
- High GWP
- Agriculture

The 2008 Scoping Plan included 18 measures to reduce emissions from the various sectors. The measures often overlap and have interdependent relationships with other measures as described earlier. The measures are implemented with regulations and programs applicable to specific sources of emissions. More detailed descriptions of the measures are provided in Scoping Plan Appendix C, Sector Overview and Emission Reduction Strategies. The State has been very aggressive in adopting regulations to implement the Scoping Plan and, as a result, the State is on track to achieve the 2020 target as discussed above.

Most of the reductions required to reach AB 32's 2020 reduction target will be achieved by regulations that apply to both existing and new development, including the RPS, Pavley standards, LCFS, landfill regulations, regulations and programs on high GWP gases, initiatives on water conservation (such as SB X7-7), and the indirect influence of the Cap-and-Trade system on electricity and transportation fuel prices.

The project's significance with respect to consistency with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emission have been evaluated below and addressed for each sector.

As previously noted, in November 2017, ARB released the proposed 2017 Scoping Plan Update to the Scoping Plan, which identifies the State's post-2020 reduction strategy. The 2017 Scoping Plan reflects the 2030 target of a 40 percent reduction below 1990 levels, set by EO B-30-15 and codified by SB 32. Key programs that the proposed 2017 Scoping Plan builds upon include the Cap-and-Trade Regulation, the LCFS, and much cleaner cars, trucks, and freight movement, utilizing cleaner, renewable energy, and strategies to reduce CH_4 emissions from agricultural and other wastes. The

proposed project would comply with all applicable provisions contained in the 2017 Scoping Plan because the adopted regulations would apply to new development or the emissions sectors associated with new development.

Transportation

Approximately 89 percent of the project's opening year GHG emissions as summarized in Table 3-1 would be from transportation (mobile sources). Transportation emissions are heavily regulated at the source, including, but not limited to, engine emissions standards and fuel requirements. Because these regulations and policies reduce GHG emissions at the source, the project would be subject to and therefore not conflict with these transportation measures. It should be noted that the State programs require no action at the local level, and that their benefits to car and truck travel will be realized at the project level.

State Regulations/Scoping Plan Measures

Adopted regulations that will reduce the project's GHG emissions through engine emission standards and fuel requirements are discussed below.

California Light-Duty Vehicle Greenhouse Gas Standards. AB 1493/Pavley I and II required ARB to adopt regulations to reduce GHG emissions from non-commercial passenger vehicles and light-duty trucks of model year 2009 through 2016.

The standards phase in during the 2009 through 2016 model years. When fully phased in, the near-term (2009–2012) standards will result in about a 22-percent reduction compared with the 2002 fleet, and the mid-term (2013–2016) standards will result in about a 30-percent reduction. The second phase of the implementation for the Pavley bill was incorporated into Amendments to the Low-Emission Vehicle Program, referred to as LEV III or the Advanced Clean Cars program. The Advanced Clean Cars program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. The regulation will reduce GHGs from new cars by 34 percent from 2016 levels by 2025.

This measure applies to all new passenger vehicles starting with model year 2009. The project is consistent with this measure and its implementation, as it would apply to all new passenger vehicles purchased in California. As such, any passenger vehicles associated with construction and operation of the project would be required to comply with the Pavley emissions standards.

Executive Order S-01-07 – Low Carbon Fuel Standard (LCFS). The LCFS regulation became fully effective in 2010 and will reduce GHG emissions by reducing the carbon intensity of transportation fuels used in California by at least 10 percent by 2020. The proposed project would utilize these emissions reductions as they are implemented into 2020 from all operational mobile emissions sources.

This measure applies to transportation fuels utilized by vehicles in California. The project is consistent with this measure and its implementation, as motor vehicles associated with construction and operation of the project would utilize low carbon transportation fuels as required under this measure.

Medium/Heavy-Duty Vehicles. As part of the Heavy-duty Vehicle Greenhouse Gas Regulation, ARB also implemented the Drayage Truck Regulation and Truck and Bus Regulation. These three regulations were collectively adopted to address and reduce emissions from trucks. Since the proposed project has a large truck component, these regulations will aid in reducing GHG emissions from the project.

This measure applies to medium- and heavy-duty vehicles that operate in the state, and thus would apply to medium- and heavy-duty vehicles that serve the project. The project is consistent with this measure and its implementation, as medium- and heavy-duty vehicles associated with construction and operation of the project would be required to comply with the requirements of this regulation.

The applicable T-6 measures from the scoping plan related to Goods Movement Efficiency would also apply here. It should be noted that several measures are not being considered in the Sustainable Freight Strategy. Notwithstanding the applicable project design features outlined above are still consistent (e.g., **SP-GHG-4**, **SP-GHG-6**, and **SP-AQ-1**).

Tractor-Trailer Greenhouse Gas Regulation. The tractors and trailers subject to this regulation must either use EPA SmartWay certified tractors and trailers, or retrofit their existing fleet with SmartWay verified technologies. The regulation applies primarily to owners of 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and owners of the heavy-duty tractors that pull them on California highways.

Cap-and-Trade Program

Notably, the Cap-and-Trade Program covers transportation fuel suppliers to address emissions from fuels and from combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period. While the Cap-and-Trade Program technically covered fuel suppliers as early as 2012, they did not have a compliance obligation until 2015. The Cap-and-Trade Program covers the GHG emissions associated with the combustion of transportation fuels in California, whether refined in-state or imported. The point of regulation for transportation fuels is when they are supplied, or delivered into commerce. Accordingly, as with stationary source GHG emissions and GHG emissions attributable to electricity use, virtually all GHG emissions from CEQA projects associated with VMT are covered by the Cap-and-Trade Program.

In September 2013, SCAQMD adopted two Negative Declarations stating that GHG emissions subject to the ARB Cap-and-Trade Program do not count against the 10,000 $MTCO_2e$ significance threshold SCAQMD applies when acting as a lead agency. In addition, the San Joaquin Valley Air Pollution Control District (SJVAPCD) has recently taken this issue one step further and adopted a policy: "CEQA Determinations of Significance for Projects Subject to ARB's GHG Cap-and-Trade Regulation." This policy applies when SJVAPCD is the lead agency and when it is a responsible agency. In short, SJVAPCD "has determined that GHG emissions increases that are covered under ARB's Cap-and-Trade regulation cannot constitute significant increases under CEQA." SJVAPCD classifies ARB's Cap-and-Trade Program as an approved GHG emission reduction plan or GHG mitigation program under CEQA Guidelines Section 15064(h)(3). The policy acknowledges that "combustion of fossil fuels including transportation fuels used in California (on and off road including locomotives), not directly covered at large sources, are subject to Cap-and-Trade requirements, with compliance obligations starting in 2015." As such, SJVAPCD concludes that GHG emissions associated with VMT cannot constitute significant increases under CEQA. This regulatory conclusion is therefore directly applicable to the proposed project because VMT would be by far the largest source of project GHG emissions.

Because the proposed project has a large mobile source component and Cap-and-Trade emission reductions are difficult to calculate on a project level, the proposed project's mobile source emissions are very conservative, making the total emission calculations conservative. The phase-in of the Cap-and-Trade Program compliance obligations for transportation fuel providers further reduces GHG emissions attributable to mobile sources, beyond the GHG emissions reductions achieved and modeled by the Pavley Standard and LCFS.

Energy

The second largest source, almost 5 percent, of GHG emissions shown in Table 4.2.7-6 from the project is energy consumption from electricity and natural gas.

State Regulations/Scoping Plan Measures

Energy-related emissions are also heavily regulated at the source, including, but not limited to, energy efficiency standards and renewable energy requirements. Because these regulations and polices reduce GHG emissions at the source, the project would be subject to and therefore implement these energy measures.

Energy Efficiency – Title 24/CALGREEN. As previously discussed in Section 2.7, the California Energy Commission indicates that the 2016 Title 24 standards will reduce energy consumption by 5 percent above that achieved by 2013 Title 24 (Urban Crossroads 2018).

The proposed project is also subject to the CALGREEN Code Title 24 building energy efficiency requirements that offer builders better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses. Furthermore, the project, as required by Specific Plan Requirement **SP-GHG-3** will be designed with LEED features for potential certification. This adds an additional layer of energy and water conservation that may be achieved.

Renewables Portfolio Standard. As previously described above, California's Renewable Portfolio Standard (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy sources to 33 percent of total retail sales by 2020 as established under SB 1078 and accelerated under SB 107 and SB X1-2. Additionally, SB 1368 prohibits any retail seller of electricity in California from entering into a long-term financial commitment for baseload generation if the GHG emissions are higher than those from a combined-cycle natural gas power plant. As a customer of Southern California Edison, the proposed project would purchase from an increasing supply of renewable energy sources and more efficient baseload generations and thereby reduce GHG emissions.

Million Solar Roofs Program. The Million Solar Roofs Program set a goal to install 3,000 megawatts of new solar capacity by 2017, moving the state toward a cleaner energy future and helping lower the cost of solar systems for consumers. The Million Solar Roofs Initiative is a ratepayer-financed incentive program aimed at transforming the market for rooftop solar systems by driving down costs over time.

The project is consistent with this scoping plan measure, as the project would provide solar-ready roofs that can accommodate installation of solar panels at the discretion of future building owners and tenants. The proposed project does not require the construction of solar panels on buildings, but does require that rooftops be designed to accommodate the weight of potential solar and associated infrastructure.

Water

GHG emissions also result from electricity consumption related to water supply, treatment, and distribution, as well as wastewater treatment. As shown in Table 4.2.7-6, the project's GHG emissions related to water consumption would be less than 1 percent of total project GHG emissions.

State Regulations/Scoping Plan Measures

Renewables Portfolio Standard Related to Water Supply and Conveyance. This measure would increase electricity production from eligible renewable power sources to 33 percent by 2020. A reduction in GHG emissions results from replacing natural gas-fired electricity production with zero GHG emitting renewable sources of power. By 2020, this requirement will reduce emissions from electricity used for water supply and conveyance in California by approximately 21.3 MMTCO2e, representing 15.2 percent of emissions from electricity generation (in-state and imports).

As previously discussed, as a customer of SCE, the proposed project would purchase from an increasing supply of renewable energy sources and more efficient baseload generations consistent with the RPS and thereby reduce GHG emissions.

Model Water Efficient Landscape Ordinance. The Model Water Efficient Landscape Ordinance was required by AB 1881, the Water Conservation Act. The bill required local agencies to adopt a local landscape ordinance at least as effective in conserving water as the Model Ordinance by January 1, 2010. Reductions in water use of 20 percent consistent with the SB X7-7 2020 mandate are expected upon compliance with the ordinance. Governor Brown's Drought Executive Order of April 1, 2015 (EO B-29-15) directed the California Department of Water Resources to update the MWELO through expedited regulation. The California Water Commission approved the revised Model Water Efficient Landscape Ordinance on July 15, 2015 effective December 15, 2015. New development projects that include landscape areas of 500 square feet or more are subject to the Ordinance.

The project is required to comply with the Model Water Efficient Landscape Ordinance as required by City of Fontana, which would result in a minimum of 20 percent reduced water use for outdoor irrigation. The project is consistent with this measure, as it would result in a minimum 20 percent reduced water use pursuant to the Project Design Features identified herein.

Waste Diversion

Disposal of solid waste in landfills would contribute approximately 3 percent of project GHG emissions as shown in Table 4.2.7-6.

State Regulations/Scoping Plan

The CARB Scoping Plan recommends three measures for reducing emissions from Municipal Solid Waste at the state level: (1) landfill methane control; (2) increased efficiency of landfill methane capture; and (3) high recycling/zero waste. ARB is in the process of developing a discrete early action program for methane recovery, which was adopted in early 2010. This measure is expected to result in a 1.0 $MMTCO_2e$ reduction by 2020. Other measures proposed by ARB include increasing efficiency of landfill methane capture (2) and instituting high recycling/zero waste policies (3). Potential reductions associated with these measures are still to be determined.

Implementation of the CALGREEN code and state measures reduce the amount of solid waste disposed of in landfills. The CALGREEN code requires jurisdictions to divert a minimum of 50 percent of their nonhazardous construction and demolition waste from landfills. In addition, SB 341 amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the State that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020, and annually thereafter. The proposed project is subject to these regulations as well as SB 341's policy goal, and would thereby reduce GHG emissions.

Consistency with Executive Orders S-3-05 and B-30-15

At the state level, EOs S-3-05 and B-30-15 are orders from the State's Executive Branch for the purpose of reducing GHG emissions. The goal of EO S-3-05 is to reduce GHG emissions to 1990 levels by 2020, as codified by the Legislature as the 2006 Global Warming Solutions Act (AB 32). The project, as analyzed above, is consistent with AB 32. Therefore, the project would not conflict with this component of EO S-3-05. The Executive Orders also establish goals to reduce GHG emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050. However, studies have shown that, in order to meet the 2030 and 2050 targets, aggressive technologies in the transportation and energy sectors, including electrification and the decarbonization of fuel, will be required. In its Climate Change Scoping Plan, ARB acknowledged that the "measures needed to meet the 2050 are too far in the future to define in detail." In the First Scoping Plan Update, however, ARB generally described the type of activities required to achieve the 2050 target: "energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and rapid market penetration of efficiency and clean energy technologies that requires significant efforts to deploy and scale markets for the cleanest technologies immediately."

Unlike the 2020 and 2030 reduction targets of AB 32 and SB 32, respectively the 2050 target of Executive Order S-3-05 has not been codified. Accordingly, the 2050 reduction target has not been the subject of any analysis by CARB. For example, CARB has not prepared an update to the aforementioned Scoping Plan that provides guidance to local agencies as to how they may seek to contribute to the achievement of the 2050 reduction target.

In 2017, the California Supreme Court examined the need to use the Executive Order S-3-05 2050 reduction target in Cleveland National Forest Foundation v. San Diego Association of Governments (2017) 3 Cal.5th 497 (Cleveland National). The case arose from SANDAG's adoption of its 2050 Regional Transportation Plan, which included its Sustainable Communities Strategy, as required by SB 375 (discussed above). On review, the Supreme Court held that SANDAG did not violate CEQA by not considering the Executive Order S-3-05 2050 reduction target.

As explained above, the 2050 reduction target of Executive Order S-3-05 has not been codified, unlike the 2020 and 2030 reduction targets of AB 32 and SB 32, respectively. Accordingly, the 2050 reduction target has not been the subject of any analysis by CARB. For example, CARB has not prepared an update to the aforementioned Scoping Plan that provides guidance to local agencies as to how they may seek to contribute to the achievement of the 2050 reduction target.

Further, the Project is much smaller in size and scope in comparison to the Regional Transportation Plan examined in *Cleveland National*. In that case, the California Supreme Court held that SANDAG did not violate CEQA by not considering the Executive Order S-3-05 2050 reduction target. Accordingly, there is no information presently available to assess the Project's consistency with regard to the 2050 target of Executive Order S-3-05.

The 2017 Scoping Plan builds on the 2008 Scoping Plan in order to achieve the 40 percent reduction from 1990 levels by 2030. Major elements of the 2017 Scoping Plan framework that will achieve the GHG reductions include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing ZEV buses and trucks. When adopted, this measure would apply to all trucks accessing the project site, this may include existing trucks or new trucks purchased by the project proponent could be eligible for incentives that expedite the project's implementation of ZEVs.

- Low Carbon Fuel Standard (LCFS), with an increased stringency (18 percent by 2030). When adopted, this measure would apply to all fuel purchased and used by the project in the state.
- Implementing SB 350, which expands the Renewables Portfolio Standard to 50 percent renewable energy sources, and doubles energy efficiency savings by 2030. When adopted, this measure would apply when electricity is provided to the project site by a utility company.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks. When adopted, this measure would apply to all trucks accessing the project site, this may include existing trucks or new trucks that are part of the statewide goods movement sector.
- Implementing the proposed Short-Lived Climate Pollutant Strategy, which focuses on reducing methane and hydroflurocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by year 2030. When adopted, the project would be required to comply with this measure and reduce SLPS accordingly.
- Continued implementation of SB 375. The project is not within the purview of SB 375, and would therefore not conflict with this measure.
- Post-2020 Cap-and-Trade Program that includes declining caps. When adopted, the project would be required to comply with the Cap-and-Trade Program if it generates emissions from sectors covered by Cap-and-Trade.
- 20 percent reduction in GHG emissions from refineries by 2030. When adopted, the project would be required to comply with this measure if it were to utilize any fuel from refineries.
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink. This is a statewide measure that would not apply to the project.
- As shown above, the proposed project would not conflict with any of the 2017 Scoping Plan elements as any regulations adopted would apply directly or indirectly to the project.

Further, recent studies show that the State's existing and proposed regulatory framework will allow the State to reduce its GHG emissions level to 40 percent below 1990 levels by 2030.

Conclusion

The project is consistent with all applicable Scoping Plan goals and policies as evaluated herein. Additionally, the project incorporates a number of project design features and mitigation measures that go beyond the Scoping Plan requirements that would further minimize GHG emissions. The project promotes the goals of the Scoping Plan through implementation of the design measures that reduce energy consumption, and water consumption, and reduction in vehicle miles traveled. In addition, the project is required to comply with the regulations described in this section that have been adopted to implement the Scoping Plan and to achieve the AB 32 2020 target and the SB 32 2030 target. The project would also be consistent with any new adopted Scoping Plan measures included in the 2017 Scoping Plan Update as these will be regulatory requirements (when adopted). Therefore, the project does not conflict with any plans to reduce GHG emissions and furthers the State's goals relative to this impact.

Notwithstanding, because the proposed project exceeds the applicable numeric threshold and results in a cumulatively considerable impact with respect to GHG emissions, a significant and unavoidable finding with respect to this criterion is also identified.

Specific Plan Requirements and Regulatory Requirements

The applicant will implement the following Specific Plan requirements and regulatory requirements, as summarized below and specified in detail in Section 3.6 of the Project Description.

- **SP-GHG-1:** Incorporate Water Conservation and Efficient Measures for Landscaping.
- **SP-GHG-2:** Design Building Components to Meet 2016 Title 24 Standards.
- **SP-GHG-3:** Design CALGreen-Compliant Buildings.
- **SP-GHG-4:** Provide Electrical Connections at Loading Docks.
- **SP-GHG-5:** Utilize Energy Efficient Lighting.
- **SP-GHG-6:** Select Efficient Refrigerants and Heating, Ventilating, and Air Conditioning (HVAC) Systems**.**
- **SP-GHG-7:** Provide Landscaped Parking Lots.
- **SP-GHG-7:** Implement Onsite Recycling Program.
- **SP-AQ-1:** Encourage Ridesharing and Transit Incentives.
- **SP-AQ-6:** Utilize Electric Cargo Handling Equipment.
- **SR-GHG-1:** Provide Waste Reduction and Recycling Education.
- **SR-GHG-2:** Incorporate More Energy-Efficient Measures Related to Construction and Building Materials.
- **SR-GHG-3:** Incorporate Energy-Efficiency Measures for New Warehouse Buildings.

Mitigation Measures

Mitigation Measures **MM AQ-1** through **MM AQ-14,** and **MM GHG-1**.

Residual Impacts

As discussed above, with implementation of **Mitigation Measures MM AQ-1** through **MM AQ-14** and **MM GHG-1; Specific Plan Requirements SP-GHG-1** though **SP-GHG-8**, **SP-AQ-1** and **SP-AQ-6;** and **Standard Requirements SR-GHG-1** through **SR-GHG-3**, the proposed project would be consistent with all applicable ARB Scoping Plan goals and policies. However, as discussed above in relation to threshold GHG-1, even with these mitigation measures, Specific Plan Requirements, and Standard Requirements, there are no feasible additional measures exist that could be implemented to reduce project-related emissions to levels that are less-than-significant (<3,000 $MTCO_2e$). Impacts would be significant and unavoidable.

4.2.8 Hazards and Hazardous Materials

Introduction

This section evaluates potential hazards and hazardous materials impacts associated with implementation and operation of the West Valley Logistics Center Specific Plan (WVLCSP) project. Specifically, hazardous conditions of the Specific Plan area are compared with future planned land uses and conditions proposed by the WVLCSP. Potential impacts are identified according to existing and post-project conditions within the WVLCSP and impact thresholds established by the City of Fontana (City). 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) for the West Valley Logistics Center prepared by Golden State Land and Tree Assessment in March of 2013 (provided in Appendix C), the Valley Trails Specific Plan Environmental Impact Report (EIR) prepared by Jones & Stokes in October of 2006, and a Phase I ESA and Limited Site Characterization prepared for the Specific Plan area in 2004 by LOR Geotechnical Group. The project area for the Valley Trails Specific Plan is similar to and encompasses all but 1.54 acres (Lot A) of the WVLCSP site; therefore, it was considered relevant to the analysis conducted for the proposed WVLCSP project.

In addition to the reports mentioned above, a supplemental Environmental Data Resources (EDR) database report was produced by ICF in July of 2017 to update surrounding hazardous materials site information with most recent data available. The supplemental EDR database report is included as Appendix C in this Second Recirculated Draft EIR (2nd RDEIR).

Terminology

- **Airport Influence Area.** According to the County of 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 type and a 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, that 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 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 the 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

A site-specific Phase I ESA was prepared in 2013 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 2nd RDEIR. The Phase I ESA identified, to the extent feasible, recognized environmental conditions in connection with the project site.

Federal and state environmental 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 likelihood to affect the site, if any. Also as part of the Phase I ESA, various public agencies and individuals were contacted in order to provide insight into the historic and current uses of the site with respect to hazardous materials. Aerial photographs from 1938 through 2010 were 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 on-site contamination, based on aboveground visual observation. As mentioned above, an EDR report was produced in 2017 to supplement information found in the 2013 Phase I ESA with updated surrounding hazardous materials site information.

According to the 2013 Phase I ESA, the subject property was vacant, except for the remnants of residential landscaping. The unpaved roads on the property were used for limited off-highway vehicle and equestrian purposes. During the site reconnaissance, evidence was found that indicated a release of waste oil as well as dumped construction, automotive, and household waste. There was also 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.

Valley Trails Specific Plan

A Phase I ESA was also conducted in 2004 and was used in support of the 2006 Valley Trails Specific Plan EIR. A limited 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. The 2003 site reconnaissance noted the presence of the former landfill and the potential for encountering methane in the subsurface. Findings of the survey were photo-documented.

In addition to the site reconnaissance, a limited site characterization, which included soil sampling, was conducted to determine if potential pesticide use at the site had included organochlorine pesticides, which are persistent in the environment.

Hazardous Materials Database Results

On-Site

Portions of the proposed project footprint overlap with three sites listed in various environmental databases. The *Rancho de Santa Fe Partnership* site at 11490 Locust Avenue was identified in the Leaking Underground Storage Tank (LUST), Statewide Environmental Evaluation and Planning System (SWEEPS UST), Historical Cortese, Recovered Government Archive Leaking Underground Storage Tank (RGA LUST), and DTSC waste manifest data (HAZNET) and Facility Index System (FINDS) databases. The site was listed as a diesel-impacted soil only site. The case was originally opened in March of 1994 and was granted closure in September 1994 by the Regional Water Quality Control Board (RWQCB). The second site is an unnamed site at 7th Street East and Locust Avenue. This site was listed in the Drug Lab Location listings. The site was listed as being a location where drug lab waste and/or equipment were abandoned. The site was listed in the Drug Lab Location database in January 2002 and no additional details were provided. The third site, *HUD Intown Properties* site, was listed in the HAZNET database as a household hazardous waste collection site. No violations were identified associated with this listing.

Off-site Properties

Nine off-site properties were identified in the supplemental database search conducted in 2017 (Appendix C). The specific search radius for each database was conducted in conformance with ASTM Standard E 1527-13. Eight of the nine sites are included in the following table. The table contains the site, address, and distance from the proposed project, the database(s) the site was identified in, and a summary of its most recent environmental status. Due to its potential to affect the proposed project, the former Crestmore Waste Disposal Site (WDS) is discussed in more detail below.

Table 4.2.8-1. Off-site Hazardous Materials Sites

Site	Address	Distance from the Project	Databases	Site Status Summary
Jesus A Rios	6861 Lauren Lane	0.030 mile to the SSW	EDR Historical Cleaner	Carpet and upholstery cleaners. Last entry under EDR Historical Cleaner database was in 2004. No violations associated with site.
J and A Auto Repair	18353 10th Street	0.079 mile to the ENE	EDR Historical Auto	Historic auto repair facility, from 1988 to 1993. No violations associated with this listing.
SCE-Bloomington Substation	Jurupa Avenue and Linden Avenue	0.142 mile to the NE	AST, San Bernardino County permit	A 900-gallon aboveground storage tank on-site. Hazardous materials permitted facility. No violations associated with site.
ARCO/AM-PM/ Gas n' Go/ Ruba Enterprises/ Wilber Mock	11510 Cedar Avenue	0.230 mile to the ENE	LUST, HIST UST, SWEEPS UST, UST, San Bernardino County Permit	Historic UST site. Gasoline-impacted soil only. Case opened in April of 2007 and was granted closure by the RWQCB Santa Ana Region in June of 2012. No other violations were identified.
Northstar Exterminators	11552 Cedar Avenue	0.234 mile to the ENE	San Bernardino County Permit	Hazardous materials permitted facility. Status currently inactive. No violations associated with the site.
One Stop Junior Market	11340 Cedar Avenue	0.245 mile to the ENE	SWEEPS UST, HIST UST	Historic UST site. Two 7,500-gallon gasoline tanks. No violations associated with the site.
Bloomington HS Expansion	10750 Laurel Avenue	0.755 mile to the N	EnviroStor, SCH	School investigation site. No contaminants found on-site and No Action Required status granted in 2005 by the DTSC.
Sycamore Hills Elementary School	Tamarind Avenue/Santa Ana Avenue	0.798 mile to the NNW	EnviroStor, SCH	School investigation site. On-site soil sampled and No Further Action status granted in 2002 by the DTSC.

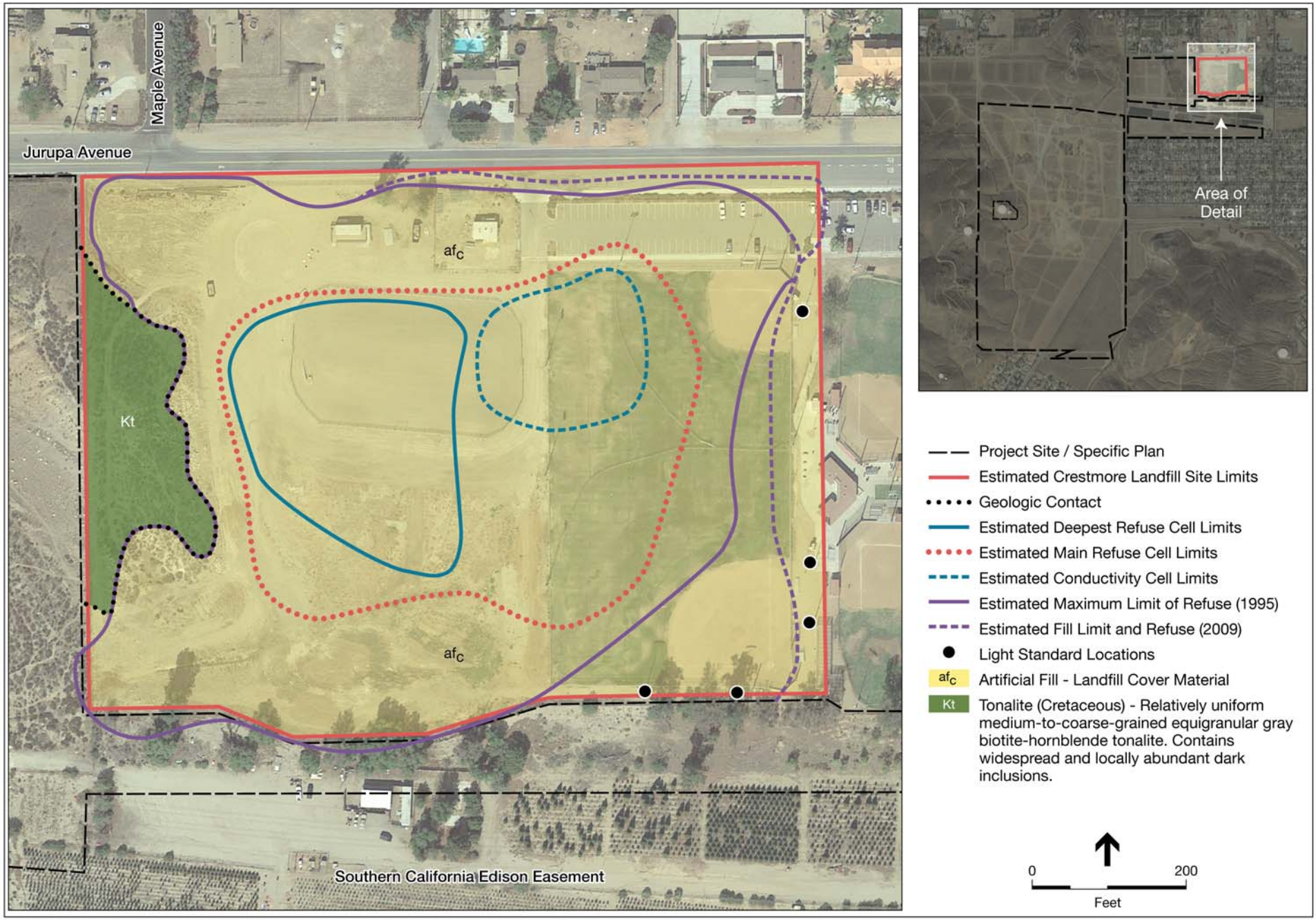


Figure 4.2.8-1
Location of Former Crestmore Landfill
West Valley Logistics Center Specific Plan 2nd RDEIR

Former Crestmore Waste Disposal Site

The former Crestmore WDS, 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 WDS was a limestone quarry known as Little Hill Quarry prior to being used as a refuse disposal site. The former Crestmore WDS 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 4.2.8-1. 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 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.

Agricultural Activities

The project site was historically used for agriculture dating from as far back as 1953 to as recently as 2005. As such, agricultural chemicals have likely been applied at the site. Therefore, these chemicals along with their associated metal constituents 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 in 2004 by LOR Geotechnical Group to supplement a Phase I ESA being conducted on the property the same year. The Limited Site Characterization findings were used in support of the Valley Trails Specific Plan EIR analysis. The Limited Site Characterization was performed 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 northeast of the project area, and Ruth O. Harris Middle School is to the northwest. Crestmore Elementary is the next closest school, 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 Flabob Airport in Riverside County, approximately 3 miles to the south; Rialto Municipal Airport, approximately 5.5 miles to the north; and Riverside Municipal Airport, approximately 5.8 miles to the south. San Bernardino International Airport is approximately 9.5 miles northeast of the project site. Fontana is within the flight path of Ontario International Airport, which is approximately 9.5 miles west of the project area. Furthermore, the City of Fontana is one of the identified affected agencies in the Los Angeles/Ontario International Airport Land Use Compatibility Plan. Because the nearest aviation

facility is 3 miles from the project site (Flabob Airport in Riverside County), the 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. The EPA is the principal federal agency responsible for federal implementation and enforcement of 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 San Bernardino County 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 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. The Pipeline and Hazardous Materials Safety Administration 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 (CFR, 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 On-site 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 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 (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 4.2.10, *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 General Plan 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 of Fontana 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 more than 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 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. Because of cooperation between many entities, specifically, individual cities within the valley area, this requires numerous mutual aid agreements between the County Fire Department and the 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 County Fire Department requires preapproval of plans for new buildings and changes to existing buildings. The County Fire Department reviews these plans to ensure that the Fire Code is being followed and prevent unnecessary hazards. As buildings are being constructed or modified, County 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 County 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:

- A supplemental EDR database report conducted by ICF in July 2017;
- 2013 Phase I ESA prepared by Golden State Land and Tree Assessment (Appendix C);

- Phase I ESA and Limited Site Characterization prepared in 2004 in accordance by LOR Geotechnical Group;
- 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 and Development Code and City 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 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 hazards and hazardous materials–related project design features that follow below, which include regulatory requirements and standard requirements, would prevent or reduce potentially significant impacts.

Specific Plan Requirements

SP-HM-1: Sampling and Remediation. Prior to submittal of a grading permit for the West Valley Logistics Center Specific Plan area, a Phase II Environmental Site Assessment (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 Fontana Director of Community Development and the San Bernardino County Division of Environmental Health Services (DEHS) 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 International Standards.
- 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 shall provide verification as to whether any portions of the project site are contaminated and require remediation to achieve the risk-based cleanup standard[1] for an acceptable excess cancer risk of 1×10^{-5} or as otherwise established by the Department of Toxic Substances Control (DTSC), Regional Water Quality Control Board (RWQCB), or DEHS for construction workers and workers within proposed uses on-site. The applicant and project contractor(s) 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 applicable regulatory agency. If any hazardous materials are discovered, a plan for their proper remediation shall be prepared in accordance with applicable requirements of the California Division of Occupational Safety and Health and the County of San Bernardino Environmental Health Services. Should it be determined that underground storage tanks remain on-site, they shall be removed pursuant to the recommendations of the Phase II ESA and the applicable requirements of the City of Fontana, DTSC, RWQCB, and DEHS.

[1] Regulatory agencies have historically used conservative standard-based criteria (i.e., drinking water standards) or required cleanup 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 criteria 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 the actual health and environmental risk posed by contaminants in the ground or water. As a result, land uses where risks to the public health are higher (e.g., residential) will have more stringent cleanup requirements than would less sensitive uses (e.g., industrial), given the same level of cancer risk (City of Brisbane 2013).

In the event that that the Phase II ESA identifies contamination on-site, the following remediation measures may be employed (site-specific recommendations and measures will be included in the Phase II ESA, based on sampling results):

- 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 aboveground 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, which 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.

All grading within the boundaries of the former Crestmore Waste Disposal Site shall be in accordance with the requirements of California Code of Regulations Title 27, Environmental Protection.

Installation of Sub-slab Vapor Barriers. To minimize potential vapor intrusion into new buildings within 1,000 feet of the Crestmore Waste Disposal Site footprint, sub-slab vapor barriers can be employed in the project area as a passive option if testing conducted prior to the issuance of building permits indicates the presence of methane or other volatile gases.

Additionally, prior to site construction, the applicant shall undertake the actions below in accordance with the performance standards provide herein to ensure safe conditions on the site.

Additional Air Pollutant and Greenhouse Gas Emissions Analysis. Should site remediation and/or soil excavation be required as part of implementation of this measure, additional analysis of the air quality and greenhouse gas emissions associated with such site remediation and/or soil excavation will be required.[2]

[2] Although this measure sets performance standards for safety in relation to hazardous materials, such air quality and greenhouse 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 Soil Management Plan or Remedial Action Plan undertaken prior to approval of a grading plan.

Asbestos and Lead Based-Paint Sampling. Sampling shall be undertaken to confirm the absence of asbestos and lead-based paint in the remnant construction debris on-site. The soil sampling shall include applicable sampling procedures, pursuant to the directives of the DEHS, and be subject to review by the DEHS.

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. 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 regulate worker exposure during construction activities that affect lead-based paint. The Interim Final Rule found in 29 Code of Federal Regulations, 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;
    - Cleanup 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.
    - The 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 California Division of Occupational Safety and Health must be notified of asbestos abatement activities.
    - Asbestos abatement contractors must follow state regulations contained in 8 California Code of Regulations 1529 and 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 of Fontana'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; and
        - The most recently adopted version of the California Building Code adopted by the City of Fontana.
    - 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, the County of San Bernardino Fire Department will provide oversight in site cleanup and 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 the Occupational Safety and Health Administration's Safety and Health Standards 29 Code of Federal Regulations, Part 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 California Code of Regulations Title 27.

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.

RR-HM-4: Prepare a Fuel Modification Zone Management Plan. In accordance with Section 30-189(12), Article V, Division 7, of the City of Fontana (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. For the project, 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. 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.

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.

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 sampling as necessary (see **Specific Plan Requirement SP-HM-1**) which would determine whether any contaminants are currently on-site and guide implementation of remedial actions to remove the contamination (if necessary) prior to construction. Therefore, with adherence to **Regulatory Requirement RR-HM-2** and **Specific Plan Requirement SP-HM-1**, 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.

Operational

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 for preservation of natural open space and drainage facilities. 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. Warehouse distribution uses could also include the storage, handling, transport, and disposal of hazardous materials that would be subject to federal, state, and local regulatory requirements designed to minimize the potential for adverse effects on the public and the environment. 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 or warehouse setting. For industrial and warehouse 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 is unlikely that these materials would be stored or used in large quantities.

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.

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*:

- **SP-HM-1:** Sampling and Remediation
- **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** and **Specific Plan Requirement SP-HM-1**.

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 4.2.9, *Hydrology and Water Quality*) and **Mitigation Measure HAZ-1** 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 such as grading, pouring foundations, and underground utilities installation during project construction is considered a potential hazard to construction personnel and the nearby public, including residences and travelers on roadways in the vicinity. Accidental contact or exposure to buried service facilities can include deleterious reactions involving equipment accidents, hazardous materials release, explosions, or electrocution. Also, and as mentioned in the 2013 Phase I Environmental Site Assessment (Appendix C), it is possible that pockets of contamination exist from 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. 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 related to the proposed project may encounter the aforementioned contaminants during grading, excavation, installation of support structures for new buildings, etc., thus exposing construction personnel to potential impacts. 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. **Specific Plan Requirement SP-HM-1**, involving a site contamination investigation/sampling and performance of remedial action planning as necessary, and **Mitigation Measure HAZ-1**, stated below, would also be required to reduce the potential impact from hazardous materials.

Crestmore Waste Disposal Site

As stated previously, the former Crestmore WDS footprint is partially contained within Parcel 7 at its easternmost extent. Currently, the landfill 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 beyond the landfill footprint. If not mitigated, vapors from the landfill could enter structures and create unsafe 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, to expose people to potential methane gas hazards. According to the findings from the 2013 Phase I ESA (Appendix C), the potential presence of other gases besides methane (e.g., volatile organic compounds, carbon dioxide) can be considered a potential hazard due to the proposed project's proximity to the former Crestmore WDS. 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 aforementioned contaminants 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 former landfill 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 WVLCSP project site from the former landfill, the project applicant shall implement protective measures on-site as specified in **Specific Plan Requirement SP-HM-1**. Therefore, implementation of **Specific Plan Requirement SP-HM-1** would be required to reduce this potential impact to less-than-significant levels through sampling and remedial actions contained therein.

Operation

The proposed project would include development of approximately 212 acres for warehouse distribution use, 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.

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-HM-1:** Sampling and Remediation
- **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 WDS. 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 adjacent in proximity to the closed former landfill.

Mitigation Measures

Mitigation Measure HAZ-1: 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 reduced to below significant with adherence to **Specific Plan Requirement SP-HM-1, Regulatory Requirements RR-HM 1** through **RR-HM-3**, **Standard Requirements SR-HM-1** and **SR-HM-2**, and implementation of **Mitigation Measure HAZ-1**.

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.

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 reduced to below significant with adherence to **Regulatory Requirement RR-HM-2**.

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

As mentioned under Impact HAZ-2, there is potential for contamination to exist on-site. Additionally, portions of the existing project site overlap with hazardous materials sites found in several environmental databases during review of the supplemental 2017 EDR report. Portions of the project property overlap with three sites:

- The Rancho de Santa Fe Partnership site at 11490 Locust Avenue was identified in the LUST, SWEEPS UST, Historical Cortese, RGA LUST, HAZNET, and FINDS databases. The site was listed as a diesel-impacted soil only site. The case was originally opened in March of 1994 and was granted closure in September of the same year by RWQCB.
- An unnamed site identified as overlapping with the proposed project site is located at 7th Street East and Locust Avenue. This site was listed in the Drug Lab Location listings. The site was listed as being a location where drug lab waste and/or equipment was abandoned. The listing was dated January 2002 and no additional details were provided.
- The third site is the HUD Intown Properties site. The site was listed in the HAZNET database as a household hazardous waste collection site. No violations associated with this listing were identified.

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 WDS. With adherence to **Specific Plan Requirement SP-HM-1**, **Regulatory Requirements RR-HM-1** through **RR-HM-3**, **Standard Requirements SR-HM-1** and **SR-HM-2**, and implementation of **Mitigation Measure HAZ-1** 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.

Specific Plan Requirements, Regulatory Requirements, and Standard Requirements

The applicant shall implement the following Specific Plan requirements, regulatory requirements, and standard requirements, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*:

- **SP-HM-1:** Sampling and Remediation
- **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 Spark Arresters for Construction Equipment

Mitigation Measures

Implement **Mitigation Measure HAZ-1**.

Residual Impacts

Impacts would be reduced to below significant with adherence to **Specific Plan Requirement SP-HM-1**, **Regulatory Requirements RR-HM-1** through **RR-HM-3**, **Standard Requirements SR-HM-1** and **SR-HM-2**, and implementation of **Mitigation Measure HAZ-1**.

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 three 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 roadways would be improved to allow for adequate access through and to the project site as required by Fontana Fire Protection District standards. Moreover, the project does not include any characteristics (e.g., permanent road closures, long-term blocking of road access) that would physically impair or otherwise interfere with emergency response or evacuation in the project vicinity.

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 4.2.15, *Transportation and Traffic*) would be implemented to minimize obstructions, 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. Implementation of **Mitigation Measure TRA-1a** would be required.

Mitigation Measures

Implement **Mitigation Measure TRA-1a**, as described in Section 4.2.15, *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 stated in **Regulatory Requirement SR-HM-4**. 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 **Regulatory Requirement RR-HM-4** and implementation of **Mitigation Measure HAZ-2** would be required to reduce impacts.

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-HM-4:** Prepare a Fuel Modification Zone Management Plan
- **SR-HM-2:** Require Construction Equipment Spark Arresters

Mitigation Measures

Mitigation Measure HAZ-2: Clear Materials that Could Serve as Fire Fuel from Construction Areas. Prior to ground clearing, grading and other ground disturbance 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 Fontana Fire Protection District prior to issuance of grading permits.

Residual Impacts

Impacts would be less than significant with implementation of **Standard Requirement SR-HM-2** and **Regulatory Requirement RR-HM-4**, as well as **Mitigation Measure HAZ-2**.

4.2.9 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 direct and indirect as well as 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); the *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 and 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), and also contained in Appendix J of this Environmental Impact Report.

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 maintain a site's predevelopment runoff rates and volumes. Design elements typically include, among other things, the use of vegetated swales and retention basins, minimization of impermeable surfaces, and the use of small-scale natural drainage features to slow, clean, infiltrate, and capture rainfall.
- **Hydromodication.** 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 percent chance of being equaled or exceeded in any single year but 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 WVLCSP project site is located within a region of Mediterranean 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 D). 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.

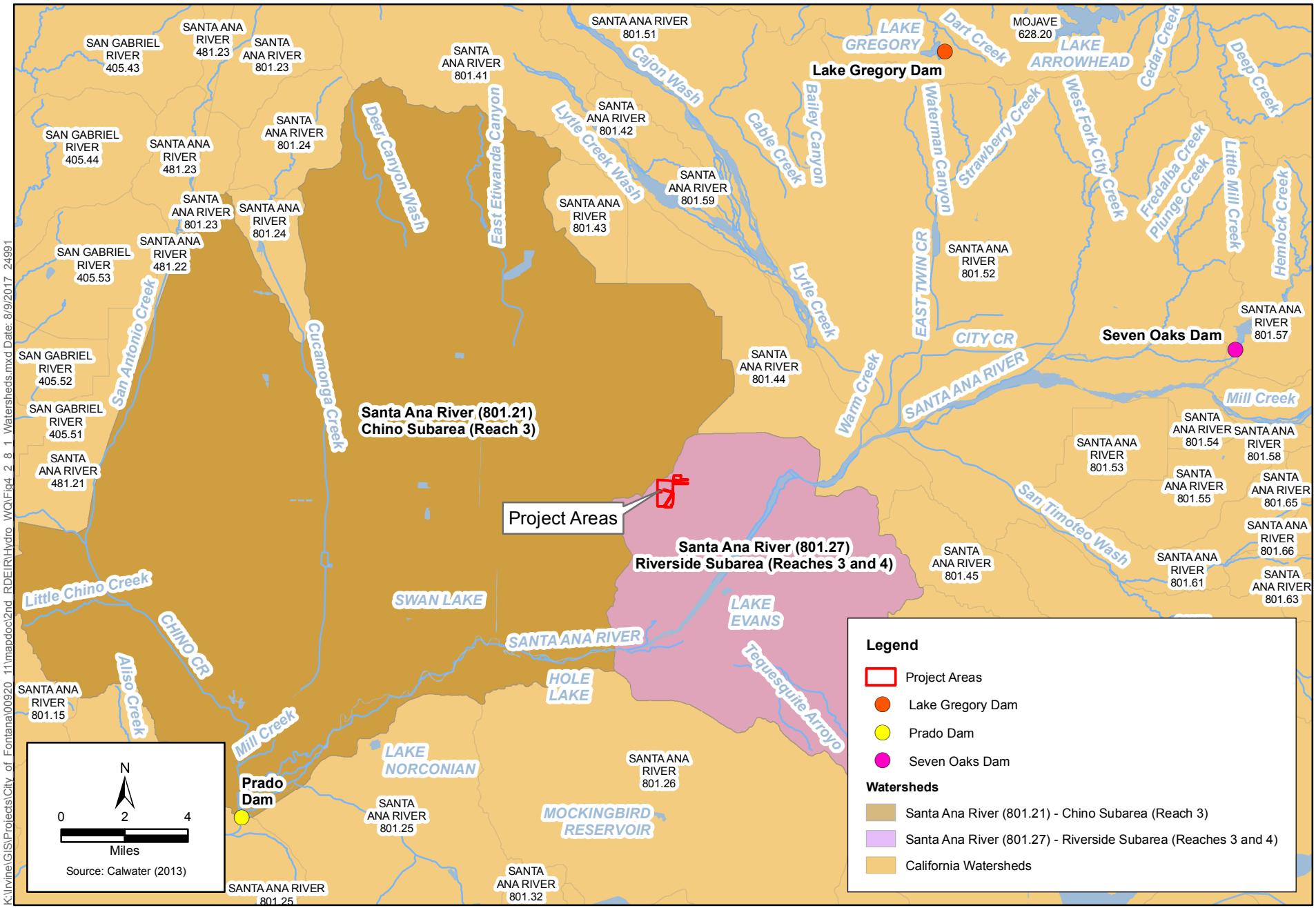
Elevations range from approximately 1,000 to 1,240 feet from east to west on the project site. A natural hillside area, which is part of the larger Jurupa Hills, is just west of the project site and reaches a maximum elevation of 2,217 feet above mean sea level. The project site's southern block occupies 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 percent of its water supply from groundwater drawn from 38 wells operating in Chino Basin, Lytle Basin, Rialto/Colton Subbasin, and another unnamed basin (City of Fontana 2010). However, as described in more detail in Section 4.2.16, *Utilities and Service Systems*, the WVLCSP 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 WVLCSP project area is located within the Santa Ana River watershed and is part of the Santa Ana River Basin (Figure 4.2.9-1). The Santa Ana River watershed falls between Riverside, San Bernardino, and Orange Counties. The Santa Ana River flows 69 miles from its headwaters in the San Bernardino and San Gabriel Mountains, generally southwest to its mouth near Newport Beach and 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 located 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 the 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 northwesternmost 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 ç, primarily from canyon drainages in the northern sphere and from surface drainages flowing north from the Jurupa Hills.



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Figure 4.2.9-1
Watersheds and Surface Waters within the Project Vicinity
West Valley Logistics Center Specific Plan 2nd RDEIR

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 3-3, *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 within Fontana are provided by the City of Fontana (City) and the San Bernardino County Flood Control District, as described in Section 4.2.16, *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 4.2.9-2 (FEMA 2013).

Flood control is provided on the project site by 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 4.2.9-1.

Table 4.2.9-1. 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 Subbasin 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 located within the Chino Subbasin of the Upper Santa Ana Valley Groundwater Basin. However, the WVLCSP project site is located primarily within the northwestern portion of the Riverside-Arlington Subbasin in the Upper Santa Ana Valley Groundwater Subbasin, as shown in Figure 4.2.9-3. 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 4.2.9-2 (Santa Ana RWQCB 2008).[1] As previously described, the project area is within Santa Ana River Reaches 3 and 4.

Table 4.2.9-2. 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

[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).

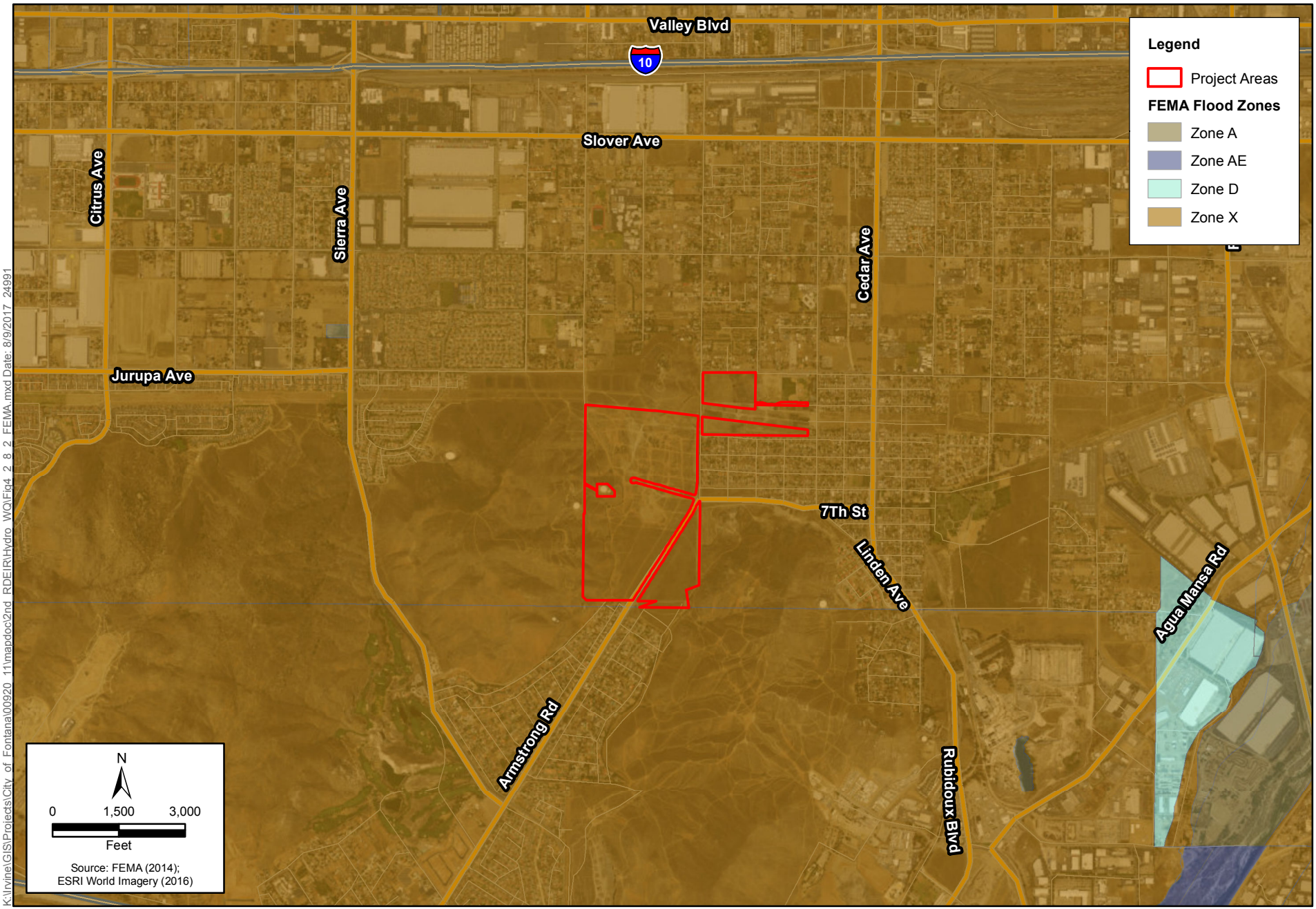


Figure 4.2.9-2
FEMA Flood Zones within the Project Vicinity
West Valley Logistics Center Specific Plan 2nd RDEIR

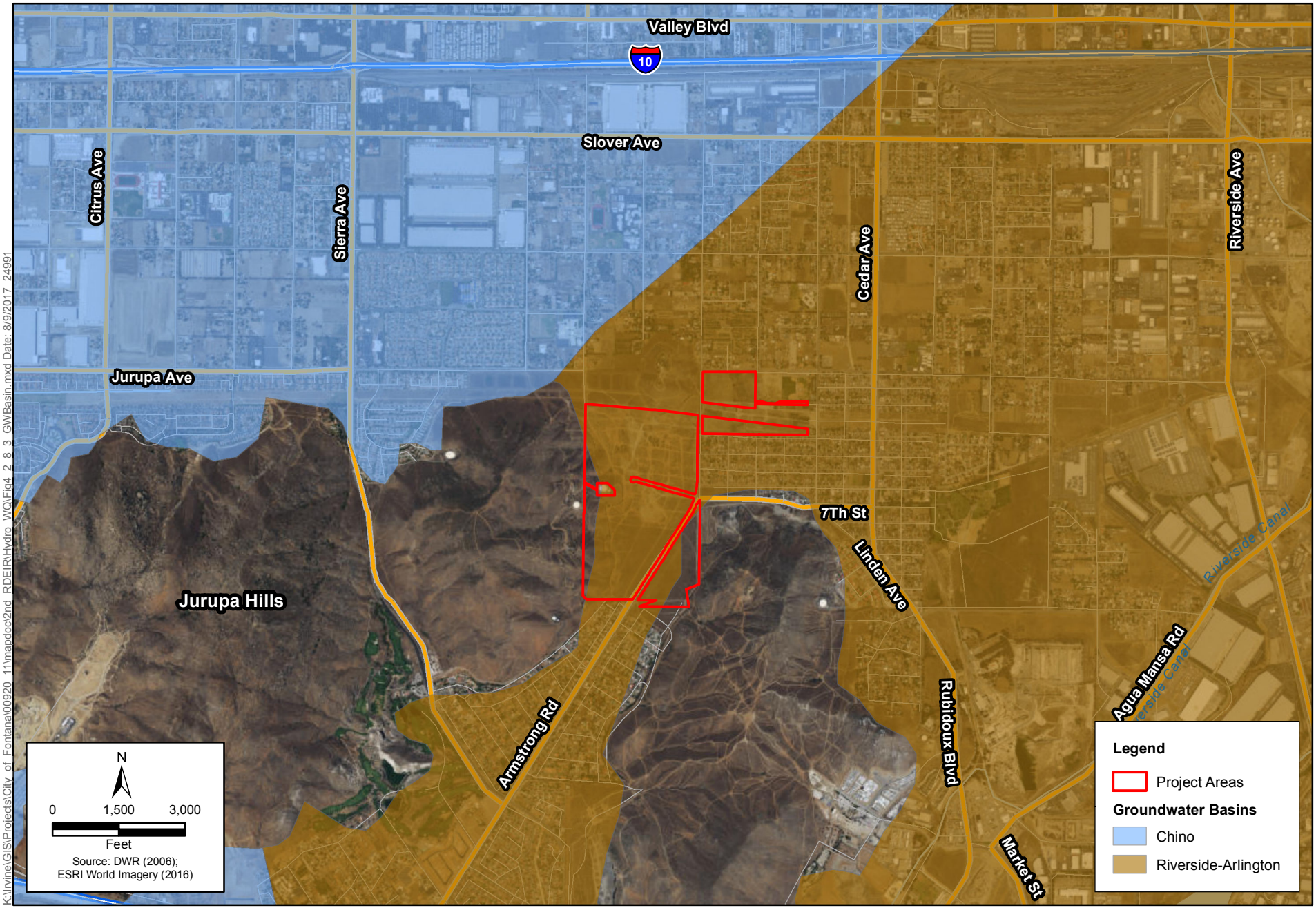


Figure 4.2.9-3
Groundwater Basins within the Project Vicinity
West Valley Logistics Center Specific Plan 2nd RDEIR

candidate water bodies for TMDL analysis, a list of water quality–limited segments was generated by the California State Water Resources Control Board (SWRCB). The 303(d)-listed impairments for the project and surrounding area are shown in Table 4.2.9-3 and are based on the 2010 California Integrated Report (SWRCB 2011).

Table 4.2.9-3. 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

Source: SWRCB 2011.

Table 4.2.9-4 describes water quality objectives for surface waters in the project area and surrounding area downstream of the project site (Santa Ana RWQCB 2008).

Table 4.2.9-4. 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 4.2.9-4, 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 4.2.9-4 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 the SWRCB and nine RWQCBs. The 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 the 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 the SWRCB or a RWQCB 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 under 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 Storm Water 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 (County) and City 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 address 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.

Riverside County NPDES Permit

On January 29, 2010, the Santa Ana Regional Water Quality Control Board issued a fourth-term area wide National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System Permit (MS4 Permit) to the Riverside County Flood Control and Water Conservation District (the Principal Permittee) and cities within the County. On June 7, 2013, the Santa Ana Regional Water Quality Control Board amended the permit (Order No. R8-2013-0024) to include the Cities of Eastvale and Jurupa Valley. Riverside County's permit also requires the permittee and co-permittees (including the City of Jurupa Valley) to implement an Urban Runoff Program.

Impact Analysis

Methodology

Potential impacts resulting from implementing the proposed WVLCSP were analyzed by comparing existing conditions, as described in Chapter 2.0, *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 thus there is only a very limited risk of flooding on the project site. A qualitative discussion is provided.

Groundwater Recharge: Impacts on 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 prepared in 2013 (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 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 specific plan requirements, regulatory requirements, and conditions of approval would prevent or reduce potentially significant environmental impacts.

Specific Plan Requirement

SP-HW-1: Implement Best Management Practices for Water Quality Management. Site Design best management practices will be included in the project-wide Stormwater Quality Management Plan submitted to the City of Fontana and approved prior to the issuance of a grading permit (see **Regulatory Requirement RR-HW-2**). The best management practices, 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, swaled landscaped areas prior to discharge of overflow into storm drains.
- 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-lined systems) for conveying parking lot runoff into storm drains.
- 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.

SP-HW-2: On-site Stormwater Detention: On-site detention basins will be designed and sized to reduce 100-year peak flows to 90 percent of the 25-year peak flow rate for existing conditions. Detention basins within the West Valley Logistics Center Specific Plan area will be designed such that the lower elevations of the basins are used for water quality purposes. The higher elevations of the basins will be used to limit the difference between pre- and post-development peak flow rates.

Regulatory Requirements

RR-HW-1: Prepare and Implement a Stormwater Pollution Prevention Program (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 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 of Fontana engineer.

RR-HW-2: Submit a Stormwater Quality Management Plan (SWQMP) for City Approval. An SWQMP based on final design for each phase of the West Valley Logistics Center Specific Plan will be submitted to the Fontana Director of Public Works for approval prior to issuance of grading permits. The SWQMP will provide project-specific site design, source control, and treatment control best management practices (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 of Fontana's Municipal Storm Water Management Plan and the San Bernardino County Municipal Separate Storm Sewer System 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 San Bernardino County-wide Municipal Separate Storm Sewer System Permit and the City of Fontana's (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 (BMPs) for Water Quality Management. Site design BMPs will be included in the project-wide Stormwater Quality Management Plan submitted to the City of Fontana 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 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 utilizing alternative paving materials in select areas.
- Drain rooftops into pervious, swaled landscaped areas prior to discharge of overflow into storm drains.
- 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-lined systems) for conveying parking lot runoff into storm drains.
- 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.

Standard Requirements

SR-HW-1: Maintain Stormwater Detention Basins and Biotreatment Areas during Project Operation. Final selection of best management practices (BMPs) will be subject to approval by the Santa Ana Regional Water Quality Control Board. The City of Fontana (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 Environmental Impact Report, 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 Storm Water 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.

SR-G-1: Develop and Implement an Erosion Control Plan. The applicant or developer will prepare and submit to the City of Fontana Department of Public Works 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 location of all soil-disturbing activities (including but not limited to sites involving new development or roadways), the location of all drainage structures that will be directly affected by soil-disturbing activities, and the location and type 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 WVLCSP project would be approximately 212 acres (Development Area), 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 BMPs, would be implemented and 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 on Lot A of the WVLCSP. 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.
- Protection of drainage facilities in downstream off-site areas from sediment using BMPs acceptable to the RWQCB.
- All construction activities will cease during high wind (winds exceeding 25 miles per hour) and rain storm events.
- Grass and/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 Requirements RR-HW-1**) and associated compliance with the General Construction Permit and local stormwater ordinances (**Regulatory Requirements RR-HW-2, RR-HW-3, and RR-HW-4, and Standard Requirement SR-G-1**), potential water quality impacts from construction activities would be less than significant.

Operation

Implementation 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 impact 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 (PAHs), which are created as combustion by-products of gasoline and other fossil fuels
- 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 impact stormwater. The City of Fontana provides weekly street sweeping on industrially zoned streets. 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 will 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. Hence, 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 4.2.9-3, 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 Chapter 3, *Project Description*, Section 3.4.4, 100-year flood flows would be detained in on-site stormwater basins, such that 100-year peak flows are reduced to 90 percent of the 25-year peak flow rate for existing conditions. Thus, the net effect of project development would be a

decrease in stormwater runoff. 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 would be, 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 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 **Specific Plan Requirements SP-HW-1 and SP-HW-2**, **Standard Requirements SR-HW-1** and **SR-G-1**, **Regulatory Requirements RR-HW-1** through **RR-HW-4**, 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 the post-construction stormwater measures, would reduce water quality impacts during project operation to less than significant.

Specific Plan Requirements, Regulatory Requirements, and Standard Requirements

The applicant shall implement the following Specific Plan requirements, regulatory requirements, and standard requirements, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*:

- **SP-HW-1**: Best Management Practices for Water Quality Management.
- **SP-HW-2:** On-site Stormwater Detention.
- **RR-HW-1**: Prepare and Implement a Stormwater Pollution Prevention Program (SWPPP).
- **RR-HW-2**: Submit a Stormwater Water Quality Management Plan (SWQMP) 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 (BMPs) for Water Quality Management.
- **SR-HW-1**: Maintain Stormwater Detention Basins and Biotreatment Areas during Project Operation.
- **SR-G-1**: Develop and Implement an Erosion Control Plan.

Mitigation Measures

No mitigation is required.

Residual Impacts

With implementation of **Specific Plan Requirements SP-HW-1** and **SP-HW-2**, **Regulatory Requirements RR-HW-1 through RR-HW-4**, and **Standard Requirements SR-HW-1** and **SR-G-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 of the project site is approximately 575 feet above mean sea level. The lowest elevations on site are slightly below 1,000 feet above mean sea level. Thus, 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 on 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 4.2.16, *Utilities and Service Systems*, for discussion of water demand and supply for the proposed project and conditions of approval 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 a manner that would cause 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 **Specific Plan Requirement SP-HW-1**, **Standard Requirements SR-HW-1** and **SR-G-1**, and **Regulatory Requirements RR-HW-1**, **RR-HW-2**, **RR-HW-3**, and **RR-HW-4** would further ensure that significant impacts resulting from the changes in drainage patterns would not occur.

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-HW-1**: Best Management Practices for Water Quality Management.
- **RR-HW-1**: Prepare and Implement a Stormwater Pollution Prevention Program (SWPPP).
- **RR-HW-2**: Submit a Stormwater Water Quality Management Plan (SWQMP) 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 (BMPs) for Water Quality Management.
- **SR-HW-1**: Maintain Stormwater Detention Basins and Biotreatment Areas during Project Operation.
- **SR-G-1**: Develop and Implement an Erosion Control Plan.

Mitigation Measures

No mitigation is required.

Residual Impacts

With implementation of **Specific Plan Requirement SP-HW-1**, **Regulatory Requirements RR-HW-1**, **RR-HW-2**, **RR-HW-3**, and **RR-HW-4**, and **Standard Requirements SR-HW-1** and **SR-G-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 4.2.9-5, below.

Table 4.2.9-5. 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 4.2.16, *Utilities and Service Systems*, for more information). This storm drain would discharge runoff into an existing detention basin (Table 4.2.9-1) 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 percent 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 percent 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 4.2.9-6 summarizes inflow/outflow and volume for each basin.

Table 4.2.9-6. 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 4.2.9-6, the detention basins would reduce 100-year flow from proposed improvements to less than 90 percent 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 **Standard Requirement SR-HW-1**. Therefore, with implementation of the proposed detention basins, **Standard Requirements SR-HW-1** and **SR-G-1**, and **Regulatory Requirements RR-HW-1**, **RR-HW-2**, **RR-HW-3**, **and RR-HW-4** impacts related to drainage patterns and flooding would be less than significant.

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-HW-1**: Prepare and Implement a Stormwater Pollution Prevention Program (SWPPP).
- **RR-HW-2**: Submit a Stormwater Water Quality Management Plan (SWQMP) 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 (BMPs) for Water Quality Management.
- **SR-HW-1:** Maintain Stormwater Detention Basins and Biotreatment Areas during Project Operation.
- **SR-G-1**: Develop and Implement an Erosion Control Plan.

Mitigation Measures

No mitigation is required.

Residual Impacts

With implementation of **Regulatory Requirements RR-HW-1**, **RR-HW-2**, **RR-HW-3**, and **RR-HW-4**, and **Standard Requirements SR-HW-1** and **SR-G-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, project stormwater and runoff drainage would be detained and held in on-site stormwater basins, and post-development flows would be less than current conditions. Stormwater drainage is discussed in more detail in Section 4.2.16, *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-4** and **Standard Requirements SR-HW-1** and **SR-G-1**.

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*:

- **SP-HW-1**: Best Management Practices for Water Quality Management.
- **RR-HW-1**: Prepare and Implement a Stormwater Pollution Prevention Program (SWPPP).
- **RR-HW-2**: Submit a Stormwater Water Quality Management Plan (SWQMP) 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 (BMPs) for Water Quality Management.
- **SR-HW-1:** Maintain Stormwater Detention Basins and Biotreatment Areas during Project Operation.
- **SR-G-1**: Develop and Implement an Erosion Control Plan.

Mitigation Measures

No mitigation is required.

Residual Impacts

With implementation of **Regulatory Requirements RR-HW-1**, **RR-HW-2**, **RR-HW-3**, and **RR-HW-4**, and **Standard Requirements SR-HW-1** and **SR-G-1**, 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 Requirements SR-HW-1** and **SR-G-1**, and **Specific Plan Requirement SP-HW-1**.

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-HW-1**: Best Management Practices for Water Quality Management.

- **RR-HW-1**: Prepare and Implement a Stormwater Pollution Prevention Program (SWPPP).
- **RR-HW-2**: Submit a Stormwater Water Quality Management Plan (SWQMP) 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 (BMPs) for Water Quality Management.
- **SR-HW-1**: Maintain Stormwater Detention Basins and Biotreatment Areas during Project Operation.
- **SR-G-1**: Develop and Implement an Erosion Control Plan.

Mitigation Measures

No mitigation is required.

Residual Impacts

With implementation of **Specific Plan Requirement SP-HW-1**, **Regulatory Requirements RR-HW-1**, **RR-HW-2**, **RR-HW-3**, and **RR-HW-4**, and **Standard Requirements SR-HW-1** and **SR-G-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.

Mitigation Measures

No mitigation measures would be required, since no structures would be placed within the 100-year flood zone.

Residual Impacts

There would be no impacts pertaining 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 Setting* section above, 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 4.2.6, *Geology*, 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.

4.2.10 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 City of Fontana 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 City of Fontana 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 corner of the city of Fontana, adjacent to the Jurupa Hills. The city of Fontana is in the southwestern, valley region of San Bernardino County. Neighboring areas to the city of Fontana include the San Bernardino National Forest and the San Gabriel Mountains to the north, the Cities of Rialto and San Bernardino and the unincorporated community of Bloomington (in 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 a logistics hub because of the large number of homes and warehouse distribution buildings, and the community's proximity to the regional freeway system, 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 approximately 0.9 mile south of Foothill Boulevard and immediately 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 (City) 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 percent 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. A third reservoir is 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. It is surrounded by a mixture of open space and residential land uses within the city of Jurupa Valley in Riverside County to the south and the unincorporated community of Bloomington in San Bernardino County to the north and east. Bloomington and the city of Jurupa Valley consist mainly of lower density single-family residential development but also include 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 open space 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 of Fontana 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 of Fontana'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 sub-regional 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 balance between jobs and housing growth, and environmental quality, as well as planning for appropriate transportation systems to serve existing and future land uses. Another important function of SCAG is preparation of the Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) for Southern California, which, in addition to providing for a regional balance between jobs, housing, and growth and environmental quality, is charged with providing a regional blueprint for defining the development patterns and transportation systems needed to achieve a sufficient reduction in regional greenhouse gas (GHG) emissions as to facilitate achievement of statewide GHG reduction targets. 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 among Riverside County, as well as cities in the western portion of the county, and other public agencies 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. Relevant 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 2016–2040 RTP/SCS, which was adopted in April 2016. The RTP/SCS integrates transportation planning with economic development and sustainability planning and aims to comply with state GHG emissions reduction 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 22 million residents, an increase of nearly 4 million by 2040, while also meeting the GHG emissions-reduction targets set by the California Air Resources Board. SCAG is empowered by state law to assess regional housing needs and provide a specific allocation of housing needs for all economic segments of the community within each of the region's counties and cities. In addition, SCAG has taken on the role of planning for regional growth management.

Local

City of Fontana General Plan

The City of Fontana 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, a 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 polices 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 the planned locations for various types of land uses throughout the community. These land use designations are designed to ensure that sufficient land will be available for residential, commercial, industrial, 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 provide policy direction for zoning designations, which are depicted on the current zoning map for Fontana (City of Fontana 2013b) and discussed below.

Current land use designations applicable to the Specific Plan 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 4.2.10-1.

Table 4.2.10-1. Existing On-Site and Surrounding Property Zoning and Land Use Designations

	City of Fontana		San Bernardino County – Bloomington	City of Jurupa Valley	
Location	**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**	**SP[1]**	**--**	**--**	**--**
Surrounding Areas					
North	P-UC R-PC	R-PC[1, 2]	--	--	--
East	R-PC	R-PC[1]	RS RL-20	--	--
South	--	--	--	LDR MDR OS-RUR	A-1 SP MH RA
West	R-PC P-PF	R-PC P-PF[1]	--	--	--
Planning Area 2					
Parcels 7 and 9	**P-R**	**SP, R-PC**	**--**	**--**	**--**
Surrounding Areas					
North	--	--	RS-1, IN	--	--
East	R-PC	R-PC	RS, IN	--	--
South	P-UC	R-PC[2]	--	--	--
West	R-PC	R-PC[1]	--	--	--

	City of Fontana		San Bernardino County – Bloomington	City of Jurupa Valley	
Location	**Land Use**	**Zoning**	**Land Use/Zoning***	**Land Use**	**Zoning**
Planning Area 3					
Detention Basin Area (Lot A)	**P-PF**	**SP**	**--**	**--**	**--**
Surrounding Areas					
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

San Bernardino County Land Use/Zoning:

* = Land use and zoning are combined.

RS = Single Residential (1 unit/0.25 acre)

RS-1 = Single Residential (1 unit/acre)

RL-20 = Rural Living

IN = Institutional

Jurupa Valley Land Use/Zoning:

LDR = Low-Density Residential – Country Neighborhood

MDR = Medium Density Residential

LI = Technology and Innovation

A-1 = Light Agriculture

SP = Specific Plan

MH = Manufacturing Heavy

Sources: City of Fontana 2003; County of San Bernardino 2013; City of Jurupa Valley 2017.

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 6, Section 30-301.2, of the City's Zoning and Development Code, any use permitted shall be subject to a conditional use permit. Section 30-301.3 states that the "development standards and design guidelines applicable to the underlying zoning district shall apply in the utility corridor overlay district except that more restrictive standards may be applied if it is determined that the standards of the underlying zoning district do not adequately buffer adjacent development from any negative impacts of development within the utility corridor overlay district."

- **Hillside Overlay**. Per Division 7, Section 30-301.5, of the City's Zoning and Development Code, development within this overlay 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. Additional requirements include preparation of a biotic resources habitat management plan as part of any development application within the Hillside Overlay Zone.

Fontana Grading Ordinance

Rules and regulations pertaining to earth resources and grading are set forth in 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 countywide policies set forth in 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 area immediately to the east of the project site is within the southern part of the South Bloomington community. 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 located along Appaloosa Lane, north of Paso Fino Street, east of the project site.

City of Jurupa Valley (Riverside County)

The City of Jurupa Valley was incorporated in July 2011 and adopted its current general plan on September 7, 2017 to replace the Riverside County General Plan. The project site is not within the city of Jurupa Valley; 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 4.2.10-1 above.

Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County MSHCP encompasses approximately 1.26 million acres (1,966 square miles) within Riverside County, 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 western portion of the county. The MSHCP allows Riverside County and cities within the western portion of the county 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 also provides valuable information to adjacent communities, including the city of Fontana, regarding the habitats present along the county line, as well as the conservation policies being applied within Riverside County to those habitat areas. Such information can also assist communities to make informed land use and conservation decisions regarding lands adjacent to the Riverside county line.

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 conservation 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 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 currently undeveloped parcels with warehouse distribution 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 would involve construction of roadways within the project site's boundaries along with improvements to local existing roadways outside of the Specific Plan area. 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. Thus, although the WVLCSP proposes a general plan Circulation Element amendment to delete the proposed extension of Alder Avenue through the project site to connect from Jurupa Avenue to Locust Avenue/Armstrong Road at their intersection with 7th Street, such a road extension would be physically difficult, and would result in the significant biological resource impacts that preservation of Parcel 8 as open space seeks

to avoid. Thus, the proposed general plan Circulation Element amendment would not create any physical barrier that would reduce the connectivity between the Bloomington and Fontana areas, but would leave existing natural hillside barriers in place. Existing physical connectivity between communities surrounding the WVLCSP would not be diminished by the proposed elimination of Alder Avenue as a through route between Jurupa Avenue and Locust Avenue/Armstrong Road.

The proposed warehouse distribution project in a vacant area of the city, with the inclusion of circulation improvements would facilitate connectivity and accessibility to adjacent communities and transportation corridors, and 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 4.2.10-2. 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 4.2.10-3 also includes a consistency analysis for SCAG regional policies. Because the proposed project would not result in an inconsistency with the City's General Plan or the Zoning and Development Code, no significant impact would occur, and no mitigation measures would be necessary.

Table 4.2.10-2. 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 provides for diverse opportunities for residents, employers, and the city as a whole, and is consistent with this goal. The proposed land use plan would balance warehouse distribution development, public facility, and open space uses on site to allow for a high-quality and state-of-the-art logistics center. The WVLCSP also includes the preservation of biological resources and stormwater detention 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 a warehouse distribution facility, consistent with the Light Industrial (I-L) and Open Space (OS) land uses proposed for the Specific Plan area. 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
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

Goals and Policies	Consistency Analysis	Finding
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 avoid natural features and sensitive habitat on the project site. The Specific Plan preserves sensitive natural areas in passive open space and is generally consistent with this goal. As described in Section 4.2.15, because timing for implementation of roadway and freeway mainline improvements is not known and the implementation of mitigation measures outside of the city of Fontana cannot be guaranteed even though the Environmental Impact Report (EIR) provides for such mitigation, 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 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, GHG emissions, and hydrology and water quality in various sections of this Second Recirculated Draft Environmental Impact Report (2nd RDEIR). 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 detained on site and held in stormwater basins to avoid any adverse impacts on the surrounding neighborhoods. Although the project would result 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.	Consistent

Goals and Policies	Consistency Analysis	Finding
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.	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 (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

Goals and Policies	Consistency Analysis	Finding
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.	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 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 Circulation Element. However, the extension of Alder Avenue through the site as currently proposed in the Circulation Element would require substantial grading and loss of habitat area to extend the roadway through the steep Jurupa Hills. Approval of the proposed general plan amendment to delete the extension of Alder Avenue from the general plan would eliminate inconsistencies between the WVLCSP and the general plan Circulation Element.	Consistent
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 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 Committee as part of the Property Owners' Association to ensure that local residential streets are not used by tenants of the proposed warehouse distribution development (see Section 3.4.3, *Circulation Improvements*).	Consistent

Goals and Policies	Consistency Analysis	Finding
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 4.2.15, *Transportation and Traffic*, implementation of Specific Plan provisions along with **Mitigation Measures TRA-1c** and **TRA-1d** along with 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 roadways within the Specific Plan area to their full general plan rights-of-way, and provide full half-width improvements along the southerly side of Jurupa Avenue east of the project site to improve street function. Locust Avenue north of the project site would be improved to a minimum 40-foot pavement width with a pavement section appropriate for project-generated truck traffic. The WVLCSP would also provide signalization at key intersections to supplement fair share fees for intersection improvements.	Consistent
Goal 3: A circulation system is provided that reduces conflicts between commercial trucking, private/public transportation, and land uses.	The proposed Specific Plan requirements will provide driveway channelization and truck route designations to reduce or avoid conflicts between commercial trucking and the surrounding land uses. Also, a Transportation Management Committee, which would be part of the Property Owners' Association for the Specific Plan area, 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 Transportation Management Committee as part of the Property Owners' Association to guide project traffic to the regional transportation network and away from residential streets. Additionally, as stated in Section 4.2.11, *Noise*, the proposed truck haul routes would not pass by hospitals, schools, parks, daycare facilities, libraries, and similar uses.	Consistent

Goals and Policies	Consistency Analysis	Finding
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 a warehouse distribution 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 within the project site. However, the availability of a variety of existing housing types throughout the city is adequate with respect to accommodating the demand for a mix of housing types. Analysis undertaken for this EIR also demonstrated that replacing the approved residential planned community with the proposed warehouse development would not jeopardize the City's ability to maintain an adequate land inventory and meet Fontana's share of regional housing needs for all economic segments of the community.	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 trails 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 warehouse distribution 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
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, encompassing the more visible, higher elevations of the site, would be preserved as part of the WVLCSP.	Consistent

Goals and Policies	Consistency Analysis	Finding
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, *Project Description*, 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 along with 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. The Specific Plan requires that screen walls be integrated with the architectural character of the main on-site building. Further, the Specific Plan sets forth sign standards to achieve a visually attractive development. These sign standards would be reviewed and verified by the City 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 a warehouse distribution center near existing residential areas. Design requirements in the WVLCSP set forth standards and guidelines to minimize any conflicts or spillover effects by reducing maximum building heights below those permitted in the City's Planning and Development Code for industrial uses, along with increasing minimum setback requirements from residentially zoned properties. The Specific Plan requires 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

Goals and Policies	Consistency Analysis	Finding
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 employment base with a plan to develop a high-quality warehouse development that will bring new businesses into the community.	Consistent
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.	The WVLCSP would be subject to the zoning requirements of the Light Industrial (I-L) designation of the WVLCSP, which do not permit heavy manufacturing or processing of raw materials but do promote uses related to warehousing and distribution, as well as light manufacturing. 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.	Consistent
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 standard conditions. 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

Goals and Policies	Consistency Analysis	Finding
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 District-maintained fire stations.	Consistent
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 a warehouse distribution 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 development increments 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 development increments and involve the implementation of improvements necessary to support occupancy as specific development projects are completed on site. The Specific Plan sets specific requirements to tie the timing of site development to the availability of infrastructure.	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 infrastructure. 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 in a private street within the project site and coordinated with roadway construction to avoid multiple disruptions to services.	Consistent

Goals and Policies	Consistency Analysis	Finding
Open Space and Conservation Element		
Goal 1.1: Preserve Natural Open Space in the San Gabriel Mountains and Jurupa Hills.	The WVLCSP preserves approximately 55 acres of natural hillside open space along the eastern edge of the Jurupa Hills.	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.	Approximately 55 acres of natural hillside open space in the WVLCSP would be preserved in open space along the eastern edge of 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.	The proposed natural hillside open space conserves an existing, contiguous portion of Riversidean Sage Scrub habitat for use by the California Gnatcatcher, which is an Endangered bird species.	Consistent
Policy 1: Encourage the preservation of natural habitat in conjunction with private or public development projects.	The land use plan for the WVLCSP includes the preservation of approximately 55 acres of natural habitat in conjunction with the proposed 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, *Biological Resources*, 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 WVLCSP would be detained 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 WVLCSP 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 SOI.	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, *Cultural Resources*, for a full discussion of available resources, project impacts, and proposed mitigation measures.	Consistent

Goals and Policies	Consistency Analysis	Finding
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
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 WVLCSP, 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 WVLCSP includes a public benefits fee that the City can use for any purpose, including parks to serve the community. The project would also construct sidewalks along Locust Avenue, Armstrong Road, Jurupa Avenue, and 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

Goals and Policies	Consistency Analysis	Finding
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 bicycles, equestrian riders, and pedestrians through the project site.	Consistent
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 with implementation of the WVLCSP.	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.	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 4.2.6, *Geology and Soils*, 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 standard conditions. Implementation of **Regulatory Requirement RR-HW-1**, **Standard Requirements SR-G-1** and **SR-HW-1**, and **Mitigation Measures GEO-1** and **GEO-2** would result in less-than-significant impacts.	Consistent

Goals and Policies	Consistency Analysis	Finding
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 detain 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 **Regulatory Requirement RR-HM4** and **Mitigation Measure HAZ-3**. See Section 4.2.8, *Hazards and Hazardous Materials*, 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 4.2.8, *Hazards and Hazardous Materials*, for further discussion.	Consistent

Goals and Policies	Consistency Analysis	Finding
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. Standard conditions 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 4.2.11, *Noise*, 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 4.2.11-1 lists definitions of acoustical terms, Table 4.2.11-2 shows common sound levels and their noise sources, and Table 4.2.11-3 shows land use compatibility for exterior community noise, as recommended by the California Department of Health Services, Office of Noise Control. As stated Section 4.2.11, *Noise*, 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 WVLCSP. With the incorporation of noise mitigation measures and standard conditions, noise impacts would be reduced to the extent feasible. See Section 4.2.11, *Noise*, for more information.	Consistent

Goals and Policies	Consistency Analysis	Finding
Policy 2: On-road trucking activities shall be regulated in the city to ensure noise impacts are minimized.	Because the proposed warehouse distribution 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. Specific plan requirements setting forth truck routes and standard conditions requiring implementation of truck idling restrictions and **Mitigation Measure NOI-1** is identified to reduce operational truck-related noise and noise near sensitive land uses further. Also, a Transportation Management Committee would be established as part of the Property Owners' Association 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 4.2.11-4 of this 2nd RDEIR shows that noise levels for all residential uses along the roadways analyzed in this EIR exceeds 65 dBA CNEL under existing conditions. As shown in Table 4.2.11-25, with inclusion of the proposed project under existing conditions, project-related increases in noise levels would exceed the applicable significance threshold along Locust Avenue between Slover Avenue and 8th Street and along Jurupa Avenue between Locust Avenue and Cedar Avenue. Under future, Year 2040 cumulative conditions, CNEL noise standards would be exceeded for all residential uses along the roadways analyzed in this EIR. As shown in Table 4.2.11-26, project related increases in CNEL would exceed the applicable significance threshold along Locust Avenue between Slover Avenue and Jurupa Avenue and between 11th Street and 8th Street. Project-related CNEL increases would also exceed the applicable significance threshold along Jurupa Avenue between Locust Avenue and Cedar Avenue. 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

Goals and Policies	Consistency Analysis	Finding
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
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 4.2.11, *Noise*, and mitigation measures and standard conditions 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 on-site industrial equipment associated with the proposed WVLCSP with the incorporation of noise mitigation measures and project design features and proper shielding. See Section 4.2.11, *Noise*, 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 4.2.11, *Noise*. 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 4.2.11, *Noise*, 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 within manufacturers' specifications, 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
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 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 Transportation Management Committee as part of the Property Owners' Association), 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 a warehouse distribution center near major transportation facilities, including I-10 and SR-60, and in proximity to a large labor pool, 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 4.2.11, respectively, including Regulatory Requirement RR-AQ-7 (Require Equipment to be Turned Off When Not in Use), 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 Transportation Management Committee would be established as part of the Property Owners' Association 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
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 4.2.2, *Air Quality*, **Regulatory Requirements RR-AQ-1** through **RR-AQ-8,** and **Mitigation Measures AQ-1** through **AQ-14** would be implemented during construction and operation of Specific Plan land uses 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-8,** and **Mitigation Measures AQ-1** through **AQ-14** have been identified to reduce particulate emissions to the minimum practicable levels, 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 Requirement RR-AQ-**1 through **RR-AQ-8** and **Mitigation Measures AQ-1** through **AQ-114**have been identified to reduce particulate emissions to the minimum practicable levels, consistent with this policy.	Consistent

Table 4.2.10-3. SCAG Land Use and Planning Consistency Analysis

Goals and Policies	Consistency Analysis	Finding
SCAG 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy Goals		
Goal 1: Align the plan investments and policies with improving regional economic development and competitiveness.	This goal is related to the structure of the overall RTP/SCS, and is not applicable to site-specific development projects such as the WVLCSP.	N/A
Goal 2: Maximize mobility and accessibility for all people and goods in the region.	The addition of a logistics center in southeastern Fontana will meet a growing regional need for warehouse space, and thereby increase the ease of goods movement.	Consistent
Goal 3: Ensure travel safety and reliability for all people and goods in the region.	As part of project development, roadway improvements will be made to ensure safe accessibility and turning movements for trucks.	Consistent
Goal 4: Preserve and ensure a sustainable regional transportation system.	This goal is related to the overall design of transportation systems in the region, and is not applicable to site-specific development projects such as the WVLCSP.	N/A
Goal 5: Maximize the productivity of our transportation system.	The proposed West Valley Logistics Center will provide connections from the project site to nearby truck routes and regional freeway, thereby enhancing the productivity of those truck routes and regional freeways for goods movement.	Consistent

Goals and Policies	Consistency Analysis	Finding
Goal 6: Protect the environment and health of our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).	All feasible mitigation measures will be implemented to minimize the air quality impacts of proposed development.	Consistent
Goal 7: Actively encourage and create incentives for energy efficiency, where possible.	The WVLCSP would develop a warehouse distribution center that provides for technological innovation in building design with regard to lighting, heating and cooling, materials reuse, 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 8: Encourage land use and growth patterns that facilitate transit and active transportation.	All roadways within the WVLCSP will be signed as Class III bicycle routes. Providing a substantial employment-generating use within southeastern Fontana will contribute to the critical mass needed to support transit availability in the area.	Consistent
Goal 9: Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies	This goal is related to the overall design of transportation systems in the region, and is not applicable to site-specific development projects such as the WVLCSP.	N/A

With adoption of the proposed general plan amendment, the proposed WVLCSP would be consistent with the City of 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 discussed 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. A detailed discussion of biological conditions within and adjacent to the project site is provided in Section 4.3.2, *Biological Resources*.

The proposed project would preserve existing Riversidean sage scrub habitat in perpetuity through the establishment of a 55.23-acre conservation area located along the southwestern boundary of the site, contiguous with existing Riversidean sage scrub habitats in the Jurupa Hills and the northern boundary of the Western Riverside County MSHCP. The WVLCSP conservation area would be fenced to prevent encroachment into the habitat area from the developed portions of the site, and would be protected in perpetuity from development. Preservation of Riversidean sage scrub habitat for wildlife use adjacent to larger areas of habitat protected under the MSHCP would have a positive effect compared to existing conditions wherein unauthorized entry into the hillside portions of the project site for off-road motorcycling is not uncommon. No conflicts between the proposed projected and the adjacent MSHCP would therefore occur, and impacts would be less than significant.

Mitigation Measures

No mitigation required.

Residual Impacts

Impacts would be less than significant.

4.2.11 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 Urban Crossroads Inc. in October 2017 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 and Concepts

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.

Environmental noise descriptors are generally based on averages, rather than instantaneous, noise levels. The most commonly used figure is the equivalent sound level (L_{eq}). Equivalent sound levels are not measured directly but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The L_{eq} represents a steady-state sound level containing the same total energy as a time varying signal over a given sample period and is commonly used to describe the "average" noise levels within the environment.

Peak hour or average noise levels, while useful, do not completely describe a given noise environment. Noise levels lower than peak hour may be disturbing if they occur during times when quiet is most desirable, namely evening and nighttime (sleeping) hours. To account for this, the Community Noise Equivalent Level (CNEL) representing a composite 24-hour noise level, is utilized. The CNEL is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. These additions are made to account for the noise-sensitive time periods during the evening and night hours when sound appears louder. CNEL does not represent the actual sound level heard at any time, but rather represents the total sound exposure. The City of Fontana relies on the 24-hour CNEL level to assess land use compatibility with transportation related noise sources.

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 dBA (very quiet) to 100 dBA (very loud). An increase of 10 dB is also perceived as a doubling of loudness. Thus, 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 4.2.11-1 lists definitions of acoustical terms; Figure 4.2.11-1 shows common sound levels and their noise sources.

Table 4.2.11-1. 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.
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*, 1991

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are more sensitive to noise intrusion than are commercial or industrial developments and related activities. As ambient noise levels affect the desirability of an area, so too can the mismanagement of noise impacts reduce an area's desirability as a place to live, shop, and work. For this reason, land use compatibility with the noise environment is an important consideration in the planning and design process. The Federal Highway Administration (FHWA) encourages State and local government to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway, or that the developments are planned, designed, and constructed in such a way that noise impacts are minimized.

Figure 4.2.11-1. Common Sound Levels and Their Noise Sources

COMMON OUTDOOR ACTIVITIES	COMMON INDOOR ACTIVITIES	A - WEIGHTED SOUND LEVEL dBA	SUBJECTIVE LOUDNESS	EFFECTS OF NOISE
THRESHOLD OF PAIN		140	INTOLERABLE OR DEAFENING	HEARING LOSS
NEAR JET ENGINE		130		
		120		
JET FLY-OVER AT 300m (1000 ft)	ROCK BAND	110		
LOUD AUTO HORN		100	VERY NOISY	
GAS LAWN MOWER AT 1m (3 ft)		90		
DIESEL TRUCK AT 15m (50 ft), at 80 km/hr (50 mph)	FOOD BLENDER AT 1m (3 ft)	80		SPEECH INTERFERENCE
NOISY URBAN AREA, DAYTIME	VACUUM CLEANER AT 3m (10 ft)	70	LOUD	
HEAVY TRAFFIC AT 90m (300 ft)	NORMAL SPEECH AT 1m (3 ft)	60		
QUIET URBAN DAYTIME	LARGE BUSINESS OFFICE	50	MODERATE	SLEEP DISTURBANCE
QUIET URBAN NIGHTTIME	THEATER, LARGE CONFERENCE ROOM (BACKGROUND)	40		
QUIET SUBURBAN NIGHTTIME	LIBRARY	30	FAINT	NO EFFECT
QUIET RURAL NIGHTTIME	BEDROOM AT NIGHT, CONCERT HALL (BACKGROUND)	20		
	BROADCAST/RECORDING STUDIO	10	VERY FAINT	
LOWEST THRESHOLD OF HUMAN HEARING	LOWEST THRESHOLD OF HUMAN HEARING	0		

Approximately 10 percent of the population has a low tolerance for noise, and even in the quietest environment, some noise complaints may occur. Another 25 percent of the population will not complain even in severe noise environments. Surveys have shown that about 10 percent of people exposed to traffic noise of 60 dBA will report being annoyed with the noise, and each increase of 1 dBA is associated with approximately 2 percent more people being annoyed. Figure 4.2.11-2 illustrates the general reactions that are expected in response to changes in noise levels. An increase or decrease of 1 dBA cannot be perceived except in carefully controlled laboratory experiments, a change of 3 dBA is considered *barely perceptible*, and changes of 5 dBA are considered *readily perceptible*.

Figure 4.2.11-2. Noise Level Increase Perception

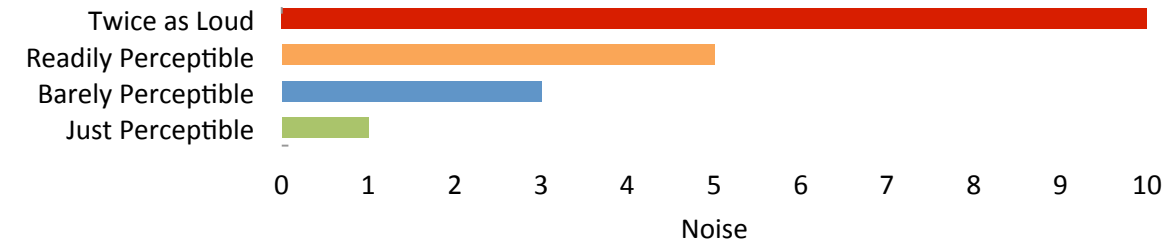
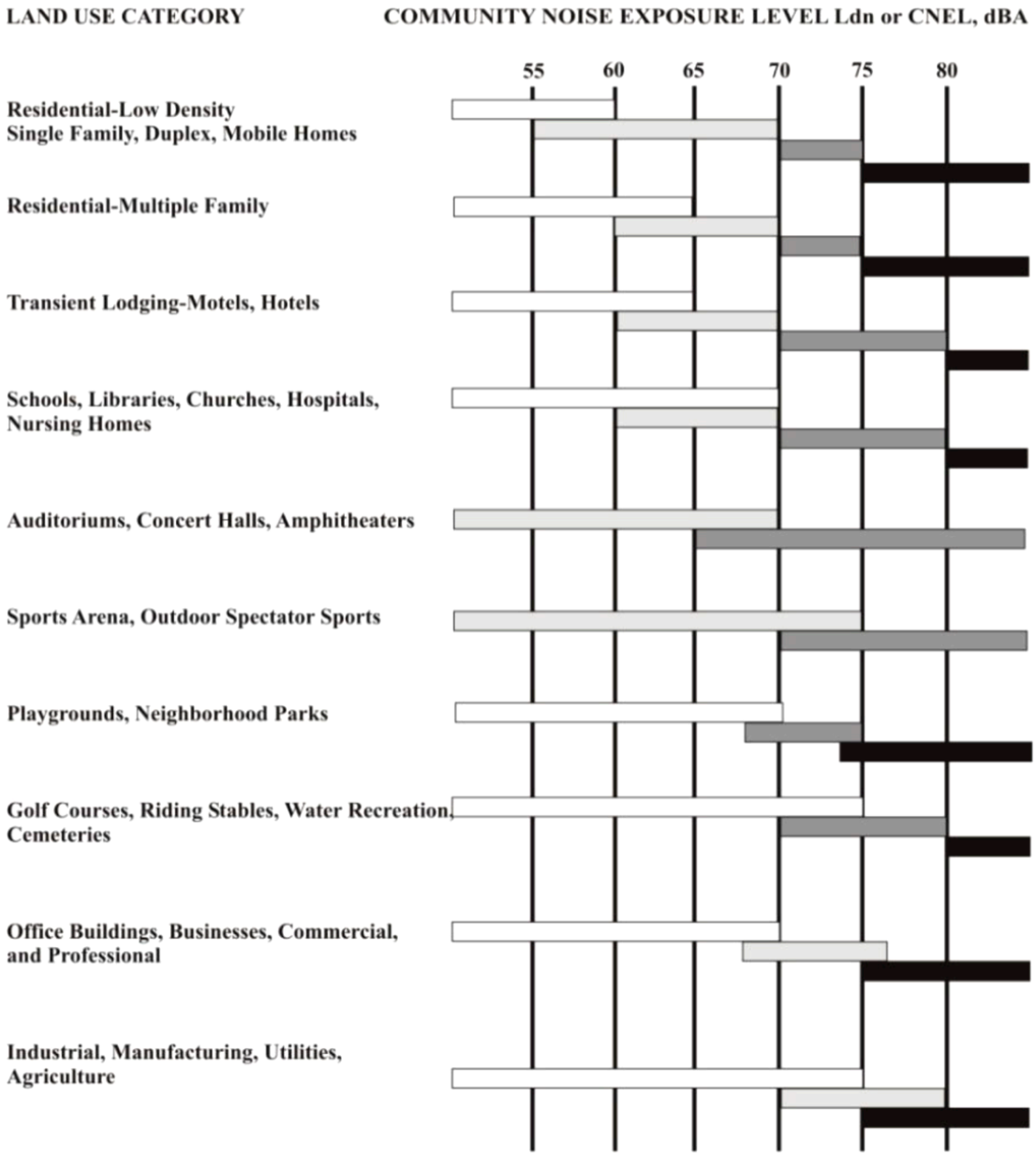


Table 4.2.11-2. Land Use Compatibility for Exterior Community Noise



Source: California Office of Noise Control

Noise Propagation

Sound from a localized source (i.e., a stationary point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of approximately 6 dBA for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path and are described as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as *cylindrical spreading*. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source.

The propagation path of noise from a roadway or highway to a receptor is usually very close to the ground. Noise attenuation from ground absorption adds to the attenuation associated with geometric spreading. Traditionally, this additional attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually sufficiently accurate for distances of less than 200 feet. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receptor, such as a parking lot), no excess ground attenuation occurs. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receptor such as soft dirt, grass, or scattered bushes and trees), an additional ground attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance from a line source.

Receptors located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (e.g., more than 500 feet) due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also have an effect.

A large object or barrier in the path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Shielding by trees and other such vegetation typically only has an “out of sight, out of mind” effect. That is, the perception of noise impact tends to decrease when vegetation blocks the line of sight to a nearby resident. However, for vegetation to provide a substantial, or even noticeable, noise reduction, the vegetation area must be at least 15 feet in height, 100 feet wide, and dense enough to completely obstruct the line of sight between the source and the receiver. This size of vegetation may provide up to 5 dBA of noise reduction. FHWA does not consider the planting of vegetation to be a noise abatement measure.

Noise Control

Noise control is the process of obtaining an acceptable noise environment for an observation point or receptor by controlling the noise source, transmission path, receptor, or all three. Effective noise barriers can reduce noise levels by 10 to 15 dBA, cutting the loudness of traffic or point source noise in half. A noise barrier is most effective when placed close to the noise source or receptor. Noise barriers, however, do have limitations. For a noise barrier to work, it must be high enough and long enough to block the path of the noise source.

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 peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings, but is not always suitable for evaluating human response (annoyance) because it takes some time for the human body to respond to vibration signals. Instead, the human body responds to average vibration amplitude often described as the root mean square (RMS). The RMS amplitude is defined as the average of the squared amplitude of the signal, and is most frequently used to describe the effect of vibration on the human body. Decibel notation (in velocity decibels [VdB]) is commonly used to measure RMS. Decibel notation (VdB) serves to reduce the range of numbers used to describe human response to vibration. Typically, groundborne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receivers for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration-sensitive equipment.

The background vibration-velocity level in residential areas is generally 50 VdB. Groundborne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

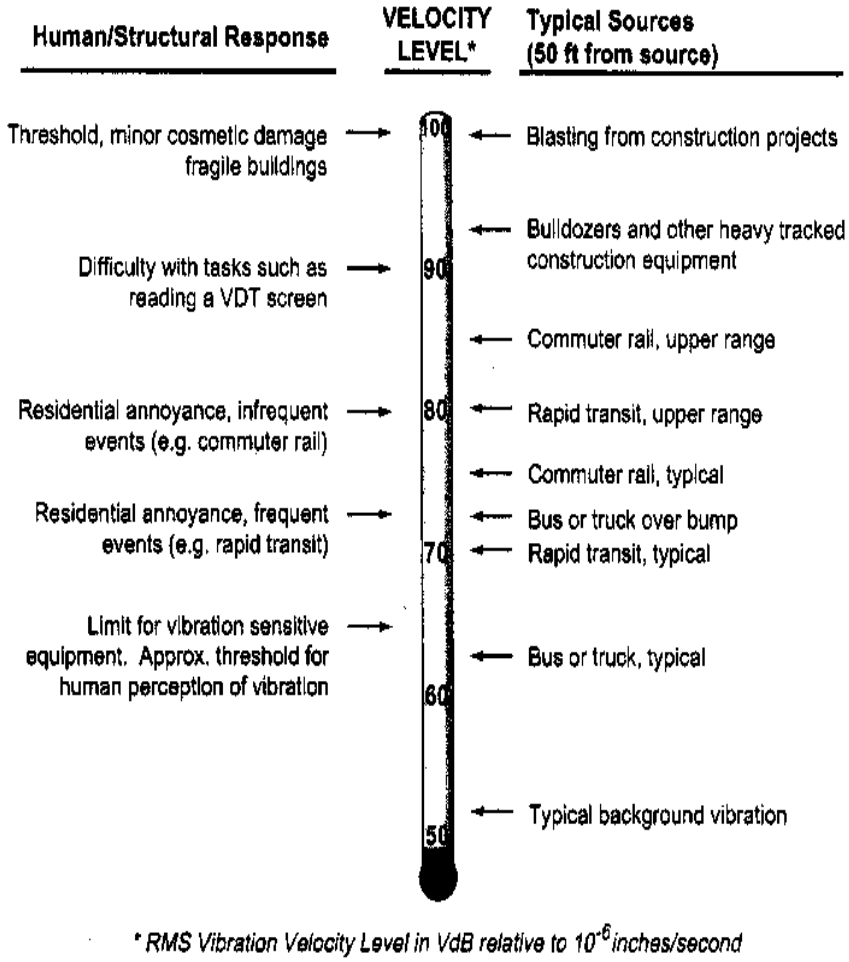
A comparison of common groundborne vibration levels is shown on Figure 4.2.11-3. Typical background vibration levels are between 50 and 60 VdB, whereas the levels for minor cosmetic damage to fragile buildings or blasting are generally in the range of 100 VdB.

Vibration Sensitive Land Uses

The Federal Transit Administration (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.

Figure 4.2.11-3. Common Groundborne Vibration Levels



Source: FTA 2006.

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 located across Jurupa Avenue from Parcel 7, across Locust Avenue north of 7th Avenue. and approximately 115 feet from the project's southern 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, Jurupa Avenue, 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

Ambient Noise Measurements

To assess the existing noise level environment including traffic and other existing noise sources, eleven 24-hour noise level measurements were taken on January 31, 2017 at sensitive receiver locations to describe and document the existing noise environment in the Specific Plan area. Figure 4.2.11-4 indicates noise level measurement locations. The long-term noise level measurements were taken as close to the nearest sensitive receiver locations as possible to assess the existing ambient hourly noise levels surrounding the project site. Descriptions of distances to the project site represent the distance between the monitoring location and the project site boundary.

- Location L1 represents the noise levels at Fiesta Park west of the project site within a residential community on Volante Drive. The noise level measurements collected show an overall 24-hour exterior noise level of 57.7 dBA CNEL. The hourly noise levels measured at location L1 ranged from 49.9 to 56.0 dBA L_{eq} during the daytime hours and from 44.8 to 53.4 dBA L_{eq} during the nighttime hours. The average daytime noise level was calculated at 54.0 dBA L_{eq} and average nighttime noise level at 49.8 dBA L_{eq}.
- Location L2 represents the noise levels northwest of the project site at the northeast corner of Volante Drive and Jurupa Avenue adjacent to homes. The noise level measurements collected show an overall 24-hour exterior noise level of 69.6 dBA CNEL. The hourly noise levels measured at location L2 ranged from 60.9 to 72.9 dBA L_{eq} during the daytime hours and from 52.4 to 66.6 dBA L_{eq} during the nighttime hours. The average daytime noise level was calculated at 68.0 dBA L_{eq} and average nighttime noise level at 60.6 dBA L_{eq}.
- Location L3 represents the noise levels northwest of the project site at the northwest corner of Tamarind Avenue and Jurupa Avenue near existing homes. The 24-hour CNEL indicates that the overall exterior noise level is 65.3 dBA CNEL. At location L3 the background ambient noise levels ranged from 58.5 to 65.4 dBA L_{eq} during the daytime hours and from 46.8 to 62.9 dBA L_{eq} during the nighttime hours. The average daytime noise level was calculated at 62.5 dBA L_{eq} and average nighttime noise level at 57.3 dBA L_{eq}.
- Located north of the project site, location L4 represents the noise levels on Locust Avenue near existing homes. The noise level measurements collected show an overall 24-hour exterior noise level of 75.2 dBA CNEL. The hourly noise levels measured at location L4 ranged from 66.8 to 75.3 dBA L_{eq} during the daytime hours and from 58.4 to 72.4 dBA L_{eq} during the nighttime hours. The average daytime noise level was calculated at 70.9 dBA L_{eq} and average nighttime noise level at 68.0 dBA L_{eq}.
- Location L5 represents the noise levels northeast of the project site on Jurupa Avenue near existing homes. The noise level measurements collected show an overall 24-hour exterior noise level of 70.4 dBA CNEL. The hourly noise levels measured at location L5 ranged from 61.8 to 69.5 dBA L_{eq} during the daytime hours and from 54.4 to 70.7 dBA L_{eq} during the nighttime hours. The average daytime noise level was calculated at 65.9 dBA L_{eq} and average nighttime noise level at 63.3 dBA L_{eq}.
- Location L6 represents the noise levels east of the project site on Linden Avenue adjacent to Kessler Park and existing homes. The noise level measurements collected show an overall 24-hour exterior noise level of 65.9 dBA CNEL. The hourly noise levels measured at location L6

ranged from 58.2 to 64.6 dBA L_{eq} during the daytime hours and from 50.1 to 64.6 dBA L_{eq} during the nighttime hours. The average daytime noise level was calculated at 62.1 dBA L_{eq} and average nighttime noise level at 58.4 dBA L_{eq}.

- Located south and east of the project site, location L7 represents the noise levels on 11th Street adjacent to existing homes. The noise level measurements collected show an overall 24-hour exterior noise level of 66.2 dBA CNEL. The hourly noise levels measured at location L7 ranged from 57.7 to 64.3 dBA L_{eq} during the daytime hours and from 51.5 to 63.5 dBA L_{eq} during the nighttime hours. The average daytime noise level was calculated at 61.2 dBA L_{eq} and average nighttime noise level at 59.1 dBA L_{eq}.
- Location L8 represents the noise levels adjacent to existing homes on Locust Avenue, south of 11th Street, and east of the proposed project. The noise level measurements collected show an overall 24-hour exterior noise level of 77.6 dBA CNEL. The hourly noise levels measured at location L8 ranged from 75.3 to 80.2 dBA L_{eq} during the daytime hours and from 66.0 to 79.6 dBA L_{eq} during the nighttime hours. The average daytime noise level was calculated at 77.6 dBA L_{eq} and average nighttime noise level at 74.6 dBA L_{eq}.
- Location L9 represents the noise levels east of the project site across Locust Avenue adjacent to homes north of 9th Street. The noise level measurements collected show an overall 24-hour exterior noise level of 77.8 dBA CNEL. The hourly noise levels measured at location L9 ranged from 68.3 to 76.1 dBA L_{eq} during the daytime hours and from 59.4 to 75.3 dBA L_{eq} during the nighttime hours. The average daytime noise level was calculated at 72.8 dBA L_{eq} and average nighttime noise level at 70.9 dBA L_{eq}.
- Location L10 represents the noise levels east across Locust Avenue from the project site adjacent to homes north of 8th Street. The noise level measurements collected show an overall 24-hour exterior noise level of 77.4 dBA CNEL. The hourly noise levels measured at location L10 ranged from 69.5 to 78.8 dBA L_{eq} during the daytime hours and from 61.6 to 75.0 dBA L_{eq} during the nighttime hours. The average daytime noise level was calculated at 73.5 dBA L_{eq} and average nighttime noise level at 70.0 dBA L_{eq}.
- Location L11 represents the noise levels south of the project site adjacent to homes located on Armstrong Road. The noise level measurements collected show an overall 24-hour exterior noise level of 58.4 dBA CNEL. The hourly noise levels measured at location L11 ranged from 48.7 to 57.8 dBA L_{eq} during the daytime hours and from 44.8 to 55.2 dBA L_{eq} during the nighttime hours. The average daytime noise level was calculated at 52.2 dBA L_{eq} and average nighttime noise level at 51.7 dBA L_{eq}.

Table 4.2.11-3 describes area daytime and nighttime ambient noise conditions, which are dominated by auto and heavy truck activities on area roadways near the noise level measurement locations. Table 4.2.11-4 identifies existing CNEL noise contours. Appendix K provides summary worksheets of the noise levels for each hour as well as the minimum, maximum, L_1, L_2, L_5, L_8, L_{25}, L_{50}, L_{90}, L_{95}, and L_{99} percentile noise levels observed during the daytime and nighttime periods.

Table 4.2.11-3. 24-Hour Ambient Noise Level Measurements

Location[1]	Distance to Project Boundary (Feet)[2]	Description	Energy Average Hourly Noise Level (dBA L_{eq})[3]		
			Daytime	Nighttime	CNEL
L1	3,760	At Fiesta Park west of the project site within a residential community on Volante Drive.	54.0	49.8	57.7
L2	3,330	Northwest of the project site at the northeast corner of Volante Drive and Jurupa Avenue adjacent to homes.	68.0	60.6	69.6
L3	1,650	Northwest of the project site at the northwest corner of Tamarind Avenue and Jurupa Avenue near existing homes.	62.5	57.3	65.3
L4	10	North of the project site on Locust Avenue near existing homes.	70.9	68.0	75.2
L5	200	Northeast of the project site on Jurupa Avenue near existing homes.	65.9	63.3	70.4
L6	1,415	East of the project site on Linden Avenue adjacent to Kessler Park and existing homes.	62.1	58.4	65.9
L7	610	On 11th Street adjacent to existing homes, south and east of the project site boundaries.	61.2	59.1	66.2
L8	42	Adjacent to existing homes on Locust Avenue, south of 11th Street, and east of the proposed project.	77.6	74.6	81.9
L9	40	East of the project site across Locust Avenue adjacent to homes north of 9th Street.	72.8	70.9	77.8
L10	38	East across Locust Avenue from the project site adjacent to homes north of 8th Street.	73.5	70.0	77.4
L11	315	South of the project site adjacent to homes on Armstrong Road.	52.2	51.7	58.4

[1] See Figure 4.2.11-4 for the noise level measurement locations.
[2] Distance is measured from the monitoring location to the project site boundary.
[3] Energy (logarithmic) average hourly levels. The long-term 24-hour measurement worksheets are included in Appendix K.
Daytime = 7:00 a.m. to 10:00 p.m.; Nighttime = 10:00 p.m. to 7:00 a.m.

Table 4.2.11-4. Existing Off-site Noise Levels

ID	Road	Segment	Adjacent Planned Land Use[1]	CNEL at Nearest Adjacent Land Use (dBA)[2]	Noise Criteria Exceeded?[3]	Distance to Contour from Centerline (Feet)		
						70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Sierra Av.	n/o Slover Av.	Commercial	80.7	Yes	388	835	1,800
2	Sierra Av.	s/o Slover Av.	Commercial	80.6	Yes	380	818	1,762
3	Sierra Av.	s/o Santa Ana Av.	Residential	81.2	Yes	417	898	1,935
4	Locust Av.	s/o Slover Av.	Residential	72.5	Yes	64	139	299
5	Locust Av.	s/o Santa Ana Av.	Residential	74.4	Yes	87	187	402

ID	Road	Segment	Adjacent Planned Land Use[1]	CNEL at Nearest Adjacent Land Use (dBA)[2]	Noise Criteria Exceeded?[3]	Distance to Contour from Centerline (Feet)		
						70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
6	Locust Av.	s/o Jurupa Av.	Vacant	75.1	Yes	121	261	561
7	Locust Av.	s/o Dwy. 4	Residential	76.2	Yes	114	245	528
8	Locust Av.	s/o Dwy. 5	Residential	76.2	Yes	114	245	528
9	Locust Av.	s/o 11th St.	Residential	76.0	Yes	110	238	512
10	Locust Av.	s/o 10th St.	Residential	75.8	Yes	108	232	500
11	Locust Av.	s/o 9th St.	Residential	75.7	Yes	105	227	488
12	Locust Av.	s/o 8th St.	Vacant	75.6	Yes	104	225	484
13	Locust Av.	s/o Dwy. 10	Residential	75.3	Yes	124	268	577
14	Armstrong Rd.	n/o Sierra Av.	Residential	74.9	Yes	126	271	584
15	Armstrong Rd.	s/o Sierra Av.	Residential	79.0	Yes	237	510	1,098
16	Cedar Av.	s/o Valley Bl.	Residential	81.0	Yes	281	606	1,306
17	Cedar Av.	n/o Slover Av.	Community Industrial	79.5	Yes	224	482	1,039
18	Cedar Av.	s/o Slover Av.	General Commercial	77.4	Yes	163	351	756
19	Cedar Av.	s/o Santa Ana Av.	Residential	78.0	Yes	177	381	821
20	Cedar Av.	s/o Jurupa Av.	Residential	78.0	Yes	179	385	829
21	Cedar Av.	s/o 11th St.	Residential	77.7	Yes	169	364	784
22	Cedar Av.	s/o 7th St.	Residential	79.9	Yes	238	513	1,106
23	Rubidoux Bl.	s/o El Rivino Rd.	Residential	78.4	Yes	234	504	1,085
24	Rubidoux Bl.	s/o Market St.	Light Industrial	78.5	Yes	219	471	1,016
25	Slover Av.	w/o Sierra Av.	Commercial	78.0	Yes	189	406	875
26	Slover Av.	e/o Sierra Av.	Commercial	80.7	Yes	283	610	1,314
27	Slover Av.	e/o Alder Av.	Community Industrial	77.8	Yes	172	370	798
28	Slover Av.	e/o Locust Av.	Residential	77.9	Yes	174	375	808
29	Slover Av.	e/o Cedar Av.	Residential	75.8	Yes	126	271	585
30	Santa Ana Av.	w/o Sierra Av.	Residential	75.3	Yes	104	225	484
31	Santa Ana Av.	e/o Sierra Av.	Residential	73.9	Yes	83	180	387
32	Santa Ana Av.	w/o Alder Av.	Residential	74.5	Yes	88	189	407
33	Santa Ana Av.	e/o Alder Av.	Residential	75.5	Yes	102	219	473
34	Santa Ana Av.	w/o Locust Av.	Residential	75.3	Yes	100	215	463
35	Santa Ana Av.	e/o Locust Av.	Residential	74.1	Yes	83	179	385
36	Jurupa Av.	e/o Locust Av.	Residential	70.0	Yes	60	130	279
37	Jurupa Av.	w/o Cedar Av.	Residential	71.6	Yes	66	142	307
38	7th St.	e/o Locust Av.	Residential	73.2	Yes	85	182	393

[1] Sources: City of Fontana General Plan Land Use Map; County of San Bernardino Land Use Plan (FH29A Fontana); and the City of Jurupa Valley General Plan Land Use Map.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use.
[3] Does the CNEL at the adjacent land use exceed the General Plan noise standards/criteria for the given land use (Section 3.3)?

Table 4.2.11-3 lists the existing (2017) 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 4.2.11-3 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 existing 65 and 70 dBA CNEL contour lines extending into residential areas in the following locations:

- Sierra Avenue south of Santa Ana Avenue (81.2 dBA CNEL at nearest residential use)
  - 417 feet from roadway centerline to 70 dBA CNEL
  - 898 feet from roadway centerline to 65 dBA CNEL
- Locust Avenue south of Slover Avenue (72.5 dBA CNEL at nearest residential use)
  - 64 feet from roadway centerline to 70 dBA CNEL
  - 139 feet from roadway centerline to 65 dBA CNEL
- Locust Avenue south of Santa Ana Avenue (74.4 dBA CNEL at nearest residential use)
  - 87 feet from roadway centerline to 70 dBA CNEL
  - 187 feet from roadway centerline to 65 dBA CNEL
- Locust Avenue south of Driveway 4 (76.2 dBA CNEL at nearest residential use)
  - 114 feet from roadway centerline to 70 dBA CNEL
  - 245 feet from roadway centerline to 65 dBA CNEL
- Locust Avenue south of Driveway 5 (76.2 dBA CNEL at nearest residential use)
  - 114 feet from roadway centerline to 70 dBA CNEL
  - 245 feet from roadway centerline to 65 dBA CNEL
- Locust Avenue south of 11th Street (76.0 dBA CNEL at nearest residential use)
  - 110 feet from roadway centerline to 70 dBA CNEL
  - 238 feet from roadway centerline to 65 dBA CNEL
- Locust Avenue south of 10th Street (75.8 dBA CNEL at nearest residential use)
  - feet from roadway centerline to 70 dBA CNEL
  - feet from roadway centerline to 65 dBA CNEL
- Locust Avenue south of 10th Street (75.8 dBA CNEL at nearest residential use)
  - 108 feet from roadway centerline to 70 dBA CNEL
  - 232 feet from roadway centerline to 65 dBA CNEL
- Locust Avenue south of 9th Street (75.7 dBA CNEL at nearest residential use)
  - 105 feet from roadway centerline to 70 dBA CNEL
  - 227 feet from roadway centerline to 65 dBA CNEL
- Locust Avenue south of Driveway 10 (75.3 dBA CNEL at nearest residential use)
  - 124 feet from roadway centerline to 70 dBA CNEL
  - 268 feet from roadway centerline to 65 dBA CNEL

- Armstrong Road north of Sierra Avenue (74.9 dBA CNEL at nearest residential use)
  - 126 feet from roadway centerline to 70 dBA CNEL
  - 271 feet from roadway centerline to 65 dBA CNEL
- Armstrong Road south of Sierra Avenue (79.0 dBA CNEL at nearest residential use)
  - 237 feet from roadway centerline to 70 dBA CNEL
  - 510 feet from roadway centerline to 65 dBA CNEL
- Cedar Avenue south of Valley Boulevard (81.0 dBA CNEL at nearest residential use)
  - 281 feet from roadway centerline to 70 dBA CNEL
  - 606 feet from roadway centerline to 65 dBA CNEL
- Cedar Avenue south of Santa Ana Avenue (78.0 dBA CNEL at nearest residential use)
  - 177 feet from roadway centerline to 70 dBA CNEL
  - 381 feet from roadway centerline to 65 dBA CNEL
- Cedar Avenue south of Jurupa Avenue (78.0 dBA CNEL at nearest residential use)
  - 179 feet from roadway centerline to 70 dBA CNEL
  - 385 feet from roadway centerline to 65 dBA CNEL
- Cedar Avenue south of 11th Street (77.7 dBA CNEL at nearest residential use)
  - 169 feet from roadway centerline to 70 dBA CNEL
  - 364 feet from roadway centerline to 65 dBA CNEL
- Cedar Avenue south of 7th Street (79.9 dBA CNEL at nearest residential use)
  - 238 feet from roadway centerline to 70 dBA CNEL
  - 513 feet from roadway centerline to 65 dBA CNEL
- Rubidoux Boulevard south of El Rivino Road (78.4 dBA CNEL at nearest residential use)
  - 234 feet from roadway centerline to 70 dBA CNEL
  - 504 feet from roadway centerline to 65 dBA CNEL
- Slover Avenue east of Locust Avenue (77.9 dBA CNEL at nearest residential use)
  - 174 feet from roadway centerline to 70 dBA CNEL
  - 375 feet from roadway centerline to 65 dBA CNEL
- Slover Avenue east of Cedar Avenue (75.8 dBA CNEL at nearest residential use)
  - 126 feet from roadway centerline to 70 dBA CNEL
  - 271 feet from roadway centerline to 65 dBA CNEL
- Santa Ana Avenue west of Sierra Avenue (75.3 dBA CNEL at nearest residential use)
  - 104 feet from roadway centerline to 70 dBA CNEL
  - 225 feet from roadway centerline to 65 dBA CNEL

- Santa Ana Avenue east of Sierra Avenue (73.9 dBA CNEL at nearest residential use)
    - 83 feet from roadway centerline to 70 dBA CNEL
    - 180 feet from roadway centerline to 65 dBA CNEL
- Santa Ana Avenue west of Alder Avenue (74.5 dBA CNEL at nearest residential use)
    - 88 feet from roadway centerline to 70 dBA CNEL
    - 189 feet from roadway centerline to 65 dBA CNEL
- Santa Ana Avenue east of Alder Avenue (75.5 dBA CNEL at nearest residential use)
    - 102 feet from roadway centerline to 70 dBA CNEL
    - 209 feet from roadway centerline to 65 dBA CNEL
- Santa Ana Avenue west of Locust Avenue (75.3 dBA CNEL at nearest residential use)
    - 100 feet from roadway centerline to 70 dBA CNEL
    - 215 feet from roadway centerline to 65 dBA CNEL
- Santa Ana Avenue east of Locust Avenue (74.1 dBA CNEL at nearest residential use)
    - 83 feet from roadway centerline to 70 dBA CNEL
    - 179 feet from roadway centerline to 65 dBA CNEL
- Jurupa Avenue east of Locust Avenue (70.0 dBA CNEL at nearest residential use)
    - 60 feet from roadway centerline to 70 dBA CNEL
    - 130 feet from roadway centerline to 65 dBA CNEL
- Jurupa Avenue west of Cedar Avenue (71.6 dBA CNEL at nearest residential use)
    - 66 feet from roadway centerline to 70 dBA CNEL
    - 142 feet from roadway centerline to 65 dBA CNEL
- 7th Street east of Locust Avenue (73.2 dBA CNEL at nearest residential use)
    - 85 feet from roadway centerline to 70 dBA CNEL
    - 182 feet from roadway centerline to 65 dBA CNEL

The specific assumptions used in developing existing noise levels and the model printouts are provided in 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 overflown 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 overflown 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 on roadways adjacent to the Specific Plan area are limited to passenger vehicles and periodic delivery trucks accessing the local roadways. Existing vibration sources on roadways already carrying substantial numbers of trucks, such as Slover Avenue, are also an existing source of vibrations.

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 CNEL[1] or L_{dn},[2] and used as a guide in land use decisions to minimize the exposure of community 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.

[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.

[2] L_{dn} is a 24-hour day and night A-weighed 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}.

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.

State of California Green Building Standards Code

California's 2014 Green Building Standards Code contains mandatory measures for non-residential building construction in Section 5.507 on Environmental Comfort. These noise standards are applied to new construction in California for controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when non-residential structures are developed in areas where the exterior noise levels exceed 65 dBA CNEL, such as within a noise contour of an airport, freeway, railroad, and other areas where noise contours are not readily available. If the development falls within an airport or freeway 65 dBA CNEL noise contour, the combined sound transmission class (STC) rating of the wall and roof-ceiling assemblies must be at least 50. For those developments in areas where noise contours are not readily available and the noise level exceeds 65 dBA L_{eq} for any hour of operation, a wall and roof-ceiling combined STC rating of 45, and exterior windows with a minimum STC rating of 40 are required (Section 5.507.4.1).

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.)

The City of Fontana noise control guidelines for determining and mitigating non-transportation or stationary noise source impacts from operations in neighboring residential areas are found in the Zoning and Development Code (Section 30-182) in Appendix 3.1. For residential zoning districts, Section 30-182 indicates that no use shall create or cause to be created any sound that exceeds the ambient noise standards outlined in Table 30-182A. The performance standards limit the maximum allowable exterior noise level to 65 dBA L_{eq} during any time of the day at sensitive receiver locations.

To protect residents from the negative effect of "spillover" noise (Goal #3), the City of Fontana has identified the following policies in the General Plan Noise Element:

(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

(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.)

(5) Construction shall be performed as quietly as feasible when performed in proximity to residential or other noise sensitive land uses.

To support these policies, the General Plan identifies the following actions:

(8) Require that new industrial and commercial land uses consider the noise from on-site operations (including unloading/loading activities) and its potential impacts on vacant land slated for subsequent sensitive use development during the environmental review process.

(9) Require that new industrial and commercial land uses design their sites so as to route truck/train traffic as far as possible from adjoining, more sensitive uses. Alternatively, require these facilities to provide acoustic shielding (e.g., sound walls) to protect more sensitive land uses from on-site vehicle movement.

(10) Require that new industrial and commercial land uses orient their loading docks so as to maintain the maximum distance from adjoining, more sensitive land uses. Alternatively, require these facilities to provide acoustic shielding (e.g., sound walls of enclosed docks) for on-site loading operations.

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.

The City's noise control guidelines for determining and mitigating non-transportation or stationary noise source impacts from operations in neighboring residential areas are found in Zoning and Development Code Section 30-182. For residential zoning districts, Section 30-182 indicates that no use shall create or cause to be created any sound that exceeds the ambient noise standards outlined in Table 30-182A, which are 45 dBA interior and 65 dBA exterior. The performance standards limit the maximum allowable exterior noise level to 65 dBA L_{eq} during any time of the day at sensitive receiver locations.

Because the City has not adopted 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):

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 4.2.11-5 through 4.2.11-8).
- 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 4.2.11-5 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.

Table 4.2.11-5. County of San Bernardino Interior/Exterior Noise Level Standards – Mobile Noise Sources

		L_{dn} or CNEL, dBA	
Categories	**Land Use**	**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.

L_{dn} = day-night average noise level

N/A = not applicable

Table 4.2.11-6. County of San Bernardino 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.
L_2 = the noise level exceeded 2% of the time during a stated period.
L_8 = the noise level exceeded 8% of the time during a stated period.
L_{25} = the noise level exceeded 25% of the time during a stated period.
L_{50} = 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 4.2.11-7. County of San Bernardino 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.

Table 4.2.11-8. County of San Bernardino 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.
L_{dn} = day/night noise level

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.

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 4.2.11-7.

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 are regulated by the County's Development Code, Section 83.01, which has noise standards similar to those identified in Table 4.2.11-5. In addition, Table 4.2.11-8 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.

Vibration Standards. The County of San Bernardino Development Code, Section 83.01.090(a) states that vibration shall be no "greater than or equal to two-tenths inches per second measured at or beyond the lot line."

City of Jurupa Valley Operational Noise Standards

The City of Jurupa Valley Municipal Code, adopted from the County of Riverside Municipal Code, includes stationary-source noise level limits in Section 9.52.040. For residential use, the City of Jurupa Valley Municipal Code indicates that the exterior daytime (7:00 a.m. to 10:00 p.m.) noise level limit is 55 dBA L_{eq}, and the nighttime noise level limit is 45 dBA L_{eq} (10:00 p.m. to 7:00 a.m.).

Comparison of City of Fontana, San Bernardino County, and City of Jurupa Valley Noise Standards

A comparison of the noise standards maintained by the cities of Fontana and Jurupa Valley and San Bernardino County is presented in Tables 4.2.11-9 and 4.2.11-10.

Table 4.2.11-9. Comparison of Noise Standards

			Exterior Noise Levels (dBA)[4]					
Jurisdiction	Land Use	Time Period	L_{eq} (E. Avg.)	L_{50} (30 mins)	L_{25} (15 mins)	L_8 (5 mins)	L_2 (1 min)	L_{max} (Anytime)
City of Fontana[1]	Residential	Daytime	65	-	-	-	-	-
		Nighttime	65	-	-	-	-	-
County of San Bernardino[2]	Residential	Daytime	55	55	60	65	70	75
		Nighttime	45	45	50	55	60	65
City of Jurupa Valley[3]	Residential	Daytime	55	-	-	-	-	-
		Nighttime	45	-	-	-	-	-

[1] Source: Section 30-182 of the City of Fontana Development Code, Division 6 - Performance Standards.
[2] Source: Section 83.01.080(c) of the County of San Bernardino County Code, Title 8 Development Code.
[3] Source: Section 9.52.040, Table 1, of the City of Jurupa Valley Municipal Code.
[4] L_{eq} represents a steady state sound level containing the same total energy as a time varying signal over a given sample period. The percent noise level is the level exceeded "n" percent of the time during the measurement period. L_{25} is the noise level exceeded 25% of the time.
Daytime = 7:00 a.m. to 10:00 p.m.; Nighttime = 10:00 p.m. to 7:00 a.m.; E. Avg. = logarithmic (energy) average

Table 4.2.11-10. Comparison of Construction Noise Standards

Jurisdiction	Permitted Hours of Construction Activity	Construction Noise Level Standards (dBA L_{eq})
City of Fontana[1]	7:00 a.m. and 6:00 p.m. on weekdays and between the hours of 8:00 a.m.; and 5:00 p.m. on Saturdays	n/a
County of San Bernardino[2]	7:00 a.m. to 7:00 p.m. on any day; except Sundays and Federal holidays.	n/a
City of Jurupa Valley[3]	6:00 a.m. to 6:00 p.m. June to September; 7:00 a.m. to 6:00 p.m. October to May	n/a
Acceptable thresholds for determining the relative significance of project construction noise levels[4]:		65

[1] Source: City of Fontana Municipal Code, Section 18-62.
[2] Source: Section 83.01.080(g)(3) of the County of San Bernardino County Code, Title 8 Development Code.
[3] Source: City of Jurupa Valley Municipal Code, Section 9.52.020.
[4] Within the County of San Bernardino, construction noise level limits of 65 dBA L_{eq} are identified in the following cities: Rancho Cucamonga (Development Code, Section 17.66.050(D)(4)(a) Noise Standards); Adelanto (Code of Ordinances, Section 17.90.020(d) Construction Practices); and Chino (Municipal Code, Section 9.40.060(D) Special Provisions).
n/a = Municipal Code does not identify maximum acceptable construction source noise levels.

Impact Analysis

Methodology

For analytical purposes, the following assumptions were made based on discussion with the applicant to develop reasonable worst-case analyses:

- The 3,473,690 square feet of total buildings area within the project site at buildout would be distributed between "high cube" and typical warehouse distribution buildings as follows:
  - A total of 3,183,100 square feet of "high cube" warehouse uses[3] would be developed within five buildings (Buildings 1–3, 5, and 7). "High cube" and typical warehouse distribution are used for the storage of materials, goods, and merchandise prior to their distribution to retail outlets, distribution centers, or other warehouses.
  - A total of 290,590 square feet of typical warehouse uses would be developed within Buildings 4 and 6. Warehouse uses are primarily devoted to the storage of materials, but they may also include office and maintenance areas.
  - A maximum of 15 percent of the total floor area within the project site would be devoted to cold storage (521,550 square feet).
  - Project operations would be ongoing 24 hours per day, 7 days per week.
  - On-site noise sources are expected to include: idling trucks, truck delivery activities, truck loading and unloading, backup alarms, and parking lot vehicle movements.

[3] A high-cube warehouse is distinguished from a typical warehouse in relation to its size (typically has 500,000 gross square feet or more of floor area) and its level of automation. A typical high-cube warehouse has a high level of on-site automation and logistics management to enable highly efficient processing of goods through the high-cube warehouse.

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 FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level. The national Reference Energy Mean Emission Levels used in this analysis have been substituted with the California Vehicle Noise Emission Levels to represent local conditions. 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.

The Federal Interagency Committee on Noise (FICON) developed guidance to be used for the assessment of project-generated increases in noise levels that consider the ambient noise level. The FICON recommendations are based on studies that relate aircraft noise levels to the percentage of persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of cumulative noise exposure metrics, such as the average daily noise level (i.e., CNEL).

For example, if the ambient noise environment is quiet (less than 60 dBA) and the new noise source greatly increases the noise levels, an impact may occur if the noise criteria may be exceeded. Therefore, for this analysis, FICON identifies a *readily perceptible* 5 dBA or greater project-related noise level increase as a significant impact when the noise criteria for a given land use is exceeded. Per FICON, in areas where the without-project noise levels range from 60 to 65 dBA, a 3 dBA *barely perceptible* noise level increase appears to be appropriate for most people. When the without-project noise levels already exceed 65 dBA, any increase in community noise louder than 1.5 dBA or greater is considered a significant impact if the noise criteria for a given land use is exceeded, because it likely contributes to an existing noise exposure exceedance. Table 4.2.11-11 below provides a summary of the potential noise impact significance criteria, based on guidance from FICON.

Table 4.2.11-11 Significance of Noise Impacts at Noise-Sensitive Receivers

Without-Project Noise Level	Potential Significant Impact
< 60 dBA	5 dBA or more
60 - 65 dBA	3 dBA or more
> 65 dBA	1.5 dBA or more
Source: FICON 1992	

The Fontana Plan Noise Element, Figure 12-1, *Land Use Compatibility for Community Noise Exposure* matrix is used to determine potential impacts at adjacent non-noise-sensitive land uses. The *normally acceptable* exterior noise level for non-noise-sensitive land use, such as industrial use, is 70 dBA CNEL. Noise levels greater than 70 dBA CNEL are considered *conditionally acceptable* per the *Land Use Compatibility for Community Noise Exposure* (City of Fontana 2003).

Noise impacts are considered significant if any of the following occur as a direct result of the proposed development. Table 4.2.11-11 shows the significance criteria summary matrix.

Off-Site Traffic Noise

- When the noise levels at existing and future noise-sensitive land uses (e.g., residential):
  - are less than 60 dBA, a 5.0 dBA or greater project-related noise level increase would be a significant impact; or
  - range from 60 to 65 dBA, a 3.0 dBA or greater project-related noise level increase would be a significant impact; or
  - already exceed 65 dBA, a 1.5 dBA or greater project-related noise level increase would be a significant impact.
- When the noise levels at existing and future non-noise-sensitive land uses (e.g., industrial):
  - are less than Fontana General Plan Noise Element, Figure 12-1, *normally acceptable* 70 dBA, a 5.0 dBA or greater project-related noise level increase would be a significant impact; or
  - are greater than Fontana General Plan Noise Element, Figure 12-1, *normally acceptable* 70 dBA a 3.0 dBA or greater project-related noise level increase would be a significant impact.

Operational Noise

- If project-related operational (stationary-source) noise levels:
  - Exceed the exterior 65 dBA L_{eq} noise level standards at adjacent land uses in City of Fontana Zoning and Development Code, Table 30-128A); or
  - Exceed the exterior 55 dBA L_{eq} daytime or 45 dBA L_{eq} nighttime noise level standards for sensitive land uses by more than:
    - A cumulative period of 30 minutes (L_{50});
    - Exceed the standards above plus 5 dBA for a cumulative period of more than 15 minutes (L_{25}) in any hour; or
    - Exceed the standard above plus 10 dBA for a cumulative period of more than 5 minutes (L_{8}) in any hour; or
    - Exceed the standard above plus 15 dBA for a cumulative period of more than 1 minute (L_{2}) in any hour; or
    - Exceed the standard above the standard plus 20 dBA at any time (maximum noise level [L_{max}]).
- In addition, a significant impact would result if project-related activities would exceed the exterior daytime 55 dBA L_{eq} or nighttime 45 dBA L_{eq} noise level standards at nearby sensitive residential land uses within the City of Jurupa Valley per Section 9.52.040, Table 1, of the City of Jurupa Valley Municipal Code.

Construction Noise and Vibration

- A significant impact would occur if project-related construction activities:
  - occur at any time other than the permitted hours of 7:00 a.m. and 6:00 p.m. on weekdays and between the hours of 8:00 a.m. and 5:00 p.m. on Saturdays; or
  - create noise levels at sensitive residential receivers that exceed the construction noise level limit of 65 dBA L_{eq}.
- A significant impact would occur if short-term project construction vibration levels exceed the County of San Bernardino vibration standard of 0.2 inch per second (in/sec) PPV at sensitive receiver locations.

Thresholds of Significance

Criteria for determining the significance of impacts related to noise are based on criteria contained in Appendix G of the 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 related to noise.

Specific Plan Requirements

SP-GHG-4: Provide Electrical Connections at 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-N-1: Noise Performance Standards: The noise standard for generation of noise from any stationary noise source as it affects adjacent properties shall be:

Residential	55 A-weighted decibels (dBA) (7:00 a.m.–10:00 p.m.)
	45 dBA (10:00 p.m.–7:00 a.m.)
Industrial	70 dBA any time

No person shall operate or cause the operation of any stationary source of noise at any location or allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, which causes the noise level, when measured on any other property, to exceed:

1. The noise standard specified above for the receiving land use for a cumulative period of more than 30 minutes in any hour.
2. The noise standard specified above for the receiving land use plus 5 dBA for a cumulative period of more than 15 minutes in any hour.
3. The noise standard specified above for the receiving land use plus 10 dBA for a cumulative period of more than 5 minutes in any hour.
4. The noise standard specified above for the receiving land use plus 15 dBA for a cumulative period of more than 1 minute in any hour.
5. The noise standard specified above for the receiving land use plus 20 dBA for any period of time.
6. If the noise exceeding the applicable noise standard or the ambient noise level consists entirely of impact noise or simple tone noise, each of the noise levels described above shall be reduced by 5 dBA.

The preceding performance standards do not apply to the following uses, each of which shall meet any applicable requirements of the City of Fontana:

- Motor vehicles;
- Emergency equipment, vehicles, devices, and activities; and
- Temporary construction, maintenance, or demolition activities conducted between the hours of 6:00 a.m. and 7:00 p.m.

SP-N-2: Installation of Sound Barriers on Site. Screen wall/noise barriers will be constructed near Buildings 1, 2, 3, 4, and 7, as shown on Exhibit 10-A of the West Valley Logistics Center Noise Impact Analysis, 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. Screen walls would be constructed from cement or concrete masonry units 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. 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 grade.

In addition, minimum 8-foot high temporary construction noise barriers will be installed at the project site boundaries adjacent to sensitive receivers, as shown in the West Valley Logistics Center Noise Study, for the duration of mobile-equipment construction activities for the duration of the site preparation and grading stages of project construction. The noise-control barriers must have a solid face from top to bottom. The noise-control barriers must meet the minimum height and be constructed as follows:

- The temporary noise barriers will provide a minimum transmission loss of 20 A-weighted decibels (Federal Highway Administration, Noise Barrier Design Handbook). The noise barrier is to be constructed using an acoustical blanket (e.g., vinyl acoustic curtains or quilted blankets) attached to the construction site perimeter fence or equivalent temporary fence posts.
- The noise barrier will be maintained and any damage promptly repaired. Gaps, holes, or weaknesses in the barrier or openings between the barrier and the ground will be promptly repaired.
- The noise control barrier and associated elements are to be completely removed and the site appropriately restored upon the conclusion of the construction activity.

Alternatively, the planned 14-foot-high permanent screen walls (noise barriers) at the eastern project site boundary adjacent to Locust Avenue, shown on Figure 3-3, if built prior to project construction, can replace the 8-foot-high temporary noise barriers intended to reduce the construction noise levels at homes on Locust Avenue between 11th and 8th Streets.

SP-N-3: Truck Idling. To reduce potential noise impacts related to truck idling during project operations, deed restrictions and parking lot signage shall limit the maximum number of trucks idling on the east side of Building 1 to 20 trucks during nighttime hours between 10:00 p.m. and 7:00 a.m. Proposed deed restrictions and parking lot signage will be submitted to the City of Fontana Community Development Department for review and approval prior to issuance of a certificate of occupancy.

SP-N-4: Vibration Performance Standard. No person shall create or cause the creation of any activity that causes a vibration that can be felt beyond the property line of any residentially zoned property with or without the aid of an instrument.

Regulatory Requirement

RR-N-1: Comply with the Construction Noise Municipal Code Exemption. The City of Fontana'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.

SR-N-4: Ensure Proper Operation and Maintenance of Operational Equipment. All on-site operating equipment under the control of the building user that is used in outdoor areas (including but not limited to trucks, tractors, forklifts, and hostlers) shall be operated with properly functioning and well-maintained mufflers. The City of Fontana may conduct periodic inspection at its discretion.

SR-N-5: Ensure Proper Maintenance of On-site Pavement. Quality pavement conditions free of vertical deflection (i.e., speed bumps) and potholes shall be maintained to minimize on-site operational truck noise. The City of Fontana may conduct periodic inspection at its discretion.

SR-N-6: Post Appropriate Notices. The truck access gates and loading docks within the truck court of Buildings 1–7 shall be posted with signs that state:

- Truck drivers shall turn off engines when not in use;
- Diesel trucks servicing the project shall not idle for more than 5 minutes; and
- Telephone numbers of the building facilities manager and the California Air Resources Board to report violations.

SR-N-7: Limitation on Construction Hours. Prior to approval of grading plans and/or issuance of building permits, plans shall include a note indicating that noise-generating project construction activities shall only occur between the hours of 7:00 a.m. and 6:00 p.m. on weekdays and between the hours of 8:00 a.m. and 5:00 p.m. on Saturdays.

- During all project site construction, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise-sensitive receptors nearest the project site.
- The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receivers nearest the project site (i.e., to the center) during all project construction.
- The construction contractor shall limit construction haul truck deliveries to the same hours specified for construction equipment (between the hours of 7:00 a.m. and 6:00 p.m. on weekdays and between the hours of 8:00 a.m. and 5:00 p.m. on Saturdays). The contractor shall design delivery routes to minimize the exposure of sensitive land uses or residential dwellings to delivery truck-related noise.

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 located across Locust Avenue from the project site (see Figure 4.2.11-4).

Construction of the proposed project would require the use of scrapers, dozers, and trucks. Table 4.2.11-12 provides a summary of typical noise levels for 17 types of construction equipment and activities. Using the reference construction equipment noise levels, calculations of WVLCSP construction noise level impacts at the nearby sensitive receiver locations were completed. Tables 4.2.11-13 and 4.2.11-14 present the short-term construction noise levels for each stage of construction. Table 4.2.11-13 provides a summary of the construction noise levels by stage at nearby noise-sensitive receptors. Based on the stages of construction, noise impacts associated with the WVLCSP are expected to create temporarily high noise levels at the nearby receptors. To assess peak construction noise, this analysis shows the highest noise impacts when the equipment with the highest reference noise level is operating at the closest point from the center of construction activity to each receiver location.

Table 4.2.11-12. Construction Equipment Noise Levels

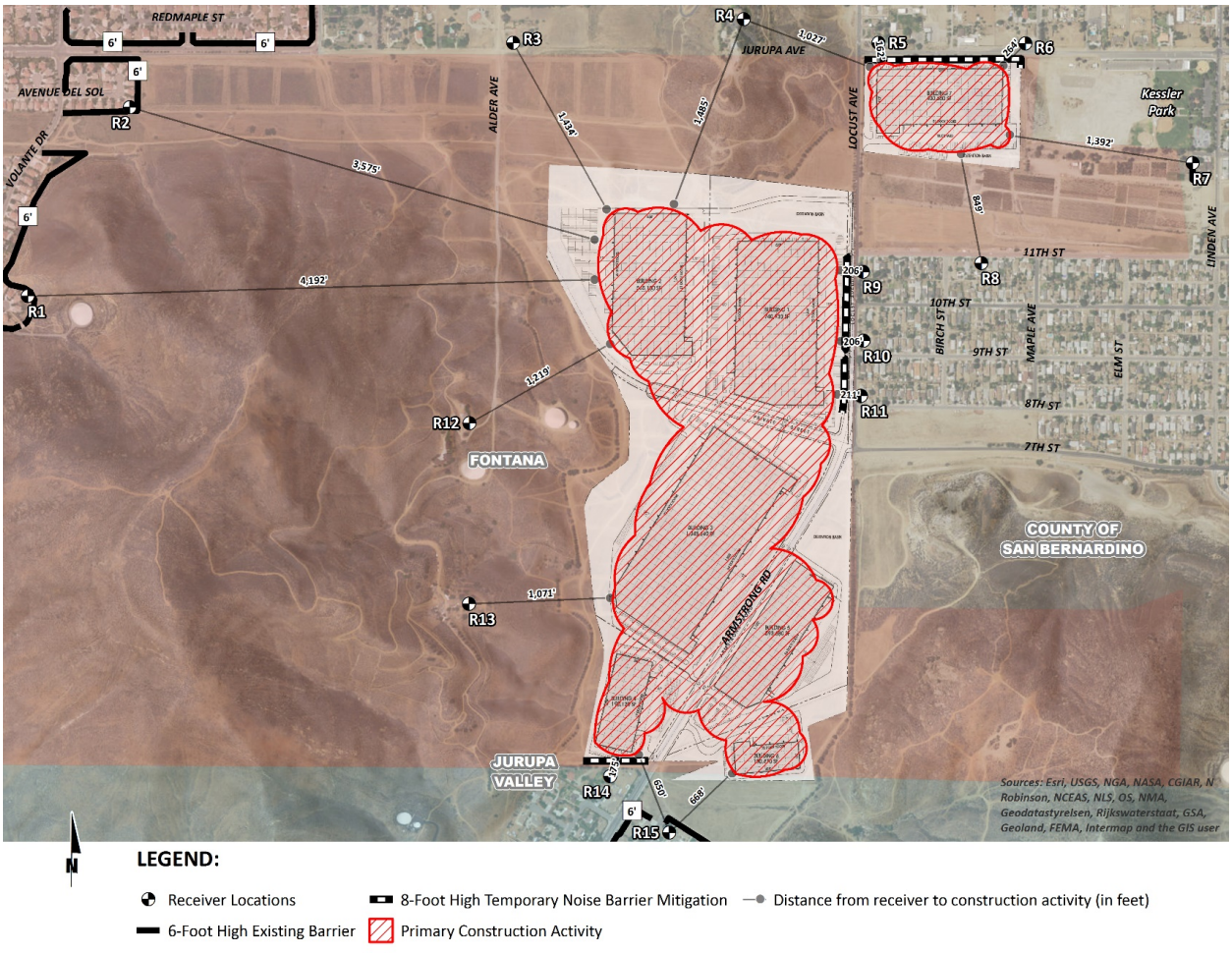
ID	Noise Source	Distance from Source (Feet)	Noise Levels at Reference Distance (dBA L_{eq})	Noise Levels at 50 Feet (dBA L_{eq})[7]
1	Truck Pass-Bys & Dozer Activity[1]	30	63.6	59.2
2	Dozer Activity[1]	30	68.6	64.2
3	Construction Vehicle Maintenance[2]	30	71.9	67.5
4	Foundation Trenching[2]	30	72.6	68.2
5	Rough Grading Activities[2]	30	77.9	73.5
6	Residential Framing[3]	30	66.7	62.3
7	Water Truck Pass-By & Backup Alarm[4]	30	76.3	71.9
8	Dozer Pass-By[4]	30	84.0	79.6
9	Two Scrapers & Water Truck Pass-By[4]	30	83.4	79.0
10	Two Scrapers Pass-By[4]	30	83.7	79.3
11	Scraper, Water Truck, & Dozer Activity[4]	30	79.7	75.3
12	Concrete Mixer Truck Movements[5]	50	71.2	71.2
13	Concrete Paver Activities[5]	30	70.0	65.6
14	Concrete Mixer Pour & Paving Activities[5]	30	70.3	65.9
15	Concrete Mixer Backup Alarms & Air Brakes[5]	50	71.6	71.6
16	Concrete Mixer Pour Activities[5]	50	67.7	67.7
17	Forklift, Jackhammer, & Metal Truck Bed Loading	50	67.9	67.9

ID	Noise Source	Distance from Source (Feet)	Noise Levels at Reference Distance (dBA L_{eq})	Noise Levels at 50 Feet (dBA L_{eq})[7]

Source: Appendix K

[1] As measured by Urban Crossroads on 10/14/15 at a business park construction site located at the northwest corner of Barranca Parkway and Alton Parkway in the City of Irvine.
[2] As measured by Urban Crossroads on 10/20/15 at a construction site located in Rancho Mission Viejo.
[3] As measured by Urban Crossroads on 10/20/15 at a residential construction site located in Rancho Mission Viejo.
[4] As measured by Urban Crossroads on 10/30/15 during grading operations within an industrial construction site located in the City of Ontario.
[5] Reference noise level measurements were collected from a nighttime concrete pour at an industrial construction site, located at 27334 San Bernardino Avenue in the City of Redlands, between 1:00 a.m. to 2:00 a.m. on 7/1/15.
[6] As measured by Urban Crossroads on 9/9/16 during demolition of an existing paved parking lot at 41 Corporate Park in Irvine.
[7] Reference noise levels are calculated at 50 feet using a drop off rate of 6 dBA per doubling of distance (point source).

Figure 4.2.11-4. Construction Noise Source and Receiver Locations



The construction noise analysis shows that the highest construction noise levels would occur when equipment is operating at the project site boundary. As shown in Table 4.2.11-12, unmitigated construction noise levels that would be experienced at nearby sensitive receiver locations are expected to range from 36.1 to 69.4 dBA L_{eq} and will exceed the 65 dBA L_{eq} construction noise level threshold at receiver locations R5, R6, R9 to R11, and R14.

Table 4.2.11-13. WVLCSP Construction Noise Level Summary without Noise Barriers (dBA L_{eq})

Receiver Location[1]	Construction Phase Hourly Noise Level (dBA L_{eq})					
	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	Peak Activity[2]
R1	36.1	36.1	24.7	28.1	24.0	36.1
R2	37.5	37.5	26.1	29.5	25.4	37.5
R3	50.4	50.4	39.0	42.4	38.3	50.4
R4	48.3	48.3	36.9	40.3	36.2	48.3
R5	69.4	69.4	58.0	61.4	57.3	69.4
R6	65.1	65.1	53.7	57.1	53.0	65.1
R7	45.7	45.7	34.3	37.7	33.6	45.7
R8	55.0	55.0	43.6	47.0	42.9	55.0
R9	67.3	67.3	55.9	59.3	55.2	67.3
R10	67.3	67.3	55.9	59.3	55.2	67.3
R11	67.1	67.1	55.7	59.1	55.0	67.1
R12	51.8	51.8	40.4	43.9	39.7	51.8
R13	52.9	52.9	41.5	45.0	40.8	52.9
R14	68.7	68.7	57.3	60.7	56.6	68.7
R15	52.3	52.3	40.9	44.3	40.2	52.3

Source: Appendix K

[1] Noise receiver locations are shown on Figure 4.2.11-4.

[2] Estimated construction noise levels during peak operating conditions.

While these noise levels would represent a substantial increase over existing ambient noise levels, construction would be limited to 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**.

To further address construction noise, temporary construction noise barriers would be provided at the construction boundaries near affected receiver locations where construction noise levels could exceed applicable thresholds, as shown on Figure 4.2.11-4 (see **Specific Plan Requirement SP-N-2**). These noise barriers would be in place for the duration of mobile-equipment construction activities during the site preparation and grading stages of Specific Plan area construction. The construction noise analysis presents a conservative, worst-case approach with the highest noise-level-producing equipment for each stage of site construction operating at the closest point from the edge of construction activity to the nearby sensitive receiver locations. This scenario is unlikely to

occur during typical construction activities and likely overstates the construction noise levels that would be experienced at each receiver location. The analysis also does not account for noise attenuation from the area's natural topography. With the installation of temporary exterior noise control barriers at the minimum height shown in Table 4.2.11-14 and on Figure 4.2.11-5, the worst-case construction noise levels at the nearby residential receivers would be less than significant.

Table 4.2.11-14 shows the peak construction noise levels at the receiver locations would range from 60.2 to 64.5 dBA L_{eq} with the attenuation provided by temporary construction noise barriers and/or natural topography. As shown in Table 4.2.11-14, temporary noise barriers would reduce construction noise levels at receiver locations to below 65 dBA L_{eq}. Alternatively, the planned 14-foot-high screen wall (noise barrier) at the eastern Specific Plan boundary could be substituted for the temporary noise barriers if built prior to project construction. The noise impact due to project construction would be less than significant with the use of temporary noise barriers for the duration of mobile-equipment construction activities during the site preparation and grading stages of site development. The temporary construction noise barrier attenuation calculations are provided in Appendix K, along with example photographs of temporary noise barrier installations for reference.

Table 4.2.11-14. Construction Noise Levels with Noise Barriers (dBA L_{eq})

	Construction Noise Levels (dBA L_{eq})			With Temporary Noise Barriers (dBA L_{eq})			
Receiver Location[1]	**Peak Activity[2]**	**Threshold[3]**	**Threshold Exceeded?[4]**	**Temp. Barrier Height (Feet)**	**Attenuation**	**Construction Noise Levels[5]**	**Threshold Exceeded?[4]**
R1	36.1	65	No	-	-	-	No
R2	37.5	65	No	-	-	-	No
R3	50.4	65	No	-	-	-	No
R4	48.3	65	No	-	-	-	No
R5	69.4	65	Yes	8	-4.9	64.5	No
R6	65.1	65	Yes	8	-4.9	60.2	No
R7	45.7	65	No	-	-	-	No
R8	55.0	65	No	-	-	-	No
R9	67.3	65	Yes	8	-4.9	62.4	No
R10	67.3	65	Yes	8	-4.9	62.4	No
R11	67.1	65	Yes	8	-4.9	62.2	No
R12	51.8	65	No	-	-	-	No
R13	52.9	65	No	-	-	-	No
R14	68.7	65	Yes	8	-4.9	63.8	No
R15	52.3	65	No	-	-	-	No

[1] Noise receiver locations are shown in Appendix K.
[2] Estimated construction noise levels during peak operating conditions, as shown in Table 4.2.11-13.
[3] Construction noise standards as shown in Table 3-2.
[4] Do the estimated project construction noise levels satisfy the construction noise level threshold?
[5] Mitigated construction noise levels with the attenuation provided by the temporary noise barriers during construction required by **Specific Plan Requirement SP-N-2** (see also Appendix K for the temporary noise barrier attenuation calculations).

Off-site Construction Noise

Off-site construction activities would consist of road widening and paving, construction of an off-site sewer lift station, and installation of sewer lines, as described in Chapter 3, *Project Description*. Peak noise levels for these off-site construction activities could reach 71.6 dBA L_{eq} at 50 feet for roadway construction and 68.2 dBA L_{eq} at 50 feet for sewer lift station construction and sewer line installation. While construction would be limited to 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**, noise would be generated at sensitive off-site receptors along Locust Avenue and Jurupa Avenue in excess of 65 dBA L_{eq}.

Operational Noise

Potential long-term noise impacts would be associated with stationary sources on the project site and on- and off-site traffic activities. The operational noise level calculations shown in Tables 4.2.11-15 and 4.2.11-16 account for distance attenuation. As indicated in these tables, project-related operational noise levels would range from 19.6 to 44.8 dBA L_{eq}, 16.8 to 42.0 dBA L_{50}, 13.7 to 40.4 dBA L_{25}, 18.1 to 44.9 dBA L_8, 21.8 to 48.7 dBA L_2, and 27.7 to 53.6 dBA L_{max} at the sensitive receiver locations. This analysis includes the barrier attenuation provided by the planned 14-foot-high screen walls (noise barriers) as shown on Figure 4.2.11-5.

Figure 4.2.11-5. Operational Noise Source and Receptor Locations

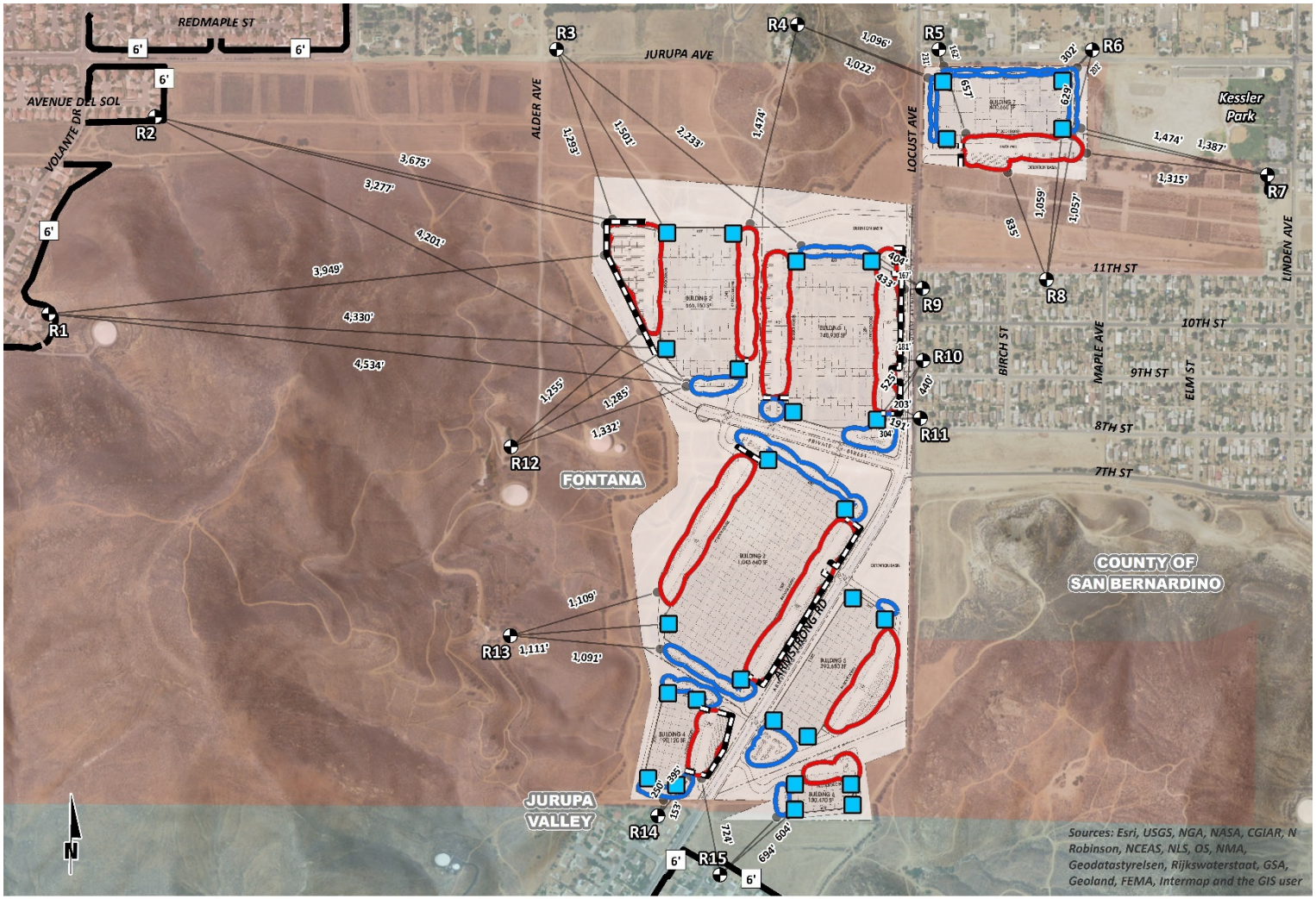


Table 4.2.11-15. West Valley Logistics Center Operational Noise Generation

Receiver Location[1]	Noise Source[2]	Project Operational Noise Levels (dBA)[3]					
		Leq (E. Avg.)	L_{50} (30 mins)	L_{25} (15 mins)	L_8 (5 mins)	L_2 (1 min)	L_{max} (Anytime)
R1	Distribution/Warehouse Activity	13.2	10.2	13.2	17.8	21.6	26.0
	Roof-Top Air Conditioning Units	18.4	15.6	0.0	0.0	0.0	19.4
	Parking Lot Vehicle Movements	0.9	0.0	1.5	4.5	7.9	20.3
	Combined Noise Level:	19.6	16.8	13.7	18.1	21.8	27.7
R2	Distribution/Warehouse Activity	14.8	11.8	14.8	19.4	23.2	27.6
	Roof-Top Air Conditioning Units	19.9	17.1	0.0	0.0	0.0	20.9
	Parking Lot Vehicle Movements	1.6	0.0	2.2	5.2	8.6	21.0
	Combined Noise Level:	21.1	18.3	15.2	19.6	23.4	29.2
R3	Distribution/Warehouse Activity	22.9	19.9	22.9	27.5	31.3	35.7
	Roof-Top Air Conditioning Units	27.7	24.9	4.2	2.0	0.6	28.7
	Parking Lot Vehicle Movements	7.1	3.7	7.7	10.7	14.1	26.5
	Combined Noise Level:	29.0	26.1	23.1	27.6	31.4	36.9
R4	Distribution/Warehouse Activity	33.4	30.4	33.4	38.0	41.8	46.2
	Roof-Top Air Conditioning Units	30.4	27.6	6.9	4.7	3.3	31.4
	Parking Lot Vehicle Movements	13.9	10.5	14.5	17.5	20.9	33.3
	Combined Noise Level:	35.2	32.3	33.5	38.0	41.8	46.6
R5	Distribution/Warehouse Activity	22.8	19.8	22.8	27.4	31.2	35.6
	Roof-Top Air Conditioning Units	44.6	41.8	21.1	18.9	17.5	45.6
	Parking Lot Vehicle Movements	29.9	26.5	30.5	33.5	36.9	49.3
	Combined Noise Level:	44.8	42.0	31.6	34.6	38.0	51.0
R6	Distribution/Warehouse Activity	23.2	20.2	23.2	27.8	31.6	36.0
	Roof-Top Air Conditioning Units	41.6	38.8	18.1	15.9	14.5	42.6
	Parking Lot Vehicle Movements	28.0	24.6	28.6	31.6	35.0	47.4
	Combined Noise Level:	41.8	39.0	30.0	33.2	36.7	48.9
R7	Distribution/Warehouse Activity	34.4	31.4	34.4	39.0	42.8	47.2
	Roof-Top Air Conditioning Units	27.8	25.0	4.3	2.1	0.7	28.8
	Parking Lot Vehicle Movements	11.2	7.8	11.8	14.8	18.2	30.6
	Combined Noise Level:	35.3	32.3	34.4	39.0	42.8	47.4
R8	Distribution/Warehouse	38.3	35.3	38.3	42.9	46.7	51.1

Receiver Location[1]	Noise Source[2]	Project Operational Noise Levels (dBA)[3]					
		Leq (E. Avg.)	L_{50} (30 mins)	L_{25} (15 mins)	L_8 (5 mins)	L_2 (1 min)	L_{max} (Anytime)
	Activity						
	Roof-Top Air Conditioning Units	30.7	27.9	7.2	5.0	3.6	31.7
	Parking Lot Vehicle Movements	13.6	10.2	14.2	17.2	20.6	33.0
	Combined Noise Level:	39.0	36.0	38.3	42.9	46.7	51.2
R9	Distribution/Warehouse Activity	40.3	37.3	40.3	44.9	48.7	53.1
	Roof-Top Air Conditioning Units	39.1	36.3	15.6	13.4	12.0	40.1
	Parking Lot Vehicle Movements	21.3	17.9	21.9	24.9	28.3	40.7
	Combined Noise Level:	42.8	39.9	40.4	44.9	48.7	53.5
R10	Distribution/Warehouse Activity	39.6	36.6	39.6	44.2	48.0	52.4
	Roof-Top Air Conditioning Units	36.8	34.0	13.3	11.1	9.7	37.8
	Parking Lot Vehicle Movements	21.2	17.8	21.8	24.8	28.2	40.6
	Combined Noise Level:	41.5	38.5	39.7	44.3	48.0	52.8
R11	Distribution/Warehouse Activity	39.2	36.2	39.2	43.8	47.6	52.0
	Roof-Top Air Conditioning Units	41.5	38.7	18.0	15.8	14.4	42.5
	Parking Lot Vehicle Movements	27.9	24.5	28.5	31.5	34.9	47.3
	Combined Noise Level:	43.6	40.7	39.6	44.1	47.8	53.6
R12	Distribution/Warehouse Activity	25.1	22.1	25.1	29.7	33.5	37.9
	Roof-Top Air Conditioning Units	29.0	26.2	5.5	3.3	1.9	30.0
	Parking Lot Vehicle Movements	11.6	8.2	12.2	15.2	18.6	31.0
	Combined Noise Level:	30.5	27.7	25.4	29.9	33.6	39.3
R13	Distribution/Warehouse Activity	35.8	32.8	35.8	40.4	44.2	48.6
	Roof-Top Air Conditioning Units	30.3	27.5	6.8	4.6	3.2	31.3
	Parking Lot Vehicle Movements	13.3	9.9	13.9	16.9	20.3	32.7
	Combined Noise Level:	36.9	33.9	35.8	40.4	44.2	48.8
R14	Distribution/Warehouse Activity	33.1	30.1	33.1	37.7	41.5	45.9
	Roof-Top Air Conditioning Units	43.2	40.4	19.7	17.5	16.1	44.2
	Parking Lot Vehicle Movements	30.4	27.0	31.0	34.0	37.4	49.8
	Combined Noise Level:	43.8	41.0	35.3	39.3	42.9	52.1

Receiver Location[1]	Noise Source[2]	Project Operational Noise Levels (dBA)[3]					
		Leq (E. Avg.)	L_{50} (30 mins)	L_{25} (15 mins)	L_8 (5 mins)	L_2 (1 min)	L_{max} (Anytime)
R15	Distribution/Warehouse Activity	27.8	24.8	27.8	32.4	36.2	40.6
	Roof-Top Air Conditioning Units	34.4	31.6	10.9	8.7	7.3	35.4
	Parking Lot Vehicle Movements	18.5	15.1	19.1	22.1	25.5	37.9
	Combined Noise Level:	35.3	32.5	28.4	32.8	36.6	43.2

[1] See Exhibit 9-A for the receiver and noise source locations.
[2] Reference noise sources as shown on Table 9-1.
[3] Operational noise level calculations are provided in Appendix 9.2.
"E. Avg." = logarithmic (energy) average

Table 4.2.11-16 presents a summary of the combined total operational noise that would be generated by the WVLCSP at nearby sensitive receiver locations in comparison to local jurisdiction exterior noise level standards. The proposed project's operational noise generation at nearby sensitive receptors ranges from 19.6 to 44.8 dBA L_{eq}, 1816.8 to 42.0 dBA L_{50}, 13.7 to 40.4 dBA L_{25}, 18.1 to 44.9 dBA L8, 2021.8 to 48.7 dBA L2, and 27.7 to 53.6 dBA L_{max}. Based on the results of this analysis, the operational noise that would be generated at the WVLCSP site would meet City of Fontana, County of San Bernardino, and City of Jurupa Valley daytime and nighttime exterior noise level standards. The operational noise level calculations are included in Appendix K.

Table 4.2.11-16. Operational Noise Level Compliance with Local Noise Standards

Receiver Location[1]	Jurisdiction	Noise Level at Receiver Locations (dBA)[2] L_{eq} (E. Avg.)	L_{50} (30 mins)	L_{25} (15 mins)	L_8 (5 mins)	L_2 (1 min)	L_{max} (Anytime)	Threshold Exceeded?[3] Daytime	Nighttime
R1	Fontana	19.6	16.8	13.7	18.1	21.8	27.7	No	No
R2	Fontana	21.1	18.3	15.2	19.6	23.4	29.2	No	No
R3	County of SB	29.0	26.1	23.1	27.6	31.4	36.9	No	No
R4	County of SB	35.2	32.3	33.5	38.0	41.8	46.6	No	No
R5	County of SB	44.8	42.0	31.6	34.6	38.0	51.0	No	No
R6	County of SB	41.8	39.0	30.0	33.2	36.7	48.9	No	No
R7	County of SB	35.3	32.3	34.4	39.0	42.8	47.4	No	No
R8	County of SB	39.0	36.0	38.3	42.9	46.7	51.2	No	No
R9	County of SB	42.8	39.9	40.4	44.9	48.7	53.5	No	No
R10	County of SB	41.5	38.5	39.7	44.3	48.0	52.8	No	No
R11	County of SB	43.6	40.7	39.6	44.1	47.8	53.6	No	No
R12	Fontana	30.5	27.7	25.4	29.9	33.6	39.3	No	No
R13	Fontana	36.9	33.9	35.8	40.4	44.2	48.8	No	No
R14	Jurupa Valley	43.8	41.0	35.3	39.3	42.9	52.1	No	No
R15	Jurupa Valley	35.3	32.5	28.4	32.8	36.6	43.2	No	No

Source: Appendix K

[1] See Appendix K for the receiver and noise source locations.

[2] Estimated project operational noise levels as shown in Appendix K.

[3] Do the estimated project operational noise levels meet the operational noise level standards (Table 3-1 in Appendix K)?

Daytime = 7:00 a.m. to 10:00 p.m.; Nighttime = 10:00 p.m. to 7:00 a.m.; E. Avg. = logarithmic (energy) average; County of SB = County of San Bernardino

To describe the effect that the Specific Plan's operational noise generation would have on ambient noise levels, the proposed project's operational noise generation was combined with the existing ambient noise level measurements for the nearby receiver locations. Noise levels that would be experienced at sensitive receptors when project-generated noise is added to ambient conditions are presented in Tables 4.2.11-17 and 4.2.11-18 for daytime hours, and Tables 4.2.11-19 and 4.2.11-20 for nighttime hours. As indicated in these tables, the proposed project would not generate an increase in L_{eq} greater than 1.0 dBA at any location. The greatest increase in daytime operational noise level increase at the nearby sensitive receptors would be a 0.6 dBA L_{eq} increase at location R14. During the nighttime hours, the highest project-related noise level increase would be a 0.6 dBA L_{eq} increase at location R14. Because project-related operational noise contributions would not exceed applicable significance criteria, increased noise levels resulting from the proposed project would not result in a substantial temporary/periodic or permanent increase in noise above ambient levels, and impacts would be less than significant.

Table 4.2.11-17. WVLCSP Daytime Contributions to Ambient Noise Levels (Receptor Sites R1 to R8)

Location			Noise Levels (dBA)						
Rec.[1]	Meas.[2]	Type of Noise	L_{eq} (E. Avg.)	L_{50} (30 mins)	L_{25} (15 mins)	L_{8} (5 mins)	L_{2} (1 min)	L_{max} (Anytime)	Threshold Exceeded?[7]
R1	L1	Project Noise Level[3]	19.6	16.8	13.7	18.1	21.8	27.7	No
		Ambient Noise Level[4]	54.0	45.6	50.2	56.7	62.5	80.3	
		Combined[5]	54.0	45.6	50.2	56.7	62.5	80.3	
		Project Contribution[6]	0.0	0.0	0.0	0.0	0.0	0.0	
R2	L2	Project Noise Level[3]	21.1	18.3	15.2	19.6	23.4	29.2	No
		Ambient Noise Level[4]	68.0	57.0	61.2	66.5	74.1	101.4	
		Combined[5]	68.0	57.0	61.2	66.5	74.1	101.4	
		Project Contribution[6]	0.0	0.0	0.0	0.0	0.0	0.0	
R3	L3	Project Noise Level[3]	29.0	26.1	23.1	27.6	31.4	36.9	No
		Ambient Noise Level[4]	62.5	49.3	55.5	63.3	70.7	90.9	
		Combined[5]	62.5	49.3	55.5	63.3	70.7	90.9	
		Project Contribution[6]	0.0	0.0	0.0	0.0	0.0	0.0	
R4	L4	Project Noise Level[3]	35.2	32.3	33.5	38.0	41.8	46.6	No
		Ambient Noise Level[4]	70.9	61.9	68.1	73.6	78.3	100.9	
		Combined[5]	70.9	61.9	68.1	73.6	78.3	100.9	
		Project Contribution[6]	0.0	0.0	0.0	0.0	0.0	0.0	
R5	L4	Project Noise Level[3]	44.8	42.0	31.6	34.6	38.0	51.0	No
		Ambient Noise Level[4]	70.9	61.9	68.1	73.6	78.3	100.9	
		Combined[5]	70.9	61.9	68.1	73.6	78.3	100.9	
		Project Contribution[6]	0.0	0.0	0.0	0.0	0.0	0.0	
R6	L5	Project Noise Level[3]	41.8	39.0	30.0	33.2	36.7	48.9	No
		Ambient Noise Level[4]	65.9	55.8	62.7	69.4	73.5	91.5	
		Combined[5]	65.9	55.9	62.7	69.4	73.5	91.5	
		Project Contribution[6]	0.0	0.1	0.0	0.0	0.0	0.0	

Location			Noise Levels (dBA)						
Rec.[1]	Meas.[2]	Type of Noise	L_{eq} (E. Avg.)	L_{50} (30 mins)	L_{25} (15 mins)	L_{8} (5 mins)	L_{2} (1 min)	L_{max} (Anytime)	Threshold Exceeded?[7]
R7	L6	Project Noise Level[3]	35.3	32.3	34.4	39.0	42.8	47.4	No
		Ambient Noise Level[4]	62.1	53.9	58.5	65.0	770.1	90.4	
		Combined[5]	62.1	53.9	58.5	65.0	770.1	90.4	
		Project Contribution[6]	0.0	0.0	0.0	0.0	0.0	0.0	
R8	L7	Project Noise Level[3]	39.0	36.0	38.3	42.9	46.7	51.2	No
		Ambient Noise Level[4]	61.2	50.8	56.2	64.6	69.8	88.6	
		Combined[5]	61.2	50.9	56.3	64.6	69.8	88.6	
		Project Contribution[6]	0.0	0.1	0.1	0.0	0.0	0.0	

[1] See Appendix K for the receiver and noise source locations.
[2] Measurement locations as shown in Appendix K.
[3] Total operational noise levels as shown in Appendix K.
[4] Existing ambient noise level measurements provided in Appendix K.
[5] Represents the combined ambient conditions plus the project activities.
[6] The noise level increase expected with the addition of the proposed project activities.
[7] Based on Significance Criteria discussed in Section 4 of Appendix K, and summarized in the discussion of Methodology, above.

Table 4.2.11-18. WVLCSP Daytime Contribution to Ambient Noise Level (Receptor Sites R9 to R15)

Location			Noise Levels (dBA)						
Rec.[1]	Meas.[2]	Type of Noise	L_{eq} (E. Avg.)	L_{50} (30 mins)	L_{25} (15 mins)	L_{8} (5 mins)	L_{2} (1 min)	L_{max} (Anytime)	Threshold Exceeded?[7]
R9	L8	Project Noise Level[3]	42.8	39.9	40.4	44.9	48.7	53.5	No
		Ambient Noise Level[4]	77.6	65.7	74.6	81.6	85.6	103.0	
		Combined[5]	77.6	65.7	74.6	81.6	85.6	103.0	
		Project Contribution[6]	0.0	0.0	0.0	0.0	0.0	0.0	
R10	L9	Project Noise Level[3]	41.5	38.5	39.7	44.3	48.0	52.8	No
		Ambient Noise Level[4]	72.8	61.2	69.4	75.7	80.5	98.4	
		Combined[5]	72.8	61.2	69.4	75.7	80.5	98.4	
		Project Contribution[6]	0.0	0.0	0.0	0.0	0.0	0.0	
R11	L10	Project Noise Level[3]	43.6	40.7	39.6	44.1	47.8	53.6	No
		Ambient Noise Level[4]	73.5	61.1	70.1	77.3	81.3	105.1	
		Combined[5]	73.5	61.1	70.1	77.3	81.3	105.1	
		Project Contribution[6]	0.0	0.0	0.0	0.0	0.0	0.0	
R12	L3	Project Noise Level[3]	30.5	27.7	25.4	29.9	33.6	39.3	No
		Ambient Noise Level[4]	62.5	49.3	55.5	63.3	70.7	90.9	
		Combined[5]	62.5	49.3	55.5	63.3	70.7	90.9	
		Project Contribution[6]	0.0	0.0	0.0	0.0	0.0	0.0	
R13	L3	Project Noise Level[3]	36.9	33.9	35.8	40.4	44.2	48.8	No
		Ambient Noise Level[4]	62.5	49.3	55.5	63.3	70.7	90.9	
		Combined[5]	62.5	49.4	55.5	63.3	70.7	90.9	
		Project Contribution[6]	0.0	0.1	0.0	0.0	0.0	0.0	
R14	L11	Project Noise Level[3]	43.8	41.0	35.3	39.3	42.9	52.1	No
		Ambient Noise Level[4]	52.2	45.7	49.6	53.9	58.6	88.5	
		Combined[5]	52.8	47.0	49.8	54.0	58.7	88.5	
		Project Contribution[6]	0.6	1.3	0.2	0.1	0.1	0.0	

Location			Noise Levels (dBA)						
Rec.[1]	Meas.[2]	Type of Noise	L_{eq} (E. Avg.)	L_{50} (30 mins)	L_{25} (15 mins)	L_{8} (5 mins)	L_{2} (1 min)	L_{max} (Anytime)	Threshold Exceeded?[7]
R15	L11	Project Noise Level[3]	35.3	32.5	28.4	32.8	36.6	43.2	No
		Ambient Noise Level[4]	52.2	45.7	49.6	53.9	58.6	88.5	
		Combined[5]	52.3	45.9	49.6	53.9	58.6	88.5	
		Project Contribution[6]	0.1	0.2	0.0	0.0	0.0	0.0	

[1] See Appendix K for the receiver and noise source locations.
[2] Measurement locations as shown in Appendix K.
[3] Total operational noise levels as shown in Appendix K.
[4] Existing ambient noise level measurements provided in Appendix K.
[5] Represents the combined ambient conditions plus the project activities.
[6] The noise level increase expected with the addition of the proposed project activities.
[7] Based on Significance Criteria discussed in Section 4 of Appendix K, and summarized in the discussion of Methodology, above.

Table 4.2.11-19. WVLCSP Nighttime Contribution to Ambient Noise (Receptor Sites R1 to R8)

Location			Noise Levels (dBA)						
Rec.[1]	Meas.[2]	Type of Noise	L_{eq} (E. Avg.)	L_{50} (30 mins)	L_{25} (15 mins)	L_{8} (5 mins)	L_{2} (1 min)	L_{max} (Anytime)	Threshold Exceeded?[7]
R1	L1	Project Noise Level[3]	19.6	16.8	13.7	18.1	21.8	27.7	No
		Ambient Noise Level[4]	49.8	53.8	45.6	50.2	56.9	76.3	
		Combined[5]	49.8	53.8	45.6	50.2	56.9	76.3	
		Project Contribution[6]	0.0	0.0	0.0	0.0	0.0	0.0	
R2	L2	Project Noise Level[3]	21.1	18.3	15.2	19.6	23.4	29.2	No
		Ambient Noise Level[4]	60.6	48.0	52.3	59.2	65.1	95.3	
		Combined[5]	60.6	48.0	52.3	59.2	65.1	95.3	
		Project Contribution[6]	0.0	0.0	0.0	0.0	0.0	0.0	
R3	L3	Project Noise Level[3]	29.0	26.1	23.1	27.6	31.4	36.9	No
		Ambient Noise Level[4]	57.3	43.1	46.0	52.4	60.6	93.7	
		Combined[5]	57.3	43.2	46.0	52.4	60.6	93.7	
		Project Contribution[6]	0.0	0.1	0.0	0.0	0.0	0.0	
R4	L4	Project Noise Level[3]	35.2	32.3	33.5	38.0	41.8	46.6	No
		Ambient Noise Level[4]	68.0	52.6	58.7	67.8	74.7	98.1	
		Combined[5]	68.0	52.6	58.7	67.8	74.7	98.1	
		Project Contribution[6]	0.0	0.0	0.0	0.0	0.0	0.0	
R5	L4	Project Noise Level[3]	44.8	42.0	31.6	34.6	38.0	51.0	No
		Ambient Noise Level[4]	68.0	52.6	58.7	67.8	74.7	98.1	
		Combined[5]	68.0	53.0	58.7	67.8	74.7	98.1	
		Project Contribution[6]	0.0	0.4	0.0	0.0	0.0	0.0	
R6	L5	Project Noise Level[3]	41.8	39.0	30.0	33.2	36.7	48.9	No
		Ambient Noise Level[4]	63.3	49.8	53.3	60.9	69.0	70.7	
		Combined[5]	63.3	50.1	53.3	60.9	69.0	70.7	
		Project Contribution[6]	0.0	0.3	0.0	0.0	0.0	0.0	

Location			Noise Levels (dBA)						
Rec.[1]	Meas.[2]	Type of Noise	L_{eq} (E. Avg.)	L_{50} (30 mins)	L_{25} (15 mins)	L_{8} (5 mins)	L_{2} (1 min)	L_{max} (Anytime)	Threshold Exceeded?[7]
R7	L6	Project Noise Level[3]	35.3	32.3	34.4	39.0	42.8	47.4	No
		Ambient Noise Level[4]	58.4	51.3	53.1	57.1	63.0	85.2	
		Combined[5]	58.4	51.4	53.2	57.2	63.0	85.2	
		Project Contribution[6]	0.0	0.1	0.1	0.1	0.0	0.0	
R8	L7	Project Noise Level[3]	39.0	36.0	38.3	42.9	46.7	51.2	No
		Ambient Noise Level[4]	59.1	50.6	52.9	58.2	65.9	82.4	
		Combined[5]	59.1	50.7	53.0	58.3	66.0	82.4	
		Project Contribution[6]	0.0	0.1	0.1	0.1	0.1	0.0	

[1] See Appendix K for the receiver and noise source locations.
[2] Measurement locations as shown in Appendix K.
[3] Total operational noise levels as shown in Appendix K.
[4] Existing ambient noise level measurements provided in Appendix K.
[5] Represents the combined ambient conditions plus the project activities.
[6] The noise level increase expected with the addition of the proposed project activities.
[7] Based on Significance Criteria discussed in Section 4 of Appendix K, and summarized in the discussion of Methodology, above.

Table 4.2.11-20. WVLCSP Contribution to Nighttime Ambient Noise (Receptor Sites R9 to R15)

Location			Noise Levels (dBA)						
Rec.[1]	Meas.[2]	Type of Noise	L_{eq} (E. Avg.)	L_{50} (30 mins)	L_{25} (15 mins)	L_{8} (5 mins)	L_{2} (1 min)	L_{max} (Anytime)	Threshold Exceeded?[7]
R9	L8	Project Noise Level[3]	42.8	39.9	40.4	44.9	48.7	53.5	No
		Ambient Noise Level[4]	74.6	56.0	63.0	73.6	82.1	100.4	
		Combined[5]	74.6	56.1	63.0	73.6	82.1	100.4	
		Project Contribution[6]	0.0	0.1	0.0	0.0	0.0	0.0	
R10	L9	Project Noise Level[3]	41.5	38.5	39.7	44.3	48.0	52.8	No
		Ambient Noise Level[4]	70.9	55.2	61.0	70.0	77.3	98.2	
		Combined[5]	70.9	55.3	61.0	70.0	77.3	98.2	
		Project Contribution[6]	0.0	0.1	0.0	0.0	0.0	0.0	
R11	L10	Project Noise Level[3]	43.6	40.7	39.6	44.1	47.8	53.6	No
		Ambient Noise Level[4]	70.0	52.3	59.3	69.6	77.8	96.5	
		Combined[5]	70.0	52.6	59.3	69.6	77.8	96.5	
		Project Contribution[6]	0.0	0.3	0.0	0.0	0.0	0.0	
R12	L3	Project Noise Level[3]	30.5	27.7	25.4	29.9	33.6	39.3	No
		Ambient Noise Level[4]	57.3	43.1	46.0	52.4	60.6	93.7	
		Combined[5]	57.3	43.2	46.0	52.4	60.6	93.7	
		Project Contribution[6]	0.0	0.1	0.0	0.0	0.0	0.0	
R13	L3	Project Noise Level[3]	36.9	33.9	35.8	40.4	44.2	48.8	No
		Ambient Noise Level[4]	57.3	43.1	46.0	52.4	60.6	93.7	
		Combined[5]	57.3	43.6	46.4	52.7	60.7	93.7	
		Project Contribution[6]	0.0	0.5	0.4	0.3	0.1	0.0	
R14	L11	Project Noise Level[3]	43.8	41.0	35.3	39.3	42.9	52.1	No
		Ambient Noise Level[4]	51.7	44.4	47.4	52.8	57.6	76.4	
		Combined[5]	52.4	46.0	47.7	53.0	57.7	76.4	
		Project Contribution[6]	0.7	1.6	0.3	0.2	0.1	0.0	
R15	L11	Project Noise Level[3]	35.3	32.5	28.4	32.8	36.6	43.2	No
		Ambient Noise Level[4]	51.7	44.4	47.4	52.8	57.6	76.4	
		Combined[5]	51.8	44.7	47.5	52.8	57.6	76.4	
		Project Contribution[6]	0.1	0.3	0.1	0.0	0.0	0.0	

[1] See Appendix K for the receiver and noise source locations.
[2] Measurement locations as shown in Appendix K.
[3] Total operational noise levels as shown in Appendix K.
[4] Existing ambient noise level measurements provided in Appendix K.
[5] Represents the combined ambient conditions plus the project activities.
[6] The noise level increase expected with the addition of the proposed project activities.
[7] Based on Significance Criteria discussed in Section 4 of Appendix K, and summarized in the discussion of Methodology, above.

While the WVLCSP is not expected to generate significant operational noise impacts requiring mitigation, **Standard Requirements SR-N-4** through **SR-N-6** will further reduce potential operational noise levels received at nearby noise-sensitive receiver locations.

Transportation Noise

To assess the off-site transportation CNEL noise level impacts associated with the proposed WVLCSP, noise contours were developed based on the Traffic Impact Analysis prepared for the proposed project (Appendix L) for the following traffic scenarios:

- **Existing Without/With Project**: This scenario refers to the existing present-day noise conditions, without and with the proposed project. Existing noise conditions were presented in the *Existing Conditions* section.
- **Year 2040 Without/With Project**: This scenario below refers to the background noise conditions at future Year 2040 without and with the proposed project plus ambient growth. This scenario corresponds to Year 2040 conditions, and includes all cumulative projects identified in the Traffic Impact Analysis.

Traffic Noise Contours

To quantify the proposed project's operational traffic noise impacts along the surrounding roadway system, the changes in traffic noise levels on roadway segments surrounding the WVLCSP were calculated based on project-related changes in existing and future average daily traffic volumes.

Noise contours were used to assess the Specific Plan's incremental traffic-related noise impacts at land uses adjacent to roadways conveying project traffic. The noise contours do not consider the effect of any existing noise barriers or topography that may attenuate ambient noise levels, and thereby represent a worst-case analysis. Tables 4.2.11-21 through 4.2.11-24 present a summary of the exterior traffic noise levels, without barrier attenuation, for project-related increases in existing and future Year 2040 noise levels along the 38 study area roadway segments analyzed in this 2nd RDEIR. Appendix L includes a summary of the traffic noise level contours for each traffic scenario.

Table 4.2.11-21. Existing with Project Conditions Noise Contours

ID	Road	Segment	Adjacent Planned Land Use[1]	CNEL at Nearest Adjacent Land Use (dBA)[2]	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Sierra Av.	n/o Slover Av.	Commercial	73.8	423	911	1962
2	Sierra Av.	s/o Slover Av.	Commercial	72.0	380	818	1763
3	Sierra Av.	s/o Santa Ana Av.	Residential	70.9	417	898	1935
4	Locust Av.	s/o Slover Av.	Residential	73.1	116	250	538
5	Locust Av.	s/o Santa Ana Av.	Residential	73.5	134	289	622
6	Locust Av.	s/o Jurupa Av.	Vacant	73.6	209	451	971
7	Locust Av.	s/o Dwy. 4	Residential	74.8	189	408	879
8	Locust Av.	s/o Dwy. 5	Residential	74.8	189	408	879
9	Locust Av.	s/o 11th St.	Residential	74.8	182	392	845

ID	Road	Segment	Adjacent Planned Land Use[1]	CNEL at Nearest Adjacent Land Use (dBA)[2]	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
10	Locust Av.	s/o 10th St.	Residential	81.3	180	388	836
11	Locust Av.	s/o 9th St.	Residential	80.6	178	384	827
12	Locust Av.	s/o 8th St.	Vacant	81.2	177	382	824
13	Locust Av.	s/o Dwy. 10	Residential	76.3	128	277	596
14	Armstrong Rd.	n/o Sierra Av.	Residential	77.3	127	274	590
15	Armstrong Rd.	s/o Sierra Av.	Residential	78.7	237	511	1102
16	Cedar Av.	s/o Valley Bl.	Residential	79.5	284	611	1316
17	Cedar Av.	n/o Slover Av.	Community Industrial	79.5	234	504	1085
18	Cedar Av.	s/o Slover Av.	General Commercial	79.3	163	351	756
19	Cedar Av.	s/o Santa Ana Av.	Residential	79.2	178	384	828
20	Cedar Av.	s/o Jurupa Av.	Residential	79.1	203	437	942
21	Cedar Av.	s/o 11th St.	Residential	79.1	194	417	899
22	Cedar Av.	s/o 7th St.	Residential	75.5	268	578	1246
23	Rubidoux Bl.	s/o El Rivino Rd.	Residential	75.0	264	568	1224
24	Rubidoux Bl.	s/o Market St.	Light Industrial	79.1	230	496	1068
25	Slover Av.	w/o Sierra Av.	Commercial	81.1	189	407	876
26	Slover Av.	e/o Sierra Av.	Commercial	79.8	317	682	1470
27	Slover Av.	e/o Alder Av.	Community Industrial	77.4	213	458	987
28	Slover Av.	e/o Locust Av.	Residential	78.0	190	409	882
29	Slover Av.	e/o Cedar Av.	Residential	78.9	126	271	585
30	Santa Ana Av.	w/o Sierra Av.	Residential	78.6	104	225	484
31	Santa Ana Av.	e/o Sierra Av.	Residential	80.7	84	180	388
32	Santa Ana Av.	w/o Alder Av.	Residential	79.2	88	189	408
33	Santa Ana Av.	e/o Alder Av.	Residential	78.9	102	220	475
34	Santa Ana Av.	w/o Locust Av.	Residential	78.0	100	216	465
35	Santa Ana Av.	e/o Locust Av.	Residential	81.4	84	181	389
36	Jurupa Av.	e/o Locust Av.	Residential	79.2	110	236	509
37	Jurupa Av.	w/o Cedar Av.	Residential	78.4	108	233	501
38	7th St.	e/o Locust Av.	Residential	75.8	85	184	397

[1] Sources: City of Fontana General Plan Land Use Map; County of San Bernardino Land Use Plan (FH29A Fontana); and the City of Jurupa Valley General Plan Land Use Map.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use.

Table 4.2.11-22. Year 2040 without Project Conditions Noise Contours

ID	Road	Segment	Adjacent Planned Land Use[1]	CNEL at Nearest Adjacent Land Use (dBA)[2]	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Sierra Av.	n/o Slover Av.	Commercial	82.5	508	1095	2358
2	Sierra Av.	s/o Slover Av.	Commercial	82.9	544	1172	2525
3	Sierra Av.	s/o Santa Ana Av.	Residential	82.8	536	1154	2487
4	Locust Av.	s/o Slover Av.	Residential	77.4	138	297	639
5	Locust Av.	s/o Santa Ana Av.	Residential	78.1	152	327	704
6	Locust Av.	s/o Jurupa Av.	Vacant	78.7	210	453	975
7	Locust Av.	s/o Dwy. 4	Residential	78.2	154	333	717
8	Locust Av.	s/o Dwy. 5	Residential	78.2	154	333	717
9	Locust Av.	s/o 11th St.	Residential	77.6	141	303	652
10	Locust Av.	s/o 10th St.	Residential	77.5	138	298	642
11	Locust Av.	s/o 9th St.	Residential	78.5	161	348	750
12	Locust Av.	s/o 8th St.	Vacant	77.2	133	286	617
13	Locust Av.	s/o Dwy. 10	Residential	77.2	166	358	772
14	Armstrong Rd.	n/o Sierra Av.	Residential	79.5	254	546	1177
15	Armstrong Rd.	s/o Sierra Av.	Residential	81.7	355	764	1646
16	Cedar Av.	s/o Valley Bl.	Residential	82.6	358	772	1664
17	Cedar Av.	n/o Slover Av.	Community Industrial	79.9	238	513	1106
18	Cedar Av.	s/o Slover Av.	General Commercial	79.2	213	460	991
19	Cedar Av.	s/o Santa Ana Av.	Residential	80.5	261	562	1211
20	Cedar Av.	s/o Jurupa Av.	Residential	80.3	254	548	1181
21	Cedar Av.	s/o 11th St.	Residential	80.0	243	523	1127
22	Cedar Av.	s/o 7th St.	Residential	82.0	326	703	1514
23	Rubidoux Bl.	s/o El Rivino Rd.	Residential	80.5	321	691	1488
24	Rubidoux Bl.	s/o Market St.	Light Industrial	81.2	331	713	1537
25	Slover Av.	w/o Sierra Av.	Commercial	80.6	281	606	1306
26	Slover Av.	e/o Sierra Av.	Commercial	82.4	369	795	1714
27	Slover Av.	e/o Alder Av.	Community Industrial	80.2	247	532	1147
28	Slover Av.	e/o Locust Av.	Residential	80.2	250	539	1162
29	Slover Av.	e/o Cedar Av.	Residential	77.3	159	342	736
30	Santa Ana Av.	w/o Sierra Av.	Residential	76.4	123	265	572
31	Santa Ana Av.	e/o Sierra Av.	Residential	74.6	93	200	431
32	Santa Ana Av.	w/o Alder Av.	Residential	76.2	113	244	525
33	Santa Ana Av.	e/o Alder Av.	Residential	77.1	130	281	605
34	Santa Ana Av.	w/o Locust Av.	Residential	77.0	128	277	596
35	Santa Ana Av.	e/o Locust Av.	Residential	75.7	105	227	490
36	Jurupa Av.	e/o Locust Av.	Residential	74.8	125	270	581

ID	Road	Segment	Adjacent Planned Land Use[1]	CNEL at Nearest Adjacent Land Use (dBA)[2]	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
37	Jurupa Av.	w/o Cedar Av.	Residential	74.4	103	221	476
38	7th St.	e/o Locust Av.	Residential	75.2	115	248	535

[1] Sources: City of Fontana General Plan Land Use Map; County of San Bernardino Land Use Plan (FH29A Fontana); and the City of Jurupa Valley General Plan Land Use Map.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use.

Table 4.2.11-23. Year 2040 with Project Conditions Noise Contours

ID	Road	Segment	Adjacent Planned Land Use[1]	CNEL at Nearest Adjacent Land Use (dBA)[2]	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Sierra Av.	n/o Slover Av.	Commercial	82.8	539	1161	2501
2	Sierra Av.	s/o Slover Av.	Commercial	82.9	544	1172	2525
3	Sierra Av.	s/o Santa Ana Av.	Residential	82.8	536	1154	2487
4	Locust Av.	s/o Slover Av.	Residential	79.0	176	380	819
5	Locust Av.	s/o Santa Ana Av.	Residential	79.5	190	409	881
6	Locust Av.	s/o Jurupa Av.	Vacant	80.7	282	608	1310
7	Locust Av.	s/o Dwy. 4	Residential	80.5	222	479	1031
8	Locust Av.	s/o Dwy. 5	Residential	80.5	222	479	1031
9	Locust Av.	s/o 11th St.	Residential	80.1	206	444	958
10	Locust Av.	s/o 10th St.	Residential	80.0	204	440	949
11	Locust Av.	s/o 9th St.	Residential	80.6	224	482	1039
12	Locust Av.	s/o 8th St.	Vacant	79.9	200	431	929
13	Locust Av.	s/o Dwy. 10	Residential	77.3	170	366	788
14	Armstrong Rd.	n/o Sierra Av.	Residential	79.5	254	548	1181
15	Armstrong Rd.	s/o Sierra Av.	Residential	81.7	355	765	1649
16	Cedar Av.	s/o Valley Bl.	Residential	82.6	360	777	1673
17	Cedar Av.	n/o Slover Av.	Community Industrial	80.2	248	534	1151
18	Cedar Av.	s/o Slover Av.	General Commercial	79.2	214	460	991
19	Cedar Av.	s/o Santa Ana Av.	Residential	80.5	262	565	1217
20	Cedar Av.	s/o Jurupa Av.	Residential	80.8	275	592	1276
21	Cedar Av.	s/o 11th St.	Residential	80.6	264	568	1224
22	Cedar Av.	s/o 7th St.	Residential	82.5	352	759	1635
23	Rubidoux Bl.	s/o El Rivino Rd.	Residential	81.0	347	747	1609

ID	Road	Segment	Adjacent Planned Land Use[1]	CNEL at Nearest Adjacent Land Use (dBA)[2]	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
24	Rubidoux Bl.	s/o Market St.	Light Industrial	81.4	340	733	1580
25	Slover Av.	w/o Sierra Av.	Commercial	80.6	282	607	1307
26	Slover Av.	e/o Sierra Av.	Commercial	82.9	399	860	1852
27	Slover Av.	e/o Alder Av.	Community Industrial	81.0	282	607	1308
28	Slover Av.	e/o Locust Av.	Residential	80.6	264	568	1224
29	Slover Av.	e/o Cedar Av.	Residential	77.3	159	342	736
30	Santa Ana Av.	w/o Sierra Av.	Residential	76.4	123	266	572
31	Santa Ana Av.	e/o Sierra Av.	Residential	74.6	93	201	432
32	Santa Ana Av.	w/o Alder Av.	Residential	76.2	113	244	526
33	Santa Ana Av.	e/o Alder Av.	Residential	77.1	131	282	607
34	Santa Ana Av.	w/o Locust Av.	Residential	77.0	129	277	598
35	Santa Ana Av.	e/o Locust Av.	Residential	75.7	106	229	494
36	Jurupa Av.	e/o Locust Av.	Residential	76.5	163	352	757
37	Jurupa Av.	w/o Cedar Av.	Residential	76.4	138	298	641
38	7th St.	e/o Locust Av.	Residential	75.2	116	250	538

[1] Sources: City of Fontana General Plan Land Use Map; County of San Bernardino Land Use Plan (FH29A Fontana); and the City of Jurupa Valley General Plan Land Use Map.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use.

Project-Related Off-Site Traffic Noise Level Increases (Existing with Project Conditions)

As shown in Table 4.2.11-24, the WVLCSP would generate noise level increases of up to 3.9 dBA CNEL on area roadway segments. Based on the significance criteria identified above, land uses adjacent to the following roadway segments would experience significant noise level increases due to project-related traffic in the following locations:

- Existing residential uses on Locust Avenue:
  - South of Slover Avenue (Segment #4);
  - South of Santa Ana Avenue (Segment #5);
  - South of 11th Street (Segment #9);
  - South of 10th Street (Segment #10); and
  - South of 9th Street (Segment #11).
- Vacant lands designated residential use along Locust Avenue:
  - South of Jurupa Avenue (Segment #6);
  - South of WVLCSP Driveway 4 (Segment #7);
  - South of Driveway 5 (Segment #8); and
  - South of 8th Street (Segment #12).

- Existing residential uses on Jurupa Avenue:
  - East of Locust Avenue (Segment #36); and
  - West of Cedar Avenue (Segment #37).

Table 4.2.11-24. Project-Related Traffic Noise Impacts, Existing with Project Conditions

			CNEL at Adjacent Land Use (dBA)[1]			Noise-Sensitive	
ID	Road	Segment	No Project	With Project	Project Addition	Land Use?	Threshold Exceeded?[2]
1	Sierra Av.	n/o Slover Av.	80.7	81.3	0.6	No	No
2	Sierra Av.	s/o Slover Av.	80.6	80.6	0.0	No	No
3	Sierra Av.	s/o Santa Ana Av.	81.2	81.2	0.0	Yes	No
4	Locust Av.	s/o Slover Av.	72.5	76.3	3.8	Yes	Yes
5	Locust Av.	s/o Santa Ana Av.	74.4	77.3	2.8	Yes	Yes
6	Locust Av.	s/o Jurupa Av.	75.1	78.7	3.6	No	Yes
7	Locust Av.	s/o Dwy. 4	76.2	79.5	3.3	No	Yes
8	Locust Av.	s/o Dwy. 5	76.2	79.5	3.3	No	Yes
9	Locust Av.	s/o 11th St.	76.0	79.3	3.3	Yes	Yes
10	Locust Av.	s/o 10th St.	75.8	79.2	3.3	Yes	Yes
11	Locust Av.	s/o 9th St.	75.7	79.1	3.4	Yes	Yes
12	Locust Av.	s/o 8th St.	75.6	79.1	3.5	No	Yes
13	Locust Av.	s/o Dwy. 10	75.3	75.5	0.2	Yes	No
14	Armstrong Rd.	n/o Sierra Av.	74.9	75.0	0.1	Yes	No
15	Armstrong Rd.	s/o Sierra Av.	79.0	79.1	0.0	Yes	No
16	Cedar Av.	s/o Valley Bl.	81.0	81.1	0.1	Yes	No
17	Cedar Av.	n/o Slover Av.	79.5	79.8	0.3	No	No
18	Cedar Av.	s/o Slover Av.	77.4	77.4	0.0	No	No
19	Cedar Av.	s/o Santa Ana Av.	78.0	78.0	0.1	Yes	No
20	Cedar Av.	s/o Jurupa Av.	78.0	78.9	0.8	No	No
21	Cedar Av.	s/o 11th St.	77.7	78.6	0.9	No	No
22	Cedar Av.	s/o 7th St.	79.9	80.7	0.8	No	No
23	Rubidoux Bl.	s/o El Rivino Rd.	78.4	79.2	0.8	No	No
24	Rubidoux Bl.	s/o Market St.	78.5	78.9	0.3	No	No
25	Slover Av.	w/o Sierra Av.	78.0	78.0	0.0	No	No
26	Slover Av.	e/o Sierra Av.	80.7	81.4	0.7	No	No
27	Slover Av.	e/o Alder Av.	77.8	79.2	1.4	No	No
28	Slover Av.	e/o Locust Av.	77.9	78.4	0.6	Yes	No
29	Slover Av.	e/o Cedar Av.	75.8	75.8	0.0	Yes	No
30	Santa Ana Av.	w/o Sierra Av.	75.3	75.3	0.0	Yes	No
31	Santa Ana Av.	e/o Sierra Av.	73.9	73.9	0.0	Yes	No
32	Santa Ana Av.	w/o Alder Av.	74.5	74.5	0.0	Yes	No
33	Santa Ana Av.	e/o Alder Av.	75.5	75.5	0.0	Yes	No
34	Santa Ana Av.	w/o Locust Av.	75.3	75.4	0.0	Yes	No

ID	Road	Segment	CNEL at Adjacent Land Use (dBA)[1] No Project	With Project	Project Addition	Noise-Sensitive Land Use?	Threshold Exceeded?[2]
35	Santa Ana Av.	e/o Locust Av.	74.1	74.2	0.1	Yes	No
36	Jurupa Av.	e/o Locust Av.	70.0	73.9	3.9	Yes	Yes
37	Jurupa Av.	w/o Cedar Av.	71.6	74.8	3.2	Yes	Yes
38	7th St.	e/o Locust Av.	73.2	73.2	0.1	Yes	No

[1] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use.
[2] Based on Significance Criteria discussed in Section 4 of Appendix K, and summarized in the discussion of Methodology, above.

The significant off-site noise level impacts identified in Table 4.2.11-24 require mitigation to reduce the potential impacts at nearby sensitive land uses. Therefore, **Mitigation Measure NOI-1** requires the use of rubberized asphalt for all new pavement installed by the proposed project. Changing the pavement type of a roadway can reduce the amount of noise produced at the source for both near-term and long-term conditions. By incorporating rubberized asphalt overlays into off-site roadway improvements, off-site traffic noise level increases from automobile traffic can be reduced by roughly 4 dBA, and adjacent land uses can benefit from the *barely perceptible* (3 dBA or less) off-site traffic noise level reductions in truck-related traffic noise levels. Because several affected off-site roadways are within unincorporated San Bernardino County, the City of Fontana cannot guarantee implementation of this measure outside of the City. Therefore, despite **Mitigation Measure NOI-1**, Existing with Project impact conditions along several roadway segments outside of the City of Fontana would remain significant. However, the Existing with Project scenario would not occur because the WVLCSP would not be fully constructed under existing conditions. Therefore, an analysis of future Year 2040 conditions without and with the proposed project is included in this noise study to determine the project-related impacts and necessary mitigation measures.

Project-Related Off-Site Traffic Noise Level Increases (Year 2040 Conditions)

As shown in Table 4.2.11-25, the WVLCSP would generate noise level increases of up to 2.7 dBA CNEL along area roadway segments under future cumulative conditions. Based on the significance criteria presented above, land uses adjacent to the following roadway segments would experience significant noise level increases due to WVLCSP-related traffic:

- Residential uses on Locust Avenue:
  - South of Slover Avenue (Segment #4);
  - South of Santa Ana Avenue (Segment #5);
  - South of Jurupa Avenue (Segment #6);
  - South of Driveway 4 (Segment #7);
  - South of Driveway 5 (Segment #8);
  - South of 11th Street (Segment #9);
  - South of 10th Street (Segment #10);
  - South of 9th Street (Segment #11); and
  - South of 8th Street (Segment #12).

- Residential uses on Jurupa Avenue:
  - East of Locust Avenue (Segment #36); and
  - West of Cedar Avenue (Segment #37).

Table 4.2.11-25. Year 2040 Off-Site Project-Related Traffic Noise Impacts

ID	Road	Segment	CNEL at Adjacent Land Use (dBA)[1]			Noise-Sensitive Land Use?	Threshold Exceeded?[2]
			No Project	With Project	Project Addition		
1	Sierra Av.	n/o Slover Av.	82.5	82.8	0.4	No	No
2	Sierra Av.	s/o Slover Av.	82.9	82.9	0.0	No	No
3	Sierra Av.	s/o Santa Ana Av.	82.8	82.8	0.0	Yes	No
4	Locust Av.	s/o Slover Av.	77.4	79.0	1.6	Yes	Yes
5	Locust Av.	s/o Santa Ana Av.	78.1	79.5	1.5	Yes	Yes
6	Locust Av.	s/o Jurupa Av.	78.7	80.7	1.9	No	No
7	Locust Av.	s/o Dwy. 4	78.2	80.5	2.4	No	No
8	Locust Av.	s/o Dwy. 5	78.2	80.5	2.4	No	No
9	Locust Av.	s/o 11th St.	77.6	80.1	2.5	Yes	Yes
10	Locust Av.	s/o 10th St.	77.5	80.0	2.5	Yes	Yes
11	Locust Av.	s/o 9th St.	78.5	80.6	2.1	Yes	Yes
12	Locust Av.	s/o 8th St.	77.2	79.9	2.7	No	No
13	Locust Av.	s/o Dwy. 10	77.2	77.3	0.1	Yes	No
14	Armstrong Rd.	n/o Sierra Av.	79.5	79.5	0.0	Yes	No
15	Armstrong Rd.	s/o Sierra Av.	81.7	81.7	0.0	Yes	No
16	Cedar Av.	s/o Valley Bl.	82.6	82.6	0.0	Yes	No
17	Cedar Av.	n/o Slover Av.	79.9	80.2	0.3	No	No
18	Cedar Av.	s/o Slover Av.	79.2	79.2	0.0	No	No
19	Cedar Av.	s/o Santa Ana Av.	80.5	80.5	0.0	Yes	No
20	Cedar Av.	s/o Jurupa Av.	80.3	80.8	0.5	No	No
21	Cedar Av.	s/o 11th St.	80.0	80.6	0.5	No	No
22	Cedar Av.	s/o 7th St.	82.0	82.5	0.5	No	No
23	Rubidoux Bl.	s/o El Rivino Rd.	80.5	81.0	0.5	No	No
24	Rubidoux Bl.	s/o Market St.	81.2	81.4	0.2	No	No
25	Slover Av.	w/o Sierra Av.	80.6	80.6	0.0	No	No
26	Slover Av.	e/o Sierra Av.	82.4	82.9	0.5	No	No
27	Slover Av.	e/o Alder Av.	80.2	81.0	0.9	No	No
28	Slover Av.	e/o Locust Av.	80.2	80.6	0.3	Yes	No
29	Slover Av.	e/o Cedar Av.	77.3	77.3	0.0	Yes	No
30	Santa Ana Av.	w/o Sierra Av.	76.4	76.4	0.0	Yes	No
31	Santa Ana Av.	e/o Sierra Av.	74.6	74.6	0.0	Yes	No
32	Santa Ana Av.	w/o Alder Av.	76.2	76.2	0.0	Yes	No
33	Santa Ana Av.	e/o Alder Av.	77.1	77.1	0.0	Yes	No
34	Santa Ana Av.	w/o Locust Av.	77.0	77.0	0.0	Yes	No

ID	Road	Segment	CNEL at Adjacent Land Use (dBA)[1] No Project	With Project	Project Addition	Noise-Sensitive Land Use?	Threshold Exceeded?[2]
35	Santa Ana Av.	e/o Locust Av.	75.7	75.7	0.1	Yes	No
36	Jurupa Av.	e/o Locust Av.	74.8	76.5	1.7	Yes	Yes
37	Jurupa Av.	w/o Cedar Av.	74.4	76.4	1.9	Yes	Yes
38	7th St.	e/o Locust Av.	75.2	75.2	0.0	Yes	No

[1] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use.
[2] Based on Significance Criteria discussed in Section 4 of Appendix K, and summarized in the discussion of Methodology, above.

Specific Plan Requirements, Regulatory Requirements, and Standard Requirements

The applicant will implement the following Specific Plan Requirements, Regulatory Requirements, and Standard Requirements, as summarized below and specified in detail in Section 3.6 of the Project Description.

- **SP-GHG-4:** Provide Electrical Connections at Loading Docks
- **SP-N-1:** Noise Performance Standards
- **SP-N-2:** Installation of Sound Barriers on Site
- **SP-N-3:** Truck Idling
- **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
- **SR-N-4:** Ensure Proper Operation and Maintenance of Operational Equipment
- **SR-N-5:** Ensure Proper Maintenance of On-site Pavement
- **SR-N-6:** Post Appropriate Notices
- **SR N-7**: Limitation on Construction Hours

Mitigation Measures

Mitigation Measure NOI-1: Provide Rubberized Pavement. To reduce the off-site traffic noise levels resulting from WVLCSP-related truck trips, the use of an asphalt rubber hot mix overlay to reduce the noise levels associated with vehicle tires traveling over pavement is required during off-site project roadway improvements on the following roadway segments:

City of Fontana

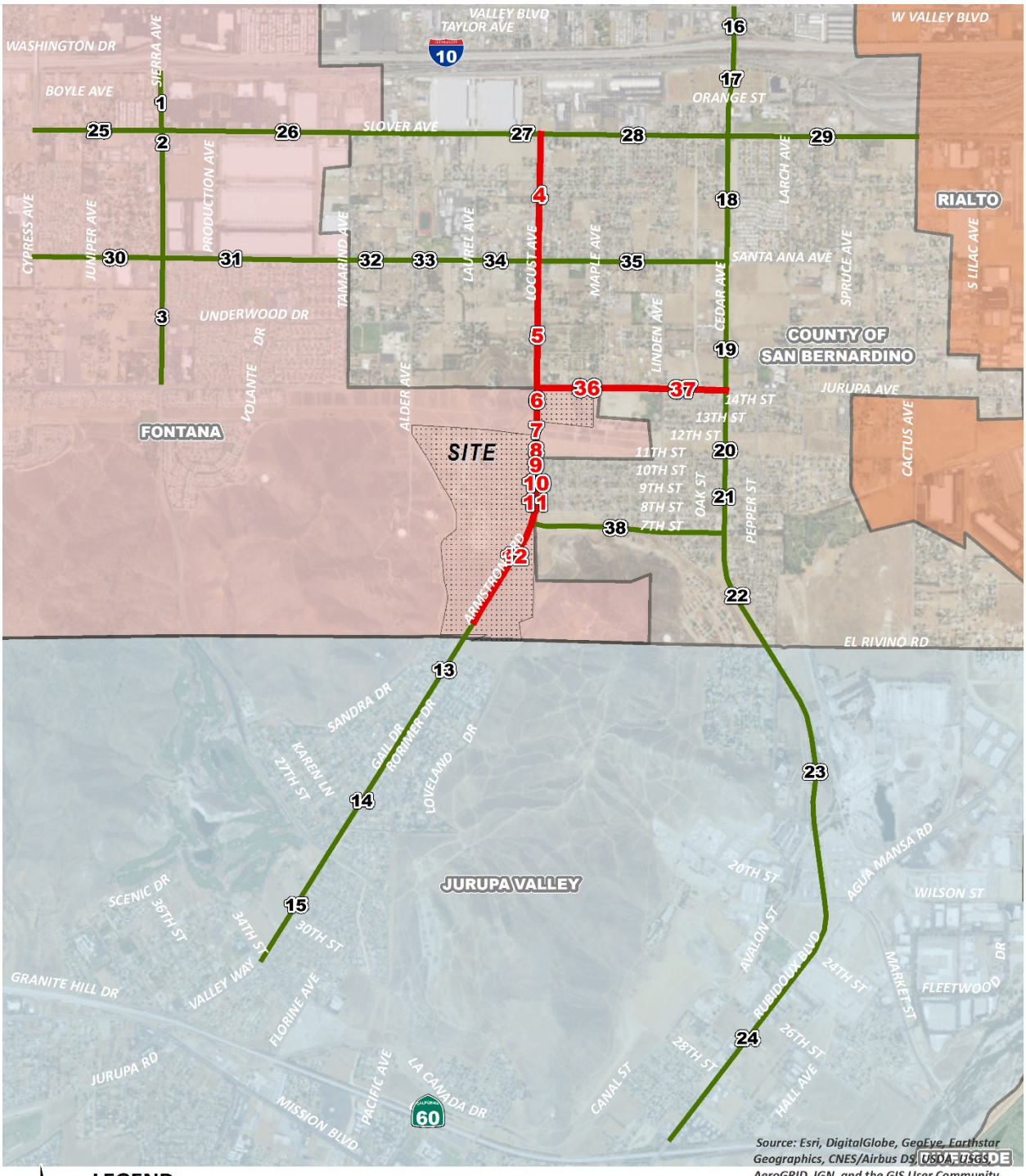
- Locust Avenue:South of Jurupa Avenue (Segment #6)
- South of Driveway 4 (Segment #7)
- South of Driveway 5 (Segment #8)
- South of 11th Street (Segment #9)
- South of 10th Street (Segment #10)
- South of 9th Street (Segment #11)
- South of 8th Street (Segment #12)

- Jurupa Avenue:
  - East of Locust Avenue—eastbound lanes from Locust Avenue to Kessler Park (Segment #36)

San Bernardino County

- Locust Avenue:
  - South of Slover Avenue (Segment #4)
  - South of Santa Ana Avenue (Segment #5)
- Jurupa Avenue:
  - West of Cedar Avenue (Segment #37)

Figure 4.2.11-6. Off-site Traffic Noise Impact Mitigation Locations



Residual Impacts

Construction impacts would be less than significant with implementation of **Specific Plan Requirements SP-GHG-4** and **SP-N-1** through **SP-N-3**, **Regulatory Requirement RR-N-1**, **Standard Requirements SR-N-1** through **SR-N-6**, and **Mitigation Measure AQ-7.** Operational impacts associated with on-site activities, including idling trucks, would be significant in relation to air quality, and implementation of **Specific Plan Requirements SP-N-1** through **SP-N-3**, **Regulatory Requirement RR-N-1**, **and Mitigation Measure AQ-10** would reduce on-site operational noise impacts to less-than-significant levels.

However, off-site traffic noise would remain significant at the following locations:

- Existing residential uses on Locust Avenue:
  - South of Slover Avenue (Segment #4);
  - South of Santa Ana Avenue (Segment #5);
  - South of 11th Street (Segment #9);
  - South of 10th Street (Segment #10); and
  - South of 9th Street (Segment #11).
- Vacant lands designated residential use along Locust Avenue:
  - South of Jurupa Avenue (Segment #6);
  - South of WVLCSP Driveway 4 (Segment #7);
  - South of Driveway 5 (Segment #8); and
  - South of 8th Street (Segment #12).
- Existing residential uses on Jurupa Avenue:
  - East of Locust Avenue (Segment #36); and
  - West of Cedar Avenue (Segment #37).

Consideration was given to requiring construction of noise walls along Jurupa Avenue between Locust Avenue and Cedar Street. However, existing residential uses along the north side of Jurupa Avenue currently take access along the roadway, and future development along the south side of Jurupa Avenue between the Specific plan area and Kessler Park will likewise need to take access from Jurupa Avenue. As a result, numerous breaks in a potential sound wall would be required, reducing its effectiveness to reduce traffic noise levels. In addition, construction of an 8-foot-high solid masonry wall along the front setback line of properties along Jurupa Avenue would not be permitted by applicable zoning regulations.

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 4.2.11-26.

Table 4.2.11-26. Typical Vibration Levels for Construction Equipment

Equipment	Approximate peak particle velocity at 25 feet (inches/second)
Small bulldozer	0.003
Large bulldozer	0.089
Loaded trucks	0.076
Jackhammer	0.035

Vibration levels from construction equipment attenuate at a rate of $PPV_{equip} = PPV_{ref} \times (25/D)^{\wedge 1.5}$ as referenced above. Groundborne vibration typically decreases rapidly with distance. Based on the FTA data (Table 4.2.11-26), 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 4.2.11-27).

Table 4.2.11-27. 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.
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.

Groundborne vibration levels resulting from grading and construction activities occurring within the Specific Plan area were estimated based on data published by FTA. Using the vibration source level of construction equipment provided in Table 4.2.11-26 and the construction vibration assessment methodology published by FTA, it is possible to estimate WVLCSP vibration impacts.

Based on the reference vibration levels provided by FTA, a large bulldozer represents the peak source of vibration with a reference velocity of 0.089 in/sec PPV at 25 feet. At distances ranging from 162 to 4,192 feet from project site construction activities to sensitive receptors, construction vibration velocity levels are expected to approach 0.005 in/sec PPV, as shown in Appendix K, which is below the vibration threshold of 0.2 in/sec PPV at all receiver locations during construction.

Project-related construction vibration levels also do not represent levels capable of causing building damage to nearby residential homes. Peak proposed project construction vibration levels identified in Appendix K, approaching 0.005 in/sec PPV, are below FTA vibration levels for building damage at the residential homes near the Specific Plan area. Furthermore, the impacts at the site of the closest sensitive receivers are unlikely to be sustained during the entire construction period, but would occur only during the times that heavy construction equipment is operating adjacent to the eastern project site boundary. Construction within the Specific Plan area would be restricted to daytime hours consistent with City requirements, thereby eliminating potential vibration impacts during the sensitive nighttime hours.

Because the predicted vibration levels from project construction would be at or below the thresholds of perception and building damage, construction 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. Ground-borne 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.

Specific Plan Requirement

The applicant will implement the following Specific Plan Requirement, as summarized below and specified in detail in Section 3.6 of the Project Description.

- **SP-N-4:** Vibration Performance Standard

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant with implementation of **Specific Plan Requirement SP-N-4**.

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.

Noise from On-site Operations

The proposed project would generate a daytime operational noise level increase at nearby sensitive receptors of up to 0.6 dBA L_{eq} at Receptor R14 and 0.2 dBA L_{eq} at Receptor R15. The proposed project would not increase the ambient L_{eq} at any other locations. During nighttime hours, the highest project-related noise level increase would approach 0.6 dBA L_{eq} at Receptor R14 with an increase of 0.1 dBA L_{eq} at Receptor R15. Because project-related operational noise contributions would not exceed applicable significance criteria, increased noise levels resulting from the proposed project would not result in a substantial permanent increase in noise above ambient levels, and impacts would be less than significant.

Traffic Noise Impacts

As discussed in Impact NOI-1, implementation of the proposed project would result in an increase in noise levels of up to 3.9 dBA CNEL over the existing without project noise environment and 2.7 dBA CNEL over the future year 2040 without project noise environment (see Tables 4.2.11-24 and 4.2.11-25, above).

Based on the significance criteria presented above, land uses adjacent to the following roadway segments would experience significant noise level increases due to WVLCSP-related traffic:

- Residential uses on Locust Avenue:
  - South of Slover Avenue (Segment #4);
  - South of Santa Ana Avenue (Segment #5);
  - South of Jurupa Avenue (Segment #6);
  - South of Driveway 4 (Segment #7);
  - South of Driveway 5 (Segment #8);
  - South of 11th Street (Segment #9);
  - South of 10th Street (Segment #10);
  - South of 9th Street (Segment #11); and
  - South of 8th Street (Segment #12).
- Residential uses on Jurupa Avenue:
  - East of Locust Avenue (Segment #36); and
  - West of Cedar Avenue (Segment #37).

Impacts would be significant, and implementation of **Mitigation Measure NOI-1** 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 Requirements and Standard Requirements

The applicant will implement the following Specific Plan Requirements and Standard Requirements, as summarized below and specified in detail in Section 3.6 of the Project Description.

- **SP-GHG-4:** Provide Electrical Connections at Loading Docks
- **SP-N-1:** Noise Performance Standards
- **SP-N-2:** Installation of Sound Barriers on Site
- **SP-N-3:** Truck Idling
- **SR-N-4:** Ensure Proper Operation and Maintenance of Operational Equipment
- **SR-N-5:** Ensure Proper Maintenance of On-site Pavement
- **SR-N-6:** Post Appropriate Notices

Mitigation Measures

Implement **Mitigation Measure AQ-10** to reduce ambient noise levels related to truck idling during loading and unloading. Implement **Mitigation Measure NOI-1** to reduce ambient noise levels related to increased traffic.

Residual Impacts

While the noise level associated with on-site operations, including truck idling, would be an increase over ambient noise levels, it would not represent a significant increase. Therefore, with inclusion of **Specific Plan Requirements SP-GHG-4**, and **SP-N-1** through **SP-N-4**, **Standard Requirements SR-N-4** through **SR-N-6**, and **Mitigation Measures AQ-10** and **NOI-1,** on-site operational impacts would be less than significant.

However, off-site traffic noise would remain significant at the following locations:

- Residential uses on Locust Avenue:
  - South of Slover Avenue (Segment #4);
  - South of Santa Ana Avenue (Segment #5);
  - South of Jurupa Avenue (Segment #6);
  - South of Driveway 4 (Segment #7);
  - South of Driveway 5 (Segment #8);
  - South of 11th Street (Segment #9);

- South of 10th Street (Segment #10);
- South of 9th Street (Segment #11); and
- South of 8th Street (Segment #12).

- Residential uses on Jurupa Avenue:
  - East of Locust Avenue (Segment #36); and
  - West of Cedar Avenue (Segment #37).

Consideration was given to requiring construction of noise walls along Jurupa Avenue between Locust Avenue and Cedar Street. However, existing residential uses along the north side of Jurupa Avenue currently take access along the roadway, and future development along the south side of Jurupa Avenue between the Specific Plan area and Kessler Park will likewise need to take access from Jurupa Avenue. As a result, numerous breaks in a potential sound wall would be required, reducing its effectiveness to reduce traffic noise levels. In addition, construction of a 6-foot-high solid masonry wall along the front setback line of properties along Jurupa Avenue would not be permitted by applicable zoning regulations. Therefore, even with the implementation of **Mitigation Measure NOI-1**, 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.

While construction noise levels would represent a substantial increase over existing ambient noise levels, construction would be limited to 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**.

While construction 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.

To further address construction noise, temporary construction noise mitigation barriers would be provided at the construction boundaries near affected receiver locations where construction noise levels could exceed applicable thresholds, as shown on Figure 4.2.11-5. These noise barriers would be in place for the duration of mobile-equipment construction activities during the site preparation

and grading stages of Specific Plan area construction. With the installation of temporary exterior noise control barriers, construction noise levels at the nearby residential receivers would be less than significant.

Specific Plan Requirements, Regulatory Requirements, and Standard Requirements

The applicant will implement the following Specific Plan requirements, Regulatory Requirements, and Standard Requirements as summarized below and specified in detail in Section 3.6 of the Project Description.

- **SP-AQ-1:** Require Equipment to Turn Off When Not in Use
- **SP-GHG-4:** Provide Electrical Connections at Loading Docks
- **SP-N-1:** Noise Performance Standards
- **SP-N-2:** Installation of Sound Barriers on Site
- **SP-N-3:** Truck Idling
- **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
- **SR-N-4:** Ensure Proper Operation and Maintenance of Operational Equipment
- **SR-N-5:** Ensure Proper Maintenance of On-site Pavement
- **SR-N-6:** Post Appropriate Notices
- **SR-N-7**: Limitations on Construction Hours

Mitigation Measures

Implement **Mitigation Measure AQ-7**.

Residual Impacts

Temporary construction noise impacts would be less than significant with implementation of **Specific Plan Requirements SP-AQ-1, SP-GHG-4,** and **SP-N-1** through **SP-N-3**, **Regulatory Requirement RR-N-1**, **Standard Requirements SR-N-1** through **SR-N-7**, 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. No impacts would result.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would result.

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 noise impact would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would result.

4.2.12 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 of Fontana and region is 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 San Bernardino County and adjacent to the city of Jurupa Valley and the unincorporated Bloomington area of San Bernardino County.

Population and Housing

As of 2016, San Bernardino County had a population of approximately 2,139,570 individuals. The American Community Survey identified 705,962 housing units within San Bernardino County, 91,637 of which were vacant in 2015, the most recent year for which housing data are available. The American Community Survey identified the countywide homeowner vacancy rate as 2.4 percent and the renter vacancy rate as 5.8 percent in 2015 (U.S. Census Bureau 2016a).

The city of Fontana had an estimated population of 209,895 in 2016. In terms of population, Fontana is the second largest city in San Bernardino County and the 20th largest city in the state (California Department of Finance 2017). The American Community Survey identified 52,095 housing units within the city, 2,120 of which were vacant in 2015, the most recent year for which housing data are available. The American Community Survey identified Fontana's 2015 homeowner vacancy rate as 2.0 percent and the renter vacancy rate as 3.1 percent (U.S. Census Bureau 2016b).

Employment

Current data for California shows the state unemployment rate at 5.0 percent (EDD 2017a). According to the Employment Development Department, San Bernardino County has a labor force of approximately 949,400 individuals—901,700 are employed and 47,700 are unemployed. The unemployment rate for San Bernardino County is equal to the 5.0 percent state average. The city of Fontana has a labor force of approximately 97,100 individuals—91,800 are employed and 5,300 are unemployed. The city of Fontana's unemployment rate is slightly higher than the state and San Bernardino County at 5.5 percent (EDD 2017b). It should be noted that the statewide, countywide, and city of Fontana unemployment rates are substantially lower than at the time of the First Recirculated Draft Environmental Impact Report (8.8 percent, 10.0 percent, and 10.4 percent, respectively).

SCAG Trends and Forecasts

The most current Southern California Association of Governments (SCAG) forecasts (Regional Transportation Plan/Sustainable Communities Strategy [RTP/SCS] 2017) for the region, San Bernardino County, and city of Fontana are shown in Table 4.2.12-1.

Table 4.2.12-1. Population, Housing, and Employment Trends and Forecasts

	2012	2020	2040
Adopted SCAG Regionwide Forecasts			
Population	18,322,000	19,395,000	22,138,000
Households	5,885,000	6,415,000	7,412,000
Employment	7,440,000	8,507,000	9,872,000
County of San Bernardino			
Population	2,068,000	2,197,000	2,731,000
Households	615,000	687,000	854,000
Employment	659,000	789,000	1,028,000
City of Fontana			
Population	200,200	NA	280,900
Households	49,600	NA	74,000
Employment	47,000	NA	70,800

Source: SCAG 2017.

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 community[1] 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

[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 percent of county median income), Very Low Income (30–50 percent of county median income), Low Income (50–80 percent of county median income), Moderate Income (80–120 percent of county median income), and Above Moderate Income (greater than 120 percent of county median income).

housing need for each economic segment of the community. The RHNA is not a mandate for a local 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 (City) General Plan Housing Element (2014) is one of the seven general plan elements mandated by the State of California and the City's official plan for providing 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-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 4.2.13, *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 Quality 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 is anticipated to 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 5.0 percent unemployment rates within the county and city and the temporary nature of construction projects. Furthermore, the construction industry has recently come 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 the Inland Empire region, which has an average unemployment rate. Because of the many bedroom communities surrounding Fontana, even as the economy continues to improve, the labor force within the area would likely remain available for increased local employment opportunities, including those provided by the proposed project. As shown in Table 4.2.12-1, San Bernardino County has a lower proportion of employment as compared to the number of households than the statewide average, which will continue into the future, indicating an abundant local labor pool to support future employment growth. Table 4.2.12-1 also indicates that the city of Fontana will have a substantial labor pool available to support employment growth through at least 2040. An examination of SCAG employment and household projections indicates a similar availability of existing and projected labor availability in nearby communities in San Bernardino and Riverside counties. It is anticipated

that the available workforce in Fontana, surrounding communities, and the region would adequately meet the project's employment demand without resulting in in-migration of new residents to the region beyond the substantial housing increases already projected for Fontana and the Inland Empire region through 2040.

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), with an associated 727 households in the Fontana area (2,959 residents).[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 third-party trucking companies. 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 5.0 percent 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 homeowner vacancy rate within the city of Fontana is 2.0 percent, and its rental vacancy rate is 3.1 percent. The homeowner vacancy rate within San Bernardino County is 2.4 percent, and its rental vacancy rate is 5.8 percent. 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, which are intended for extremely low through 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 4.2.12-2 provides a breakdown of units needed by income group in Fontana during the current planning cycle.

[2] The population growth generation factor is assumed to be one-quarter (25 percent) of employment multiplied by 4.07 persons per household, which represents the average household size in the city of Fontana for 2017, based on data from the California Department of Finance (2017).

Table 4.2.12-2. 2014–2021 City of Fontana RHNA Allocations for New Housing

Income Level	Number of Units	Percent 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 2017

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 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 SCAG, combines to a current RHNA total need of 7,843 residential units, which is then broken down by income level. Table 4.2.12-3 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 4.2.12-3. 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, including vacant lots and properties that could potentially be redeveloped. The vacant parcels within the city that have Residential land use designations could 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 densities suitable for moderate and above moderate income levels. In addition, two planned specific plan developments as shown in Table 4.2.12-3 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 City's 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 25 to 39 dwelling units per acre.

As shown in Table 4.2.12-3, 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 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 Metropolitan Statistical Area, the default density for the city is 30 dwelling units per acre. This means that zoning that permits future development at densities of 30 dwelling units per acre or greater is presumed to meet the needs of lower income households, while zoning for lower development 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, the dwelling units within the Valley Trails Specific Plan would be considered to be available for moderate and above moderate income households. Therefore, 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 its approved residential use to its proposed warehouse use, 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, which is 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 WVLCSP project would not affect the City's ability to provide housing for all economic segments of the community.

As discussed in Section 4.2.10, *Land Use and Planning*, the proposed project would require amendments to the City's General Plan and Zoning Code in order to develop the industrial WVLCSP project. As included in Table 4.2.10-2, a consistency analysis of the proposed Specific Plan with the City's General Plan goals and policies concludes that the WVLCSP 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 WVLCSP 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 strategy of implementing new higher-density zoning districts, discussed above, in addition to the current 5 percent housing vacancy rate within the city, demonstrates 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, addition of turning lanes and pavement improvements along existing roadways, a proposed new sewer lift station and force main at 11th Street and Linden Avenue) and a sewer line in 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 off-site infrastructure improvements provided within existing roadway rights-of-way. 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.

4.2.13 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 or Specific Plan) project. For analysis of parks and recreational facilities, refer to Section 4.2.14, *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 also 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 from the project site. Table 4.2.13-1 lists existing public facilities that provide services for the project area.

Table 4.2.13-1. 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	4
Other Public Facilities		
Kaiser Foundation Hospital	9961 Sierra Avenue, Fontana 92335	1.9
Green Acres Memorial Garden (cemetery)	11th 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 located 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 (City) 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 offers 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.).

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. 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, 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 five-person medic-truck squad (captain, engineer, two firefighter/paramedics, and firefighter) and a medic truck.

The secondary response station for the project area is Station 76, located 1.5 miles north of the project site at 10174 Magnolia Street. This local Bloomington station is operated by the County of Riverside 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 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 2016).

School Facilities

Most of Fontana's students are served by the Fontana Unified School District; however, the project site is within the Colton Joint Unified School District (CJUSD). A total of 14 schools are within Fontana city limits. The project site is within the service areas of four CJUSD schools: Sycamore Hills Elementary School (current enrollment[1] 725), Walter Zimmerman Elementary School (current enrollment 743), Ruth O. Harris Middle School (current enrollment 780), and Bloomington High School (current enrollment 2.161). Sycamore Hills Elementary, Zimmerman Elementary, and Harris Middle School are all currently below capacity. Bloomington High School is at capacity (Change pers. comm.; CJUSD 2017a). CJUSD has noted that some schools farther from the project site are at capacity such that the district needs to place students at school sites beyond their normal attendance boundary. CJUSD charges a school facilities impact fee of $0.56 per square foot for commercial, industrial, and senior housing development within the district boundaries (CJUSD 2017b).

Parks and Recreation Facilities

For analysis of parks and recreational facilities, refer to Section 4.2.14, *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 2016).

Table 4.2.13-1 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 4.2.8, *Hazards and Hazardous Materials*, for additional fire and emergency response regulations applicable to the proposed project.

[1] Current enrollment of CJUSD schools is based on the 2016 school year.

State

Senate Bill 50 (School Impacts)

The Leroy F. Greene School Facilities Act of 1998, or Senate Bill (SB) 50, restricts the ability of local agencies, such as the City of Fontana, to deny land use approvals on the basis that public school facilities are inadequate, and precludes local agencies from requiring more than a standard developer fee. SB 50 authorizes school districts to levy developer fees to finance the construction or reconstruction of school facilities to address local school facility needs resulting from new development. SB 50 establishes the base amount of allowable developer fees for school impacts.

Section 65995(h) of the Government Code, which sets forth the provisions of SB 50, states that the payment of statutory fees is "deemed to be full and complete mitigation of the impacts of any legislative or adjudicated act, or both, involving but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization…on the provision of adequate school facilities." Although SB 50 fully mitigates direct impacts on school facilities, under the California Environmental Quality Act (CEQA), the indirect impacts related to school attendance or construction of school facilities must also be considered and mitigated in the environmental impact report. These include indirect impacts on traffic, air quality, and noise levels.

Education Code Section 48204(b) states that a school district may deem a pupil to be a resident "if at least one parent or the legal guardian of the pupil is physically employed within the boundaries of that school district for a minimum of 10 hours during the school week." This is an accommodation for parents who live and work in different school attendance boundaries, and also provides the nexus required to levy school fees against commercial and industrial development.

Local

City of Fontana General Plan

The Public Facilities, Services, and Infrastructure Element of the City of Fontana 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 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 toward 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 CEQA 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 4.2.8, *Hazards and Hazardous Materials*.

Specific Plan Requirements

SP-PS-1: Implement Crime Prevention through Environmental Design (CPTED) Measures. The West Valley Logistics Center Specific Plan complies with the City of Fontana's CPTED Guidelines. As such, the Specific Plan incorporates 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; and

- 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.

SP-PS-2: Fire Protection through Implementation of Safety Design Measures. In order to address current plans by the Fontana Fire Protection District (FFPD) to move the fire station that is currently closest to the West Valley Logistics Center Specific Plan (Specific Plan) site to another location farther from the project site such that the travel distance and running time from the relocated fire station to the project site would increase, the Specific Plan includes the following measures to provide for adequate fire protection and meet the requirements of the FFPD:

- Adequate offsite public and onsite private fire hydrants will be required; their number and location will be determined after FFPD reviews and approves the site plan.
- The proposed private street, along with any entry gates to individual building sites, will be built to City of Fontana (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 City Municipal Code.
- Construction of public or private roadways in the proposed development will not exceed 15 percent 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. No dead-ending street or fire lane will be greater than 700 feet in length, unless approved by the FFPD.
- Secondary access will be required for Parcels 1 through 7.
- Fire lane widths will not be less than 20 feet. When a fire lane must accommodate the operation of an FFPD aerial ladder apparatus or where fire hydrants are installed, those portions will not be less than 28 feet wide.
- Where access for a given building requires accommodation of FFPD apparatus, the minimum outside radius of the paved surface will be 35 feet. An additional 6 feet of clear space must be maintained beyond the outside radius to a vertical point 13 feet 6 inches above the paved surface of the roadway.
- Where access for a given building requires accommodation of FFPD apparatus, overhead clearance will not be less than 14 feet.
- 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.
- Access for FFPD apparatus and personnel to and into all structures will be required.
- Provision of additional vehicular access where buildings exceed 28 feet in height as may be required by the FFPD.

Regulatory Requirements

RR PS-1: Pay Colton Joint Unified School District Fees. Proposed commercial, industrial, and senior housing development projects, including the West Valley Logistics Center Specific Plan, are required to pay the established Colton Joint Unified School District school facilities impact fees per square foot of building area at the time of building permit issuance. Individual buildings within the West Valley Logistics Center Specific Plan will be required to pay school fees at the established rate at the time of building permit issuance.

RR-PS-2: Pay City of Fontana Impact Development 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 at the established rate at the time of building permit issuance. New development must also comply with the Fontana Police Department's Standard Building Security Specifications and the City of Fontana's Crime Prevention through Environmental Design guidelines.

RR-PS-3: Pay City of Fontana Impact Fees for Library Facilities. The proposed project will pay the City of Fontana's development impact fee at the established rate at the time of building permit issuance to support expansion of library services.

RR-HM-4: Prepare and Implement a Fuel Modification Zone Management Plan. In accordance with Section 30-189(12), Article V, Division 7, of the City of Fontana (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. 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.

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.

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 Section 4.2.14, *Recreation*)**
- **Other public facilities (libraries)**

The WVLCSP would facilitate development of up to 3,473,690 square feet of warehouse use, including development of seven warehouse buildings ranging in size from 100,000 square feet to over 1,000,000 square feet. 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 direct impacts on public services from increased demand for services within the Specific Plan area, as well as potential indirect impacts from additional employment and job growth (growth-inducing effects). Impacts on parks and other recreational facilities are analyzed separately in Section 4.2.14, *Recreation*.

Police Protection

The WVLCSP would facilitate development of the site with warehouse logistics uses that would increase demand for police protection services above that of the existing vacant 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 the City's established crime prevention guidelines (**Specific Plan Requirement SP-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, because 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 (Brazill pers. comm.).

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 CPTED Guidelines (refer to **Specific Plan Requirement SP-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 schedule[2] (refer to **Regulatory Requirement RR-PS-2**).

Approval of the proposed development would increase service response times; however, because of the recent expansion of Fontana's central police facility, implementation of specified development requirements (refer to **Specific Plan Requirement SP-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 warehouse distribution uses that would increase demand for fire protection services. As stated in Section 4.2.8, *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 (refer to **Specific Plan Requirement SP-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 **RR-HM-4** (fuel modification management zone).

During project operations, the proposed new warehouse development would cause additional demand on the FFPD to respond to calls to the site, including additional service demand for Station 77. The FFPD is currently able to maintain its 6-minute response time goal[3] to the project site. However, in addition to the new need for service from the proposed project site, the 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.

[2] Based on the proposed 3,473,690 square feet of industrial use, currently established police development impact fees ($0.131/square foot) are estimated to be $455,053.

[3] The FFPD's ability to meet its 6-minute response goal is the threshold used to determine whether new or expanded facilities would be needed, the construction of which could result in significant impacts. Therefore, the 6-minute response goal and the resulting need for new or expanded facilities is the basis for determining impact significance.

Relocation of Station 77, which is likely to cause FFPD response times to the project site to exceed 6 minutes, would indicate the need for construction of a new fire station to maintain response time goals to the project site and surrounding area; however, this need would be caused by FFPD's planned relocation of Station 77, and not by the proposed project. The FFPD does not identify any planned additional facilities in its strategic plan that would maintain adequate response time to the project site and surrounding area following relocation of Station 77; therefore, the relocation would cause response times to the project site and vicinity for fire and paramedic emergency services to fail to meet the FFPD's established response time goal.

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**).[4] 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 the 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-4** (fuel modification zone management), and **Standard Requirements SR-HM-2** (spark arresters on construction equipment)**, Mitigation Measure HAZ-2** (clear fire fuel), and **Specific Plan Requirement SP-PS-2**, potential impacts on fire services from implementation of the Specific Plan 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*). While state law permits parents to register their children for school based on their place of employment, such school registrations are very minimal. 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 $0.56 per square foot. This is considered by law to be full mitigation for any impacts that may be generated by the proposed project.[5]

No new school facilities would be necessary as a result of the project because the elementary and middle schools within the service area of the project are currently below capacity. Bloomington High School is currently operating 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.

[4] Based on the proposed 3,473,690 square feet of industrial use, currently established fire development impact fees ($0.10/square foot) are estimated to be approximately $347,370.

[5] Based on the proposed 3,473,690 square feet of industrial use, currently established CJUSD school fees ($0.56/square foot) are estimated to be approximately $2,096,466.

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; however, estimating the precise number of employees who would use these facilities would be highly speculative. Because the project is not expected to generate 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 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 (which are currently calculated at $0.042 per 1,000 square foot of industrial building area) as specified in the City's fee schedule.[6]

Specific Plan Requirements and Regulatory Requirements

The applicant will 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-PS-1:** Implement Crime Prevention through Environmental Design (CPTED) Measures.
- **SP-PS-2:** Fire Protection through Implementation of Safety Design Measures.
- **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.
- **RR-HM-4:** Prepare and Implement a Fuel Modification Zone Management Plan.

SR-HM-2: Require Construction Equipment Spark Arresters. Mitigation Measures

To reduce wildfire impacts, the project would require **Standard Requirement SR-HM-2** (Require Construction Equipment Spark Arresters) and **Mitigation Measure HAZ-2** (clear fire fuel), provided in Section 4.2.8, *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 **Specific Plan Requirement SP-PS-2**.

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 proposed project does not have control over staffing within FPD and is therefore being required to provide certain physical design measures (refer to **Specific Plan Requirement SP-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.

[6] Based on the proposed 3,473,690 square feet of industrial use, currently established library development impact fees ($0.042/square foot) are estimated to be approximately $145,895.

Incremental demands for public services would be addressed by the payment of fees toward capital improvements (**Regulatory Requirements RR-PS-1, RR-PS-2**, and **RR-PS-3**). With the incorporation of **Specific Plan Requirement SP-PS-1**, **Specific Plan Requirement SP-PS-2**, **Standard Requirements SR-HM-2** (spark arresters on construction equipment), and **Mitigation Measure HAZ-2** (clear fire fuel), impacts anticipated from the proposed project related to public services would be less than significant.

4.2.14 Recreation

Introduction

This section evaluates the impacts of the proposed West Valley Logistics Center Specific Plan (WVLCSP or Specific Plan) 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 on such facilities that could result 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-acre walk- or bike-to parks that are 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 and 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. Includes hiking/biking trails with improved surface of concrete or asphalt for the bike and an unimproved surface for jogging. Minimum widths are 8 feet for two bikes, 5 feet for one bike, and 4 feet for hikers.
- **Class 2 Bikeway.** Often referred to as a bike lane. Used along roadways in urban settings. Minimum width is 4 feet between the gutter or parking lane and the auto travel lane.
- **Class 3 Bikeway.** Often referred to as a bike route; connects Class 1 and 2 bikeways; and 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 eight 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 county boundary via a Jurupa Area community trail (County of Riverside 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 has eight community parks. Village Park, at 15601 Village Drive, is closest to the project site and is approximately 2.8 miles to the 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 seven neighborhood parks in the City. Catawba Park, at 11411 Catawba Avenue, is closest to the project site and is approximately 2.3 miles to the 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 and is approximately 0.7 mile to the 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 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 4.2.14-1 identifies parks and recreational facilities in the vicinity of the project site and their distances from the site.

Table 4.2.14-1. 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

Facility	Type	Address	Proximity to 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 24th 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 City of Fontana 2017.

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.

The Quimby Act permits cities and counties to require dedication of land or payment of fees in lieu of dedication as a condition of approval of tentative maps or parcel maps. The act sets standards for the amount of land that a city or county can require dedication of or payment of fees in lieu of dedication. Under the Quimby Act, the dedication of land, or payment of fees, or both, cannot exceed

3 acres of park area per 1,000 persons residing within the subdivision, unless the amount of existing neighborhood and community park area exceeds that limit, in which case the calculated amount may be adopted as a higher standard, not to exceed 5 acres per 1,000 persons residing within a subdivision.

Southern California Association of Governments 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy

The 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is a major advisory plan prepared by the Southern California Association of Governments that addresses important regional issues such as transportation, land use, open space, water, greenhouse gas emissions, and air quality. The 2016–2040 RTP/SCS is designed to ensure that the regional transportation system serves all segments of society. It is subject to numerous performance measures to monitor its progress toward achieving social equity and environmental justice. These measures include accessibility to parks and natural lands, roadway noise impacts, air quality impacts, and public health impacts.

The 2016–2040 RTP/SCS 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 2016–2040 RTP/SCS presents a vision of how Southern California can balance resource conservation, economic vitality, and quality of life, recognizing that the region will experience an increase of four million residents through 2040. The 2016–2040 RTP/SCS 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.

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 equivalent to the maximum dedication permitted by the State's Quimby Act.

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. Data sources for this section include the City of Fontana General Plan Open Space and Conservation Element (City of Fontana 2003a); City of Fontana General Plan Parks, Recreation, and Trails Element (City of Fontana 2003a); 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 the increased use of or demand for recreational facilities resulting from the proposed project would either cause deterioration of existing recreational facilities or result in the construction of expanded or new recreational facilities, which may have an adverse physical effect on the environment.

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 that might have an adverse physical effect on the environment.

Project Design Features

The following recreation-related project design features, which include Specific Plan Requirements, would prevent or reduce potentially significant environmental impacts on recreation.

Specific Plan Requirements

SP-R-1: Trail Access and Location Verification: The following measures are required by the West Valley Logistics Center Specific Plan:

- Final parcel map and grading plans shall identify the confirmed alignment of the Jurupa Hills Trail through the project site.
- Development of the West Valley Logistics Center Specific Plan shall retain access to the existing Jurupa Hills Trail and Southern California Edison Easement Trail.
- The Property Owners' Association shall be charged with ensuring that on-site operations are conducted so as to not cause deterioration of the Jurupa Hills Trail and Southern California Edison Easement Trail.

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 warehouse distribution 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 as part of 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. Furthermore, 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 create 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, weekday daytime population of the project site would be higher than during evenings and weekends, when park use is at its greatest.

Although there would be no residents living within the project site, employees working within the site could use recreational facilities and open spaces in Fontana and the adjacent unincorporated San Bernardino County community of Bloomington during certain times of the day. 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 (i.e., 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 4.2.14-1, several neighborhood, community, and regional parks, trails, and recreational facilities are located in the surrounding area. Because of the proximity of existing recreational facilities, workers would be able to access and use nearby parks, trails, and community centers. Kessler Park, which is approximately 500 feet east of the project site, provides ballfields and athletic courts that could be used by project site workers. Workers could also use the two trails running through the project site.

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 use 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 the project site 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 within Fontana would be maintained per City 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 the Project Description.

- **SP-R-1:** Trail Access and Location Verification.

Mitigation Measures

Mitigation Measure REC-1: Jurupa Hills Trail Realignment Plan. Any realignment of the Jurupa Hills Trail as a result of the proposed project will 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 will 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 will also submit plans for review and approval and will 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, and accessory structures. For compliance, the applicant will 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 that might have an adverse physical effect on the environment

As previously mentioned, the proposed project would include 3,473,690 square feet of warehouse distribution 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 Specific Plan. 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 that 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.

4.2.15 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 Urban Crossroads in October 2017 (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 Daily Traffic (ADT).** The ADT 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 on the methodologies used to derive PCE for freeway segments, refer to the TIA in Appendix L.
- **Peak Hour.** A 1-hour period between 7:00 and 9:00 a.m. and 4:00 and 6:00 p.m. that experiences the heaviest amount of traffic on a given intersection or freeway mainline segment.

[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 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.

- **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 60 (SR-60) freeways, west of I-215 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 Riverside County and west of the unincorporated Bloomington community in 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/Locust Avenue, which traverses the project site from the south to the north. Armstrong Road/Locust Avenue divides the project area and runs 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 May and December 2016. Existing freeway segment bidirectional volumes are derived from the Caltrans Performance Measurement System website for the segments of I-10 west of Sierra Avenue and SR-60 west of Valley Way. The data were obtained from December 6 to 8, 2016.

Manual AM and PM peak hour turning movement counts were conducted in May and December 2016. The raw manual peak hour turning movement traffic count data sheets are included in the TIA (Appendix L). The traffic counts collected in May and December 2016 include the following vehicle classifications: passenger cars, 2-axle trucks, 3-axle trucks, and 4 or more axle trucks. To represent the impact large trucks, buses, and recreational vehicles have on traffic flow, all trucks were converted into PCE because, by their size alone, these vehicles occupy the same space as two or more passenger cars. In addition, the time it takes for these larger vehicles to accelerate and slow down is longer than for passenger cars, and varies depending on the type of vehicle and number of axles. For the purpose of the WVLCSP traffic analysis, a PCE factor of 2.0 has been applied to 2-axle trucks, 2.5 for 3-axle trucks, and 3.0 for 4+-axle trucks to estimate each turning movement. These factors are consistent with the values recommended for use in the City of Fontana's (City's) traffic study guidelines.

Existing ADT volumes on arterial highways are based upon factored intersection peak hour counts collected by Urban Crossroads, Inc. using the following formula for each intersection leg:

Weekday PM Peak Hour (Approach Volume + Exit Volume) x 11.0568 = Leg Volume

A comparison of the PM peak hour and daily traffic volumes of various roadway segments within the study area indicated that the peak-to-daily relationship is approximately 9.04 percent. As such, the above equation utilizing a factor of 11.0568 estimates the ADT volumes on the study area roadway segments assuming a peak-to-daily relationship of approximately 9.04 percent (i.e., 1/0.0904 = 11.0568) and was assumed to sufficiently estimate ADT volumes for planning-level analyses.

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 4.2.15-1 for signalized intersections and in Table 4.2.15-2 for unsignalized intersections. These definitions are based on the Transportation Research Board Special Report 209, Highway Capacity Manual (HCM). The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The HCM methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. The HCM uses different procedures depending on the type of intersection control.

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 C or better, while the City of Jurupa Valley and San Bernardino County (County) maintain an LOS D or better standard for intersections. The San Bernardino County Congestion Management Program (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. LOS standards are summarized below in Table 4.2.15-3.

The City of Fontana, County of San Bernardino, City of Jurupa Valley, City of Riverside, and Caltrans require signalized intersection operations analysis based on the methodology described in Chapter 16 of the HCM.

Intersection LOS operations are based on an intersection's average control delay. For signalized intersections LOS, is directly related to the average control delay per vehicle and is correlated to a LOS designation as described in Table 4.2.15-1.

Table 4.2.15-1. Level of Service Definitions for Signalized Intersections

Description	Average Control Delay (Seconds), v/c ≤ 1.0	Level of Service, v/c ≤ 1.0	Level of Service, v/c > 1.0
Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00	A	F
Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00	B	F
Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00	C	F
Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00	D	F
Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00	E	F
Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	80.01 and up	F	F

Source: Transportation Research Board 2010

At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left-turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. For all-way stop-controlled intersections, LOS is computed for the intersection as a whole. The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (see Table 4.2.15-2).

Table 4.2.15-2. Unsignalized Intersection LOS Thresholds

Description	Average Control Delay Per Vehicle (Seconds)	Level of Service, v/c ≤ 1.0	Level of Service, v/c > 1.0
Little or no delays	0 to 10.00	A	F
Short traffic delays	10.01 to 15.00	B	F
Average traffic delays	15.01 to 25.00	C	F
Long traffic delays	25.01 to 35.00	D	F
Very long traffic delays	35.01 to 50.00	E	F
Extreme traffic delays with intersection capacity exceeded	> 50.00	F	F

Source: Transportation Research Board 2010

The standards used in the San Bernardino County CMP and by the Cities of Fontana and Jurupa Valley, San Bernardino County, and Caltrans to define "acceptable" LOS are shown in Table 4.2.15-3.

Table 4.2.15-3. 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 San Bernardino County
San Bernardino County CMP	E	I-10 and SR-60 freeway mainline segments

Source: Appendix L

In the city of Fontana, maintaining the LOS C threshold within a built environment may in some instances require extensive roadway widening that could affect existing uses and result in substantial costs associated with implementing improvements needed to maintain LOS C. In such cases, the City may determine the improvements required to maintain LOS C to be infeasible. In such cases, the City recognizes that LOS D may be considered the worst acceptable LOS in urbanized areas of the city.

The definition of intersection deficiency in San Bernardino County is based on the County's General Plan Circulation Element. The County's General Plan states that a target LOS of D must be maintained at county intersections and roadway segments wherever possible.

Consistent with the City of Jurupa Valley's traffic study guidelines, the City of Jurupa Valley will endeavor to maintain the target LOS of C on all City of Jurupa Valley–maintained roads and conventional state highways. As an exception, LOS D may be allowed in Community Development areas at intersections of combinations of Secondary Highways, Major Highways, Arterial Highways, Urban Arterial Highways, Expressways, or conventional state highways. LOS E may be allowed in designated Community Centers to the extent that it would support transit-oriented development and pedestrian communities. As such, all study area intersections within the city of Jurupa Valley utilize the minimum LOS threshold of LOS D for the purposes of this analysis, with the exception of CMP intersections, for which LOS E is utilized.

Consistent with the City of Riverside's General Plan Circulation Element, the City of Riverside will endeavor to maintain LOS D or better on Arterial Streets wherever possible. At key locations, such as city of Riverside Arterials that are used by regional freeway bypass traffic and at heavily traveled freeway interchanges, LOS E at peak hours may be permitted as the acceptable standard on a case-by-case basis. Locations that may warrant the LOS E standard include portions of Arlington Avenue/Alessandro Boulevard, Van Buren Boulevard throughout the city of Riverside, portions of La Sierra Avenue, and selected freeway interchanges. A higher standard such as LOS C or better may be adopted for Local and Collector streets in residential areas. The City of Riverside also recognizes that LOS F may be expected along key freeway-feeder segments during peak commute hours due to regional travel patterns. As such, all study area intersections within the city of Riverside utilize the minimum LOS threshold of LOS D to analyze WVLCSP impacts.

Caltrans endeavors to maintain a target LOS at the transition between LOS C and D on state facilities; however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing state highway

facility is operating at less than the target LOS, the existing LOS should be maintained. In general, the region-wide goal for an acceptable LOS on all freeways, roadway segments, and intersections is LOS D. LOS D is used in the analysis of the proposed project as the target LOS for freeway ramps, freeway segments, and freeway merge/diverge ramp junctions.

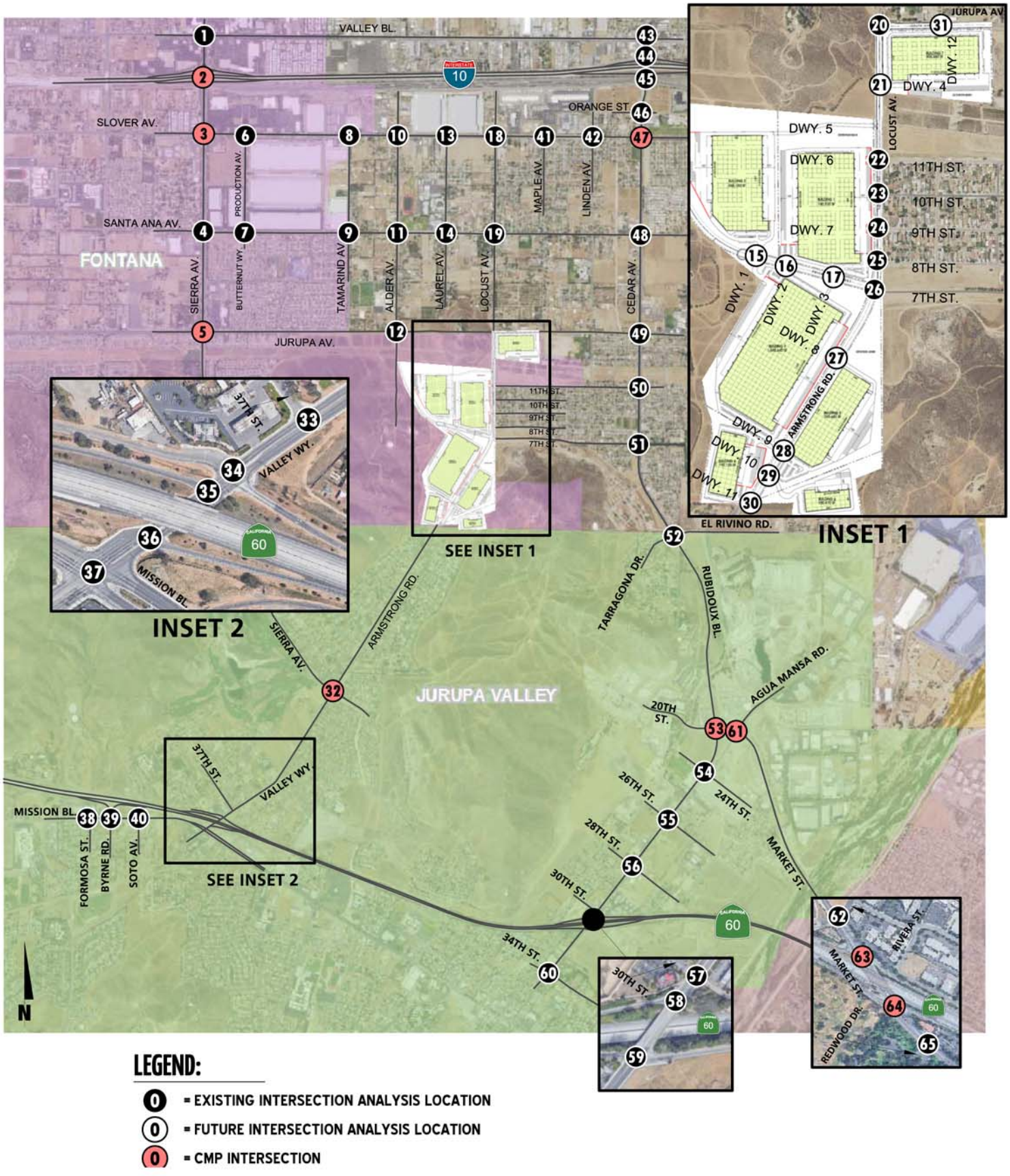
The traffic modeling and signal timing optimization software package Synchro (Version 9.1) has been utilized to analyze signalized intersections within the study area. Synchro is a macroscopic traffic software program that is based on the signalized intersection capacity analysis as specified in the HCM 2010. Macroscopic-level models represent traffic in terms of aggregate measures for each movement at the study intersections. Equations are used to determine measures of effectiveness such as delay and queue length. The LOS and capacity analysis performed by Synchro takes into consideration optimization and coordination of signalized intersections within a network.

Study Area

The following 65 study area intersection locations within the jurisdictions of the City of Fontana, City of Jurupa Valley, County of San Bernardino, and Caltrans shown in Figure 4.2.15-1 and listed in Table 4.2.15-4 were analyzed in the TIA, based on City of Fontana traffic study requirements, which require analysis of intersection locations where a proposed project is anticipated to contribute 50 or more peak-hour trips.

The rationale for evaluating intersections where a project would contribute 50 or more peak-hour trips is standard industry practice and supported by substantial evidence. Furthermore, the analysis threshold of 50 peak hour trips is identified in the San Bernardino County CMP Traffic Study Guidelines, which are followed by the City of Fontana (SANBAG 2016). It should also be noted that the 50 peak-hour trip threshold is used by several other lead agencies throughout Southern California, including Caltrans, the County of San Bernardino, and the County of Riverside. By establishing 50 project trips as the threshold of significance for when to analyze signalized intersections, the City of Fontana, the County of San Bernardino, the County of Riverside, and Caltrans consider a project trip contribution of fewer than 50 peak hour trips to be less than significant and typically not requiring evaluation.

The intent of a CMP is to more directly link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related impacts, and improve air quality. Counties within California have developed CMPs with varying methods and strategies to meet the intent of the CMP legislation. The County of San Bernardino CMP became effective with the passage of Proposition 111 in 1990, and was updated most recently in 2007. The San Bernardino County Transportation Authority adopted the 2007 CMP for San Bernardino County in December 2007. Of the 65 intersections analyzed in this Second Recirculated Draft Environmental Impact Report (2nd RDEIR), nine study area intersections are identified as CMP facilities.



LEGEND:

- (0) = EXISTING INTERSECTION ANALYSIS LOCATION
- (0) = FUTURE INTERSECTION ANALYSIS LOCATION
- (0) = CMP INTERSECTION

ICF

Figure 4.2.15-1
Study Area Intersections Location Map
West Valley Logistics Center Specific Plan 2nd RDEIR

Table 4.2.15-4. Intersection Analysis Locations

ID	Intersection Location	Jurisdiction	CMP?
1	Sierra Avenue/Valley Boulevard	Fontana	No
2	Sierra Avenue/I-10 Ramps	Caltrans, Fontana	Yes
3	Sierra Avenue/Slover Avenue	Fontana	Yes
4	Sierra Avenue/Santa Ana Avenue	Fontana	No
5	Sierra Avenue/Jurupa Avenue	Fontana	Yes
6	Production Avenue/Slover Avenue	Fontana	No
7	Production Avenue/Butternut Way/Santa Ana Avenue	Fontana	No
8	Tamarind Avenue/Slover Avenue	Fontana, SB County	No
9	Tamarind Avenue/Santa Ana Avenue	Fontana, SB County	No
10	Alder Avenue/Slover Avenue	SB County	No
11	Alder Avenue/Santa Ana Avenue	SB County	No
12	Alder Avenue/Jurupa Avenue	Fontana, SB County	No
13	Laurel Avenue/Slover Avenue	SB County	No
14	Laurel Avenue/Santa Ana Avenue	SB County	No
15	Driveway 1/7th Street – Future Intersection	Fontana	No
16	Driveway 2/7th Street – Future Intersection	Fontana	No
17	Driveway 3/7th Street – Future Intersection	Fontana	No
18	Locust Avenue/Slover Avenue	SB County	No
19	Locust Avenue/Santa Ana Avenue	SB County	No
20	Locust Avenue/Jurupa Avenue	Fontana, SB County	No
21	Locust Avenue/Driveway 4 – Future Intersection	Fontana	No
22	Locust Avenue/Driveway 6/11th Street	Fontana	No
23	Locust Avenue/10th Street	Fontana	No
24	Locust Avenue/Driveway 7/9th Street	Fontana	No
25	Locust Avenue/8th Street	Fontana	No
26	Locust Avenue/Armstrong Road/7th Street	Fontana	No
27	Armstrong Road/Driveway 8 – Future Intersection	Fontana	No
28	Armstrong Road/Driveway 9 – Future Intersection	Fontana	No
29	Armstrong Road/Driveway 10 – Future Intersection	Fontana	No
30	Armstrong Road/Driveway 11 – Future Intersection	Fontana	No
31	Driveway 12/Jurupa Avenue – Future Intersection	Fontana, SB County	No
32	Armstrong Road/Sierra Avenue	Jurupa Valley	Yes[1]
33	Valley Way/37th Street	Jurupa Valley	No
34	Valley Way/SR-60 Westbound Off-Ramp/Granite Hill Drive	Caltrans, Jurupa Valley	No
35	Valley Way/SR-60 Westbound On-Ramp	Caltrans, Jurupa Valley	No
36	Valley Way/SR-60 Eastbound On-Ramp	Caltrans, Jurupa Valley	No
37	Valley Way/Mission Boulevard	Jurupa Valley	No
38	Formosa Street/Mission Boulevard	Jurupa Valley	No
39	SR-60 Eastbound Ramps/Byrne Road/Mission Boulevard	Caltrans, Jurupa Valley	No
40	Soto Avenue/Mission Boulevard	Jurupa Valley	No
41	Maple Avenue/Slover Avenue	SB County	No

ID	Intersection Location	Jurisdiction	CMP?
42	Linden Avenue/Slover Avenue	SB County	No
43	Cedar Avenue/Valley Boulevard	SB County	No
44	Cedar Avenue/I-10 Westbound Ramps	Caltrans, SB County	No
45	Cedar Avenue/I-10 Eastbound Ramps	Caltrans, SB County	No
46	Cedar Avenue/Orange Street	SB County	No
47	Cedar Avenue/Slover Avenue	SB County	Yes
48	Cedar Avenue/Santa Ana Avenue	SB County	No
49	Cedar Avenue/Jurupa Avenue	SB County	No
50	Cedar Avenue 11th Street	SB County	No
51	Cedar Avenue/7th Street	SB County	No
52	Cedar Avenue/Rubidoux Boulevard/El Rivino Road	SB County, Jurupa Valley	No
53	Rubidoux Boulevard/20th Street/Market Street	Jurupa Valley	Yes[1]
54	Rubidoux Boulevard/24th Street	Jurupa Valley	No
55	Rubidoux Boulevard/26th Street	Jurupa Valley	No
56	Rubidoux Boulevard/28th Street	Jurupa Valley	No
57	Rubidoux Boulevard/30th Street/SR-60 Westbound Off-Ramp	Caltrans, Jurupa Valley	No
58	Rubidoux Boulevard/SR-60 Westbound On-Ramp	Caltrans, Jurupa Valley	No
59	Rubidoux Boulevard/SR-60 Eastbound Ramps	Caltrans, Jurupa Valley	No
60	Rubidoux Boulevard/34th Street	Jurupa Valley	No
61	Agua Mansa Road/Market Street	Jurupa Valley	Yes[1]
62	Market Street/Rivera Street	Riverside	No
63	Market Street/SR-60 Westbound Ramps	Caltrans, Riverside	Yes[1]
64	Market Street/SR-60 Eastbound Ramps	Caltrans, Riverside	Yes[1]
65	Market Street/Redwood Drive	Riverside	No

[1] Riverside County CMP location

San Bernardino County CMP traffic study guidelines require that freeway mainline analysis locations include the segments where a proposed project is anticipated to contribute 100 or more two-way peak hour trips. As such, the TIA for the WVLCSP evaluated the following freeway segments where the WVLCSP is anticipated to contribute 50 or more one-way peak hour trips (see Table 4.2.15-5).

Table 4.2.15-5. Freeway Mainline Segment Analysis Locations

ID	Freeway Mainline Segments
1	I-10 – Westbound, West of Sierra Avenue
2	I-10 – Westbound, East of Cedar Avenue
3	I-10 – Eastbound, West of Sierra Avenue
4	I-10 – Eastbound, East of Cedar Avenue
5	SR-60 – Westbound, West of Valley Way
6	SR-60 – Westbound, Valley Way to Rubidoux Boulevard
7	SR-60 – Westbound, East of Market Street
8	SR-60 – Eastbound, West of Valley Way
9	SR-60 – Eastbound, Valley Way to Rubidoux Boulevard
10	SR-60 – Eastbound, East of Market Street

The study area freeway merge/diverge ramp junction analysis locations include the following freeway ramp junctions for each direction of flow as shown in Table 4.2.15-6. These include locations where the WVLCSP is anticipated to contribute 50 or more one-way peak hour trips.

Table 4.2.15-6. Freeway Merge/Diverge Ramp Junction Analysis Locations

ID	Freeway Merge/Diverge Ramp Junctions
1	I-10 – Westbound On-ramp at Sierra Avenue (Merge)
2	I-10 – Westbound Off-ramp at Cedar Avenue (Diverge)
3	I-10 – Eastbound Off-ramp at Sierra Avenue (Diverge)
4	I-10 – Eastbound On-ramp at Cedar Avenue (Merge)
5	SR-60 – Westbound On-ramp at Valley Way (Merge)
6	SR-60 – Westbound Off-ramp at Valley Way (Diverge)
7	SR-60 – Westbound Off-ramp at Market Street (Diverge)
8	SR-60 – Eastbound Off-ramp at Mission Boulevard (Diverge)
9	SR-60 – Eastbound On-ramp at Mission Boulevard (Merge)
10	SR-60 – Eastbound Off-ramp at Rubidoux Boulevard (Diverge)
11	SR-60 – Eastbound On-ramp at Market Street (Merge)

Intersection Conditions

Existing (2016) peak hour traffic operations were evaluated for the study area intersections based on the analysis methodologies presented above. The intersection operations analysis results of the 65 study area intersections analyzed include 59 that currently operate at an acceptable LOS. As shown in Table 4.2.15-7, the following seven intersections are operating below an acceptable LOS under current conditions:

- Sierra Avenue/Santa Ana Avenue (#4) – LOS D AM and PM peak hours
- Alder Avenue/Santa Ana Avenue (#11) – LOS F AM peak hour only
- Locust Avenue/Santa Ana Avenue (#19) – LOS E AM peak hour; LOS F PM peak hour
- SR-60 eastbound ramps/Mission Boulevard (#39) – LOS F PM peak hour only

- Linden Avenue/Slover Avenue (#41) – LOS E AM peak hour only
- Rubidoux Boulevard/24th Street (#54) – LOS E AM peak hour; LOS F PM peak hour
- Rubidoux Boulevard/26th Street (#55) – LOS E PM peak hour only

In addition to analyzing existing LOS, a traffic signal warrant analysis for existing traffic conditions was undertaken based on existing peak hour intersection turning volumes. For existing traffic conditions, a peak hour traffic signal warrant was met during one or more peak hours at the following seven intersections:

- Alder Avenue/Slover Avenue (#10)
- Alder Avenue/Santa Ana Avenue (#11)
- Laurel Avenue/Santa Ana Avenue (#14)
- Locust Avenue/Santa Ana Avenue (#19)
- Locust Avenue/Armstrong Road/7th Street (#26)
- Maple Avenue/Slover Avenue (#41)
- Linden Avenue/Slover Avenue (#42)

Table 4.2.15-7. Intersection LOS – Existing Conditions

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service		Acceptable Level of Service
			Northbound			Southbound			Eastbound			Westbound							
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	
1	Sierra Av. & Valley Bl.	TS	2	3	1>	2	3	0	2	2	1>	2	2	2>	34.9	44.0	C	D	E
2	Sierra Av. & I-10 Freeway Ramps[4]	TS	2	3	1>>	2	3	1>>	2	0	1>>	2	0	1>>	25.1	24.8	C	C	D
3	Sierra Av. & Slover Av.	TS	2	3	1	2	3	0	2	2	1	2	2	2>	29.2	35.9	C	D	E
4	Sierra Av. & Santa Ana Av.	TS	2	3	1	2	3	0	1	2	1	1	2	1	**36.3**	**35.8**	**D**	**D**	C
5	Sierra Av. & Jurupa Av.	TS	2	2	1	2	2	1>	2	2	1	2	2	1	33.0	35.5	C	D	E
6	Production Av. & Slover Av.	TS	1	2	0	2	2	0	2	3	1	2	3	0	32.6	26.1	C	C	C
7	Production Av. & Santa Ana Av.	CSS	0	1	0	1	1	1	1	2	0	1	2	0	9.7	9.4	A	A	C
8	Tamarind Av. & Slover Av.	TS	1	1	0	1	1	0	1	2	1	1	2	0	18.1	17.1	C	B	C
9	Tamarind Av. & Santa Ana Av.	AWS	0	1	0	0	1	0	0	1	1	0	1	0	12.9	11.9	B	B	C
10	Alder Av. & Slover Av.	CSS	0	1	0	0	1	0	1	2	d	1	2	d	15.4	11.9	C	B	D
11	Alder Av. & Santa Ana Av.	AWS	0	1	0	0	1	0	0	1	0	0	1	1	**91.1**	13.2	**F**	B	D
12	Alder Av. & Jurupa Av.	AWS	0	1	0	0	1	0	0	1	0	0	1	0	6.9	7.0	A	A	C
13	Laurel Av. & Slover Av.	TS	0	1	0	0	1	0	1	2	d	1	2	d	27.1	17.1	C	B	D
14	Laurel Av. & Santa Ana Av.	AWS	0	1	0	0	1	d	0	1	0	0	1	0	24.5	13.8	C	B	D
15	Driveway 1 & 7th St.		Intersection Does Not Exist																C
16	Driveway 2 & 7th St.		Intersection Does Not Exist																C
17	Driveway 3 & 7th St.		Intersection Does Not Exist																C
18	Locust Av. & Slover Av.	TS	1	1	d	1	1	d	1	2	d	1	2	d	20.2	19.6	C	B	D
19	Locust Av. & Santa Ana Av.	AWS	0	1	0	0	1	0	0	1	0	0	1	0	**45.5**	**55.6**	**E**	**F**	D
20	Locust Av. & Jurupa Av.	CSS	0	1	0	0	1	0	0	0	0	0	1	0	12.9	12.8	B	B	C
21	Locust Av. & Driveway 4		Intersection Does Not Exist																C
22	Locust Av. & Driveway 6/11th St.	CSS	0	1	0	0	1	0	0	0	0	0	1	0	10.8	12.9	B	B	C
23	Locust Av. & 10th St.	CSS	0	1	0	0	1	0	0	0	0	0	1	0	10.2	12.3	B	B	C
24	Locust Av. & Driveway 7/9th St.	CSS	0	1	0	0	1	0	0	0	0	0	1	0	10.0	12.1	B	B	C
25	Locust Av. & 8th St.	CSS	0	1	0	0	1	0	0	0	0	0	1	0	9.9	12.5	A	B	C
26	Locust Av./Armstrong Rd. & 7th St.	CSS	0	1	0	0	1	0	0	0	0	0	1	0	12.1	17.8	B	C	C
27	Armstrong Rd. & Driveway 8		Intersection Does Not Exist																C
28	Armstrong Rd. & Driveway 9		Intersection Does Not Exist																C

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service		Acceptable Level of Service
			Northbound			Southbound			Eastbound			Westbound							
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	
29	Armstrong Rd. & Driveway 10		Intersection Does Not Exist																C
30	Armstrong Rd. & Driveway 11		Intersection Does Not Exist																C
31	Driveway 12 / Jurupa Av.		Intersection Does Not Exist																C
32	Armstrong Rd. / Sierra Av.	TS	2	1	0	1	1	d	1	2	1	1	2	0	35.7	26.0	D	C	E
33	Valley Wy. & 37th St.	CSS	1	2	0	0	2	0	1	0	1	0	0	0	17.2	11.3	C	B	D
34	Valley Wy. & SR-60 WB Off-ramp	TS	1	2	0	0	2	0	0	1	0	1	1	0	50.6	48.9	D	D	D
35	Valley Wy. & SR-60 WB On-ramp	UC	1	2	0	0	2	0	0	0	0	0	0	0	18.2	11.8	C	B	D
36	Valley Wy. & SR-60 EB On-ramp	UC	0	2	0	0	2	0	0	0	0	0	0	0	0.0	0.0	A	A	D
37	Valley Wy. & Mission Bl.	TS	2	1	1	2	2	2>	2	2	1	1	2	1>	36.0	46.5	D	D	D
38	Formosa St. & Mission Bl.	CSS	0	1	0	0	0	0	0	2	0	1	2	0	12.0	13.2	B	B	D
39	SR-60 EB Ramps / Mission Bl.	TS	0	1	0	0	1	1	1	2	0	1	2	1>	40.4	**118.5**	D	**F**	D
40	Soto Av. & Mission Bl.	CSS	0	1	0	0	1	0	0	2	0	0	2	0	10.2	15.2	B	C	D
41	Maple Av. & Slover Av.	CSS	0	1	0	0	1	0	1	2	d	1	2	d	16.8	15.3	C	C	D
42	Linden Av. & Slover Av.	AWS	0	1	0	0	1	0	1	2	d	1	2	d	**38.3**	19.3	**E**	C	D
43	Cedar Av. & Valley Bl.	TS	2	2	1	2	3	0	2	1	2	2	2	0	31.7	41.6	C	D	D
44	Cedar Av. & I-10 WB Ramps	TS	1	2	0	0	3	1	0	0	0	0	1	1	24.9	22.0	C	C	D
45	Cedar Av. & I-10 EB Ramps	TS	0	3	1	1	2	0	1	1	0	0	0	0	45.1	49.4	D	D	D
46	Cedar Av. & Orange St.	TS	1	2	0	1	2	1	1	1	0	0	1	0	15.1	15.7	B	B	D
47	Cedar Av. & Slover Av.	TS	1	2	0	1	2	0	1	2	d	1	1	1	49.3	38.3	D	D	E
48	Cedar Av. & Santa Ana Av.	TS	1	2	0	1	2	0	0	1	0	0	1	0	23.3	22.6	C	C	D
49	Cedar Av. & Jurupa Av.	TS	1	2	0	1	2	0	0	1	d	0	1	d	41.5	33.1	D	C	D
50	Cedar Av. & 11th St.	TS	1	2	0	1	2	0	0	1	0	0	1	0	8.6	11.6	A	B	D
51	Cedar Av. & 7th St.	TS	1	2	0	1	2	0	0	1	0	0	1	0	14.2	17.9	B	B	D
52	Cedar Av. & El Rivino Rd.	TS	1	2	0	1	2	0	0	1	0	0	1	1	9.0	11.9	A	B	D
53	Rubidoux Bl. & Market St.	TS	1	2	1	1	2	1	1	1	0	0	1	1>>	39.1	46.1	D	D	E
54	Rubidoux Bl. & 24th St.	CSS	0	2	0	0	2	0	0	1	0	0	1	0	**47.6**	**>100.0**	**E**	**F**	D
55	Rubidoux Bl. & 26th St.	CSS	0	2	0	0	2	0	0	1	0	0	1	0	29.5	**39.2**	D	**E**	D
56	Rubidoux Bl. & 28th St.	TS	1	2	0	1	2	0	0	1	0	0	1	0	10.9	12.3	B	B	D
57	Rubidoux Bl. & SR-60 WB Off-ramp	TS	1	2	0	0	2	0	1	0	1	0	1	0	41.7	30.9	D	C	D

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service		Acceptable Level of Service
			Northbound			Southbound			Eastbound			Westbound							
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	
58	Rubidoux Bl. & SR-60 WB On-ramp	UC	1	2	0	0	2	0	0	0	0	0	0	0	24.7	17.4	C	C	D
59	Rubidoux Bl. & SR-60 EB Ramps	TS	0	2	0	1	2	0	0	2	0	1	0	1	27.2	23.2	C	C	D
60	Rubidoux Bl. & 34th St.	TS	1	2	d	1	1	0	0	1	0	0	1	d	12.0	18.1	B	B	D
61	Agua Mansa Rd. & Market St.	TS	0	1	0	0	1	0	1	2	1	1	2	d	33.1	43.2	C	D	E
62	Market St. & Rivera St.	TS	1	2	1>	1	2	0	0	1	1	1	1	1	10.7	16.1	B	B	D
63	Market St. & SR-60 WB Ramps	TS	1	2	0	0	2	1	0	0	0	1	0	1	13.5	11.0	B	B	D
64	Market St. & SR-60 EB Ramps	TS	0	2	1	1	2	0	1	0	2	0	0	0	32.5	32.3	C	C	D
65	Market St. & Redwood Dr.	CSS	1	2	0	1	2	1	0	1	0	0	1	0	21.3	15.8	C	C	D

* **BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right-turn lane there must be sufficient width for right-turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane

[2] Per the 2010 Highway Capacity Manual, overall average intersection delay and LOS are shown for intersections with a traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and LOS for the worst individual movement (or movements sharing a single lane) are shown.

Average control delay calculated to be greater than 100.0 seconds using equations from the HCM methodology for cross-street stop controlled intersections can result in delay values that increase exponentially once LOS F is reached. As these values are not accurate estimates of actual average control delay anticipated to be experienced, the values are not reported in this table. As such, calculated delay values greater than 100.0 seconds are simply indicated as >100.0 for cross-street stop (and >200.0 for traffic signal intersections). Calculated delay values are available in Appendix L.

[3] CSS = Cross-street Stop; AWS = All-Way Stop; TS = Traffic Signal; UC = Uncontrolled

[4] LOS reported using the HCM 2000 methodology, as the HCM 2010 methodology does not support the analysis of a single-point urban interchange.

Existing Off-Ramp Queueing Conditions

A queueing analysis was performed for eastbound and westbound off-ramps of I-10 at Sierra Avenue and Cedar Avenue and SR-60 at Valley Way/Mission Boulevard, Rubidoux Boulevard, and Market Street to assess vehicle queues for the off-ramps that may potentially affect peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto I-10 or SR-60. Queuing analysis findings are presented in Table 4.2.15-8. It is important to note that off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline. As shown in Table 4.2.15-8, there are no existing queuing issues.

Table 4.2.15-8. Freeway Off-Ramp Queueing – Existing Conditions

Intersection	Movement	Available Stacking Distance (Feet)	95th Percentile Queue (Feet)[3]		Acceptable?[1]	
			AM Peak Hour	PM Peak Hour	AM	PM
Sierra Av./I-10 Freeway Ramps	EBL	1,300	393	335	Yes	Yes
	EBR	540	0	0	Yes	Yes
	WBL	450	158	195	Yes	Yes
	WBR	1,350	0	0	Yes	Yes
Valley Wy./Granite Hills Dr./SR-60 WB Off-Ramp	WBL	910	238	333	Yes	Yes
	WBT/R	245	624[2]	711[2]	Yes[3]	Yes[3]
SR-60 EB Ramps/Byrne Rd./Mission Bl.	SBL/T	1,115	481[2]	1,340[2]	Yes	Yes[3]
	SBR	1,115	0	109	Yes	Yes
Cedar Av./I-10 WB Ramps	WBL/T/R	1,270	343[2]	310[2]	Yes	Yes
	WBR	480	443[2]	491[2]	Yes	Yes[3]
Cedar Av./I-10 EB Ramps	EBL	400	585[2]	642[2]	Yes[3]	Yes[3]
	EBL/T/R	1,900	432[2]	562[2]	Yes	Yes
Rubidoux Bl./SR-60 WB Off-Ramp	WBL/T/R	1,250	793[2]	695[2]	Yes	Yes
Rubidoux Bl./SR-60 EB Ramps	EBL/T/R	1,100	224	286	Yes	Yes
Market St./SR-60 WB Ramps	WBL	170	87	95	Yes	Yes
	WBR	1,350	569[2]	100	Yes	Yes
Market St./SR-60 EB Ramps	EBL	155	298[2]	220[2]	Yes[3]	Yes[3]
	EBR	1,635	59	164	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking, which is assumed to be provided in the transition for turn pockets, is reflected in the stacking distance shown on this table, where applicable.

[2] 95th percentile volume exceeds capacity; queue may be longer. Queue shown is maximum after two cycles.

[3] Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 or SR-60 freeway mainline.

Freeway Mainline Conditions

Existing mainline directional volumes for the AM and PM peak hours are provided in Table 4.2.15-9. As shown in Table 4.2.15-9, the I-10 and SR-60 freeway segments analyzed for this study currently operate at an acceptable LOS (i.e., LOS D or better) during the peak hours, with the exception of the following freeway segments:

- SR-60 – westbound, Valley Way to Rubidoux Boulevard (#6) – LOS F AM and PM peak hours
- SR-60 – westbound, east of Market Street (#7) – LOS F AM and PM peak hours

Table 4.2.15-9. Freeway Segment Analysis – Existing Conditions

				Volume		Truck %	Truck %	Density[3]		LOS	
Freeway	**Direction[1]**	**Mainline Segment**	**Lanes[2]**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**
I-10	WB	West of Sierra Av.	5	7,599	6,129	8%	9%	25.7	20.0	C	C
		East of Cedar Av.	5	6,850	5,679	8%	10%	22.6	18.5	C	C
	EB	West of Sierra Av.	5	5,635	5,339	10%	9%	18.4	17.3	C	B
		East of Cedar Av.	4	5,263	5,341	10%	8%	21.8	21.9	C	C
SR-60	WB	West of Valley Wy.	4	6,495	7,405	4%	4%	27.3	33.3	D	D
		Valley Wy. to Rubidoux Bl.	3	6,623	4,842	4%	4%	**47.1**	**79.3**	**F**	**F**
		East of Market St.	3	6,963	7,750	3%	4%	**52.8**	**75.6**	**F**	**F**
	EB	West of Valley Wy.	4	5,471	5,157	3%	2%	21.9	20.4	C	C
		Valley Wy. to Rubidoux Bl.	3	5,672	4,233	3%	3%	34.3	22.7	D	C
		East of Market St.	3	5,665	3,874	3%	1%	34.2	20.3	D	C

* **BOLD** = Unacceptable LOS

[1] EB = eastbound; WB = westbound

[2] Number of lanes are in the specified direction and are based on existing conditions.

[3] Density is measured by passenger cars per mile per lane (pc/mi/ln).

Freeway Ramp Junction Merge/Diverge Conditions

Ramp merge and diverge operations were also evaluated for existing conditions and the results of this analysis are presented in Table 4.2.15-10. As shown in Table 4.2.15-10, the I-10 and SR-60 ramp merge and diverge areas along Sierra Avenue, Cedar Avenue, Valley Way/Mission Boulevard, Rubidoux Boulevard, and Market Street are all operating at an acceptable LOS during the AM and PM peak hours, with the exception of the following ramp junctions:

- I-10 – westbound on-ramp at Sierra Avenue (#1) – LOS E AM peak hour only
- SR-60 – westbound on-ramp at Valley Way (#5) – LOS F AM and PM peak hours
- SR-60 – westbound off-ramp at Valley Way (#6) – LOS F AM and PM peak hours
- SR-60 – westbound off-ramp at Market Street (#7) – LOS F AM and PM peak hours
- SR-60 – eastbound off-ramp at Rubidoux Boulevard (#10) – LOS E AM peak hour only

Table 4.2.15-10. Freeway Ramp Junction Merge/Diverge Analysis – Existing Conditions

Freeway	Direction[1]	Ramp or Segment	Lanes on Freeway[2]	AM Peak Hour		PM Peak Hour	
				Density[3]	LOS	Density[2]	LOS
I-10	WB	On-Ramp at Sierra Av.	4	**37.9**	**E**	33.4	D
		Off-Ramp at Cedar Av.	5	31.2	D	28.5	D
	EB	Off-Ramp at Sierra Av.	5	23.2	C	21.1	C
		On-Ramp at Cedar Av.	4	23.2	C	23.2	C
SR-60	WB	On-Ramp at Valley Wy.	3	**40.3**	**F**	**48.2**	**F**
		Off-Ramp at Valley Wy.	3	**41.7**	**F**	**53.3**	**F**
		Off-Ramp at Market St.	3	**45.0**	**F**	**52.9**	**F**
	EB	Off-Ramp at Mission Bl.	4	27.9	C	30.3	D
		On-Ramp at Mission Bl.	3	30.3	D	23.5	C
		Off-Ramp at Rubidoux Bl.	3	**35.2**	**E**	29.0	D
		On-Ramp at Market St.	3	33.8	D	24.5	C

* **BOLD** = Unacceptable LOS

[1] EB = eastbound; WB = westbound

[2] Number of lanes are in the specified direction and are based on existing conditions.

[3] Density is measured by passenger cars per mile per lane (pc/mi/ln).

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). 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 I-10 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 WVLCSP vicinity to the city via the South Fontana Transfer Center. This route runs in a north-south direction on Locust Avenue between Santa Ana Avenue and 11th Street between approximately 7:00 a.m. and 6:00 p.m. Monday through Friday and between 8:00 a.m. and 6:00 p.m. on Saturdays.

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

The traffic and transportation study area is also currently served by the Riverside Transit Authority, which provides service within Riverside County. Bus service currently exists along Rubidoux Boulevard, Market Street, and Mission Boulevard via Routes 29, 49, and 204. The existing bus routes provided within the area by Omnitrans and Riverside Transit Authority are shown on Figure 4.2.15-2.

Transit service is reviewed and updated by Omnitrans and Riverside Transit Authority periodically to address ridership, budget, and community demand needs. Changes in land use can affect these periodic adjustments, which may lead to either enhanced or reduced service where appropriate.

Commuter Rail

Commuter rail service is provided by the Southern California Regional Rail Authority, 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 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, which passes east–west through the city between Arrow Boulevard and 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/ Burlington Northern Santa Fe line are all at-grade, with the exception of the crossing at Cherry Avenue.

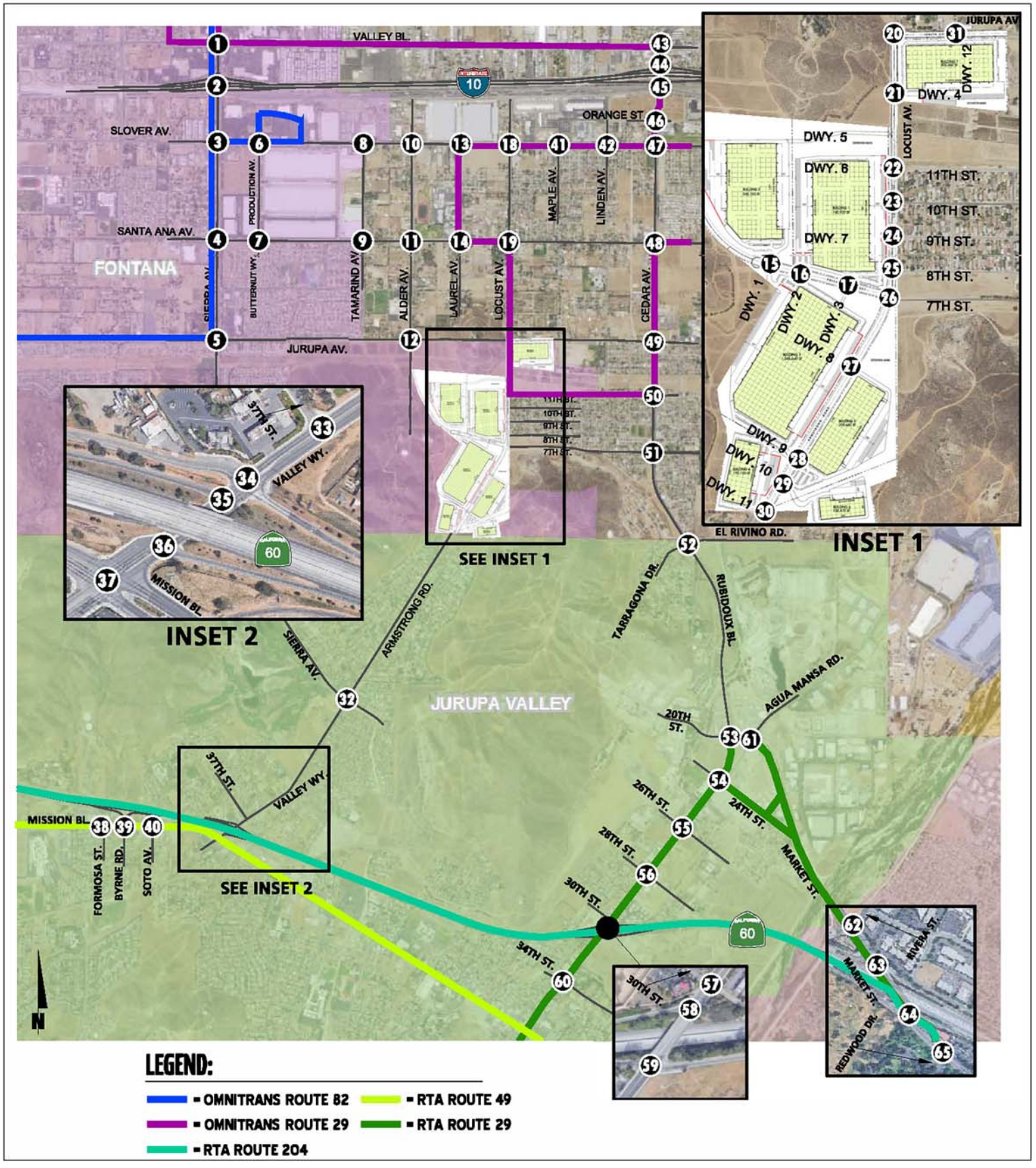


Figure 4.2.15-2
Existing Transit Routes
West Valley Logistics Center Specific Plan 2nd RDEIR

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 and Bicycle 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.

The City of Fontana General Plan Bikeways and Trails are shown in Figures 4.2.15-3 and 4.2.15-4, respectively. As shown on Figure 4.2.15-3, there are Class I or Class II bike lanes proposed along Locust Avenue north of Jurupa Avenue, along Jurupa Avenue, and along Santa Ana Avenue near the vicinity of the project. The City of Jurupa Valley General Plan Trails and Bikeway system is shown on Figure 4.2.15-5. Existing pedestrian facilities and bike lanes within the study area are shown on Figure 4.2.15-6. Field observations indicate nominal pedestrian and bicycle activity within the study area.

Regulatory Setting

Traffic analysis in 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 2010.

Senate Bill 743 (Steinberg)

Senate Bill 743 requires the California Governor's Office of Planning and Research to amend the California Environmental Quality Act (CEQA) Guidelines to provide an alternative to LOS as the metric for evaluating transportation impacts under CEQA. Particularly within areas served by transit, Senate Bill 743 requires the alternative criteria to promote the reduction of greenhouse gas emissions, development of multimodal transportation networks, and diversity of land uses. The alternative metric for transportation impacts proposed by the Office of Planning and Research to date is vehicle miles traveled. Once revised CEQA Guidelines are formally adopted by the state, auto delay, commonly measured using LOS, will no longer be considered a significant impact under CEQA.

The Office of Planning and Research most recently presented draft updates of the CEQA Guidelines implementing Senate Bill 743 in January 2016. However, as of the publication date of this 2nd RDEIR, CEQA Guidelines implementing Senate Bill 743 have not been officially adopted, and the City of Fontana has not adopted new local vehicle miles traveled thresholds by which projects can be evaluated. As a result, the delay-based analyses called for in the current CEQA Guidelines are used in this 2nd RDEIR to evaluate the project's impacts on traffic and transportation operations.

Local

Southern California Association of Governments (SCAG)

Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) is the designated metropolitan planning organization for six Southern California counties (Ventura, Los Angeles, San Bernardino, Riverside, Orange, and Imperial). As the designated metropolitan planning organization, SCAG is mandated by the federal and state governments to prepare plans for regional transportation and air quality conformity. The most recent plan adopted by SCAG is the 2016–2040 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS), which was adopted in April 2016. The RTP/SCS integrates transportation planning with economic development and sustainability planning, and aims to comply with state greenhouse gas emissions reduction 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 22 million residents, an increase of nearly four million people by 2040, 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, and provide a specific allocation of housing needs for all economic segments of the community for each of the region's counties and cities. In addition, SCAG has taken on the role of planning for regional growth management.

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 each of the cities within the county (including the city of Fontana), with policy makers consisting of mayors, councilmembers, and county supervisors. SANBAG serves as the congestion

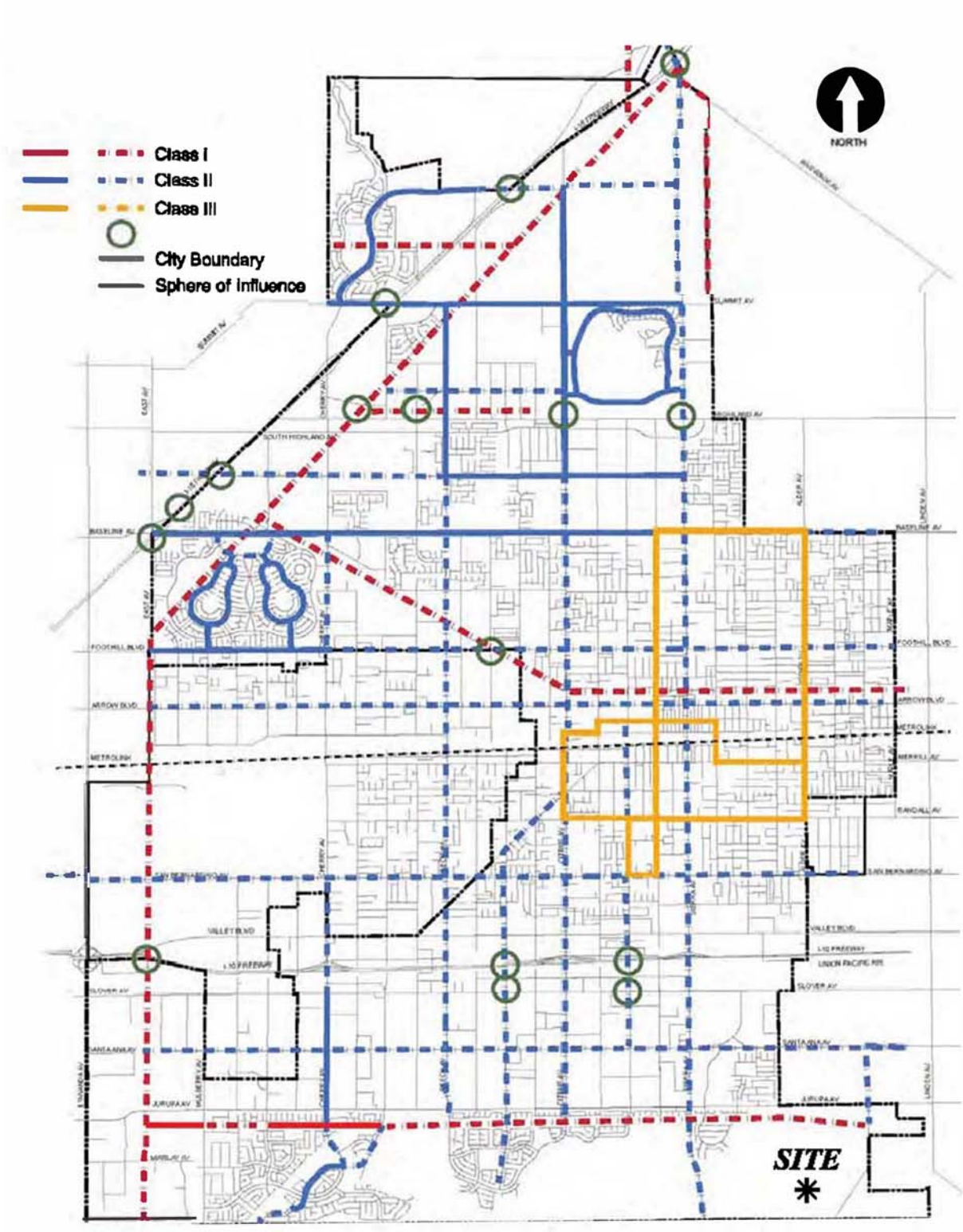


Figure 4.2.15-3
City of Fontana General Plan Bikeways
West Valley Logistics Center Specific Plan 2nd RDEIR

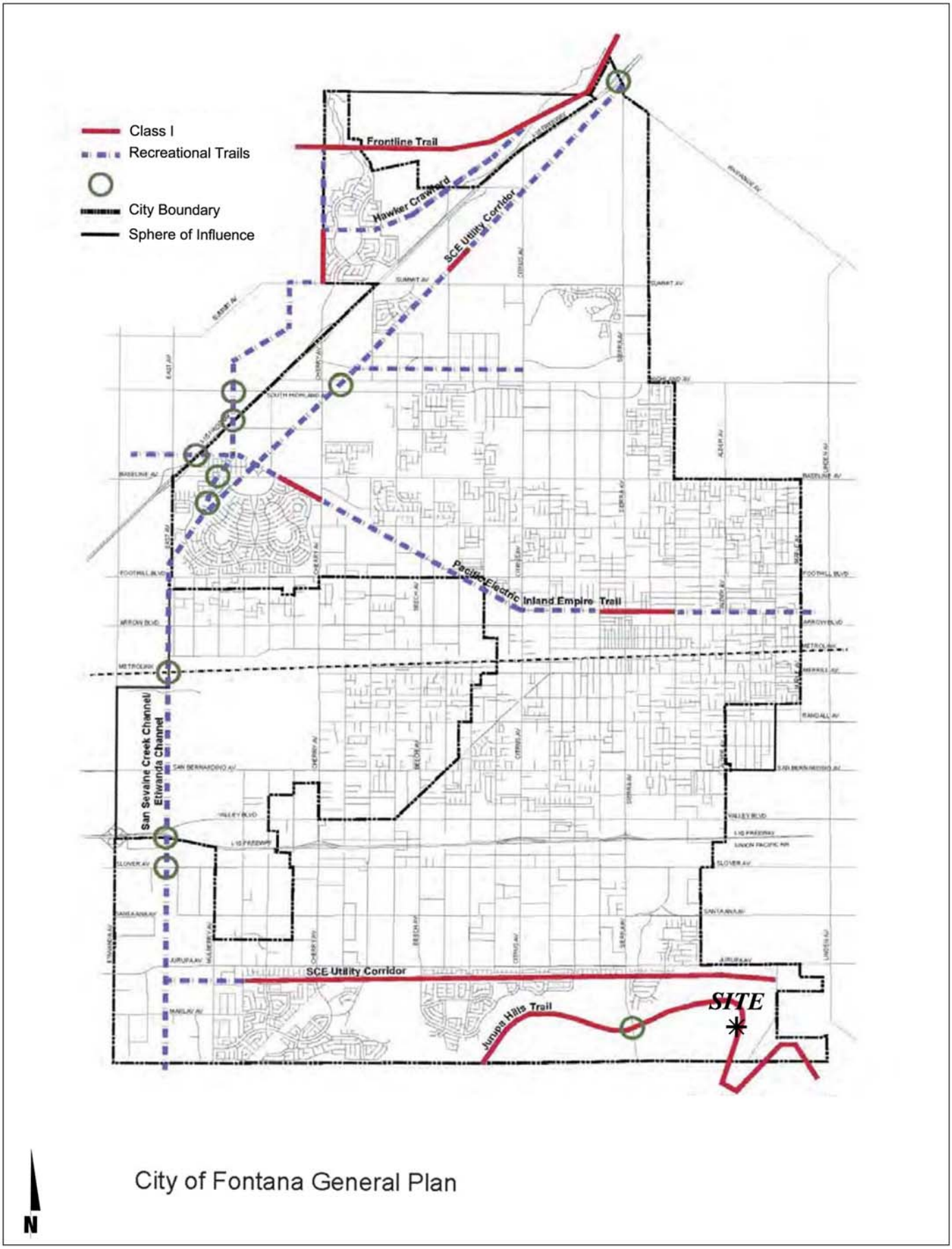
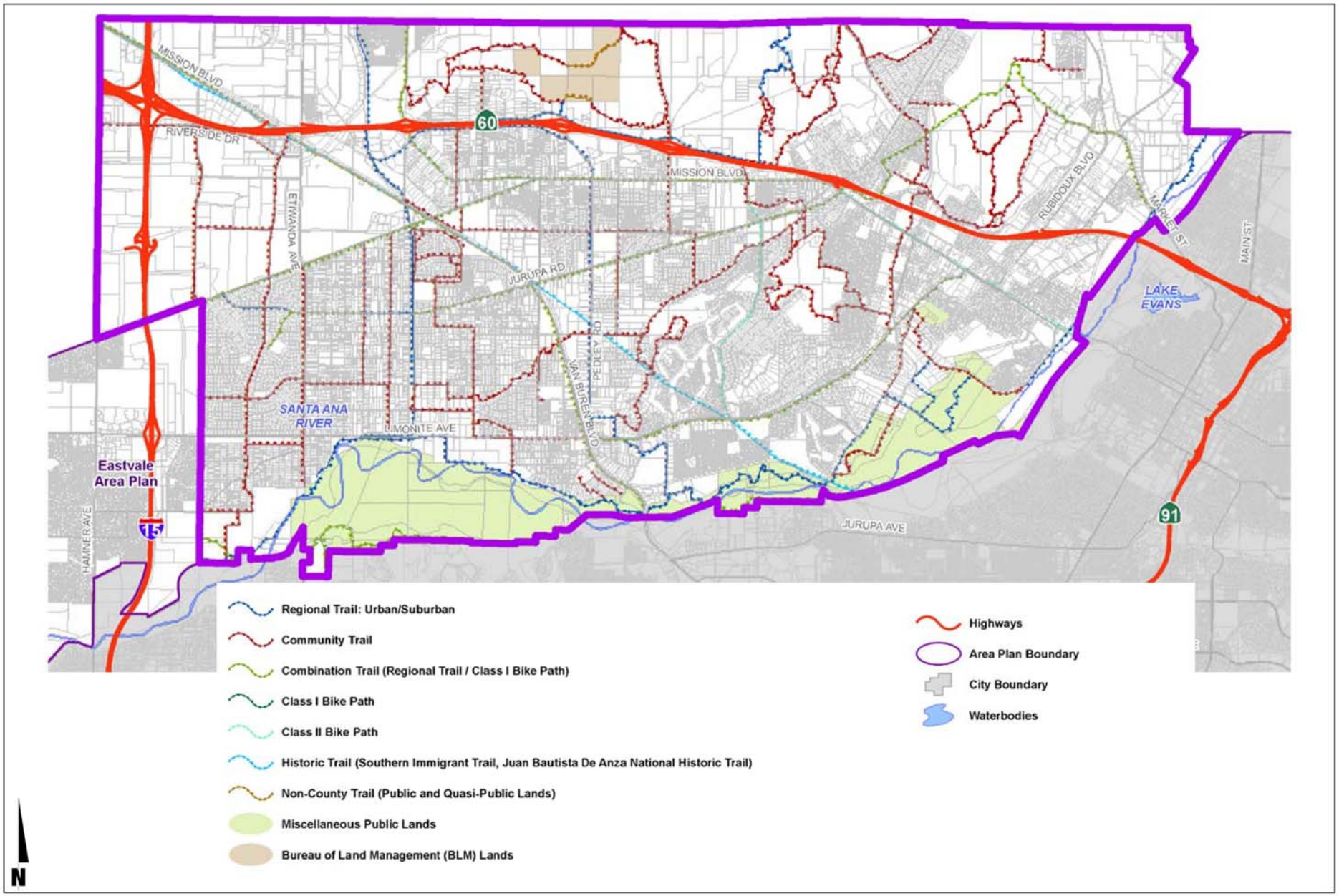
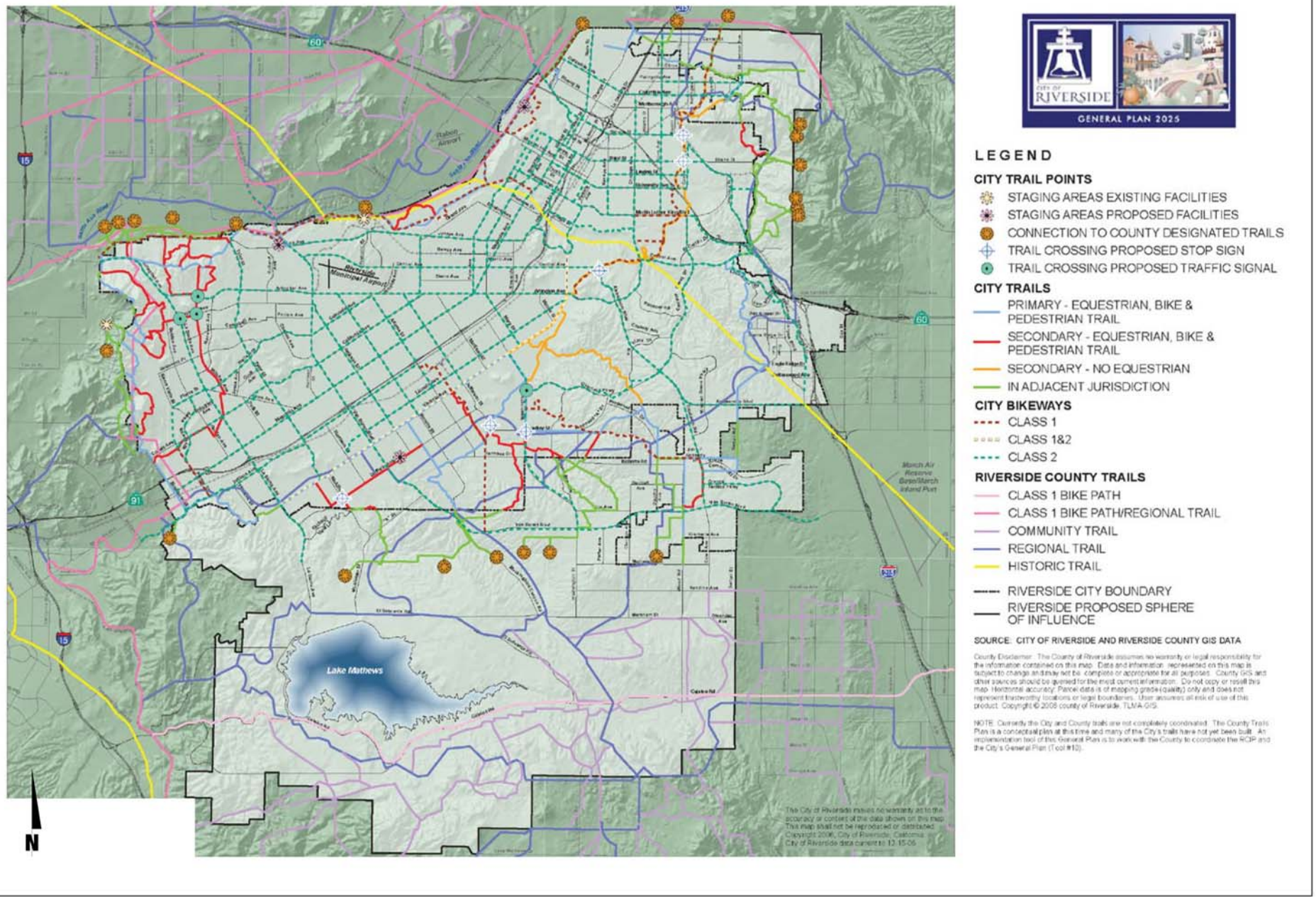


Figure 4.2.15-4
City of Fontana General Plan Trails
West Valley Logistics Center Specific Plan 2nd RDEIR



ICF

Figure 4.2.15-5
City of Jurupa Valley Trails and Bikeway System
West Valley Logistics Center Specific Plan 2nd RDEIR



ICF

Figure 4.2.15-6
City of Riverside Trails and Bikeways
West Valley Logistics Center Specific Plan 2nd RDEIR

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 responsible for the creation and implementation of the San Bernardino County CMP, which was last updated in 2016. 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 2nd RDEIR.

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 Avenue[3] (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 Ramps[4] (restriping and control measures).

[3] The Alder Avenue/Slover Avenue intersection is currently operating at an unacceptable LOS F in the AM peak hour.

[4] The Cedar Avenue/westbound I-10 ramps are currently operating at an unacceptable LOS E in the PM peak hour.

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 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 state:

> **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 San Bernardino County, 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 for generating through the RTDM, is $249.34 million. This amount is distributed among the County 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 percent 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[5]), as contained in the Institute of Traffic Engineers (ITE) *Trip Generation, 9th Edition*, 2012.

For purposes of this analysis, the following ITE land use codes and vehicle mixes have been utilized:

- ITE land use code 150 (Warehousing) was used to derive site-specific trip generation estimates for Buildings 4 and 6. Total vehicle mix percentages were also obtained from the ITE Trip Generation manual in conjunction with the South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type. SCAQMD is currently recommending the use of the ITE Trip Generation manual in conjunction with its truck mix by axle-type to better quantify trip rates associated with local warehouse and distribution projects, as truck emissions represent more than 90 percent of air quality impacts from these projects. This recommended procedure has been utilized for the purposes of this analysis in an effort to be consistent with other technical studies being prepared for the project. The percentage of trucks has been determined from the table shown on page 267 of the ITE Trip Generation manual. As shown on page 267, the truck trip generation rate for weekday daily traffic is 0.64 or 38.1 percent of the total traffic. Similarly, the truck trip generation rate for the weekday AM peak hour is 0.03 (27.3 percent of the total traffic) and 0.04 (or 33.3 percent of the total traffic) for the weekday PM peak hour.
- ITE land use code 152 (High-Cube Warehousing) was used to derive site-specific trip generation estimates for Buildings 1, 2, 3, 5, and 7. Total vehicle mix percentages were also obtained from the ITE Trip Generation manual in conjunction with SCAQMD's recommended truck mix, by axle type. SCAQMD is currently recommending the use of the ITE Trip Generation manual in conjunction with its truck mix by axle-type to better quantify trip rates associated with local warehouse and distribution projects, as truck emissions represent more than 90 percent of air quality impacts from these projects. This recommended procedure has been utilized for the purposes of this analysis in an effort to be consistent with other technical studies being prepared for the project. The percentage of trucks has been determined from the table shown on page 267 of the ITE Trip Generation manual. As shown on page 267, the truck trip generation rate for weekday daily traffic is 0.64 or 38.1 percent of the total traffic. Similarly, the truck trip generation rate for the weekday AM peak hour is 0.03 (27.3 percent of the total traffic) and 0.04 (or 33.3 percent of the total traffic) for the weekday PM peak hour.

Lastly, PCE factors were applied to the trip generation rates for heavy trucks (large 2-axles, 3-axles, and 4+-axles). PCEs allow the typical "real-world" mix of vehicle types to be represented as a single, standardized unit, such as the passenger car, to be used for the purposes of capacity and LOS analyses. The PCE factors are consistent with the recommended PCE factors in the City's traffic study guidelines.

[5] ITE defines a high-cube warehouse as a warehouse that typically has at least 200,000 gross square feet of floor area, with a ceiling height of 24 feet or more. As such, WVLCSP Buildings 4 and 6, each of which is proposed be less than 200,000 square feet in size, were analyzed as warehouses, while Buildings 1, 2, 3, 5, and 7, each of which is proposed to be greater than 390,000 square feet in size, were analyzed as high-cube warehouses.

The proposed project is anticipated to generate a net total of 6,383 actual vehicle trip-ends per day, with 439 AM peak hour trips and 477 PM peak hour trips (see Table 4.2.15-11). In comparison, the proposed project is anticipated to generate a net total of 10,495 PCE trip-ends per day: 639 PCE AM peak hour trips and 742 PCE PM peak hour trips (see Table 4.2.15-12).

Table 4.2.15-11. Project Trip Generation, Actual Vehicles

	AM Peak Hour			PM Peak Hour			
Land Use	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**Daily**
Warehousing (Buildings 4 and 6) - 290,590 square feet							
Passenger Cars	51	13	64	16	47	63	640
Truck Trips							
2-axle	4	1	5	2	5	7	87
3-axle	3	1	4	1	4	5	70
4-axle	11	3	14	5	14	19	238
Total Truck Trips	18	5	23	8	23	31	1,035
High-Cube Warehousing (Buildings 1, 2, 3, 5, and 7) – 3,183,100 square feet							
Passenger Cars	176	79	255	79	176	255	3,310
Truck Trips							
2-axle	15	7	22	9	19	28	448
3-axle	12	5	17	7	16	23	360
4-axle	40	18	58	24	53	77	1,229
Total Truck Trips	66	30	97	39	88	128	2,207
TOTAL	**312**	**127**	**439**	**143**	**334**	**477**	**6,382**

Source: Appendix L

Table 4.2.15-12. Project Trip Generation, PCE

	AM Peak Hour			PM Peak Hour			
Land Use	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**Daily**
Warehousing (Buildings 4 and 6) - 290,590 square feet							
Passenger Cars	51	13	64	16	47	63	640
Truck Trips							
2-axle	8	2	10	3	10	13	173
3-axle	8	2	10	3	10	13	174
4-axle	34	9	63	20	62	82	1,061
Total Truck Trips	101	26	127	20	62	82	1,061
High-Cube Warehousing (Buildings 1, 2, 3, 5, and 7) – 3,183,100 square feet							
Passenger Cars	176	79	255	79	176	255	3,310
Truck Trips							
2-axle	29	13	42	17	39	56	896
3-axle	29	13	42	19	39	56	901
4-axle	119	54	173	71	159	230	3,687
Total Truck Trips	177	80	257	106	236	342	5,484
TOTAL	**454**	**185**	**639**	**221**	**521**	**742**	**10,495**

Source: Appendix L

Trip distribution is the process of identifying the probable destinations, directions, or traffic routes that would be utilized by project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered, to identify the route where the project traffic would distribute.

The trip distribution pattern of passenger cars is heavily influenced by the geographical location of the site, the location of surrounding uses, and the proximity to the regional freeway system. The trip distribution pattern for truck traffic adheres to the truck management plan set forth in the WVLCSP and described in Chapter 3, *Project Description*, and is also influenced by the local truck routes approved by the City and other surrounding agencies. Given these differences, separate trip distributions were generated for both passenger cars and truck trips (see Figures 4.2.15-7 and 4.2.15-8).

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 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 LOS thresholds established by the Cities of Fontana and Jurupa Valley, the County of San Bernardino, and Caltrans, consistent with the broad Appendix G criteria set forth above.

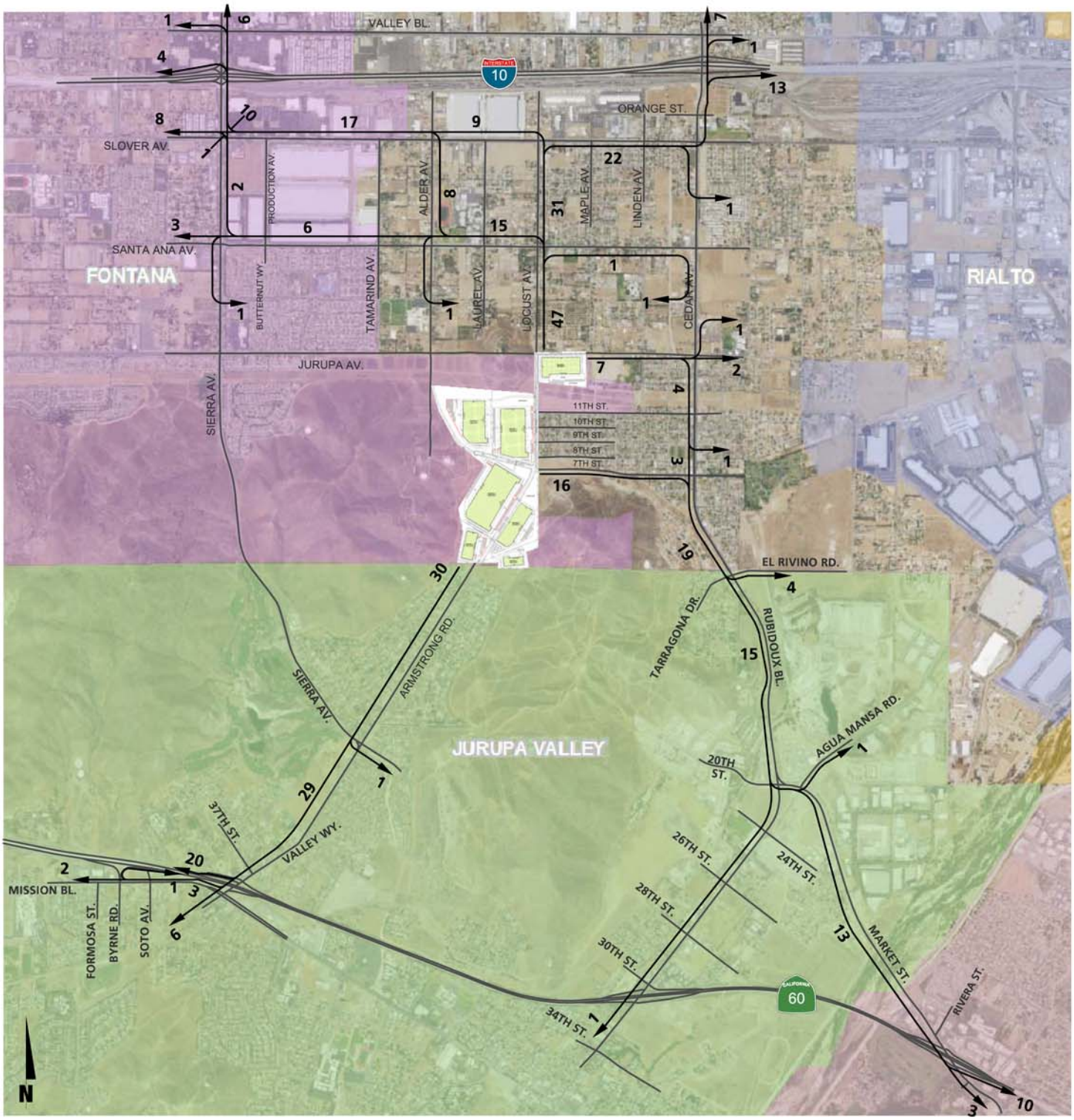
TRA-2 Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.

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.



LEGEND:

10 = PERCENT TO/FROM PROJECT

Figure 4.2.15-7
Project (Passenger Car) Trip Distribution, Sheet 1
West Valley Logistics Center Specific Plan 2nd RDEIR

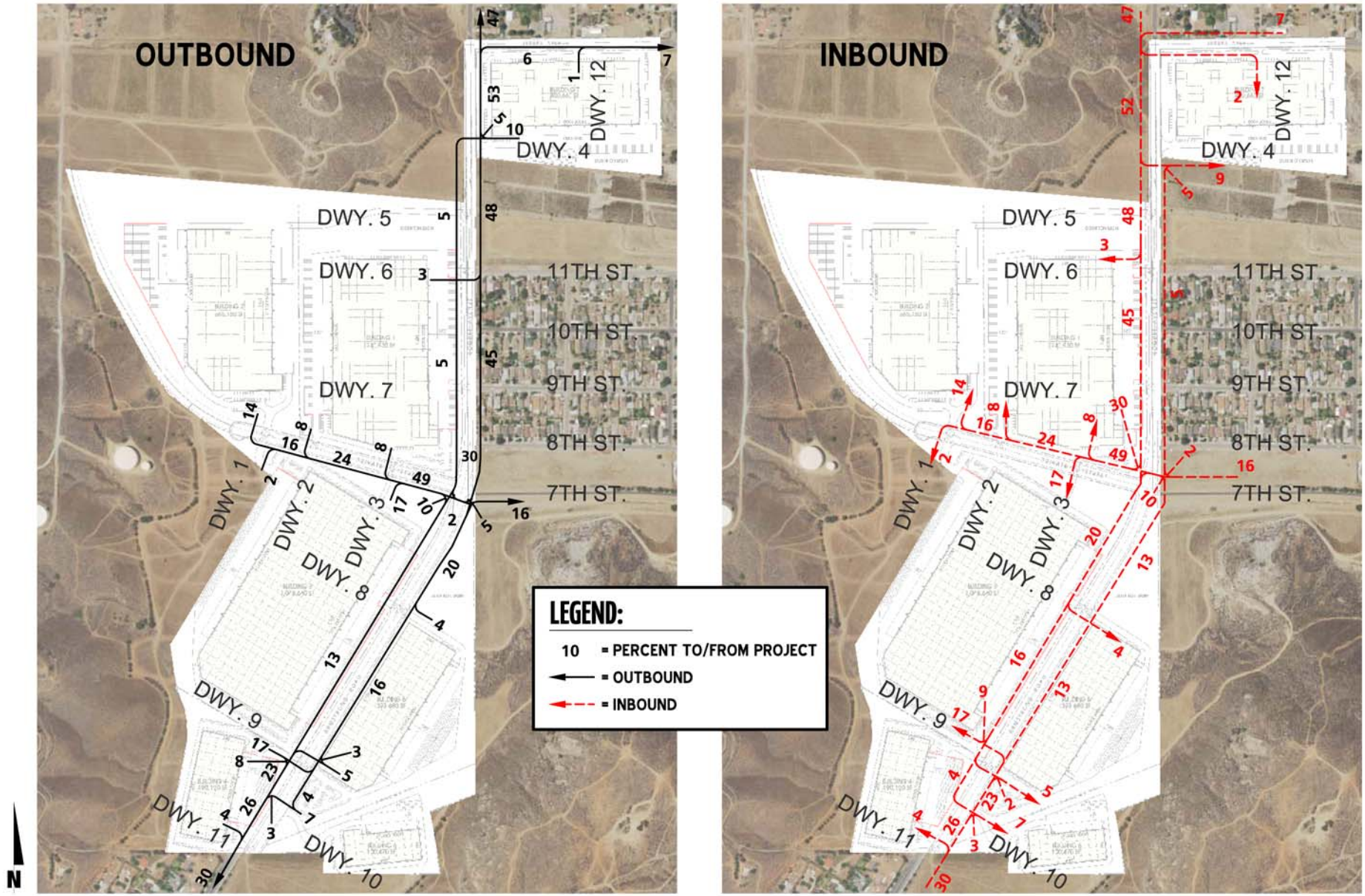
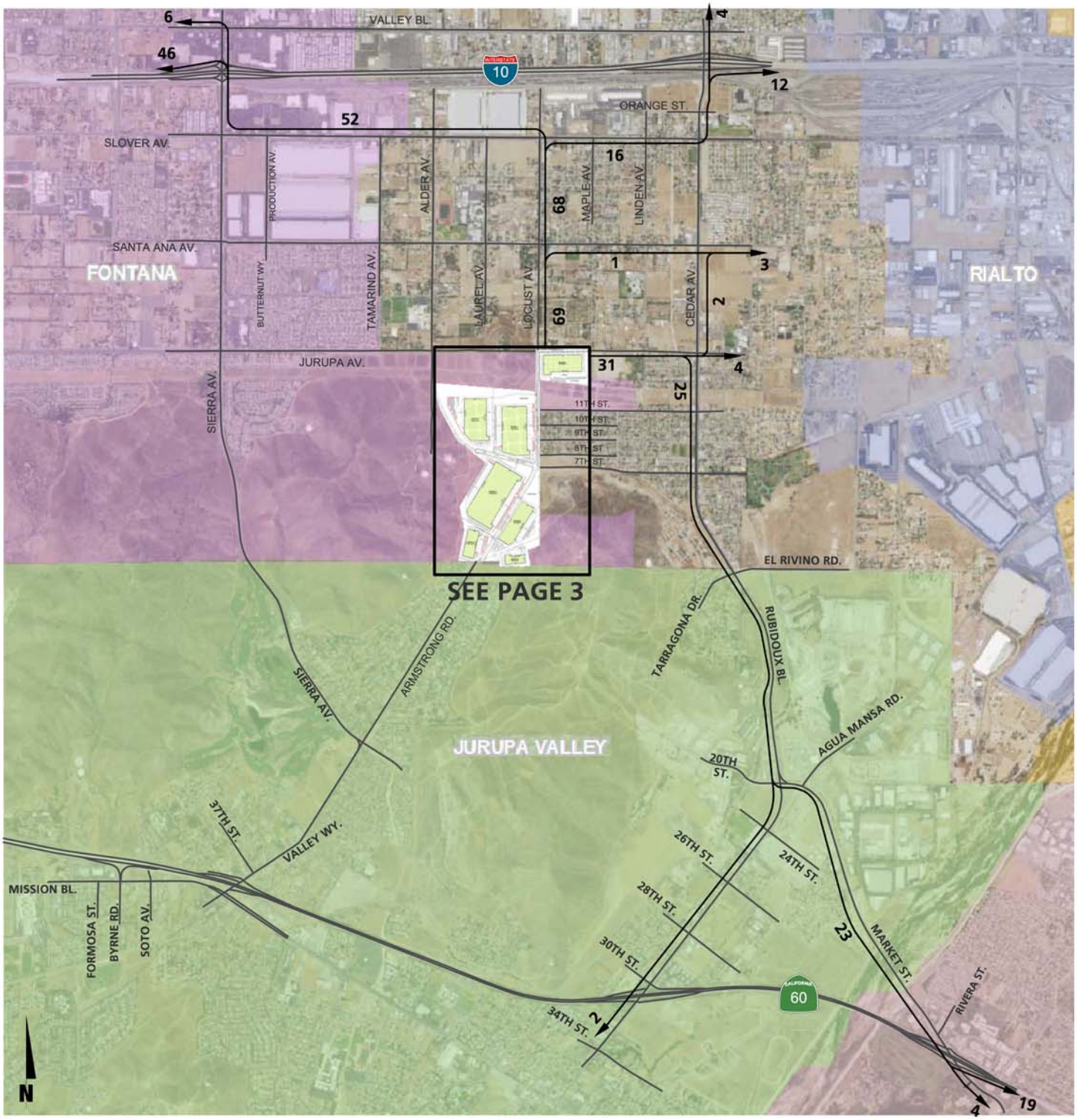


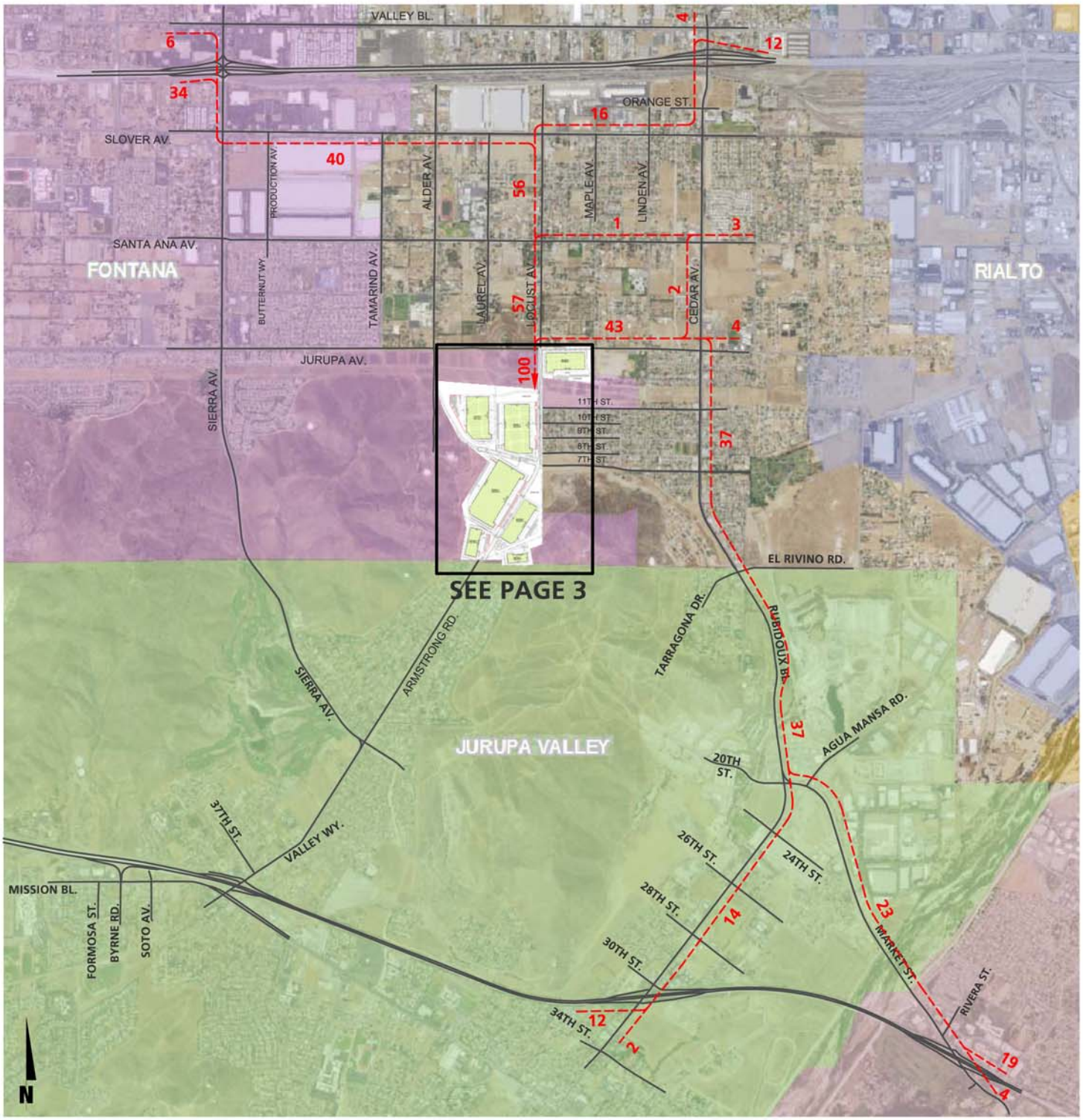
Figure 4.2.15-7
Project (Passenger Car) Trip Distribution, Sheet 2
West Valley Logistics Center Specific Plan 2nd RDEIR



LEGEND:

10 = PERCENT FROM PROJECT

Figure 4.2.15-8a
Project (Truck) Trip Distribution (Outbound)
West Valley Logistics Center Specific Plan 2nd RDEIR



LEGEND:

10 = PERCENT TO PROJECT

Figure 4.2.15-8b
Project (Truck) Trip Distribution (Inbound)
West Valley Logistics Center Specific Plan 2nd RDEIR

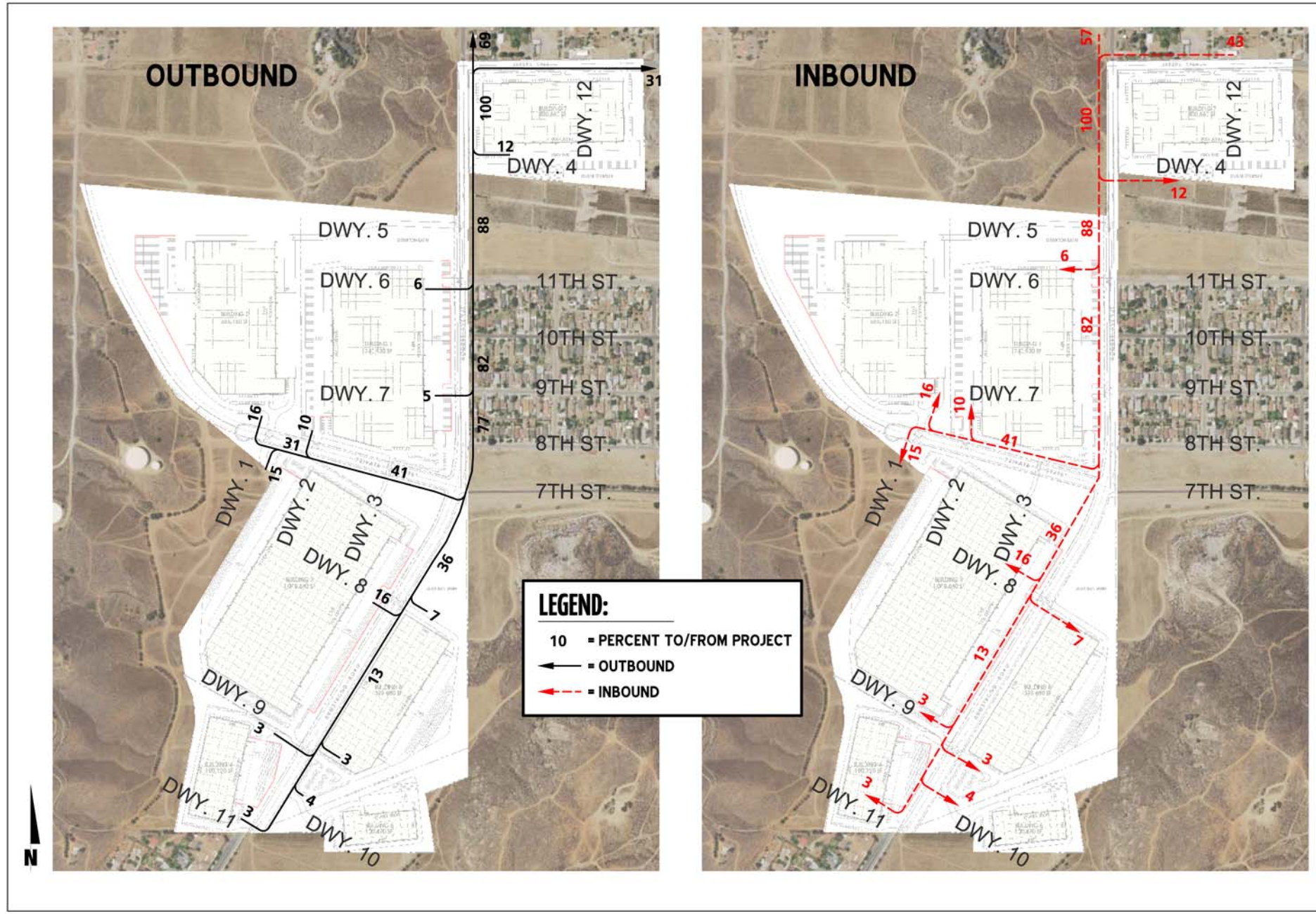


Figure 4.2.15-8c
Project (Truck) Trip Distribution
West Valley Logistics Center Specific Plan 2nd RDEIR

Determination of Significance of Impacts at Intersections

City of Fontana. For the intersections that lie within the city of Fontana, determination of significance of impacts is based on a comparison of without and with-project LOS for each analysis year (Existing, Opening Day, 2040). A significant impact is identified if the WVLCSP would increase the average delay at an intersection by more than the thresholds identified on Table 4.2.15-13. The thresholds for LOS A, B, and C do not apply to projects consistent with the general plan.

Table 4.2.15-13. Significant Impacts at Intersections within City of Fontana

Pre-Project LOS	Significant Impact Threshold[1]
A/B	10.0 Seconds
C	8.0 Seconds
D	5.0 Seconds
E	2.0 Seconds
F	1.0 Second

Source: City of Fontana 2017
[1] Increase in delay

County of San Bernardino. To determine whether the addition of project traffic at a signalized study intersection would result in a significant project-related impact, the following thresholds of significance were utilized:

- Any study intersection that is operating at LOS A, B, C, or D for any study scenario without project traffic in which the addition of project traffic causes the intersection to degrade to LOS E or F shall mitigate the impact to bring the intersection back to at least LOS D.
- Any study intersection that is operating at LOS E or F for any study scenario without project traffic shall mitigate any impacts so as to bring the intersection back to the overall level of delay established prior to project traffic being added.
- For scenarios that include the addition of cumulative project traffic (i.e., shared impacts), study intersections shall be mitigated to LOS D or better in the Valley and Mountain regions and LOS C or better in the desert regions of the county.

To determine whether the addition of project traffic at an unsignalized study intersection would result in a significant project-related impact, the following thresholds of significance were utilized:

- The addition of project related traffic causes the intersection to move from LOS D or better to LOS E or worse

  OR

- The project contributes additional traffic to an intersection that is already projected to operate at LOS E or F with background traffic (per Section 10.5.2(b))

  AND

- One or both of the following conditions are met:
  - The project adds 10 or more trips to any approach; or
  - The intersection meets the peak hour traffic signal warrant after the addition of project traffic (per Section 10.5.2(c)).

The proposed significance thresholds were applied at study area intersections for the purposes of determining project-related impacts.

City of Jurupa Valley. For purposes of analyzing traffic impacts, the City of Jurupa Valley identifies significant impacts and required contributions toward impacts based on the following:

- Pre-project conditions are at or better than acceptable LOS levels and the addition of the project traffic to existing conditions results in unacceptable LOS conditions, then the project has a project-specific significant impact under both the City of Jurupa Valley standards and CEQA. The project will be required to mitigate this impact.
- When pre-project LOS conditions are worse than acceptable levels, the impact from the addition of project traffic for all analysis scenarios is considered to be cumulatively significant under both the City of Jurupa Valley standards and CEQA. In all instances, the project will be conditioned to provide a contribution toward mitigation to address the project's significant impact.

City of Riverside. The City of Riverside uses the same impact significance criteria as the City of Fontana, as shown in Table 4.2.15-13.

Cumulative Impacts. Cumulative traffic impacts are deficiencies that are not directly caused by the project, but occur as a result of regional growth combined with those of the project or other nearby cumulative development projects. The project's contribution to a particular cumulative transportation deficiency is deemed cumulatively considerable if the project adds significant traffic to the forecasted deficiency (as measured by the 50 or more peak hour trip threshold). A project's contribution to a cumulatively considerable impact can be reduced to less-than-significant levels if the project is required to implement or fund its fair share of improvements designed to alleviate the potential cumulative impact. If full funding of future cumulative improvements is not reasonably assured, a temporary unmitigated cumulative impact may occur until the needed improvement is fully funded and constructed.

Caltrans Facilities. To determine whether the addition of project traffic to the state highway system freeway segments would result in a deficiency, the following criteria have been utilized:

- The traffic study finds that the LOS of a segment will degrade from D or better to E or F.
- The traffic study finds that the project will exacerbate an already deficient condition by contributing 50 or more one-way peak hour trips. A segment that is operating at or near capacity is deemed to be deficient.

Project Design Features

The following transportation and traffic related project design features, which include specific plan requirements that would minimize or reduce potentially significant traffic related environmental impacts.

Specific Plan Requirements

SP-TR-1: Truck Routing Plan. A plan for the routing of trucks between the project site and area freeways is set forth in the West Valley Logistics Center Specific Plan (Specific Plan) to minimize impacts on nearby residential neighborhoods. The truck routing plan also includes requirements for:

- Driveway designs and the geometrics of the intersection of Alder Avenue and Locust Avenue/Armstrong Road to direct trucks to the north and away from Valley Way;
- A comprehensive roadway and highway signage program to direct trucks along designated routes between the project site and area freeways (see Section 3.4.3, *Circulation Improvements*);
- Off-site improvements including roadway widening and signalization to accommodate project-related trucks (see Section 3.4.3, *Circulation Improvements*);
- Requirements for providing instruction to truck drivers regarding approved routes; and
- Requirements for the Transportation Management Committee of the Specific Plan Property Owners' Association to monitor truck traffic and enforce applicable Specific Plan regulations.

SP-TR-2: Feasibility Studies and Fair-Share Payments. In addition to the physical improvements included in SP-TR-1, the West Valley Logistics Center Specific Plan (Specific Plan) includes the following requirements:

- Payment of fair-share fees in addition to Nexus Study and Fontana Development Impact Fees to the County of San Bernardino for:
    - Alder Avenue/Slover Avenue (fair-share payment for signalization that is not included as part of the Development Mitigation Nexus Study. Development within the Specific Plan will provide fair-share payments at the same rate as the County of San Bernardino is collecting from projects within the adjacent unincorporated area); and
    - Cedar Avenue/Slover Avenue (fair-share payment for intersection improvements).
- The Specific Plan will prepare a feasibility study for the Valley Way/State Route 60 interchange, for which no feasible improvements to achieve acceptable levels of operation have been identified to date and, as a consequence, no improvement program has been established to which a fair-share payment for improvements can be made. The proposed feasibility study would aim to identify feasible improvements that could be undertaken at the interchange to improve existing and future levels of service, even if applicable service level standards can not be met.
- Work with the cities of Fontana and Jurupa Valley to identify Armstrong Road south of the southernmost West Valley Logistics Center driveway as not a truck route and to place appropriate signage along Armstrong Road prohibiting trucks except for local deliveries.
- Work with the California Department of Transportation to place signs along State Route 60 indicating that trucks are not permitted on Armstrong Road north of the freeway, and directing eastbound trucks to exit at Rubidoux Boulevard and westbound trucks to exit at Market Street.

SP-TR-3: Property Owners' Association Responsibilities. A Property Owners' Association shall be formed by the applicant or its designee to implement the truck traffic management program set forth in the West Valley Logistics Center Specific Plan. The applicant or its designee will submit a proposed declaration of Covenants, Conditions, and Restrictions (CC&Rs) for City review prior to issuance of the first building permit for Parcels 1–7. The City's review shall be complete, and the proposed declaration of CC&Rs shall be approved by the City, prior to issuance of the certificate of occupancy for the first building. The Property Owners' Association will include a Transportation Management Committee that will, at a minimum, have the responsibility and obligation to:

- Require building owners/lessees to inform truck drivers of the approved routes to and from the West Valley Logistics Center;
- Require dispatchers to provide truck drivers leaving the building with verbal and written instructions regarding approved truck routes to area freeways;
- Implement and maintain a monitoring program to identify the actual routes trucks are taking to and from the West Valley Logistics Center;
- Enforce the use of approved truck routes[6]; and
- Provide quarterly reporting to the City regarding the actual routes trucks are taking to and from the West Valley Logistics Center.

SP-TR-4: 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-5: Install Bicycle Racks. Bicycle racks will be provided at appropriate locations on Parcels 1 through 7 (e.g., between buildings or in automobile parking areas) for employees who wish to bicycle.

Regulatory Requirements

RR-TR-1: Pay San Bernardino County Nexus Fees and City of Fontana Development Impact Fees for Roadway Improvements. The West Valley Logistics Center Specific Plan will pay applicable fees per the San Bernardino County Nexus Study fee program and the City of Fontana's development impact fee for industrial land use at the established rates at the time of building permit issuance.

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 existing and Year 2040 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,

[6] The CC&Rs shall provide that the association, any owner, or the City, as a third-party beneficiary, shall have the right to enforce compliance "in any manner provided by law or in equity or in bringing an action for damages or an action to enjoin the violation or to specifically enforce the provisions." In addition, the project site will be subject to Conditions of Approval, including compliance with a Truck Traffic Management Plan.

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. Additional construction work would be required for the widening of Locust Avenue from Jurupa Avenue to Slover Avenue and improvements along Jurupa Avenue east of the Specific Plan area, each of which would result in temporary lane closures and potential temporary diversions.

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 for roadways within the city of Fontana and the San Bernardino County Public Works Director for roadways within unincorporated county areas 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. Such routes shall be consistent with the truck routing set forth in the project's Truck Traffic Management Plan.
- Specify the hours during which site deliveries and off-site hauling can occur and methods to mitigate construction-related impact to 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 designated representative) within the city of Fontana or the San Bernardino County Public Works Director (or a designated representative) for roadways within unincorporated county areas 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 a.m. and 3:00 p.m. only, Monday through Friday, unless approved otherwise by the City Traffic Engineer within the city of Fontana or the San Bernardino County Public Works Director for roadways within unincorporated county areas. 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 within the city of Fontana or the San Bernardino County Public Works Director for roadways within unincorporated county areas.
- 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 within the city of Fontana or the San Bernardino County Public Works Director for roadways within unincorporated county areas 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 within the city of Fontana or the San Bernardino County Public Works Director for roadways within unincorporated county areas.
- 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 within the city of Fontana and San Bernardino County requirements within unincorporated county areas.
- 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 Cities of Fontana, Jurupa Valley, and Riverside; San Bernardino County; and Caltrans within their respective jurisdictions. As shown in Table 4.2.15-14, under Existing plus Project conditions, of the 65 study area intersections analyzed, eight intersections would exceed applicable significance criteria, seven of which currently exceed LOS performance standards without WVLCSP traffic. These intersections include:

- **Sierra Avenue/Santa Ana Avenue (#4)**. This intersection is within the city of Fontana, and operates at an unacceptable LOS D during the AM and PM peak hours under existing traffic conditions. The addition of project traffic would increase delay at this intersection by 0.2 second, which is less than the City's 5.0-second increase in delay threshold. As such, the project's impact at this intersection would be less than significant.
- **Alder Avenue/Santa Ana Avenue (#11)**. This intersection is within unincorporated San Bernardino County, and operates at an unacceptable LOS F during the AM peak hour under existing traffic conditions, which would be exacerbated by the addition of project traffic. As such,

the project would have a cumulatively considerable contribution to a significant cumulative impact per San Bernardino County significance criteria, requiring mitigation (see **Regulatory Requirement RR-TR-1 and Mitigation Measure TRA-1c**). This intersection is included in the SANBAG Nexus program, which proposes widening of Santa Ana Avenue between Tamarind Avenue and Cedar Avenue from two to four lanes, including signalization of the Locust Avenue/Santa Ana Avenue intersection.

- **Locust Avenue/Santa Ana Avenue (#19)**. This intersection is within unincorporated San Bernardino County and operates at an unacceptable LOS E during the AM peak hour and LOS F during the PM peak hour under existing traffic conditions, which would be exacerbated by the addition of project traffic. As such, the project would have a cumulatively considerable contribution to a significant cumulative impact per San Bernardino County significance criteria, requiring mitigation (see **Regulatory Requirement RR-TR-1 and Mitigation Measure TRA-1c**). This intersection is included in the SANBAG Nexus program, which proposes widening of Santa Ana Avenue between Tamarind Avenue and Cedar Avenue from two to four lanes, including signalization of the Locust Avenue/ Santa Ana Avenue intersection.
- **Locust Avenue/Jurupa Avenue (#20)**. This intersection is within the city of Fontana, and operates at an acceptable LOS B during the AM and PM peak hours. The addition of project traffic would increase delay by 18.4 seconds in the AM peak hour and by 15.6 seconds in the PM peak hour, which would exceed the City's significance criteria, requiring mitigation. This intersection is included in the SANBAG Nexus program, and needed improvements would be provided as part of WVLCSP development (see **Regulatory Requirement RR-TR-1 and Mitigation Measure TRA-1b** and Table 4.2.15-18).
- **SR-60 eastbound ramps/Mission Boulevard (#39)**. This intersection is within the city of Jurupa Valley under Caltrans jurisdiction, and is not part of Riverside County's TUMF Program because no feasible improvements have been identified to bring this interchange to an acceptable LOS. This intersection operates at an unacceptable LOS F during the PM peak hour under existing traffic conditions, which would be exacerbated by the addition of project traffic. As such, the project would have a cumulatively considerable contribution to a significant cumulative impact for which no mitigation is available (see **Regulatory Requirement RR-TR-1 and Mitigation Measure TRA-1c**).
- **Linden Avenue/Slover Avenue (#42)**. This intersection is within unincorporated San Bernardino County and operates at an unacceptable LOS E during the AM peak hour under existing traffic conditions, which would be exacerbated by the addition of project traffic. The project would have a cumulatively considerable contribution to a significant cumulative impact per San Bernardino County significance criteria, requiring mitigation (see **Regulatory Requirement RR-TR-1 and Mitigation Measure TRA-1b**). While intersection improvements are included in the SANBAG Nexus study, signalization of the intersection is not. As identified in Table 4.2.15-18, the proposed project would pay 100 percent of the cost of a traffic signal, which is to be installed as part of intersection improvements funded by the Nexus program.
- **Rubidoux Boulevard/24th Street (#54)**. This intersection is within the city of Jurupa Valley and operates at an unacceptable LOS E in the AM peak hour and LOS F in the PM peak hour under existing traffic conditions, which would be exacerbated by the addition of project traffic (LOS F in both the AM and PM peak hours). As such, the project would have a cumulatively considerable contribution to a significant cumulative impact, requiring mitigation (see

Mitigation Measure TRA-1c). This intersection is not part of the Riverside County TUMF Program, and the City of Jurupa Valley has no program into which fair-share payments could be made.

- **Rubidoux Boulevard/26th Street (#55)**. This intersection is within the city of Jurupa Valley, and operates at an unacceptable LOS E in the PM peak hour under existing traffic conditions, which would be exacerbated by the addition of project traffic. As such, the project would have a cumulatively considerable contribution to a significant cumulative impact, requiring mitigation (see **Mitigation Measure TRA-1c**). This intersection is not part of the Riverside County TUMF Program, and the City of Jurupa Valley has no program into which fair-share payments could be made.

Table 4.2.15-14. Intersection Level of Service – Existing Plus Project Conditions

#	Intersection	Traffic Control[2]	Existing (2016) Delay[1] (secs.) AM	Existing (2016) Delay[1] (secs.) PM	Existing (2016) Level of Service AM	Existing (2016) Level of Service PM	E+P Delay[1] (secs.) AM	E+P Delay[1] (secs.) PM	E+P Level of Service AM	E+P Level of Service PM	Acceptable LOS	Significant Impact?[3]
1	Sierra Av. & Valley Bl.	TS	34.9	44.0	C	D	34.9	45.3	C	D	E	No
2	Sierra Av. & I-10 Freeway Ramps[4]	TS	25.1	24.8	C	C	25.1	26.0	C	C	D	No
3	Sierra Av. & Slover Av.	TS	29.2	35.9	C	D	29.6	36.1	C	D	E	No
4	Sierra Av. & Santa Ana Av.	TS	**36.3**	**35.8**	**D**	**D**	**36.3**	**36.0**	**D**	**D**	C	No
5	Sierra Av. & Jurupa Av.	TS	33.0	35.5	C	D	33.0	35.5	C	D	E	No
6	Production Av. & Slover Av.	TS	32.6	26.1	C	C	32.8	27.1	C	C	C	No
7	Production Av. & Santa Ana Av.	CSS	9.7	9.4	A	A	9.8	9.6	A	A	C	No
8	Tamarind Av. & Slover Av.	TS	18.1	17.1	C	B	18.4	18.3	B	B	C	No
9	Tamarind Av. & Santa Ana Av.	AWS	12.9	11.9	B	B	13.2	12.2	B	B	C	No
10	Alder Av. & Slover Av.	CSS	15.4	11.9	C	B	18.1	13.4	C	B	D	No
11	Alder Av. & Santa Ana Av.	AWS	**91.1**	13.2	**F**	B	**>100.0**	13.7	**F**	B	D	**Yes**
12	Alder Av. & Jurupa Av.	AWS	6.9	7.0	A	A	6.9	7.0	A	A	C	No
13	Laurel Av. & Slover Av.	TS	27.1	17.1	C	B	29.3	17.3	C	B	D	No
14	Laurel Av. & Santa Ana Av.	AWS	24.5	13.8	C	B	30.6	14.7	D	B	D	No
15	Driveway 1 & 7th St.	**CSS**	Future Intersection				9.6	9.7	A	A	C	No
16	Driveway 2 & 7th St.	**CSS**	Future Intersection				9.6	9.9	A	A	C	No
17	Driveway 3 & 7th St.	**CSS**	Future Intersection				11.0	11.3	B	B	C	No
18	Locust Av. & Slover Av.	TS	20.2	19.6	C	B	22.7	20.0	C	B	D	No
19	Locust Av. & Santa Ana Av.	AWS	**45.5**	**55.6**	**E**	**F**	**>100.0**	**>100.0**	**F**	**F**	D	**Yes**
20	Locust Av. & Jurupa Av.	CSS	12.9	12.8	B	B	**31.3**	**28.4**	**D**	**D**	C	**Yes**
21	Locust Av. & Driveway 4	**CSS**	Future Intersection				10.5	13.6	B	B	C	No
22	Locust Av. & Driveway 6/11th St.	CSS	10.8	12.9	B	B	21.5	18.7	C	C	C	No
23	Locust Av. & 10th St.	CSS	10.2	12.3	B	B	10.3	13.6	B	B	C	No
24	Locust Av. & Driveway 7/9th St.	CSS	10.0	12.1	B	B	19.0	24.5	C	C	C	No
25	Locust Av. & 8th St.	CSS	9.9	12.5	A	B	10.3	14.7	B	B	C	No
26	Locust Av./Armstrong Rd. & 7th St.	CSS/**TS**	12.1	17.8	B	C	12.1	16.6	B	B	C	No
27	Armstrong Rd. & Driveway 8	**CSS**	Future Intersection				11.9	13.7	B	B	C	No
28	Armstrong Rd. & Driveway 9	**CSS**	Future Intersection				10.7	12.3	B	B	C	No

			Existing (2016)				E+P					
			Delay[1] (secs.)		Level of Service		Delay[1] (secs.)		Level of Service			
#	Intersection	Traffic Control[2]	AM	PM	AM	PM	AM	PM	AM	PM	Acceptable LOS	Significant Impact?[3]
29	Armstrong Rd. & Driveway 10	**CSS**	Future Intersection				10.1	12.1	B	B	C	No
30	Armstrong Rd. & Driveway 11	**CSS**	Future Intersection				9.7	10.4	A	B	C	No
31	Driveway 12/Jurupa Av.	**CSS**	Future Intersection				8.9	9.3	A	A	C	No
32	Armstrong Rd./Sierra Av.	TS	35.7	26.0	D	C	37.2	28.6	D	C	E	No
33	Valley Wy. & 37th St.	CSS	17.2	11.3	C	B	17.8	11.7	C	B	D	No
34	Valley Wy. & SR-60 WB Off-ramp	TS	50.6	48.9	D	D	52.9	50.8	D	D	D	No
35	Valley Wy. & SR-60 WB On-ramp	UC	18.2	11.8	C	B	18.6	12.4	C	B	D	No
36	Valley Wy. & SR-60 EB On-ramp	UC	0.0	0.0	A	A	0.0	0.0	A	A	D	No
37	Valley Wy. & Mission Bl.	TS	36.0	46.5	D	D	36.3	46.6	D	D	D	No
38	Formosa St. & Mission Bl.	CSS	12.0	13.2	B	B	12.1	13.2	B	B	D	No
39	SR-60 EB Ramps/Mission Bl.	TS	40.4	**118.5**	D	**F**	43.1	**124.4**	D	**F**	D	**Yes**
40	Soto Av. & Mission Bl.	CSS	10.2	15.2	B	C	10.4	15.2	B	C	D	No
41	Maple Av. & Slover Av.	CSS	16.8	15.3	C	C	18.5	16.7	C	C	D	No
42	Linden Av. & Slover Av.	AWS	**38.3**	19.3	**E**	C	**48.9**	26.8	**E**	D	D	**Yes**
43	Cedar Av. & Valley Bl.	TS	31.7	41.6	C	D	32.0	42.6	C	D	D	No
44	Cedar Av. & I-10 WB Ramps	TS	24.9	22.0	C	C	30.0	23.3	C	C	D	No
45	Cedar Av. & I-10 EB Ramps	TS	45.1	49.4	D	D	49.6	49.7	D	D	D	No
46	Cedar Av. & Orange St.	TS	15.1	15.7	B	B	15.4	16.1	B	B	D	No
47	Cedar Av. & Slover Av.	TS	49.3	38.3	D	D	63.1	58.3	E	E	E	No
48	Cedar Av. & Santa Ana Av.	TS	23.3	22.6	C	C	25.4	22.7	C	C	D	No
49	Cedar Av. & Jurupa Av.	TS	41.5	33.1	D	C	51.0	49.0	D	D	D	No
50	Cedar Av. & 11th St.	TS	8.6	11.6	A	B	11.4	16.9	B	B	D	No
51	Cedar Av. & 7th St.	TS	14.2	17.9	B	B	15.8	20.0	B	B	D	No
52	Cedar Av. & El Rivino Rd.	TS	9.0	11.9	A	B	9.3	12.3	A	B	D	No
53	Rubidoux Bl. & Market St.	TS	39.1	46.1	D	D	41.3	56.6	D	E	E	No
54	Rubidoux Bl. & 24th St.	CSS	**47.6**	**>100.0**	**E**	**F**	**51.4**	**>100.0**	**F**	**F**	D	**Yes**
55	Rubidoux Bl. & 26th St.	CSS	29.5	**39.2**	D	**E**	31.5	**40.9**	D	**E**	D	**Yes**
56	Rubidoux Bl. & 28th St.	TS	10.9	12.3	B	B	11.0	12.4	B	B	D	No
57	Rubidoux Bl. & SR-60 WB Off-ramp	TS	41.7	30.9	D	C	42.7	30.9	D	C	D	No
58	Rubidoux Bl. & SR-60 WB On-ramp	UC	24.7	17.4	C	C	24.8	17.6	C	C	D	No

#	Intersection	Traffic Control[2]	Existing (2016) Delay[1] (secs.) AM	Existing (2016) Delay[1] (secs.) PM	Existing (2016) Level of Service AM	Existing (2016) Level of Service PM	E+P Delay[1] (secs.) AM	E+P Delay[1] (secs.) PM	E+P Level of Service AM	E+P Level of Service PM	Acceptable LOS	Significant Impact?[3]
59	Rubidoux Bl. & SR-60 EB Ramps	TS	27.2	23.2	C	C	28.2	23.5	C	C	D	No
60	Rubidoux Bl. & 34th St.	TS	12.0	18.1	B	B	12.0	18.1	B	B	D	No
61	Agua Mansa Rd. & Market St.	TS	33.1	43.2	C	D	37.7	46.6	D	D	E	No
62	Market St. & Rivera St.	TS	10.7	16.1	B	B	15.5	16.1	B	B	D	No
63	Market St. & SR-60 WB Ramps	TS	13.5	11.0	B	B	14.9	11.1	B	B	D	No
64	Market St. & SR-60 EB Ramps	TS	32.5	32.3	C	C	33.4	46.0	C	D	D	No
65	Market St. & Redwood Dr.	CSS	21.3	15.8	C	C	21.6	16.0	C	C	D	No

* **BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the 2010 Highway Capacity Manual, overall average intersection delay and LOS are shown for intersections with a traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and LOS for the worst individual movement (or movements sharing a single lane) are shown. Average control delay calculated to be greater than 100.0 seconds using equations from the HCM methodology for cross-street stop controlled intersections can result in delay values that increase exponentially once LOS F is reached. As these values are not accurate estimates of actual average control delay anticipated to be experienced, the values are not reported in this table. As such, calculated delay values greater than 100.0 seconds are simply indicated as >100.0 for cross-street stop (and >200.0 for traffic signal intersections). Calculated delay values are available in Appendix L.

[2] CSS = Cross-street Stop; AWS = All-Way Stop; TS = Traffic Signal; **CSS** = Improvement

[3] Significant impacts have been identified based on each applicable agency's threshold of significance.

[4] LOS reported using the HCM 2000 methodology, as the HCM 2010 methodology does not support the analysis of a single-point urban interchange.

Freeway Off-Ramp Queueing

A queueing analysis was performed for eastbound and westbound off-ramps of I-10 at Sierra Avenue, I-10 at Cedar Avenue, SR-60 at Valley Way/Mission Boulevard, SR-60 at Rubidoux Boulevard, and SR-60 at Market Street to assess vehicle queues for the off-ramps that might cause traffic exiting the freeways to back up onto the I-10 or SR-60 freeway mainlines. Queuing analysis findings are presented in Table 4.15-15. As shown in Table 4.15-15, there are no movements that are anticipated to experience queuing issues during the weekday AM or PM peak hours based on the Existing Plus Project 95th percentile traffic flows.

Table 4.2.15-15. Peak Hour Off-Ramp Queueing – Existing Plus Project Conditions

			Existing (2016)				E+P			
			95th Percentile Queue (Feet)[3]		Acceptable?[1]		95th Percentile Queue (Feet)[3]		Acceptable?[1]	
Intersection	Movement	Available Stacking Distance (Feet)	AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
Sierra Av./I-10 Freeway Ramps	EBL	1,300	393	335	Yes	Yes	393	335	Yes	Yes
	EBR	540	0	0	Yes	Yes	0	0	Yes	Yes
	WBL	450	158	195	Yes	Yes	158	195	Yes	Yes
	WBR	1,350	0	0	Yes	Yes	0	0	Yes	Yes
Valley Wy./Granite Hills Dr. / SR-60 WB Off-Ramp	WBL	910	236	333	Yes	Yes	236	330	Yes	Yes
	WBT/R	245	631[2]	711[2]	Yes[3]	Yes[3]	657[2]	713[2]	Yes[3]	Yes[3]
SR-60 EB Ramps/Byrne Rd. / Mission Bl.	SBL/T	1,115	481[2]	1,340[2]	Yes	Yes[3]	581[2]	1,374[2]	Yes	Yes[3]
	SBR	1,115	0	109	Yes	Yes	0	110	Yes	Yes
Cedar Av./I-10 WB Ramps	WBL/T/R	1,270	343[2]	310[2]	Yes	Yes	424[2]	348[2]	Yes	Yes
	WBR	480	443[2]	491[2]	Yes	Yes[3]	445[2]	493[2]	Yes	Yes[3]
Cedar Av./I-10 EB Ramps	EBL	400	585[2]	642[2]	Yes[3]	Yes[3]	596[2]	642[2]	Yes[3]	Yes[3]
	EBL/T/R	1,900	432[2]	562[2]	Yes	Yes	456[2]	562[2]	Yes	Yes
Rubidoux Bl./SR-60 WB Off-Ramp	WBL/T/R	1,250	793[2]	695[2]	Yes	Yes	800[2]	695[2]	Yes	Yes
Rubidoux Bl./SR-60 EB Ramps	EBL/T/R	1,100	224	286	Yes	Yes	238	296	Yes	Yes
Market St./SR-60 WB Ramps	WBL	170	87	95	Yes	Yes	87	95	Yes	Yes
	WBR	1,350	569[2]	100	Yes	Yes	679[2]	172[2]	Yes	Yes
Market St./SR-60 EB Ramps	EBL	155	298[2]	220[2]	Yes[3]	Yes[3]	298[2]	220[2]	Yes[3]	Yes[3]
	EBR	1,635	59	164	Yes	Yes	62	169	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking, which is assumed to be provided in the transition for turn pockets, is reflected in the stacking distance shown on this table, where applicable.

[2] 95th percentile volume exceeds capacity; queue may be longer. Queue shown is maximum after two cycles.

[3] Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 or SR-60 freeway mainline.

Freeway Mainline

The proposed project would result in the addition of vehicle trips during the AM and PM peak hours at freeway mainline segments that are subject to the LOS performance measures established by the San Bernardino County CMP and Caltrans. As shown in Table 4.2.15-16, there are no additional freeway segments anticipated to operate at an unacceptable LOS under Existing Plus Project traffic conditions during the peak hours, in addition to those previously identified under existing traffic conditions:

- SR-60 – westbound, Valley Way to Rubidoux Boulevard (#6) – LOS F AM and PM peak hours
- SR-60 – westbound, east of Market Street (#7) – LOS F AM and PM peak hours

Therefore, no direct impacts would occur. However, the addition of project-related vehicle trips to these two freeway segments would constitute a cumulatively considerable contribution to a significant cumulative impact.

Table 4.2.15-16. Basic Freeway Segment Analysis – Existing Plus Project

				Existing (2016)				E+P			
				Density[3]		LOS		Density[3]		LOS	
Freeway	**Direction[1]**	**Mainline Segment**	**Lanes[2]**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**
I-10	WB	West of Sierra Av.	5	25.7	20.0	C	C	25.8	20.3	C	C
		East of Cedar Av.	5	22.6	18.5	C	C	22.7	18.6	C	C
	EB	West of Sierra Av.	5	18.4	17.3	C	B	18.6	17.4	C	B
		East of Cedar Av.	4	21.8	21.9	C	C	21.9	22.1	C	C
SR-60	WB	West of Valley Wy.	4	27.3	33.3	D	D	27.5	33.7	D	D
		Valley Wy. to Rubidoux Bl.	3	**47.1**	**79.3**	**F**	**F**	**47.1**	**79.3**	**F**	**F**
		East of Market St.	3	**52.8**	**75.6**	**F**	**F**	**53.6**	**76.3**	**F**	**F**
	EB	West of Valley Wy.	4	21.9	20.4	C	C	22.2	20.5	C	C
		Valley Wy. to Rubidoux Bl.	3	34.3	22.7	D	C	34.4	22.8	D	C
		East of Market St.	3	34.2	20.3	D	C	34.4	20.7	D	C

BOLD = Unacceptable LOS

[1] EB = eastbound; WB = westbound

[2] Number of lanes are in the specified direction and is based on existing conditions.

[3] Density is measured by passenger cars per mile per lane (pc/mi/ln).

Freeway Merge/Diverge Analysis

Ramp merge and diverge operations were also evaluated for Existing Plus Project conditions and the results of this analysis are presented in Table 4.2.15-17. There are no additional ramp junctions anticipated to operate at unacceptable LOS with the addition of project traffic during the peak hours from those previously identified under existing traffic conditions:

- I-10 – westbound on-ramp at Sierra Avenue (#1) – LOS E AM peak hour only
- SR-60 – westbound on-ramp at Valley Way (#5) – LOS F AM and PM peak hours
- SR-60 – westbound off-ramp at Valley Way (#6) – LOS F AM and PM peak hours
- SR-60 – westbound off-ramp at Market Street (#7) – LOS F AM and PM peak hours
- SR-60 – eastbound off-ramp at Rubidoux Boulevard (#10) – LOS E AM peak hour only

Therefore, no direct impacts would occur. However, the addition of project-related vehicle trips to these five freeway locations would constitute a cumulatively considerable contribution to a significant cumulative impact.

Table 4.2.15-17. Freeway Ramp Junction Merge/Diverge Analysis – Existing Plus Project

				Existing (2016)				Existing + Project			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
Freeway	Direction[1]	Ramp or Segment	Lanes on Freeway[2]	Density[3]	LOS	Density[3]	LOS	Density[3]	LOS[4]	Density[3]	LOS
I-10	WB	On-Ramp at Sierra Av.	4	**37.9**	E	33.4	D	**38.1**	**E**	34.1	D
		Off-Ramp at Cedar Av.	5	31.2	D	28.5	D	31.5	D	28.7	D
	EB	Off-Ramp at Sierra Av.	5	23.2	C	21.1	C	23.7	C	21.3	C
		On-Ramp at Cedar Av.	4	23.2	C	23.2	C	23.3	C	23.7	C
SR-60	WB	On-Ramp at Valley Wy.	3	**40.3**	**F**	**48.2**	**F**	**40.4**	**F**	**48.6**	**F**
		Off-Ramp at Valley Wy.	3	**41.7**	**F**	**53.3**	**F**	**41.7**	**F**	**53.3**	**F**
		Off-Ramp at Market St.	3	**45.0**	**F**	**52.9**	**F**	**45.4**	**F**	**53.0**	**F**
	EB	Off-Ramp at Mission Bl.	4	27.9	C	30.3	D	28.4	D	30.4	D
		On-Ramp at Mission Bl.	3	30.3	D	23.5	C	30.5	D	23.5	C
		Off-Ramp at Rubidoux Bl.	3	**35.2**	**E**	29.0	D	**35.2**	**E**	29.0	D
		On-Ramp at Market St.	3	33.8	D	24.5	C	34.0	D	24.9	C

* **BOLD** = Unacceptable LOS

[1] EB = eastbound; WB = westbound

[2] Number of lanes are in the specified direction and is based on existing conditions.

[3] Density is measured by passenger cars per mile per lane (pc/mi/ln).

Specific Plan and Regulatory 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-TR-2:** Feasibility Studies and Fair-Share Payments
- **RR-TR-1**: Pay San Bernardino County Nexus Fees and City of Fontana Development Impact Fees for Roadway Improvements

Mitigation Measures

Implementation of **Mitigation Measures TRA-1b** and **TRA-1c** would require construction of transportation improvements, payment of development impact fees, and undertaking studies to identify design solutions that could serve as the basis for future physical improvements to alleviate the project's direct impacts and address cumulative impacts as well as the proposed project's cumulatively considerable contributions to cumulative impacts at intersections and freeway ramps 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 CalApp4th 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.

At this time, Caltrans has no fee programs or other improvement programs in place to address the deficiencies caused by development projects in the city of Fontana (or other neighboring jurisdictions) on the state highway system. As such, no improvements have been recommended to address Existing Plus Project deficiencies on the state highway system, because the project's impacts on the state highway system would be related to its contribution to cumulative impacts, there are no mechanisms available to provide fair-share funding for improvements, and improvements to address cumulative impacts have been programmed, and no funding mechanisms have been identified outside of the Nexus Study and TUMF Program. Therefore, there is no feasible mitigation available for impacts on the state highway system.

In relation to the SR-60/Valley Way interchange, unacceptable LOS is an existing condition that will worsen over time and, thus, is a cumulative issue that no single project can solve. Past studies for this freeway interchange, including the Riverside County TUMF Program, have consistently concluded that there are no feasible improvements that can be provided for this interchange to bring it to acceptable LOS standards. As a result, improvements to this interchange were not

included in the TUMF Program. Over time, LOS will continue to deteriorate. Because no feasible physical mitigation measures have been identified in previous studies for this interchange, and there is no program to which fair-share payments could be made, no mitigation is proposed for this interchange. Instead, the applicant has volunteered to undertake a study aimed at identifying what incremental improvements might help alleviate traffic congestion at this interchange, even if LOS standards cannot be achieved (see **Specific Plan Requirement SP-TR-2**).

Following preparation of such a study funded voluntarily by the applicant, it would be incumbent on Caltrans (which owns the facility) and/or the City of Jurupa Valley (in whose jurisdiction the interchange is located) to agree on what improvements should be made and then set up a program to do so.

Although voluntary preparation of such a study would not constitute mitigation of impacts under CEQA, the City of Fontana has concluded that undertaking such a study would nevertheless be appropriate in light of:

- Unacceptable LOS is an existing condition that will worsen over time as new development occurs within Jurupa Valley, Fontana, and other communities;
- Congestion at this interchange is a cumulative issue that no single project can solve;
- There are no defined improvements or programs to which a fair-share payment could be made;
- The location of the interchange, outside of Fontana, precludes the City's ability to implement physical improvements at the interchange; and
- Past studies for this freeway interchange, including the Riverside County TUMF Program, have consistently concluded that there are no feasible improvements that can be provided for this interchange to bring it to acceptable LOS standards.

In addition, the cities of Jurupa Valley and Riverside have no programs to address deficient intersections within their respective jurisdictions to which the proposed project could contribute a fair share. Therefore, **Mitigation Measures TRA-1b** and **TRA-1c** do not include requirements for fair-share payments to mitigate the contribution of project-related traffic to cumulative impacts within the cities of Jurupa Valley and Riverside. While there is reasonable certainty that improvements funded by the Nexus Study and TUMF Program will be constructed, Fontana has no jurisdiction to ensure that any fair-share payments made to other jurisdictions will be used for construction of the physical improvements for which fair-share payment is provided. Therefore, traffic-related impacts outside of the city of Fontana requiring improvements that are not funded by the Nexus Study and TUMF Program 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 unincorporated San Bernardino County, which has, at a staff level, agreed to utilize fair-share payments for physical improvements, and as a result determined that mandating fair-share payment to San Bernardino County 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 4.2.15-18 along with the required timing for the improvement.

Table 4.2.15-18. Roadway and Intersection Improvements Required to be Installed by the Applicant

Circulation Facility	Extent of Proposed Improvement	Timing for Applicant-Installed Improvements
On-site Facilities		
Jurupa Avenue	Widen eastbound lanes to full half-width improvements along frontage of Parcel 7.	Prior to certificate of occupancy for first building
Locust Avenue/Jurupa Avenue Intersection (TIA Intersection #20)	Add southbound through, westbound left-turn, and northbound right-turn lanes. Install a traffic signal.	Prior to certificate of occupancy for first building
Locust Avenue/Armstrong Road from Jurupa Avenue to the Riverside county line (including TIA Intersections #19 through #30)	Full improvements, including turning movements and signalization, as identified in the WVLCSP TIA (Appendix L).	Prior to the 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.	Prior to certificate of occupancy for first building
Locust Avenue/11th Street–Driveway 6 (TIA Intersection #21)	Install a traffic signal.	Prior to certificate of occupancy for Building 1
Locust Avenue–Armstrong Road/7th Street (TIA Intersection #25)	Install a traffic signal.	Prior to certificate of occupancy for Building 1
Alder Avenue	Install a new roadway extending northwest from the existing intersection of 7th Street and Armstrong Road/Locust Avenue.	Prior to certificate of occupancy for Building 1, 2, or 3, whichever is first
Off-site Improvements		
Locust Avenue from Jurupa Avenue to Slover Avenue	Widen Locust Avenue to provide four through travel lanes and appropriate intersection turn lanes, along with a pavement section adequate to support proposed project truck traffic. Install traffic signals at: • Jurupa Avenue • 11th Street • 7th Street	Prior to the certificate of occupancy for first building
Jurupa Avenue	Widen eastbound lanes to full half-width improvements between parcel 7 and Kessler Park.	Prior to the certificate of occupancy for first building
Linden Avenue/Slover Avenue Intersection	Pay 100% of the cost of signalization to San Bernardino County. Installation to be undertaken by the County as part of intersection improvements funded	Prior to the certificate of occupancy for first building

Circulation Facility	Extent of Proposed Improvement	Timing for Applicant-Installed Improvements
	by Nexus program.	
Maple Avenue/Slover Avenue Intersection	Pay 100% of the cost of signalization to San Bernardino County.	Prior to the certificate of occupancy for first building

Sources: West Valley Logistics Center Specific Plan 2017; Appendix L

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 DIF, which represents the project's required fee to mitigate impacts on both regional (Nexus Study) and additional local facilities, including:
  - Alder Avenue/Santa Ana Avenue (TIA Intersection #11);
  - Locust Avenue/Santa Ana Avenue intersection (TIA Intersection #19); and
  - Linden Avenue/Slover Avenue (TIA Intersection #42).
- Fair-share payment to San Bernardino County to install a traffic signal at the Alder Avenue/Slover Avenue intersection (TIA Intersection #10) that is not included in the Nexus Study. Fair-share payment for the WVLCSP will be at the same rate being charged by the County for projects within the unincorporated area.

Residual Impacts

With implementation of project design feature **Specific Plan Requirement SP-TR-2**, and all mitigation identified for the project, including payment of fees to fund future improvements and installation of roadway improvements to improve operations at deficient intersections under the Existing Plus Project scenario (**Mitigation Measure TRA-1b**, including all improvements listed in Table 4.2.15-18, and **Mitigation Measure TRA-1c**), impacts resulting from the project would remain significant and unavoidable. The project applicant would provide physical improvements for direct impacts.[7] 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 outside of the Nexus Study and TUMF Program 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 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 4.2.15-19.

[7] See page 4.2-14 for a definition of "direct impact."

Table 4.2.15-19. Residual Impacts for Intersections and Freeway/Ramp Segments with Mitigation for Existing with Project

Circulation Facility	Mitigation	Significance Conclusion
Intersection/Ramp/Freeway Segment **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 through lanes, turn lanes, and signal at Locust Ave/Jurupa Ave.	Less than Significant Impact with Mitigation
Locust Avenue from Jurupa Avenue to the Riverside county line (TIA Intersections 20–30)	Mitigation Measure TRA-1b. Project to construct Locust Avenue/Armstrong Road with full improvements, including turning movements and signalization, as identified in the WVLCSP TIA (Appendix L).	Less than Significant Impact with Mitigation
Intersection/Ramp/Freeway Segment **in Fontana** operating at an unacceptable LOS with and without the project – project would make a cumulatively considerable contribution to a significant cumulative impact (unacceptable LOS)		
Locust Ave/Santa Ana Ave Intersection	Mitigation Measure TRA-1b. Project to construct Locust Avenue to provide four through travel lanes and appropriate intersection turn lanes, along with warranted signalization and a pavement section adequate to support proposed project truck traffic.	Less than Significant Impact with Mitigation.
I-10 WB On-ramp at Sierra Avenue Merge/Diverge	No mitigation available. No funding programs exist to which project could make a fair-share contribution.	Significant and Unavoidable Impact.
Intersection/Ramp/Freeway Segment **Outside Fontana** operating at an unacceptable LOS with and without the project – project would contribute to a significant increase in unacceptable LOS		
Alder Ave/Santa Ana Ave Intersection	Mitigation Measure TRA-1c: Payment of fees to the City pursuant to Nexus Study.	Less than Significant Impact with Mitigation. Needed improvements are included in and will be constructed as part of the SANBAG Nexus Study program.
SR-60 Eastbound Ramps/Mission Boulevard	No mitigation available. No funding programs exist to which project could make a fair-share contribution.	Significant and Unavoidable Impact.
Linden Avenue/Slover Avenue	Mitigation Measure TRA-1c: Payment of fees to San Bernardino County.	Significant and Unavoidable Impact until improvement is installed by San Bernardino County with Nexus Study funding. Developer to pay 100% of the cost of signalization at this intersection (signalization of this intersection is not included as part of SANBAG Nexus Study program improvements). Signalization to be paid for by WVLCSP is to be installed concurrent with other intersection improvements.

Circulation Facility	Mitigation	Significance Conclusion
Rubidoux Boulevard/ 24th Street	No mitigation available. No funding programs exist to which project could make a fair-share contribution.	Significant and Unavoidable Impact.
Rubidoux Boulevard/ 26th Street	No mitigation available. No funding programs exist to which project could make a fair-share contribution.	Significant and Unavoidable Impact.
SR-60 Mainline, Westbound, Valley Way to Rubidoux Boulevard	No mitigation available. No funding programs exist to which project could make a fair-share contribution.	Significant and Unavoidable Impact.
SR-60 Mainline, Westbound East of Market Street	No mitigation available. No funding programs exist to which project could make a fair-share contribution.	Significant and Unavoidable Impact.
SR-60, Westbound On-ramp at Valley Way	No mitigation available. No funding programs exist to which project could make a fair-share contribution.	Significant and Unavoidable Impact.
SR-60, Westbound Off-ramp at Valley Way	No mitigation available. No funding programs exist to which project could make a fair-share contribution.	Significant and Unavoidable Impact.
SR-60, Westbound Off-ramp at Market Street	No mitigation available. No funding programs exist to which project could make a fair-share contribution.	Significant and Unavoidable Impact.
SR-60 Eastbound Off-ramp at Rubidoux Boulevard	No mitigation available. No funding programs exist to which project could make a fair-share contribution.	Significant and Unavoidable Impact.

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 unincorporated San Bernardino County on facilities not funded by the Nexus Study. The future improvements included in Mitigation **Measure TRA-1c** have been identified in the Development Mitigation Nexus Study prepared by SANBAG and the Western Riverside Council of Governments' TUMF Program. 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 do not include improvements to all intersections where the proposed project would contribute to significant cumulative impacts 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 39, 54, and 55, as well as two freeway segments and five freeway merge-diverge locations, as neither the applicant nor the City of Fontana has 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 the improvements identified in Table 4.2.15-18, the City has requested these improvements to mitigate

direct and cumulative project impacts. 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 4.2.15-18.

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 LOS 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. In 2004, Measure I sales tax revenues were extended for 30 years through 2034. Thus, improvements needed to address cumulative impacts will be funded and completed by 2034.

Although 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. While implementation of the improvements for which fair-share fees are proposed to be paid, (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 provide full improvements 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 project.[8] Therefore, impacts on facilities not paid for by the Nexus Study and TUMF Program would be considered significant and unavoidable.

Operational Impacts: Cumulative without Project

Methodology

During operations, the cumulative impact analysis for transportation and traffic evaluates a long-term (2040) scenario based on a combination of the San Bernardino Transportation Analysis Model, Riverside Transportation Analysis Model, and a list of cumulative projects (see Table 6-1 in Appendix L). Traffic projections for the Horizon Year (2040) without Project conditions were derived from the San Bernardino Transportation Analysis Model using accepted procedures for model forecast refinement and smoothing for study area intersections within the city of Fontana and unincorporated areas of San Bernardino County. The Riverside Transportation Analysis Model was utilized for study area locations within Riverside County.

[8] 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 Program.

Intersections

LOS calculations were conducted for study intersections to evaluate their operations under Horizon Year (2040) without Project conditions with roadway and intersection geometrics consistent with those funded by the Nexus Study and TUMF Program. As shown in Table 4.2.15-20, the following intersections are anticipated to operate at an unacceptable LOS during the peak hours under Horizon Year (2040) without Project conditions. Intersections that operate at an unacceptable LOS during the peak hours under existing conditions are indicated in **bold**.

- Sierra Avenue/Valley Boulevard (#1) – AM and PM peak hours
- Sierra Avenue/Slover Avenue (#3) – AM and PM peak hours
- **Sierra Avenue/Santa Ana Avenue (#4) –AM and PM peak hours**
- Sierra Avenue/Jurupa Avenue (#5) –PM peak hour only
- Production Avenue/Slover Avenue (#6) –AM peak hour only
- Tamarind Avenue/Slover Avenue (#8) –PM peak hour only
- Tamarind Avenue/Santa Ana Avenue (#9) –AM and PM peak hours
- Alder Avenue/Slover Avenue (#10) –AM and PM peak hours
- **Alder Avenue/Santa Ana Avenue (#11) – AM and PM peak hours**
- Laurel Avenue/Slover Avenue (#13) – LOS E AM peak hour only
- Laurel Avenue/Santa Ana Avenue (#14) – AM and PM peak hours
- **Locust Avenue/Santa Ana Avenue (#19) – AM and PM peak hours**
- Locust Avenue/Driveway 6/11th Street (#22) – LOS D PM peak hour only
- Locust Avenue/10th Street (#23) – LOS D PM peak hour only
- Locust Avenue/Driveway 7/9th Street (#24) – LOS F PM peak hour only
- Locust Avenue/8th Street (#25) – LOS D PM peak hour only
- Locust Avenue/Armstrong Road/7th Street (#26) – LOS F PM peak hour only
- Armstrong Road/Sierra Avenue (#32) – AM and PM peak hours
- Valley Way/37th Street (#33) – LOS F AM and PM peak hours
- Valley Way/SR-60 westbound on-ramp (#35) – AM and PM peak hours
- Valley Way/Mission Boulevard (#37) – AM and PM peak hours
- Formosa Street/Mission Boulevard (#38) – LOS E AM peak hour only
- Soto Avenue/Mission Boulevard (#40) – LOS E PM peak hour only
- Maple Avenue/Slover Avenue (#41) – LOS F AM and PM peak hours
- **Linden Avenue/Slover Avenue (#42) – AM and PM peak hours**
- Cedar Avenue/Valley Boulevard (#43) – LOS F AM and PM peak hours
- Cedar Avenue/I-10 westbound ramps (#44) – LOS E AM and PM peak hours
- Cedar Avenue/I-10 eastbound ramps (#45) – LOS F AM and PM peak hours

- Cedar Avenue/Slover Avenue (#47) - LOS F AM and PM peak hours
- Cedar Avenue/Jurupa Avenue (#49) - LOS F AM and PM peak hours
- Cedar Avenue/7th Street (#51) – LOS E AM and PM peak hours
- Cedar Avenue/Rubidoux Boulevard/El Rivino Road (#52)/LOS E PM peak hour only
- Rubidoux Boulevard/Market Street (#53) – LOS F AM and PM peak hours
- **Rubidoux Boulevard/24th Street (#54) – AM and PM peak hours**
- **Rubidoux Boulevard/26th Street (#55) – AM and PM peak hours**
- Rubidoux Boulevard/28th Street (#56) – LOS F PM peak hour only
- Rubidoux Boulevard /SR-60 westbound on-ramp (#58) LOS F AM and PM peak hours
- Rubidoux Boulevard /SR-60 eastbound on-ramp (#59) LOS F AM and PM peak hours
- Rubidoux Boulevard/34th Street (#60) – LOS E PM peak hour only
- Agua Mansa Road/Market Street (#61) - LOS F AM and PM peak hours
- Market Street/Rivera Street (#62) – LOS F PM peak hour only
- Market Street/SR-60 westbound ramps (#63) – LOS F PM peak hour only
- Market Street/SR-60 eastbound ramps (#64) – LOS F PM peak hour only
- Market Street/Redwood Drive (#65) – LOS F AM and PM peak hours

Freeway Off-Ramp Queueing

A queuing analysis was performed for the eastbound and westbound off-ramps of I-10 at Sierra Avenue, I-10 at Cedar Avenue, SR-60 at Valley Way/Mission Boulevard, SR-60 at Rubidoux Boulevard, and SR-60 at Market Street to assess vehicle queues for the off-ramps where project-related traffic might cause or contribute to peak hour operations on freeway off-ramps to back up on the mainline of I-10 or SR-60. Queuing analysis findings are presented in Table 4.2.15-21. As shown in Table 4.2.15-21, the following off-ramps are anticipated to experience queuing issues during the weekday AM or PM peak hours for Horizon Year (2040) 95th percentile traffic flows due to the indicated intersection movements:

- Valley Way/Granite Hill Drive/SR-60 westbound off-ramp (#34) – westbound shared through/ right-turn lane during the PM peak hour only
- SR-60 eastbound ramps/Byrne Road/Mission Boulevard off-ramp (#39) – southbound shared left-through lane during the PM peak hour only
- Rubidoux Boulevard/SR-60 westbound off-ramp (#57) – westbound shared left-through/right-turn lane during the AM and PM peak hours

Freeway Segments

Horizon Year (2040) without Project mainline directional volumes for the AM and PM peak hours are provided in Table 4.2.15-22. The following freeway segments are anticipated to operate at an unacceptable LOS under Horizon Year (2040) without Project traffic conditions during one or more peak hours. Those freeway segment operating at unacceptable LOS under existing conditions are identified in **bold**.

- I-10 – westbound, west of Sierra Avenue (#1) –AM and PM peak hours
- I-10 – eastbound, west of Sierra Avenue (#3) –PM peak hour only
- I-10 – eastbound, east of Cedar Avenue (#4) –PM peak hour only
- SR-60 – westbound, west of Valley Way (#5) –AM peak hour
- **SR-60 – westbound, Valley Way to Rubidoux Boulevard (#6) –AM and PM peak hours**
- **SR-60 – westbound, east of Market Street (#7) –AM and PM peak hours**
- SR-60 – eastbound, Valley Way to Rubidoux Boulevard (#9) –AM peak hour only
- SR-60 – eastbound, east of Market Street (#10) –AM peak hour only

Freeway Merge/Diverge Movements

Freeway ramp junction merge and diverge operations were also evaluated for Horizon Year (2040) without Project conditions and the results are presented in Table 4.2.15-23. As shown in Table 4.2.15-23, the following merge and diverge ramp junction areas are anticipated to operate at an unacceptable LOS under Horizon Year (2040) traffic conditions during one or more peak hours, in addition to those previously identified under Opening Year Cumulative (2018) traffic conditions:

- **I-10 – westbound on-ramp at Sierra Avenue (#1) –AM peak hour only**
- I-10 – westbound off-ramp at Cedar Avenue (#2) –AM and PM peak hours
- I-10 – eastbound on-ramp at Cedar Avenue (#4) –PM peak hour only
- **SR-60 – westbound on-ramp at Valley Way (#5) –AM and PM peak hours**
- **SR-60 – westbound off-ramp at Valley Way (#6) –AM and PM peak hours**
- **SR-60 – westbound off-ramp at Market Street (#7) –AM and PM peak hours**
- SR-60 – eastbound off-ramp at Mission Boulevard (#8) –AM and PM peak hours
- SR-60 – eastbound on-ramp at Mission Boulevard (#9) –AM peak hour only
- **SR-60 – eastbound off-ramp at Rubidoux Boulevard (#10) –PM peak hour only**

Operational Impacts: Cumulative with Project

A direct project impact would result in locations where WVLCSP traffic would cause a circulation facility (intersection, off-ramp, freeway mainline, or merge-diverge location) to operate at a deficient LOS that would otherwise operate at an acceptable peak hour LOS under long-term cumulative conditions without the proposed project. Project contributions to long-term impacts would be cumulatively considerable if the proposed project would meet the criteria described in the previous discussion of traffic thresholds of significance or contribute more than 50 trips to a freeway segment or merge-diverge location 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.

Intersection Long-Term (2040) Impacts

As shown in Table 4.2.15-20, the addition of WVLCSP traffic is anticipated to result in the following additional peak hour intersection deficiencies, in addition to those previously identified under Horizon Year (2040) without Project conditions, constituting direct project impacts:

- **Locust Avenue/Slover Avenue (#18)**. Project-related traffic would cause delay in the AM peak hour to increase from 53.9 seconds (LOS D) to 71.8 seconds (LOS E). This intersection, which is within unincorporated San Bernardino County, is included in the Nexus Study program, which will widen Locust Avenue from 7th Street to Slover Avenue from two to four lanes, along with providing needed intersection improvements. Improvements to this intersection would be provided by the WVLCSP as indicated in Table 4.2.15-18.
- **Cedar Avenue/Orange Street (#46)**. Project-related traffic would cause delay in the AM peak hour to increase from 54.2 seconds (LOS D) to 58.7 seconds (LOS E). This intersection, which is within unincorporated San Bernardino County, is not included in the Nexus study program.
- **Cedar Avenue/Santa Ana Avenue (#48)**. Project-related traffic would cause delay in the AM peak hour to increase from 54.2 seconds (LOS D) to 58.7 seconds (LOS E). This intersection, which is within unincorporated San Bernardino County, is not included in the Nexus study program.

Table 4.2.15-20. Long-Term (2040) Intersection Level of Service without and with Project

#	Intersection	Traffic Control[2]	2040 Without Project				2040 With Project				Acceptable LOS	Significant Impact?[3]
			Delay[1] (secs.)		Level of Service		Delay[1] (secs.)		Level of Service			
			AM	PM	AM	PM	AM	PM	AM	PM		
1	Sierra Av. & Valley Bl.	TS	58.7	**92.3**	E	F	59.0	**94.6**	E	**F**	E	**Yes**
2	Sierra Av. & I-10 Freeway Ramps4	TS	28.9	30.5	C	C	29.9	36.5	C	D	D	No
3	Sierra Av. & Slover Av.	TS	**137.3**	**140.5**	**F**	**F**	**165.5**	**145.3**	**F**	**F**	E	**Yes**
4	Sierra Av. & Santa Ana Av.	TS	**47.0**	**42.2**	**D**	**D**	**47.0**	**42.4**	**D**	**D**	C	No
5	Sierra Av. & Jurupa Av.	TS	43.4	80.2	D	F	43.4	**80.2**	D	**F**	E	No
6	Production Av. & Slover Av.	TS	**35.8**	30.0	**D**	C	**36.5**	**37.7**	**D**	**D**	C	**Yes**
7	Production Av. & Santa Ana Av.	CSS	12.2	11.7	B	B	12.4	11.8	B	B	C	No
8	Tamarind Av. & Slover Av.	TS	23.8	**54.2**	C	**D**	25.4	**63.0**	C	**E**	C	**Yes**
9	Tamarind Av. & Santa Ana Av.	AWS	**52.6**	**56.8**	**F**	**F**	**56.7**	**63.4**	**F**	**F**	C	**Yes**
10	Alder Av. & Slover Av.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**	D	**Yes**
11	Alder Av. & Santa Ana Av.	AWS	**>100.0**	**53.5**	**F**	**F**	**>100.0**	**60.4**	**F**	**F**	D	**Yes**
12	Alder Av. & Jurupa Av.	AWS	6.9	7.5	A	A	6.9	7.5	A	A	C	No
13	Laurel Av. & Slover Av.	TS	**70.0**	50.1	E	D	**81.0**	52.4	**F**	D	D	**Yes**
14	Laurel Av. & Santa Ana Av.	AWS	**>100.0**	**46.4**	**F**	**E**	**>100.0**	**53.9**	**F**	**F**	D	**Yes**
15	Driveway 1 & 7th St.	**CSS**	Future Intersection				9.6	9.7	A	A	C	No
16	Driveway 2 & 7th St.	**CSS**	Future Intersection				9.6	9.9	A	A	C	No
17	Driveway 3 & 7th St.	**CSS**	Future Intersection				11.0	11.3	B	B	C	No
18	Locust Av. & Slover Av.	TS	53.9	36.4	D	D	**71.8**	42.8	**E**	D	D	**Yes**
19	Locust Av. & Santa Ana Av.	AWS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**	D	**Yes**
20	Locust Av. & Jurupa Av.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**	C	**Yes**
21	Locust Av. & Driveway 4	**CSS**	Future Intersection				11.4	20.4	B	C	C	No
22	Locust Av. & Driveway 6/11th St.	CSS	12.9	**30.8**	B	**D**	15.9	23.2	C	C	C	No
23	Locust Av. & 10th St.	CSS	11.7	**28.6**	B	**D**	11.8	22.6	B	C	C	No
24	Locust Av. & Driveway 7/9th St.	CSS	17.0	**>100.0**	C	**F**	21.0	**68.6**	C	**F**	C	**Yes**
25	Locust Av. & 8th St.	CSS	12.5	**27.5**	B	**D**	11.8	24.7	B	C	C	No
26	Locust Av./Armstrong Rd. &	CSS/**TS**	24.5	**>100.0**	C	**F**	14.9	**39.5**	B	**D**	C	**Yes**

#	Intersection	Traffic Control[2]	2040 Without Project				2040 With Project				Acceptable LOS	Significant Impact?[3]
			Delay[1] (secs.)		Level of Service		Delay[1] (secs.)		Level of Service			
			AM	PM	AM	PM	AM	PM	AM	PM		
	7th St.											
27	Armstrong Rd. & Driveway 8	**CSS**	Future Intersection				14.2	21.3	B	C	C	No
28	Armstrong Rd. & Driveway 9	**CSS**	Future Intersection				12.3	19.9	B	C	C	No
29	Armstrong Rd. & Driveway 10	**CSS**	Future Intersection				11.9	19.0	B	C	C	No
30	Armstrong Rd. & Driveway 11	**CSS**	Future Intersection				11.0	12.6	B	B	C	No
31	Driveway 12 / Jurupa Av.	**CSS**	Future Intersection				9.9	11.1	A	B	C	No
32	Armstrong Rd. / Sierra Av.	TS	**>200.0**	**>200.0**	**F**	**F**	**>200.0**	**>200.0**	**F**	**F**	E	**Yes**
33	Valley Wy. & 37th St.	CSS	**66.8**	**>100.0**	**F**	**F**	**73.5**	**>100.0**	**F**	**F**	D	**Yes**
34	Valley Wy. & SR-60 WB Off-ramp	TS	**181.7**	**>200.0**	**F**	**F**	**184.6**	**>200.0**	**F**	**F**	D	**Yes**
35	Valley Wy. & SR-60 WB On-ramp	UC	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**	D	**Yes**
36	Valley Wy. & SR-60 EB On-ramp	UC	0.0	0.0	A	A	0.0	0.0	A	A	D	No
37	Valley Wy. & Mission Bl.	TS	**107.9**	**109.5**	**F**	**F**	**108.9**	**114.2**	**F**	F	D	**Yes**
38	Formosa St. & Mission Bl.	CSS	**36.3**	22.8	**E**	C	**36.8**	22.9	**E**	C	D	**Yes**
39	SR-60 EB Ramps / Mission Bl.	TS	**110.5**	**183.2**	**F**	**F**	**123.5**	**188.1**	**F**	**F**	D	**Yes**
40	Soto Av. & Mission Bl.	CSS	19.0	**42.0**	C	**E**	19.4	**42.0**	C	E	D	**Yes**
41	Maple Av. & Slover Av.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**	D	**Yes**
42	Linden Av. & Slover Av.	AWS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**	D	**Yes**
43	Cedar Av. & Valley Bl.	TS	**123.3**	**137.8**	**F**	**F**	**126.4**	**141.5**	**F**	**F**	D	**Yes**
44	Cedar Av. & I-10 WB Ramps	TS	**78.8**	**77.2**	**E**	**E**	**87.4**	**81.3**	**F**	**F**	D	**Yes**
45	Cedar Av. & I-10 EB Ramps	TS	**122.0**	**>200.0**	**F**	**F**	**122.4**	**>200.0**	**F**	**F**	D	**Yes**
46	Cedar Av. & Orange St.	TS	54.2	39.6	D	D	58.7	44.2	**E**	D	D	**Yes**
47	Cedar Av. & Slover Av.	TS	**>200.0**	**163.3**	**F**	**F**	**>200.0**	**>200.0**	**F**	**F**	E	**Yes**
48	Cedar Av. & Santa Ana Av.	TS	52.7	40.6	D	D	55.6	41.1	**E**	D	D	**Yes**
49	Cedar Av. & Jurupa Av.	TS	**162.9**	**>200.0**	**F**	**F**	**183.8**	**>200.0**	**F**	**F**	D	**Yes**
50	Cedar Av. & 11th St.	TS	21.0	36.4	C	D	21.4	36.8	C	D	D	No
51	Cedar Av. & 7th St.	TS	**67.8**	**77.6**	**E**	**E**	**82.7**	**92.9**	**F**	**F**	D	**Yes**
52	Cedar Av. & El Rivino Rd.	TS	16.1	**76.0**	B	**E**	17.4	**86.3**	B	**F**	D	**Yes**

#	Intersection	Traffic Control[2]	2040 Without Project				2040 With Project				Acceptable LOS	Significant Impact?[3]
			Delay[1] (secs.)		Level of Service		Delay[1] (secs.)		Level of Service			
			AM	PM	AM	PM	AM	PM	AM	PM		
53	Rubidoux Bl. & Market St.	TS	**>200.0**	**>200.0**	**F**	**F**	**>200.0**	**>200.0**	**F**	**F**	E	**Yes**
54	Rubidoux Bl. & 24th St.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**	D	**Yes**
55	Rubidoux Bl. & 26th St.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**	D	**Yes**
56	Rubidoux Bl. & 28th St.	TS	44.9	**102.9**	D	**F**	46.9	**105.5**	D	**F**	D	**Yes**
57	Rubidoux Bl. & SR-60 WB Off-ramp	TS	**>200.0**	**>200.0**	**F**	**F**	**>200.0**	**>200.0**	**F**	**F**	D	**Yes**
58	Rubidoux Bl. & SR-60 WB On-ramp	UC	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**	D	**Yes**
59	Rubidoux Bl. & SR-60 EB Ramps	TS	**143.1**	**95.0**	**F**	**F**	**148.7**	**97.9**	**F**	**F**	D	**Yes**
60	Rubidoux Bl. & 34th St.	TS	21.9	**72.3**	C	**E**	22.0	**73.3**	C	**E**	D	**Yes**
61	Agua Mansa Rd. & Market St.	TS	**>200.0**	**>200.0**	**F**	**F**	**>200.0**	**>200.0**	**F**	**F**	E	**Yes**
62	Market St. & Rivera St.	TS	27.9	**125.6**	C	**F**	28.0	**140.1**	C	**F**	D	**Yes**
63	Market St. & SR-60 WB Ramps	TS	39.3	**82.7**	D	**F**	40.4	**102.1**	D	**F**	D	**Yes**
64	Market St. & SR-60 EB Ramps	TS	52.6	**151.3**	D	**F**	**57.7**	**171.2**	**E**	**F**	D	**Yes**
65	Market St. & Redwood Dr.	CSS	**>100.0**	**50.8**	**F**	**F**	**>100.0**	**50.8**	**F**	**F**	D	**Yes**

* **BOLD** = level of service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the 2010 Highway Capacity Manual, overall average intersection delay and LOS are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and LOS for the worst individual movement (or movements sharing a single lane) are shown. Average control delay calculated to be greater than 100.0 seconds using equations from the HCM methodology for CSS controlled intersections can result in delay values that increase exponentially once LOS F is reached. As these values are not accurate estimates of actual average control delay anticipated to be experienced, the values are not reported in this table. As such, calculated delay values greater than 100.0 seconds are simply indicated as >100.0 for CSS (and >200.0 for TS intersections). Calculated delay values are available in Appendix L.

[2] CSS = Cross-street Stop; AWS = All-Way Stop; TS = Traffic Signal; **CSS** = Improvement

[3] Significant near-term cumulative impacts have been identified based on each applicable agency's threshold of significance.

[4] LOS reported using the HCM 2000 methodology, as the HCM 2010 methodology does not support the analysis of a single-point urban interchange (SPUI).

As shown in Table 4.2.15-20, in addition to the three direct project impacts identified above, the proposed project would result in a considerable contribution to the following cumulative impacts at intersections projected to operate at unacceptable LOS with project-related traffic in the cumulative (2040) condition:

- **Sierra Avenue/Valley Boulevard (#1)**. This intersection is within the city of Fontana. The addition of project-related traffic to this intersection would increase delay in the PM peak hour from an unacceptable 92.3 seconds to 94.6 seconds, which exceeds the City's threshold, and thus constitutes a considerable contribution to a significant cumulative impact. The Nexus Study includes widening of Sierra Avenue from Valley Boulevard to San Bernardino Avenue from four to six lanes and widening of Sierra Avenue from Slover Avenue to Valley Boulevard from three to four lanes on the west side. The Nexus Study also includes widening Valley Boulevard from Citrus Avenue to Sierra Avenue from four to six lanes and from Sierra Avenue to Alder Avenue from four to six lanes. Needed intersection improvements would be provided as part of roadway widening projects.
- **Sierra Avenue/Slover Avenue (#3)**. This intersection is within the city of Fontana. The addition of project-related traffic to this intersection would increase delay in the AM peak hour from an unacceptable 137.3 seconds to 165.5 seconds and increase delay in the PM peak hour from an unacceptable 140.5 seconds to 145.3 seconds, both of which exceed the City's threshold, and thus constitute a considerable contribution to a significant cumulative impact. While the west side of Sierra will be widened under the Nexus Study, additional improvements to those funded by the Nexus Study are needed.
- **Sierra Avenue/Santa Ana Avenue (#4).** This intersection is within the city of Fontana. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS D in both the AM and PM peak hours. The addition of project-related traffic to this intersection would not increase delay in the AM peak hour and would increase delay in the PM peak hour by 0.2 second. This is below the City's 5.0-second increase in delay threshold. Thus, project-related impacts would be less than significant at this intersection.
- **Sierra Avenue/Jurupa Avenue (#5)**. This intersection is within the city of Fontana. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS D in the AM peak hour and at an unacceptable LOS F in the PM peak hour. However, the addition of project-related traffic to this intersection would not increase delay in either the AM or PM peak hour. Thus, project-related impacts would be less than significant at this intersection.
- **Production Avenue/Slover Avenue (#6)**. This intersection is within the city of Fontana. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS D in the AM peak hour and at an unacceptable LOS F in the AM peak hour. The addition of project-related traffic to this intersection would not increase delay in the PM peak hour and would increase delay in the PM peak hour by 7.7 seconds, which exceeds the City's threshold of significance. This intersection is not included in the Nexus Study program.
- **Tamarind Avenue/Slover Avenue (#8)**. This intersection is on the border between the city of Fontana and unincorporated San Bernardino County. Under cumulative (2040) conditions, this intersection will operate at an unacceptable (per City standards) LOS D in the PM peak hour. The addition of project traffic would increase delay in the PM peak hour from 54.2 seconds to 63.0 seconds, which exceeds the City's threshold of significance, and would cause a considerable contribution to a significant cumulative impact. This intersection is not included in the Nexus Study program.

- **Tamarind Avenue/Santa Ana Avenue (#9)**. This intersection is on the border between the city of Fontana and unincorporated San Bernardino County. Under cumulative (2040) conditions, this intersection will operate at an unacceptable (per both City and County standards) LOS F in the AM and PM peak hours. The addition of project traffic would increase delay at this intersection by 4.1 seconds in the AM peak hour and by 6.6 seconds in the PM peak hour, which exceeds both City and County standards, and would cause a considerable contribution to a significant cumulative impact. This intersection is included in the Nexus Study program, which will widen Santa Ana Avenue from Tamarind Avenue to Cedar Avenue from two to four lanes, including needed improvements at this intersection.
- **Alder Avenue/Slover Avenue (#10)**. This intersection is within unincorporated San Bernardino County. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the AM and PM peak hours. The addition of project traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. As part of the Nexus Study program, Slover Avenue will be widened from two to four lanes from Tamarind Avenue to Alder Avenue and from Linden Avenue to Cedar Avenue. However, not all needed improvements will be provided at this intersection.
- **Alder Avenue/Santa Ana Avenue (#11)**. This intersection is within unincorporated San Bernardino County. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the AM and PM peak hours. The addition of project traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. As part of the Nexus Study program, Santa Ana Avenue will be widened from two to four lanes from Tamarind Avenue to Cedar Avenue, including intersection improvements and signalization at this intersection.
- **Laurel Avenue/Slover Avenue (#13)**. This intersection is within unincorporated San Bernardino County. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS E in the AM peak hour. The addition of project traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. This intersection is not included in the Nexus Study program.
- **Laurel Avenue/Santa Ana Avenue (#14)**. This intersection is within unincorporated San Bernardino County. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the AM peak hour and LOS E in the PM peak hour. The addition of project traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. As part of the Nexus Study program, Santa Ana Avenue will be widened from two to four lanes from Tamarind Avenue to Cedar Avenue, including intersection improvements at this intersection.
- **Locust Avenue/Santa Ana Avenue (#19)**. This intersection is within unincorporated San Bernardino County. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the AM and PM peak hours. The addition of project traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. As part of the Nexus Study program, Santa Ana Avenue will be widened from two to four lanes from Tamarind Avenue to Cedar Avenue and Locust Avenue will be widened from Santa Ana Avenue to Slover Avenue, including intersection improvements and signalization.

- **Locust Avenue/Driveway 6/11th Street (#22)**. This intersection is on the border between the city of Fontana and unincorporated San Bernardino County. Under cumulative (2040) conditions, this intersection will operate at an unacceptable (per City standards) LOS D in the PM peak hour. As indicated in Table 4.2.15-18, Locust Avenue would be provided with full improvements by the WVLCSP, resulting in acceptable LOS C in the AM and PM peak hours.
- **Locust Avenue/10th Street (#23)**. This intersection is on the border between the city of Fontana and unincorporated San Bernardino County. Under cumulative (2040) conditions, this intersection will operate at an unacceptable (per both City standards) LOS D in the PM peak hour. As indicated in Table 4.2.15-18, Locust Avenue would be provided with full improvements by the WVLCSP, resulting in acceptable LOS B in the AM peak hour and LOS C in the PM peak hour.
- **Locust Avenue/Driveway 7/9th Street (#24)**. This intersection is on the border between the city of Fontana and unincorporated San Bernardino County. Under cumulative (2040) conditions, this intersection will operate at an unacceptable (per both City and County standards) LOS F in the PM peak hour. As indicated in Table 4.2.15-18, Locust Avenue would be provided with full improvements by the WVLCSP (including signalization), resulting in acceptable LOS B in the AM and C in the PM peak hour.
- **Locust Avenue/8th Street (#25)**. This intersection is on the border between the city of Fontana and unincorporated San Bernardino County. Under cumulative (2040) conditions, this intersection will operate at an unacceptable (per City standards) LOS D in the PM peak hour. As indicated in Table 4.2.15-18, Locust Avenue would be provided with full improvements by the WVLCSP as outlined in the project's TIA, resulting in acceptable LOS C in the PM peak hour.
- **Locust Avenue/Armstrong Road/7th Street/Alder Avenue (#26)**. This intersection is on the border between the city of Fontana and unincorporated San Bernardino County. Under cumulative (2040) conditions, this intersection will operate at an unacceptable (per both City and County standards) LOS F in the PM peak hour. As indicated in Table 4.2.15-18, Locust Avenue would be provided with full improvements by the WVLCSP as outlined in the project's TIA, resulting in acceptable LOS C in the PM peak hour.
- **Armstrong Road/Sierra Avenue (#32)**. This intersection is within the city of Jurupa Valley. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. This intersection is not included in the Riverside County TUMF Program, and the City of Jurupa Valley does not have a program into which fair-share fee contributions can be made.
- **Valley Way/37th Street (#33)**. This intersection is within the city of Jurupa Valley. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. This intersection is not included in the Riverside County TUMF Program, and the City of Jurupa Valley does not have a program into which fair-share fee contributions can be made.
- **Valley Way/SR-60 Westbound On-ramp (#35)**. This intersection is within the city of Jurupa Valley, and is under Caltrans jurisdiction. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a

significant cumulative impact. No feasible improvements have been identified that would bring this intersection to acceptable operating conditions, and it is therefore not included in the Riverside County TUMF Program. While it would not constitute mitigation, the project applicant has offered to undertake a study to identify possible improvements that could lessen (although not likely eliminate) congestion at this intersection.

- **Valley Way/Mission Boulevard (#37)**. This intersection is within the city of Jurupa Valley, and is under Caltrans jurisdiction. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. No feasible improvements have been identified that would bring this intersection to acceptable operating conditions, and it is therefore not included in the Riverside County TUMF Program. While it would not constitute mitigation, the project applicant has offered to undertake a study to identify possible improvements that could lessen (although not likely eliminate) congestion at this intersection.
- **Formosa Street/Mission Boulevard (#38)**. This intersection is within the city of Jurupa Valley, and is under Caltrans jurisdiction. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS E in the AM peak hour. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. This intersection is not included in the Riverside County TUMF Program, and the City of Jurupa Valley does not have a program into which fair-share fee contributions can be made.
- **Soto Avenue/Mission Boulevard (#40)**. This intersection is within the city of Jurupa Valley, and is under Caltrans jurisdiction. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS E in the PM peak hour. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. This intersection is not included in the Riverside County TUMF Program, and the City of Jurupa Valley does not have a program into which fair-share fee contributions can be made.
- **Maple Avenue/Slover Avenue (#41)**. This intersection is within unincorporated San Bernardino County. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. This intersection is not included in the Nexus Study program. As indicated in Table 4.2.15-18, the project is proposing to fund 100 percent of the cost of signalization at this intersection.
- **Linden Avenue/Slover Avenue (#42)**. This intersection is within unincorporated San Bernardino County. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. This intersection is included in the Nexus Study program, which will provide needed improvements with the exception of signalization. As indicated in Table 4.2.15-18, the WVLCSP would provide 100 percent of the cost of signalization at this intersection, to be installed by San Bernardino County as part of intersection improvements funded by Nexus program.
- **Cedar Avenue/Valley Boulevard (#43)**. This intersection is within unincorporated San Bernardino County. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. This intersection is not included in the Nexus Study program.

- **Cedar Avenue/I-10 westbound ramps (#44)**. This intersection is within unincorporated San Bernardino County and under Caltrans jurisdiction. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS E in the AM and PM peak hours. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. Improvements to this interchange are being funded by Measure I sales tax revenues.
- **Cedar Avenue/I-10 eastbound ramps (#45)**. This intersection is within unincorporated San Bernardino County and under Caltrans jurisdiction. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. Improvements to this interchange are being funded by Measure I sales tax revenues.
- **Cedar Avenue/Slover Avenue (#47)**. This intersection is within unincorporated San Bernardino County. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. This intersection is not included in the Nexus Study program.
- **Cedar Avenue/Jurupa Avenue (#49)**. This intersection is within unincorporated San Bernardino County. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. This intersection is not included in the Nexus Study program.
- **Cedar Avenue/7th Street (#51)**. This intersection is within unincorporated San Bernardino County. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS E in the AM and PM peak hours. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. This intersection is not included in the Nexus Study program.
- **Cedar Avenue/Rubidoux Boulevard/El Rivino Road (#52)**. This intersection is on the border between unincorporated San Bernardino County and the city of Jurupa Valley. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS E in the PM peak hour. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. This intersection is not included in either the Nexus Study program or the Riverside County TUMF Program.
- **Rubidoux Boulevard/Market Street (#53)**. This intersection is within the city of Jurupa Valley. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. This intersection is not included in the Riverside County TUMF Program, and the City of Jurupa Valley does not have a program into which fair-share fee contributions can be made.
- **Rubidoux Boulevard/24th Street (#54)**. This intersection is within the city of Jurupa Valley. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. This intersection is not included in the Riverside County TUMF Program, and the City of Jurupa Valley does not have a program into which fair-share fee contributions can be made.

- **Rubidoux Boulevard/26th Street (#55)**. This intersection is within the city of Jurupa Valley. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. This intersection is not included in the Riverside County TUMF Program.
- **Rubidoux Boulevard/28th Street (#56)**. This intersection is within the city of Jurupa Valley. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the PM peak hour. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. This intersection is not included in the Riverside County TUMF Program.
- **Rubidoux Boulevard /SR-60 Westbound On-ramp (#58)**. This intersection is within the city of Jurupa Valley. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. This intersection is included in the Riverside County TUMF Program; however, the TUMF Program included funding for less than half of the estimated cost of interchange improvements.
- **Rubidoux Boulevard /SR-60 eastbound on-ramp (#59)**. This intersection is within the city of Jurupa Valley. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. This intersection is included in the Riverside County TUMF Program; however, the TUMF Program included funding for less than half of the estimated cost of interchange improvements.
- **Rubidoux Boulevard/34th Street (#60)**. This intersection is within the city of Jurupa Valley. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS E in the PM peak hour. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. This intersection is not included in the Riverside County TUMF Program, and the City of Jurupa Valley does not have a program into which fair-share fee contributions can be made.
- **Agua Mansa Road/Market Street (#61)**. This intersection is within the city of Jurupa Valley. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. This intersection is not included in the Riverside County TUMF Program, and the City of Jurupa Valley does not have a program into which fair-share fee contributions can be made.
- **Market Street/Rivera Street (#62)**. This intersection is within the city of Riverside. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the PM peak hour. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. This intersection is not included in the Riverside County TUMF Program, and the City of Jurupa Valley does not have a program into which fair-share fee contributions can be made.
- **Market Street/SR-60 westbound ramps (#63)**. This intersection is within the city of Riverside and is under Caltrans jurisdiction. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the PM peak hour. Addition of project-related traffic would

exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. This intersection is not included in the Riverside County TUMF Program, and Caltrans does not have a program into which fair-share fee contributions can be made.

- **Market Street/SR-60 Eastbound Ramps (#64)**. This intersection is within the city of Riverside and is under Caltrans jurisdiction. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the PM peak hour. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. This intersection is not included in the Riverside County TUMF Program, and Caltrans does not have a program into which fair-share fee contributions can be made.
- **Market Street/Redwood Drive (#65)**. This intersection is within the city of Riverside. Under cumulative (2040) conditions, this intersection will operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact. This intersection is not included in the Riverside County TUMF Program, and the City of Riverside does not have a program into which fair-share fee contributions can be made.

Long-Term (2040) Freeway Ramp Queueing Analysis

A queuing analysis was performed for the eastbound and westbound off-ramp of I-10 at Sierra Avenue, I-10 at Cedar Avenue, SR-60 at Valley Way/Mission Boulevard, SR-60 at Rubidoux Boulevard, and SR-60 at Market Street to assess the WVLCSP's contribution to the potential for off-ramp vehicle queues to back up onto I-10 or SR-60. Cumulative 2040 with Project queuing analysis findings are presented in Table 4.2.15-21. As shown in Table 4.2.15-21, the following locations are anticipated to experience queuing issues during the weekday AM or PM peak hours based on the Horizon Year (2040) 95th percentile traffic flows:

- **Valley Way/Granite Hills Drive/SR-60 westbound off-ramp**. Under 2040 cumulative conditions, the 95th percentile queueing length will exceed storage capacity in the AM and PM peak hours. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact.
- **SR-60 eastbound ramps/Byre Road/Mission Boulevard**. Under 2040 cumulative conditions, the 95th percentile queueing length will exceed storage capacity in the PM peak hour. Addition of project-related traffic would exacerbate this condition, resulting in a considerable contribution to a significant cumulative impact.
- **Rubidoux Boulevard/SR-60 westbound off-ramp**. Under 2040 cumulative conditions, the 95th percentile queueing length will exceed storage capacity in the AM and PM peak hours. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact.

Table 4.2.15-21. Long-Term (2040) Freeway Queueing Analysis with and without Project

			2040 Without Project				2040 With Project			
			95th Percentile Queue (Feet)[3]		Acceptable?[1]		95th Percentile Queue (Feet)[3]		Acceptable?[1]	
Intersection	Movement	Available Stacking Distance (Feet)	AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
Sierra Av./I-10 Freeway Ramps	EBL	1,300	448	408	Yes	Yes	448	408	Yes	Yes
	EBR	540	0	0	Yes	Yes	0	0	Yes	Yes
	WBL	450	232	373	Yes	Yes	232	373	Yes	Yes
	WBR	1,350	0	0	Yes	Yes	0	0	Yes	Yes
Valley Wy./Granite Hills Dr. / SR-60 WB Off-Ramp	WBL	910	589[2]	606[2]	Yes	Yes	589[2]	660[2]	Yes	Yes
	WBT/R	245	1,294[2]	1,461[2]	No	No	1,305[2]	606[2]	No	No
SR-60 EB Ramps/Byrne Rd. / Mission Bl.	SBL/T	1,115	1,138[2]	1,848[2]	Yes[3]	No	1,220[2]	1,880[2]	Yes[3]	No
	SBR	1,115	2	174	Yes	Yes	2	172	Yes	Yes
Cedar Av./I-10 WB Ramps	WBL/T/R	1,270	609[2]	645[2]	Yes	Yes	686[2]	681[2]	Yes	Yes
	WBR	480	694[2]	734[2]	Yes[3]	Yes[3]	694[2]	734[2]	Yes[3]	Yes[3]
Cedar Av./I-10 EB Ramps	EBL	400	902[2]	1,049[2]	Yes[3]	Yes[3]	902[2]	1,049[2]	Yes[3]	Yes[3]
	EBL/T/R	1,900	830[2]	963[2]	Yes	Yes	834[2]	967[2]	Yes	Yes
Rubidoux Bl./SR-60 WB Off-Ramp	WBL/T/R	1,250	1,400[2]	1,415[2]	No	No	1,400[2]	1,415[2]	No	No
Rubidoux Bl./SR-60 EB Ramps	EBL/T/R	1,100	642[2]	798[2]	Yes	Yes	665[2]	810[2]	Yes	Yes
Market St./SR-60 WB Ramps	WBL	170	119	138	Yes	Yes	119	138	Yes	Yes
	WBR	1,350	1,338[2]	876[2]	Yes	Yes	1,438[2]	925[2]	Yes[3]	Yes
Market St./SR-60 EB Ramps	EBL	155	416[2]	330[2]	Yes[3]	Yes[3]	416[2]	330[2]	Yes[3]	Yes[3]
	EBR	1,635	533[2]	463[2]	Yes	Yes	535[2]	466[2]	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking, which is assumed to be provided in the transition for turn pockets, is reflected in the stacking distance shown on this table, where applicable.

[2] 95th percentile volume exceeds capacity; queue may be longer. Queue shown is maximum after two cycles.

[3] Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 or SR-60 freeway mainline.

Freeway Mainline Impacts

The proposed project would result in the addition of vehicle trips during the AM and PM peak hours at freeway mainline segments that are subject to the LOS performance measures established by Caltrans. As shown in Table 4.2.15-22, the following segments would operate at an unacceptable LOS under cumulative (2040) conditions:

- **I-10 – westbound, west of Sierra Way**. This freeway mainline segment would operate at an unacceptable LOS E in the AM and PM peak hours. Addition of project-related traffic would exacerbate these conditions, resulting in a considerable contribution to a significant cumulative impact.
- **I-10 – eastbound, west of Sierra Way**. This freeway mainline segment would operate at an unacceptable LOS E in the PM peak hour. Addition of project-related traffic would exacerbate this condition, resulting in a considerable contribution to a significant cumulative impact.
- **I-10 – eastbound, east of Cedar Avenue**. This freeway mainline segment would operate at an unacceptable LOS E in the PM peak hour. Addition of project-related traffic would exacerbate this condition, resulting in a considerable contribution to a significant cumulative impact.
- **SR-60 – westbound, west of Valley Way**. This freeway mainline segment would operate at an unacceptable LOS E in the PM peak hour. Addition of project-related traffic would exacerbate this condition, resulting in a considerable contribution to a significant cumulative impact.
- **SR-60 – westbound, Valley Way to Rubidoux Boulevard**. This freeway mainline segment would operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate this condition, resulting in a considerable contribution to a significant cumulative impact.
- **SR-60 – westbound, east of Market Street**. This freeway mainline segment would operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate this condition, resulting in a considerable contribution to a significant cumulative impact.
- **SR-60 – eastbound, Valley Way to Rubidoux Boulevard**. This freeway mainline segment would operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate this condition, resulting in a considerable contribution to a significant cumulative impact.
- **SR-60 – eastbound, east of Market Street**. This freeway mainline segment would operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate this condition, resulting in a considerable contribution to a significant cumulative impact.

Table 4.2.15-22. Long-Term (2040) Freeway Mainline Operations with and without Project

Freeway	Direction[1]	Mainline Segment	Lanes[2]	2040 Without Project				2040 With Project			
				Density[3]		LOS		Density[3]		LOS	
				AM	PM	AM	PM	AM	PM	AM	PM
I-10	WB	West of Sierra Av.	5	35.0	37.0	E	E	35.4	37.7	E	E
		East of Cedar Av.	5	27.1	34.7	D	D	27.3	34.9	D	D
	EB	West of Sierra Av.	5	24.5	35.1	C	E	25.0	35.2	C	E
		East of Cedar Av.	4	29.8	51.8	D	F	29.9	52.4	D	F
SR-60	WB	West of Valley Wy.	4	31.5	40.2	D	E	31.6	40.6	D	E
		Valley Wy. to Rubidoux Bl.	3	59.3	157.7	F	F	59.3	157.7	F	F
		East of Market St.	3	70.2	113.2	F	F	71.6	114.8	F	F
	EB	West of Valley Wy.	4	29.8	26.6	D	D	30.2	26.9	D	D
		Valley Wy. to Rubidoux Bl.	3	60.9	35.0	F	E	61.1	35.1	F	E
		East of Market St.	3	59.7	28.1	F	D	61.0	28.4	F	D

* **BOLD** = Unacceptable LOS

[1] EB = eastbound; WB = westbound

[2] Number of lanes are in the specified direction and is based on existing conditions.

[3] Density is measured by passenger cars per mile per lane (pc/mi/ln).

Freeway Merge/Diverge Cumulative (2040) Analysis

The proposed project would result in the addition of vehicle trips during the AM and PM peak hours to freeway merge/diverge locations that are subject to the LOS performance measures established by Caltrans. As shown in Table 4.2.15-23, the following segments would operate at an unacceptable LOS under cumulative (2040) conditions:

- **I-10 – westbound off-ramp at Sierra Avenue**. This location would operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate this condition, resulting in a considerable contribution to a significant cumulative impact.
- **I-10 – westbound off-ramp at Cedar Avenue**. This location would operate at an unacceptable LOS E in the AM and PM peak hours. Addition of project-related traffic would exacerbate this condition, resulting in a considerable contribution to a significant cumulative impact.
- **I-10 – eastbound on-ramp at Cedar Avenue**. This location would operate at an unacceptable LOS E in the AM and PM peak hours. Addition of project-related traffic would exacerbate this condition, resulting in a considerable contribution to a significant cumulative impact.
- **SR-60 – westbound on-ramp at Valley Way**. This location would operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate this condition, resulting in a considerable contribution to a significant cumulative impact.

- **SR-60 – westbound off-ramp at Valley Way**. This location would operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate this condition, resulting in a considerable contribution to a significant cumulative impact.
- **SR-60 – westbound off-ramp at Market Street**. This location would operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate this condition, resulting in a considerable contribution to a significant cumulative impact.
- **SR-60 – eastbound off-ramp at Mission Boulevard**. This location would operate at an unacceptable LOS E in the AM and PM peak hours. Addition of project-related traffic would exacerbate this condition, resulting in a considerable contribution to a significant cumulative impact.
- **SR-60 – eastbound on-ramp at Mission Boulevard**. This location would operate at an unacceptable LOS F in the AM and PM peak hours. Addition of project-related traffic would exacerbate this condition, resulting in a considerable contribution to a significant cumulative impact.
- **SR-60 – eastbound off-ramp at Rubidoux Boulevard**. This location would operate at an unacceptable LOS f in the AM and PM peak hours. Addition of project-related traffic would exacerbate this condition, resulting in a considerable contribution to a significant cumulative impact.
- **SR-60 – eastbound on-ramp at Market Street**. This location would operate at an unacceptable LOS E in the AM and PM peak hours. Addition of project-related traffic would exacerbate this condition, resulting in a considerable contribution to a significant cumulative impact.

Table 4.2.15-23. Long-Term (2040) Freeway Merge/Diverge Conditions with and without Project

				2040 Without Project				2040 With Project			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
Freeway	Direction[1]	Ramp or Segment	Lanes on Freeway[2]	Density[3]	LOS	Density[3]	LOS	Density[3]	LOS	Density[3]	LOS
I-10	WB	On-Ramp at Sierra Av.	4	48.0	F	47.8	F	48.1	F	48.4	F
		Off-Ramp at Cedar Av.	5	37.1	E	42.3	E	37.5	E	42.2	E
	EB	Off-Ramp at Sierra Av.	5	29.0	D	32.5	D	29.5	D	32.7	D
		On-Ramp at Cedar Av.	4	30.7	D	38.5	F	30.8	D	38.9	F
SR-60	WB	On-Ramp at Valley Wy.	3	45.5	F	54.9	F	45.7	F	55.2	F
		Off-Ramp at Valley Wy.	3	47.4	F	62.7	F	47.4	F	62.7	F
		Off-Ramp at Market St.	3	51.4	F	59.3	F	51.8	F	59.5	F
	EB	Off-Ramp at Mission Bl.	4	36.1	E	37.5	E	36.3	E	37.9	E
		On-Ramp at Mission Bl.	3	39.3	F	32.2	D	39.3	F	32.2	D
		Off-Ramp at Rubidoux Bl.	3	48.2	F	37.4	E	48.3	F	37.4	E
		On-Ramp at Market St.	3	44.7	F	29.4	D	44.6	F	31.9	D

* **BOLD** = Unacceptable LOS

[1] EB = eastbound; WB = westbound

[2] Number of lanes are in the specified direction and is based on existing conditions.

[3] Density is measured by passenger cars per mile per lane (pc/mi/ln).

Mitigation Measures

The project would be required to provide improvements for direct impacts as described above in **Mitigation Measure TRA-1b** (including the improvements in Table 4.2.15-18) and below in **Mitigation Measure TRA-1d**. The project would also be required to pay fees to fund future installation of improvements to improve operations at deficient intersections to address contributions to cumulative impacts as provided below in **Mitigation Measure TRA-1e**.

In setting forth **Mitigation Measure TRA-1e**, 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-1e** includes requirements for fair-share payments to mitigate project-related impacts within unincorporated San Bernardino County, Fontana has no jurisdiction to ensure construction of physical improvements for which fair-share payment is provided. Therefore, except for contributions to cumulative impacts for which improvements are being funded under the San Bernardino County Nexus Study program or the Riverside County TUMF Program, 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 San Bernardino County and Riverside County, and as a result determined that mandating fair-share payments to San Bernardino County (**Mitigation Measure TRA-1e**) would be appropriate as the result of discussions with San Bernardino County Public Works staff, who have indicated a willingness to work with the applicant and the City of Fontana to undertake physical improvements for which the project would provide funding.

Mitigation Measure TRA-1d: Construct Intersection Improvements. Prior to the issuance of occupancy permits for the first building within the WVLCSP, the applicant shall construct the improvements called for in the WVLCSP TIA at the following intersections:

- Locust Avenue/Slover Avenue
- Cedar Avenue/Orange Street
- Cedar Avenue/Santa Ana Avenue

Mitigation Measure TRA-1e: **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 the City to fund the improvements needed to mitigate the project's contribution to cumulative impacts on intersections 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 DIF which represents required fee for mitigation of impacts to both regional (Nexus Study) and additional local facilities within the city of Fontana;
- Fair-share payments to San Bernardino County as mitigation for the project's contribution of traffic and the need for the improvements described in the WVLCSP TIA (Appendix L) at the following locations:
    - Sierra Avenue/Slover Avenue (#3)
    - Production Avenue/Slover Avenue (#6)

- Tamarind Avenue/Slover Avenue (#8)
- Alder Avenue/Slover Avenue (#10)
- Laurel Avenue/Slover Avenue (#14)
- Cedar Avenue/Valley Boulevard (#43)
- Cedar Avenue/Slover Avenue (#47)
- Cedar Avenue/Jurupa Avenue (#49)
- Cedar Avenue/7th Street (#51)
- Cedar Avenue/Rubidoux Boulevard/El Rivino Road (#52)

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 on 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 improvements have been identified in the Development Mitigation Nexus Study prepared by SANBAG, the Western Riverside Council of Governments' TUMF Program, and individual City CIPs. **Mitigation Measure TRA-1e** 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 Program.

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:

- **Jurupa Avenue**. Widen eastbound lanes to full half-width section along the frontage of Parcel 7 and easterly to Kessler Park, where full half-width improvements are already in place.
- **Locust Avenue**. Widen to provide four travel lanes from the Riverside county line to Slover Avenue with a pavement section adequate to support proposed project truck traffic, including needed intersection improvements outlined in the TIA and signalization of the following intersections:
  - Locust Avenue/Jurupa Avenue
  - Locust Avenue/11th Street
  - Locust Avenue/7th Street

Per the requirements of **Mitigation Measure TRA-1d**, the project would construct the improvements called for in the TIA at the following intersections:

- Locust Avenue/Slover Avenue
- Cedar Avenue/Orange Street
- Cedar Avenue/Santa Ana Avenue

In addition, the project would pay 100 percent of the cost for signalization of the following intersections to San Bernardino County to be installed concurrent with improvements funded by the Nexus Study program:

- Linden Avenue/Slover Avenue
- Maple Avenue/Slover Avenue

The TIA evaluated certain improvements to affected roadways with deficient LOS with the project. For the long-term (2040) scenario provided in Tables 4.2.15-20 through 4.2.15-23, the project would result in direct impacts on three intersections, and contribute to significant cumulative impacts at 44 intersections. Proposed improvements to each of those intersections would improve LOS to acceptable levels, with the exception of the following intersections as specified in Tables 7.5 through 7-8 of the TIA (Appendix L):

- Valley Way/SR-60 westbound on-ramp (#35)
- Valley Way/Mission Boulevard (#37)

Therefore, 42 of 44 affected 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 Tables 7.5 through 7-8 of the TIA (Appendix L).

Even with implementation of all feasible mitigation, impacts would remain significant and unavoidable and LOS could operate unsatisfactorily on 42 freeway mainline and merge/diverge locations in the long term (2040). 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-1e** 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.

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 meet the applicable standards of the City of Fontana and San Bernardino County, and would not have sharp roadway curves once the project is constructed. 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 4.2.15-1. 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 Truck Management Plan to guide project traffic to the regional transportation network and away from residential streets, as provided in **Specific Plan Requirement SP-TR-1**, **SP-TR-3**, and **SP-TR-4. Specific Plan Requirement SP-TR-1** includes a plan for the routing of trucks between the project site and area freeways to minimize impacts on nearby residential neighborhoods. The truck routing plan also includes requirements for:

- Driveway designs and the geometrics of the intersection of Alder Avenue and Locust Avenue/ Armstrong Road to direct trucks to the north and away from Valley Way.
- A comprehensive roadway and highway signage program to direct trucks along designated routes between the project site and area freeways (see Section 3.4.3, *Circulation Improvements*).
- Off-site improvements including roadway widening and signalization to accommodate project-related trucks (see Section 3.4.3, *Circulation Improvements*).
- Requirements for providing instruction to truck drivers regarding approved routes.
- Requirements for the Property Owners' Association to monitor truck traffic and enforce applicable Specific Plan regulations.

Specific Plan Requirement SP-TR-3 involves formation of a Property Owners' Association to implement the truck traffic management program set forth in the Specific Plan. The applicant or its designee will submit a proposed declaration of CC&Rs for City review prior to issuance of the first building permit for Parcels 1–7. The City's review shall be complete, and the proposed declaration of CC&Rs shall be approved by the City, prior to issuance of the certificate of occupancy for the first building. The Property Owners' Association will, at a minimum, have the responsibility and obligation to:

- Require building owners/lessees to inform truck drivers of the approved routes to and from the West Valley Logistics Center;
- Require dispatchers to provide truck drivers leaving the building with verbal and written instructions regarding approved truck routes to area freeways;
- Implement and maintain a monitoring program to identify the actual routes trucks are taking to and from the West Valley Logistics Center;

- Enforce the use of approved truck routes; and
- Provide quarterly reporting to the City of Fontana regarding the actual routes trucks are taking to and from the West Valley Logistics Center.

Specific Plan Requirement SP-TR-4: Ensure Installation of Safety Features

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:** Truck Routing Plan
- **SP-TR-3:** Property Owners' Association Responsibilities
- **SP-TR-4:** Ensure Installation of Safety Features

Mitigation Measures

Implement **Mitigation Measure TRA-1a.**

Residual Impacts

Implementation of **Specific Plan Requirements SP-TR-1**, **SP-TR-3**, and **SP-TR-4**, specifically for compliance with a truck routing plan 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-5**, 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-5:** Install Bicycle Racks

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impact.

4.2.16 Utilities and Service Systems

Introduction

This section discusses potential impacts associated with utilities (water supply, storm water drainage, solid waste, sewer and wastewater treatment, and solid waste disposal) resulting from implementation of the proposed West Valley Logistics Center Specific Plan (WVLCSP) project. 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,* prepared by Thienes Engineering, Inc., and provided in Appendix M; (3) *Water Distribution Analysis for the West Valley Logistics Center, Fontana, California, Job No. 2884,* also prepared by Thienes Engineering, Inc., and provided in Appendix J; and (4) the Will-Serve letters submitted by utility providers, provided within Appendix M. 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 is being consumed on site, nor is wastewater being generated. As noted in Section 4.2.1, *Aesthetics*, the project site is subject to illegal dumping of trash and other debris. Accumulated trash and debris is periodically removed from the site by the project applicant.

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 its 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 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 percent 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 (City) 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 (County). 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 WVLCSP 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 WVLCSP 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, which include development impact fees. (Garay pers. comm.; City of Fontana 2016).

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 WVLCSP 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 percent 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 five regional landfills, nine 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 2015).

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 67.5 million cubic yards. Its maximum permitted throughput is 7,500 tons per day. The year of its permit closure date is 2033 (CalRecyle 2017). Since the onset of the recent recession, waste deliveries to County facilities have declined approximately 30 to 40 percent. 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. Over a period of approximately 6 months (roughly April to June 2013), the Mid-Valley Sanitary Landfill had received approximately 1,500 to 1,600 tons per day of solid waste. Under current plans, Athens Services will import up to approximately 2,200 tons per day of solid waste from outside San Bernardino County to waste management facilities within the county (Meeka pers. comm.). On June 23, 2015, The Sun newspaper quoted Anthony Bertrand, Vice-President of Athens Services, operator of the landfill, as stating that Mid-Valley Landfill takes in 3,000 to 5,000 tons of solid waste daily.

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 the California Environmental Quality Act (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.

California Green Building Standards Code, California Code of Regulations Title 24

The 2016 California Green Building Standards Code (Title 24 CCR Part 11 [CALGREEN]) took effect January 1, 2017. These comprehensive regulations are designed to achieve major reductions in GHG emissions, energy consumption, and water use. CALGREEN requires every new building constructed in California to reduce water consumption by 20 percent, divert 65 percent of construction waste from landfills, and install low-pollutant-emitting materials. It also requires separate water meters for non-residential buildings' indoor and outdoor water use, with a requirement for moisture-sensing irrigation systems for larger landscape projects and mandatory inspections of energy systems (e.g., heat furnace, air conditioner, and mechanical equipment) for non-residential buildings larger than 10,000 square feet to ensure that all are working at their maximum capacity and according to their design efficiencies.

AB 939—Solid Waste

California requires that all jurisdictions achieve compliance with Assembly Bill (AB) 939, a state mandate that requires reaching 50 percent 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 4.2.9, *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.

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 31, Water Service, provides rules and regulations and procedures relating to water service, water supply, and water billing.

Refer also to Section 4.2.7, *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 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 WVLCSP. These various studies, communications with agencies, and Will Serve letters provide the basis for the analysis below and are referenced accordingly.

Thresholds of Significance

Criteria for determining the significance of impacts related to utilities are based on criteria contained in Appendix G of the 2016 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.

Project Design Features

The following hydrology and water quality related project design features, which include specific plan requirements and conditions of approval would prevent or reduce potentially significant environmental impacts to utilities.

Specific Plan Requirements

SP-GHG-1: Incorporate Water Conservation and Efficient Measures for Landscaping. The project will devise a comprehensive water conservation strategy in compliance with California Green Building Standards Code Water Efficiency Measures and Leadership in Energy and Environmental Design 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 recycled water for landscape irrigation within the project at such time as it can be made reasonably available. Install the infrastructure to deliver and use recycled water, as part of street improvements within the project site along Jurupa Avenue, Locust Avenue, Alder Avenue, and Armstrong Road as needed to provide recycled water for landscape irrigation when available.
- 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 of Fontana's Municipal Code Article IV, Landscaping and Water Conservation.

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 around 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 Silver certification standards for water efficiency.

SP-UT-3: Incorporate Recycling Program. The project will be designed to incorporate an operational recycling program that will include 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 specification of the California Department of Health Services and San Bernardino County Health Department.

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

SP-HW-1: Implement Best Management Practices for Water Quality Management. Site Design best management practices will be included in the project-wide Stormwater Quality Management Plan submitted to the City of Fontana and approved prior to the issuance of a grading permit (see **Regulatory Requirement RR-HW-2**). The best management practices, 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, swaled landscaped areas prior to discharge of overflow into storm drains.
- 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-lined systems) for conveying parking lot runoff into storm drains.
- 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.

SP-HW-2: On-site Stormwater Detention: On-site detention basins will be designed and sized to reduce 100-year peak flows to 90 percent of the 25-year peak flow rate for existing conditions. Detention basins within the West Valley Logistics Center Specific Plan area will be designed such that the lower elevations of the basins are used for water quality purposes. The higher elevations of the basins will be used to limit the difference between pre- and post-development peak flow rates.

Standard Requirements

SR-G-1: Develop and Implement an Erosion Control Plan. The applicant or developer will prepare and submit to the City of Fontana Department of Public Works 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 location of all soil-disturbing activities (including but not limited to sites involving new development or roadways), the location of all drainage structures that will be directly affected by soil-disturbing activities, and the location and type 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-GHG-1: Provide Waste Reduction and Recycling Education. The property operator will distribute readily available information provided by the City of Fontana 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 West Valley Logistics Center Specific Plan (West Valley Water District [WVWD], November 2013) include the following:

- The project will install water-efficient devices and landscaping according to the requirements of 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 applicant 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 this WSA, WVWD has the option to suspend the approval of the WSA.
- This project is not located 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 at such time as supplies become available. According to WVWD requirements, the project may be conditioned to construct a recycled water system physically separated from the potable water system.[1] 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; however, no such requirements are known at this time. WVWD will determine 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 will 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 West Valley Logistics Center Specific Plan 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 WSA in the event of a potential increase in water demand by the project.

[1] 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.

- 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 uses would not generate the release of industrial water discharges or require special permits related to other types of 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.

Specific Plan Requirements

The applicant will implement the following Specific Plan requirements, 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.

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 (see Figure 3-6). Sewage generated within Buildings 1–7 would be collected in proposed sewer lines to be constructed 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 gravity flow through a 15-inch sewer eastward to a new lift station at the northwest 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 R3-1 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 conservation area west of Alder Avenue, connecting to Reservoirs R2-2 and R2-3, as well as to an existing 24-inch water line running along the project site's western boundary to WVWD Reservoir R3-1. As discussed in Section 4.2.3, *Biological Resources*, water line construction would result in temporary impacts on biological resources present within the proposed conservation area; however, implementation of **Mitigation Measure BIO-4** would restore disturbance caused by pipeline construction within the proposed conservation area, and thereby avoid any permanent impacts.

Water line construction along Armstrong Avenue and Locust Avenue would occur within existing rights-of-way that have been previously disturbed, and therefore would not result in any additional environmental impacts. 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 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 in areas that experienced previous surface and subsurface ground disturbance and construction activities. Therefore, off-site facilities would not result in new significant environmental effects. In addition, as discussed in Section 4.2.15, *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 thus 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 to 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 4.2.9, *Hydrology and Water Quality*). The proposed new lift station that would be installed near the northwest corner of 11th Street and Linden Avenue would be within the boundaries of Lot A (detention basin area) of the proposed Specific Plan area. 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 and biological resources, or on hydrology and water quality (refer to those topical sections of this 2nd 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 4.2.7, *Greenhouse Gas Emissions*), noise (Section 4.2.11, *Noise*), and vehicle trips to the existing street network (Section 4.2.15, *Transportation and Traffic*). These impacts have been analyzed in each of these sections, and appropriate mitigation measures have been established, if warranted.

Specific Plan and Regulatory 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-UT-1**: Ensure Access to Utility Easements.
- **SP-UT-4**: Fontana Sewer Master Plan.
- **SP-UT-5**: Sewer/Wastewater Facilities.
- **SP-UT-6**: WVWD Water Master Plan.
- **SR-UT-1**: Comply with City of Fontana Municipal Code, Chapter 27, Article III**.**

Mitigation Measures

Implement **Mitigation Measure TRA-1a** and **Mitigation Measure BIO-4**.

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 project). The proposed project would be designed to detain its drainage on site (refer to **Specific Plan Requirement SP-HW-1** and **Specific Plan Requirement SP-HW-2** in Section 4.2.9, *Hydrology and Water Quality*), such that proposed detention basins on site would reduce 100-year peak flow to less than 90 percent 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 (see Figure 3-7). 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, and 5. Detention of stormwater adjacent to Building 7 is proposed in an underground facility. 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 4.2.9, *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 and Standard 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-HW-1**: Best Management Practices for Water Quality Management.
- **SP-HW-2**: On-site Stormwater Detention.
- **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-4. Have insufficient water supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements

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. The WSA was reviewed by WVWD in 2017, and the District determined no changes had occurred since the District's approval of the WSA that would affect water availability (Jadeski pers. comm. 2017).

Implementation of the proposed project is projected to require approximately 292 gpm of water, or 470 af/yr based on a generation factor of 1.39 gpm/acre for approximately 210 acres of potential light industrial development. The project has been accounted for within WVWD's water projections, and is also included within and consistent with the 2012 Master Plan and San Bernardino Valley Regional Water Management Plan (Water Systems Consulting 2016).

The WSA is based upon projections included within the San Bernardino Valley Regional Water Management Plan, which demonstrated that water supplies would be available during normal, single dry, and multiple dry years within a 20-year projection (2020–2040) to meet the projected demand associated with the proposed development, in addition to existing and planned future uses. 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 the requirements in **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*:

- **SP-GHG-1:** Incorporate Water Conservation and Efficient Measures for Landscaping.
- **SP-UT-2:** Incorporate Water-Efficient Building Designs.
- **SR-UT-2:** Conditions for 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 percent 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 will yield a conservative analysis.

Buildings constructed as part of the proposed project would occupy less than the approximately 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 will 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 with the additional demand for wastewater services, 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.

Specific Plan Requirements

The applicant will implement the following Specific Plan requirements, 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.

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 CALGREEN, California Code of Regulations Title 24. As further discussed under Impact UTIL-7, implementation of **Specific Plan Requirement SP-UT-3** would ensure the project complies with the 65 percent waste diversion goal set forth in the 2016 California Green Building Code. As such, no impacts would occur as a result of the proposed project.

Specific Plan and Standard Requirements

The applicant shall implement the following Specific Plan and standard requirements, as summarized below and specified in detail in Section 3.6 of Chapter 3, *Project Description*:

- **SP-UT-3**: Incorporate Recycling Program.
- **SR-GHG-1:** Provide Waste Reduction and Recycling Education**.**

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. If projections for the project involve up to 2,907 new employees, the total amount of waste to be generated (4,719 pounds per year per employee x 2,709 employees) would be 13,718,133 pounds per year (6,859 tons per year). Assuming a 48 percent diversion rate (i.e., 48 percent of the total amount of solid waste generated is diverted from entering landfills and recycled or reused), the project is projected to generate 7,133,429 pounds per year (3,567 tons per year) of solid waste that would enter a landfill (total of 13,718,133 pounds per year of solid waste generated—the 48 percent that is diverted from landfills). Assuming solid waste is generated in a 5-day workweek, approximately 260 days a year, a total of 13.7 tons per day (27,436 pounds 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 tons per day. As previously noted, the Mid-Valley Landfill takes in 3,000 to 5,000 tons of solid waste daily. This includes imports up to approximately 2,200 tons per day of solid waste from outside the county. This would leave the Mid-Valley facility with available permitted throughput capacity of approximately 2,500 to 4,000 tons per day. The Mid-Valley facility has ample capacity to accommodate the 13.7-ton-per-day 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-GHG-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-GHG-1:** Provide Waste Reduction and Recycling Education.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Chapter 5
Alternatives

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 CEQA Guidelines, the EIR is required to "include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project," and to determine an environmentally superior alternative.

Alternatives for an EIR usually take the form of a no project alternative, reduced project size, different project design, modified mix of uses, or suitable alternative project site(s). 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. 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 Second Recirculated Draft EIR [2nd RDEIR] 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. 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 proposed 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 the proposed WVLCSP is not approved and no development occurs on the project site. The No Project/Buildout of the Valley Trails Specific Plan assumes the proposed WVLCSP is not approved, and that 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 4.2.16), of this 2nd RDEIR determined that development of the proposed project would result in the following significant and unavoidable impacts:

- Impact AQ-1. Conflict with or obstruct implementation of the applicable air quality plan.
- 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 GHG-1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- Impact GHG-2: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.
- 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

The overarching goal of the proposed WVLCSP as stated by the applicant in the Specific Plan is to implement the City of Fontana General Plan by providing clear, achievable plans and standards for development of a high-quality, state-of-the-art logistics center that will attract quality employers to the community. The proposed Specific Plan identifies the following objectives:

- Facilitate the development of a functional, well serviced, and attractive logistics center that is sensitive to its setting in proximity to residential neighborhoods, and is economically competitive in the marketplace.
- Balance the need for warehouse distribution development with the preservation of on-site habitat in natural open space.

- Facilitate economic development, build on Fontana's existing industrial base, increase the number of business enterprises located in Fontana, and assist in meeting the diverse needs of local and regional commerce.
- Establish development standards and design guidelines that facilitate business and employment opportunities, are adaptive to changing market conditions, and achieve local planning objectives.
- Ensure that proposed development has a positive effect on the City of Fontana and surrounding communities.

Specific land use objectives contained in the Specific Plan are as follows:

- Develop high-quality and functional warehouse/distribution logistics sites with stringent design standards.
- Ensure that the development of the site is compatible with, and sensitive to, existing and planned land uses in the area.
- Conserve on-site habitats as natural open space.

A complete listing of the goals and objectives of the WVLCSP is provided in Section 3.3, *Project Objectives*.

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 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. The Building 7 Only alternative would allow development of only 11.5 percent (400,000 square feet) of the building area 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 AM peak hour and 64 trips occurring during the PM 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 impacts[1] 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 the majority of project objectives. It would provide needed warehouse distribution development but at a much reduced scale (88.5 percent less) than the proposed project. With a 5.0 percent unemployment rate and a low jobs-housing ratio in the City of Fontana, the creation of local employment and economic development options is important to the City. Using the Southern California Association of Governments 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 (2,907). Due to the much decreased development footprint, the number of temporary construction jobs generated would be substantially fewer as well.

Because this development would include only a single building, it would not meet the overarching goal and objective of the proposed Specific Plan for development of a state-of-the-art logistics center that would attract quality employers to the community, nor would it meet the goal of developing an attractive logistics center that is competitive in the marketplace. Developing only Building 7 would not provide a balance between the need for warehouse distribution development with the preservation of on-site habitat in natural open space, as the Building 7 Only Alternative would retain the lower elevations of the site that have little or no habitat value. Also, the Building 7 Only Alternative would not enhance the project site's overall value to the landowner or to the community. The project applicant purchased the entire 291-acre project site with a development approval covering the entire site already in place. To purchase an entitled project and then develop only 11.5 percent 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 a valuable project site.

The Building 7 Only Alternative was briefly considered during the planning process because of its ability to substantially reduce impacts on habitat while increasing open space preservation adjacent to the Jurupa Hills. 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

[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.)

development permitted within the project site would also involve a substantial reduction or elimination of public benefits since 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 to the proposed project, and more importantly, as compared to the intensity of development used by San Bernardino Associated Governments to determine needed regional roadway improvements and the Nexus Study fees. As a result, the Building Alternative 7 Only Alternative would greatly reduce the fees paid into the Nexus Study with no concurrent reduction in facilities improvement needs or costs. While the Building 7 Only Alternative would involve the same routes for trucks to access Interstate (I) 10 and State Route (SR) 60, development of only 11.5 percent of the proposed project's development intensity would severely reduce the project's ability to provide roadway improvements such as widening and structural pavement improvements along Locust Avenue and Jurupa Avenue to accommodate project-related truck traffic.

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 to 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.

5.2.2 Alternative Location

The Alternative Location Alternative would involve construction of approximately 3.47 million square feet of warehouse distribution building space in a different location than the proposed project site. The most likely alternative location for a logistics center of this size within the City of Fontana would be within the Southwest Industrial Park (SWIP). The SWIP consists of a large master plan that was approved with a certified EIR (SCH# 2009091089) by the City of Fontana. The SWIP is located within the southwestern portion of the City of Fontana and County of San Bernardino, generally situated along I-10 corridor, and includes 3,111 acres of the following uses: industrial, manufacturing, office, commercial, research and development, flex-tech, residential, public, and public/utility right-of-way uses. Because the SWIP EIR is a programmatic EIR, it did not include an air toxics evaluation for specific uses within the Specific Plan area. In the absence of an air toxics evaluation like the one prepared for the West Valley Logistics Center demonstrating that no health risks to the nearby sensitive uses would occur with implementation of the proposed project, the SWIP EIR includes Mitigation Measure 4.2-21 that precludes the siting of new warehouse facilities or distribution centers that generate a minimum of 100 truck trips per day, or 40 truck trips with transport refrigeration units per day, or transport refrigeration unit operations exceeding 300 hours per week, within 1,000 feet of any existing or proposed sensitive land use (pursuant to the recommendations set forth in the California Air Resources Board's *Air Quality and Land Use Handbook*).Therefore, if the proposed project were to be constructed in this location, it would be required to be constructed 1,000 feet from the nearest sensitive receptors.

The SWIP EIR identifies the following significant and unmitigated impacts for that project:

- Substantial adverse effect on a scenic vista
- Short-term construction emissions
- Long-term air quality emissions: significant overall increase in regional pollutant loads due to mobile source emissions and area source emissions.
- Conflicts with the Air Quality Management Plan
- Long-term mobile noise: permanent increase in ambient noise levels from mobile sources (vehicular traffic and rail), in excess of established standards
- Cumulative impact related to parks and recreation
- Roadway and intersection LOS

Additionally, if the proposed WVLCSP warehouse project does not go forward on the current site, it would be reasonable to assume that buildout according to the approved VTSP would proceed. Impacts resulting from that project have been addressed in the certified VTSP EIR and summarized in Alternative 2 below.

Because (1) the applicant for the WVLCSP does not control any land within the Southwest Industrial Park, and (2) impacts of an industrial development in the SWIP have already been addressed in a certified EIR, no additional analysis is warranted and the Alternative Location Alternative has been removed from further consideration. In addition, the impacts of not approving industrial warehouse development within the project site are addressed in Alternative 2, No Project/Buildout of the Existing Valley Trails Specific Plan.

5.3 Alternatives Carried Forward

During the preparation of this 2nd RDEIR, 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 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 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 this alternative, 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

This alternative would not require grading of the site for warehouse building pads or roadway improvements. Grading causes air pollutant and GHG emissions, such as fugitive dust and other exhaust emissions created by construction equipment. 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 eliminated under Alternative 1 compared to the proposed project. No ground-disturbing 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.

Energy Resources

Because no construction or development would occur, no construction-related use of energy would occur, nor would there be any future energy use during ongoing operations that would occur with development under Alternative 1. Therefore, Alternative 1 would have no impacts in relation to energy resources.

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 for the proposed project would be necessary under Alternative 1. Geologic 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 this alternative, no impacts related to the accidental release of hazardous materials or use of hazardous chemicals common in other warehouse distribution

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 the use, transportation, or disposal of hazards and hazardous materials. Because no development of the site would occur, no effort would be made to determine the need for site remediation. 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. This alternative 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, 100-year stormwater flows would not be reduced to 90 percent of 25-year flows as would occur with the proposed project, and stormwater runoff would continue at its current level 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 not add any impervious surfaces, which would require stormwater treatment and construction of detention basins that could affect the existing drainage pattern of the site. Therefore, because detention of stormwater flows would not occur, impacts on hydrology and water quality associated with Alternative 1 would be slightly greater than for the proposed project, although impacts would remain less than significant.

Land Use and Planning

Under Alternative 1, the project site would remain designated under the VTSP, and no future development would occur. Any future development of the site pursuant to the VTSP would be guided by land use designations currently in place (see Section 5.3.2 for analysis of environmental impacts associated with Alternative 2). 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 1would eliminate construction-related noise impacts on sensitive receptors. Additionally, Alternative 1would eliminate potential future operation and maintenance-related noise impacts that could occur with development. Therefore, Alternative 1would 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, no impacts on population and housing would occur.

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 not create any increased demands on public services and no impacts would occur.

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.

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 1would 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, this alternative 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 to 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 1would 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 since it is zoned for planned residential uses. While Alternative 1would eliminate the environmental impacts of the proposed project, it would not meet any of the project objectives stated in Section 5.1.2, as discussed in Table 5-1.

Table 5-1. Evaluation of the No Project/No Build Alternative in Relation to Project Objectives

Overarching Goal	
Implement the City of Fontana General Plan by providing clear, achievable plans and standards for development of a high-quality, state-of-the-art logistics center that will attract quality employers to the community.	This alternative would not provide for any development on the project site, and would not, therefore, implement the City's General Plan. In addition, a well-planned logistics center would not be created, and no employers would be attracted to the community.
Other WVLCSP Goals	
Facilitate the development of a functional, well serviced, and attractive logistics center that is sensitive to its setting in proximity to residential neighborhoods, and is economically competitive in the marketplace.	This alternative would not provide for any development on the project site. While the site would remain in open space, this alternative would not meet the need for warehousing development in the region, and would produce no economic value.
Balance the need for warehouse distribution development with the preservation of on-site habitat in natural open space.	This alternative would not provide for any development on the project site. While the site would remain in open space, this alternative would not meet the need for warehousing development in the region, and would produce no economic value. This alternative would not provide any local employment or local development opportunity, and is therefore inconsistent with this objective.
Facilitate economic development, build on Fontana's existing industrial base, increase the number of business enterprises located in Fontana, and assist in meeting the diverse needs of local and regional commerce.	Because no development would occur, this objective could not be met under Alternative 1.
Establish development standards and design guidelines that facilitate business and employment opportunities, are adaptive to changing market conditions, and achieve local planning objectives.	This alternative would not provide any local business or employment opportunities, and is therefore inconsistent with this objective.
Ensure that proposed development has a positive effect on the City of Fontana and surrounding communities.	Leaving the project site in its current condition would not provide for any local business or employment opportunities, nor would it provide for restoration of on-site habitat. Thus, Alternative 1 would not achieve this objective.

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 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 to 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. This alternative 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 to the 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 (PM_{10}) 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, PM_{10}, 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 reactive organic gases, 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 this alternative does not include truck-intensive uses that generate substantial diesel exhaust, as does 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] vs. 6,383 total ADT under the WVLCSP and more vehicle miles traveled than the proposed WVLCSP, the proposed warehouse use of the WVLCSP would also involve substantial use of trucks, which contribute heavily to criteria pollutant emissions and GHG emissions. Therefore, generally compared to 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 recreational park space, which would provide some habitat value. 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 impact 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 a warehouse distribution development 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 the California gnatcatcher would be similar 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 the 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). 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-disturbing activities in similar areas, but the VTSP alternative would have slightly fewer impacts on cultural resources as a reduced area would be permanently developed.

Energy Resources

As noted above, the VTSP would generate a greater amount of traffic (8,765 total ADT vs. 6,383 total ADT) under the WVLCSP and more vehicle miles traveled than the proposed WVLCSP, resulting in greater consumption of fuels for transportation use. However, the VTSP would also consume less electricity and natural gas than would the WVLCSP.

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 result in a less-than-significant impact with mitigation (the proposed project utilizes similar measures as a part



STATISTICAL ANALYSIS

PA	Product Type / Use	Acreage	Max. DU	Target Density Range
RESIDENTIAL				
Low Density Residential				
N	10,000 sq ft lots	15.9	33	1.1 - 3.1
O	10,000 sq ft lots	8.0	16	1.2 - 3.2
Low-Medium Density Residential				
K	4,000 sq ft lots	20.0	116	4.8 - 6.8
L	6,000 sq ft lots	10.6	48	3.6 - 5.6
M	6,000 sq ft lots	10.4	54	4.2 - 6.2
Medium Density Residential				
A	Detached Product	5.1	60	10.9 - 12.9
B	Detached Product	6.0	66	9.0 - 11.0
C	Detached Product	6.6	65	8.9 - 10.9
D	Detached Product	8.4	93	10.1 - 12.1
F	Detached Product	7.9	83	9.6 - 11.6
G	Detached Product	8.8	84	8.6 - 10.6
Medium-High Density Residential				
E	Attached Product	7.7	107	12.0 - 16.0
H	Attached Product	10.4	140	12.0 - 15.0
High Density Residential				
I	Attached Product	5.0	90	16.0 - 20.0
J	Attached Product	5.1	99	17.0 - 22.0
Subtotal Residential		135.9	1154	
NON-RESIDENTIAL				
Schools				
Q	Elementary School	13.8		
Parks				
P	Private Comm. Rec. Ctr.	3.7		
R	Private Comm. Parkway	18.0		
S	Linear Park/Esplanade	4.2		
T	Community Park	20.4		
Internal Roads				
	Valley Trails Road	6.2		
	Esplanade Road	2.2		
	North-South Road	1.1		
Subtotal Non-Residential		69.6		
TOTAL ADJUSTED GROSS		205.5	1154	5.62
OTHER				
Open Space				
	Natural Open Space	52.5		
	Detention Basin	14.8		
	Easement	1.9		
Roadways				
	School Access Road (North)	1.6		
	School Access Road (South)	1.0		
	Alder, Locust and Armstrong	11.3		
Subtotal Other		83.1		
TOTAL GROSS		288.6	1154	4.0

Source: Planning Center, October 2006

K:\Irvine\GIS\Projects\City_of_Fontana\00920_11\mapdoc\2nd_RDEIR\Chapter5\Fig 5-1 Valley Trails Spec Plan LU Plan_RDEIR.mxd Date: 8/9/2017 24991

Figure 5-1
Valley Trails Specific Plan Land Use Plan
West Valley Logistics Center Specific Plan 2nd RDEIR

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 similar impacts on geologic hazards and soils as 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 hazards 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. Warehouse distribution uses proposed as part of the WVLCSP 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, ventilating, 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 this alternative, 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 to the proposed project, this alternative would have slightly fewer impacts on hydrology and water quality, as more pervious surfaces (undeveloped areas and park areas) are proposed, allowing for 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. Although the uses proposed in the VTSP are noise sensitive, Alternative 2 would have fewer noise impacts than the proposed project, which 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. 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 impacts 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 due to the direct inducement of population growth.

Public Services

As stated in the VTSP EIR, this alternative would not result in significant impacts on fire, police, schools, or community facilities (library services). The developer would be required the 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 now proposed to be relocated farther from the site, which had not yet been proposed in 2007 and was therefore not evaluated in 2007 when the VTSP was approved. Overall, compared to the proposed project, Alternative 2 would have slightly greater impacts on public services than the proposed project.

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 proposed 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 AM peak hour and 846 new trips occurring during the PM peak hour. This is slightly greater than the 6,383 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 4.2.15, *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 this alternative 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 to 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 to the Proposed Project

As shown in the summary table at the end of this chapter (Table 5-9), Alternative 2 would reduce the following impacts as compared to the proposed WVLCSP project: aesthetics, air quality (reduced but still significant and unavoidable), energy, 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 the Valley Trails Specific Plan Alternative in Relation to Project Objectives

Overarching Goal	
Implement the City of Fontana General Plan by providing clear, achievable plans and standards for development of a high-quality, state-of-the-art logistics center that will attract quality employers to the community.	This alternative is consistent with the City's General Plan in that it represents the adopted specific plan for the project site. While Alternative 2 would introduce residential uses onto the project site, it would not create local employment or economic development opportunities. Alternative 2 would involve the implementation of a Specific Plan with clear achievable plans and standards for residential development. No new jobs would be created other than short-term construction jobs. This alternative would not provide for an employment-generating warehouse in proximity to potential employees but would instead increase the residential population in a City that is currently housing rich in comparison to local employment.
Other WVLCSP Goals	
Facilitate the development of a functional, well serviced, and attractive logistics center that is sensitive to its setting in proximity to residential neighborhoods, and is economically competitive in the marketplace.	This alternative includes development of 1,154 residential units, and would be compatible with surrounding residential neighborhoods. It would not, however, meet the overarching objective in terms of meeting the need for warehouse distribution development.
Balance the need for warehouse distribution development with the preservation of on-site habitat in natural open space.	This alternative provides for preservation of on-site habitat in natural open space, and balances such preservation with on-site residential, rather than warehouse development.
Facilitate economic development, build on Fontana's existing industrial base, increase the number of business enterprises located in Fontana, and assist in meeting the diverse needs of local and regional commerce.	This alternative includes development of 1,154 residential units, but would not meet this objective in terms of increasing the number of businesses in Fontana, and assisting in meeting the needs of local and regional commerce.
Establish development standards and design guidelines that facilitate business and employment opportunities, are adaptive to changing market conditions, and achieve local planning objectives.	While this alternative 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.
Ensure that proposed development has a positive effect on the City of Fontana and surrounding communities.	The development of a well-planned residential community, as would occur with implementation of Alternative 2, would have a positive effect on Fontana and surrounding communities.

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 construction of 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, approximately 3.47 million square feet of building area would be constructed under this alternative; however, because this alternative 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 this alternative, and the development area would involve the same footprint.

Analysis of Impacts

Aesthetics

Alternative 3 would result in similar, although somewhat lesser, aesthetics impacts related to scenic vistas and the degradation of the existing visual character or quality of the site and its surroundings. While Alternative 3 would disturb the same construction footprint as anticipated under the proposed project, business park buildings would have lower building heights than warehouse buildings. 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 to the proposed project, this alternative 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 to 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 percent of the project vehicles, but their exhaust would compose about 80 to 85 percent of the overall mobile source emissions (NO_X, PM_{10}, and $PM_{2.5}$). As such, this alternative is expected to result in reduced air quality and GHG impacts due to 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 to 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.

Energy Resources

Although Alternative 3 would involve the same building square footage as the proposed project, on-site uses would be more people-intensive that the proposed project. Alternative 3 would, therefore, result in greater use of fuels for transportation and would also consume more electricity and natural gas than would 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's existing zoning and General Plan land use designations 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 a land use designation change to Light Industrial to comply 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, this alternative 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 conditions 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 this alternative, 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 this alternative would generate more than five times the traffic as the proposed project (45,936 total ADT versus 6,383 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 to 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 Southern California Association of Governments 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 to the 2,907 employees expected under the proposed project, this alternative 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 the proposed project.

Recreation

Similar to 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 this alternative. 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, this alternative would result in 5,148 AM peak hour trips, 4,644 PM peak hour trips, and 45,936 daily trips. The projected number of daily trips under Alternative 3 is substantially (approximately 5 times) higher than what is expected under the proposed project (575 AM peak hour, 621 PM peak hour, and 6,383 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 the proposed project.

Utilities and Service Systems

Similar to 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 to 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 to 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, 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 as those that would occur under the proposed project would occur for all other issue areas, except energy usage, which would be greater for Alternative 3 than for the proposed project. 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

Overarching Goal	
Implement the City of Fontana General Plan by providing clear, achievable plans and standards for development of a high-quality, state-of-the-art logistics center that will attract quality employers to the community.	While this alternative would involve the implementation of a Specific Plan, providing clear, achievable plans and standards for business park development and have the ability to attract quality employers to the community, it would not meet the objective for achieving a high-quality, state-of-the-art logistics center.
Other WVLCSP Goals	
Facilitate the development of a functional, well serviced, and attractive logistics center that is sensitive to its setting in proximity to residential neighborhoods, and is economically competitive in the marketplace.	This alternative 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. This alternative 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, this alternative would not be sensitive to surrounding land uses. Also, this alternative would not provide for the needed warehouse distribution development that is economically competitive in the marketplace, but would introduce a land use type that is relatively untested in Fontana's industrial market.
Balance the need for warehouse distribution development with the preservation of on-site habitat in natural open space.	This alternative would provide a balance between on-site development and the preservation of on-site habitat in natural open space, but would not provide for development of warehouse distribution uses.
Facilitate economic development, build on Fontana's existing industrial base, increase the number of business enterprises located in Fontana, and assist in meeting the diverse needs of local and regional commerce.	The introduction of business park uses to the project site would meet this goal.
Establish development standards and design guidelines that facilitate business and employment opportunities, are adaptive to changing market conditions, and achieve local planning objectives.	This alternative would be implemented through a specific plan that would meet this goal.
Ensure that proposed development has a positive effect on the City of Fontana and surrounding communities.	The development of a well-planned business park, as would occur with implementation of Alternative 3, could have a positive effect on Fontana and surrounding communities. However, 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.

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 percent 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 percent 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 percent 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 and lower building heights 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 to the proposed project, this alternative 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 this alternative.

Air Quality/Greenhouse Gases

Alternative 4 would introduce business park uses on site as well as a development density about 25 percent 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 percent less. High-intensity truck-related uses associated with industrial uses would not occur under this alternative. Therefore, emissions associated with these truck-related uses, which make up more than 85 percent of overall mobile source emissions (NO_X, PM_{10}, 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 percent 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 and GHG.

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 percent 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, this alternative 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 this alternative, allowing previous undiscovered cultural resources (should any exist) to remain undisturbed on site.

Energy Resources

By reducing the overall development intensity, consumption of fuels for transportation and on-site energy use would be reduced under Alternative 4 in comparison to Alternative 3, and would be similar to the proposed project.

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 this alternative, fewer geology and soils impacts are expected to occur compared to the proposed project.

Hazards and Hazardous Materials

Alternative 4 would consist of a multi-tenant business park with a development intensity about 25 percent lower than the proposed project. 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 this alternative would operate in compliance with federal, state, and local regulations. Although impacts would be similar in nature, due to the smaller scale of development proposed under this alternative, reduced impacts related to hazards and hazardous materials would occur compared to 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 impacts anticipated to occur under the proposed project. Impacts related to flooding and groundwater would also be less than significant. Compared to 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 require the same changes to City zoning and General Plan land use designations to allow business park uses as would be required for the proposed project. Alternative 4 would result in a greater portion of the site to be zoned as natural open space and would reduce areas allowed for business park development. This alternative would also be required to rescind the VTSP, similar to the proposed project, and would require a new specific plan to regulate land uses on the site. Adoption of land use designation 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 impacts 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, this alternative 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 impacts anticipated to occur under the proposed project, noise impacts under Alternative 4 related to noise 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. Construction noise impacts under Alternative 4 would be reduced compared to the proposed project due to the reduced amount of development and building area. 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 ADT as the proposed project (33,176 total ADT versus 6,383 total ADT), operational noise impacts from off-site traffic would be expected to be significant and unavoidable, similar to the impacts anticipated to occur under the proposed project.

The proposed business park use would not require truck-intensive uses to the same degree as the warehouse distribution uses 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 percent 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 this alternative. 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 this alternative would create significant impacts to population and housing.

Public Services

Alternative 4 would develop a smaller multi-tenant business park with a development intensity about 25 percent 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 percent 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, this alternative would result in 3,718 AM peak hour trips, 3,354 PM 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 AM peak hour, 621 PM peak hour, and 6,383 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 the project'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 percent lower than the proposed project. Similar to the proposed project, utility improvements would be required on the project site, along with off-site sewer improvements. Water, wastewater, and solid waste generation would increase under implementation of the

alternative compared to 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 this alternative.

Summary of Environmental Impacts Compared to the Proposed Project

As summarized in the table at the end of 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 energy, 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 impact 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

Overarching Goal	
Implement the City of Fontana General Plan by providing clear, achievable plans and standards for development of a high-quality, state-of-the-art logistics center that will attract quality employers to the community.	While this alternative would involve the implementation of a specific plan providing clear, achievable plans and standards for development of a high-quality, state-of-the-art business park development and achieve a high-quality *business park* that will attract quality employers to the community, it would not meet the objective for achieving a high-quality *logistics center*.
Other WVLCSP Goals	
Facilitate the development of a functional, well serviced, and attractive logistics center that is sensitive to its setting in proximity to residential neighborhoods, and is economically competitive in the marketplace.	This alternative 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. This alternative 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, this alternative would not be sensitive to surrounding land uses. Also, this alternative would not provide for the needed warehouse distribution development that would be economically competitive in the marketplace, but would instead introduce a land use type that is relatively untested in the Fontana industrial market.
Balance the need for warehouse distribution development with the preservation of on-site habitat in natural open space.	This alternative would provide a balance between on-site development and the preservation of on-site habitat in natural open space, but would not provide for development of warehouse distribution uses.
Facilitate economic development, build on Fontana's existing industrial base, increase the number of business enterprises located in Fontana, and assist in meeting the diverse needs of local and regional commerce.	The introduction of business park uses to the project site would meet this goal.
Establish development standards and design guidelines that facilitate business and employment opportunities, are adaptive to changing market conditions, and achieve local planning objectives.	This alternative would be implemented through a specific plan that would meet this goal.
Ensure that proposed development has a positive effect on the City of Fontana and surrounding communities.	The development of a well-planned business park, as would occur with implementation of Alternative 4, could have a positive effect on Fontana and surrounding communities. However, 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.

5.3.5 Alternative 5: Reduced Intensity Logistics Center

Alternative 5 provides for development of a warehouse-based logistics center with a 30 percent reduction in intensity and development footprint as compared to the proposed project (i.e., for, a total of 2.43 million square feet of warehouse buildings). This alternative was designed to reduce impacts on air quality, GHG emissions, and noise. A 30 percent 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 increases. Note that the Building 7 Only Alternative included above in Subsection 5.2.1 would represent an 88 percent 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 to 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 intensity 30 percent lower than the proposed project. The project would require a 77 percent reduction to reduce operational NO_X air pollutant emissions below the SCAQMD threshold of significance. (Note that a 77 percent 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 percent.) While the Building 7 Only Alternative described above in Section 5.2.1 would represent an 88 percent reduced intensity alternative to reduce all significant and unavoidable air quality and GHG impacts, it was determined to be infeasible; therefore, 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 percent smaller development area with 30 percent 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 percent 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 percent. This reduction would not be enough to mitigate significant air quality impacts to less-than-significant levels. Due to a smaller development (2.43 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 2.43 million square feet of development onto the project site within a 30 percent 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 this alternative. Impacts on biological resources would be similar in nature, but reduced in scale compared 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 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 2.43 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, potential 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).

Energy Resources

Alternative 5 would introduce 2.43 million square feet of development onto the project site within a smaller development footprint than the proposed project. As a result, energy usage during construction would be reduced by approximately 30 percent, as would energy use during ongoing operations of the reduced-scale logistics center in comparison to the proposed project.

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 as the proposed project, but with a 30 percent lower development intensity. 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 require the same changes to City zoning and General Plan land use designations to allow for warehouse uses as 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 designation 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 impacts 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 the impacts 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 project-related traffic volumes on area roadways would be proportionately reduced under Alternative 5 by 30 percent, 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 percent lower than the proposed project. Alternative 5 would result in 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 percent 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 AM peak hour trips, 440 PM peak hour trips, and 5,926 daily trips. The projected number of trips under Alternative 5 is 30 percent lower than what is anticipated under the proposed project (575 AM peak hour, 621 PM peak hour, and 6,383 daily trips). Therefore, traffic impacts are anticipated to be 30 percent 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 percent 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 percent 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 to 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, energy, 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

Overarching Goal	
Implement the City of Fontana General Plan by providing clear, achievable plans and standards for development of a high-quality, state-of-the-art logistics center that will attract quality employers to the community.	This alternative would provide clear, achievable plans and standards for development of a high-quality, state-of-the-art logistics center that will attract quality employers to the community, although to a lesser degree than would the proposed project.
Other WVLCSP Goals	
Facilitate the development of a functional, well serviced, and attractive logistics center that is sensitive to its setting in proximity to residential neighborhoods, and is economically competitive in the marketplace.	Alternative 5 would facilitate development of a functional, well serviced, and attractive logistics center that is sensitive to its setting in proximity to residential neighborhoods. This alternative would also provide the opportunity for greater separation of warehouse uses from existing residential neighborhoods than the proposed project. However, because the overall development intensity of the logistics center would be substantially below that of other logistics centers in the region, it is questionable whether this alternative would be economically competitive in the marketplace.
Balance the need for warehouse distribution development with the preservation of on-site habitat in natural open space.	By providing 30% less development and building area than the proposed project, the balance between meeting the need for warehouse distribution development and preservation of on-site habitat in natural open space would be weighted more toward open space preservation than the proposed project. However, as discussed in Section 4.2.3, *Biological Resources*, lands within the proposed project's development area have little or no habitat value.
Facilitate economic development, build on Fontana's existing industrial base, increase the number of business enterprises located in Fontana, and assist in meeting the diverse needs of local and regional commerce.	This alternative would build on Fontana's existing industrial base, increase the number of business enterprises located in Fontana, and assist in meeting the diverse needs of local and regional commerce, although to a lesser degree than would the proposed project.
Establish development standards and design guidelines that facilitate business and employment opportunities, are adaptive to changing market conditions, and achieve local planning objectives.	Alternative 5 would achieve this goal.
Ensure that proposed development has a positive effect on the City of Fontana and surrounding communities.	Alternative 5 would achieve this goal.

5.3.6 Alternative 6: Proposed Project with a Prohibition on Trucks Using Sierra Avenue Alternative (Proposed Project Analyzed in the Draft EIR and First Recirculated Draft EIR)

Alternative 6 would involve prohibiting truck traffic from the West Valley Logistics Center from traveling northwest via the Sierra Avenue interchange on I-10. Under this scenario, project-related trucks would not be permitted to use Sierra Avenue or the Sierra Avenue interchange on I-10 north of the project. All other project components and features would be the same as for the proposed project, including routing of automobile trips.

Analysis of Impacts

Aesthetics

Alternative 6 would involve the same on-site development as the proposed project, with the exception that the maximum building heights in this alternative would be 100 feet, whereas a 60-foot maximum building height is now proposed. The other difference between this alternative and the project as it is currently proposed is the routing of trucks between the site and area freeways. Because of the greater proposed building heights in this alternative, impacts related to aesthetics would be greater for Alternative 6 than for the project as analyzed in the original EIR and First Recirculated EIR as compared to those anticipated to occur under the currently proposed project.

Air Quality/Greenhouse Gases

Similar to the proposed project, Alternative 6 would introduce 3.47 million square feet of warehouse/distribution 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. Thus, construction-related air quality and GHG impacts would be the same as would occur under the proposed project.

On-site 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 for the First Recirculated Draft EIR (Appendix F of the First Recirculated Draft EIR) included an analysis of Alternative 6, which represented the project analyzed in that EIR. Vehicular trips associated with the WVLCSP 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 Reports for the previously proposed project (now Alternative 6) and the proposed project, under the existing 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 would be slight differences in project-related increases of plus or minus 0.2 part per million of CO between Alternative 6 and the proposed project. However, these differences are inconsequential because the resultant concentrations are 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, prohibiting 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 sewer and roadway improvements within existing roadway rights-of-way.

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 potentially affecting cultural resources would occur from off-site construction of sewer and roadway improvements within existing roadway rights-of-way, increasing the potential for disturbance of previously undisturbed resources.

Energy Resources

Because Alternative 6 would involve the same development area and amount of development as the proposed project, energy use during construction would be the same as for the proposed project. In addition, as noted above in the discussion of air quality/GHG, Alternative 6 would generate similar vehicle miles traveled as the proposed project. With a similar amount of development and vehicle miles traveled, Alternative 6 would consume a similar amount of energy as the proposed project during ongoing operations.

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 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 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 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 or private airstrip; 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.

To determine differences in noise impacts with and without truck routes being permitted to use the Sierra Avenue interchange, noise impacts were compared for the following:

- The WVLCSP as it was previously proposed and analyzed in the First Recirculated Draft EIR, which included a prohibition against trucks using the Sierra Avenue interchange (Alternative 6 in this 2nd RDEIR); and
- The proposed project analyzed in this 2nd RDEIR, which includes truck routes accessing the Sierra Avenue interchange.

As noted above, 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 comparison of roadway noise along key roadway segments. The table also identifies whether the roadway segment has sensitive receptors present.

As shown in Table 5-6, differences in project-related noise between Alternative 6 and the proposed project are less than 3.0 dBA. The greatest differences occur along Locust Avenue south of Slover Avenue and south of Santa Ana Avenue under Existing Plus Project conditions, where Alternative 6 would generate a smaller increase in noise than would the proposed project. Under future cumulative noise conditions, differences between the proposed project and Alternative 6 would be 1.0 dBA or less.

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 Alternative 6

Roadway Segment	Currently Proposed Project (With trucks on Sierra Ave.) in dBA	Alternative 6 (Previously Proposed Project - without Trucks on Sierra Avenue) in dBA	Sensitive Land Uses Present
Existing Plus Project Conditions			
Locust Ave. south of Slover Ave.	***+3.8***	+1.6	Yes
Locust Ave. south of Santa Ana Ave.	***+2.8***	+1.6	Yes
Jurupa Ave. between Locust Ave. and Cedar Ave.	**+3.9**	***+4.1***	Yes
Locust Ave. between Jurupa Ave. and 11th St.	***+3.6***	**+3.3**	No
Locust Ave. between 11th St and 7th St.	**+3.3**	***+3.4***	Yes
Cumulative Plus Project Conditions			
Locust Ave. south of Slover Ave.	***+ 1.6***	+1.1	Yes
Locust Ave. south of Santa Ana Ave.	***+ 1.5***	+1.1	Yes
Jurupa Ave. between Locust Ave. and Cedar Ave.	***+ 1.7***	+ 1.6	Yes
Locust Ave. between Jurupa Ave. and 11th St.	+ 1.9	*+ 2.9*	No
Locust Ave. between 11th St and 7th St.	+2.5	***+ 3.1***	Yes

Source: LSA Associates 2013, Urban Crossroads 2017.
Significant impacts are indicated in **bold text**.
Italics text indicates which alternative has the higher dBA contribution.

Population and Housing

Because Alternative 6 would involve the same development area, as well as the same land uses and development intensity as the currently 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, as well as the same land uses and development intensity 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 (6,382 daily trips, 10,495 daily passenger car equivalent 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 Committee within the Property Owners' Association to guide project traffic to the regional transportation network and away from residential streets.

Under Alternative 6, no trucks would be permitted to be routed to the Sierra Avenue interchange. Instead, 100 percent of trucks would be routed east of the project site on Jurupa Avenue with 57 percent 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 percent 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. Thus, under Alternative 6, all truck traffic would be directed to the regional freeway system through communities outside of the City of Fontana.

To determine differences in traffic impacts with and without trucks being permitted to use the Sierra Avenue interchange, traffic impacts were compared for the following:

- The WVLCSP as it was previously proposed and analyzed in the First Recirculated Draft EIR, which included a prohibition against truck using the Sierra Avenue interchange (Alternative 6 in this 2nd RDEIR); and
- The proposed project analyzed in this 2nd RDEIR, which includes truck routes accessing the Sierra Avenue interchange.

As shown in Table 5-7, Alternative 6 would result in one less direct impact and three less cumulative impacts during existing plus project conditions compared to the proposed project. Alternative 6 would result in one less direct impact and seven less cumulative impacts during future year 2040 cumulative conditions compared with the currently proposed project. As a result, while the currently proposed project would significantly affect a greater number of intersections than would Alternative 6 because it would spread truck traffic over a greater number of routes, the severity of impacts at significantly affected intersections would be greater for Alternative 6 than for the currently proposed project.

A comparison of freeway mainline impacts with and without truck use of the Sierra Avenue interchange conducted for the 1st RDEIR 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 impacted intersections when compared to the currently proposed project. However, it would not avoid any of the significant and unavoidable traffic impacts that would occur for the proposed project. This alternative would impact the same residential neighborhoods east of the project site as the proposed project but to a lesser extent due to 30 percent fewer trucks traveling east. However, the currently proposed project would add truck traffic and resulting impacts on the residential neighborhoods north of the project site that would not experience truck traffic under Alternative 6.

Table 5-7. Significantly Affected Intersections for Alternative 6 (Prohibition of Trucks on Sierra Avenue) and the Proposed Project

	Existing Plus Project		Cumulative Plus Project	
Intersection	**Alternative 6 Prohibition of Trucks on Sierra Ave.**	**Currently Proposed Project (Trucks on Sierra Ave)**	**Alternative 6 Prohibition of Trucks on Sierra Ave.**	**Currently Proposed Project (Trucks on Sierra Ave)**
1. Sierra Avenue/Valley Boulevard	--	--	Cumulative[1]	Cumulative
2. Sierra Avenue/I-10 Ramps	--	--	--	--
3. Sierra Avenue/Slover Avenue	--	--	Cumulative	Cumulative
6. Production Avenue/Slover Avenue	--	--	--	Cumulative
8. Tamarind Avenue/Slover Avenue	--	--	--	Cumulative
10. Alder Avenue/Slover Avenue	Cumulative	--	Cumulative	Cumulative
11. Alder Avenue/Santa Ana Avenue	--	--	--	Cumulative
13. Laurel Avenue/Slover Avenue	--	--	--	Cumulative
14. Laurel Avenue/Santa Ana Avenue	--	--	--	Cumulative
18. Locust Avenue/Slover Avenue	--	--	--	Direct[2]
19. Locust Avenue/Santa Ana Avenue	Cumulative	Cumulative	Cumulative	Cumulative
20. Locust Avenue/Jurupa Avenue	--	Direct	Cumulative	Cumulative
21. Locust Avenue/Driveway 4	--	Cumulative	Direct	Direct
22. Locust Ave./11th St.-Driveway 6	--	--	Direct	Direct
24. Locust Ave. 9th St.-Driveway 7	--	--	Cumulative	Cumulative
25. Locust Avenue/8th Street	--	--	--	--
26. Locust Ave./Armstrong Rd-7th St.	--	--	Cumulative	Cumulative
32. Armstrong Road/Sierra Avenue	--	--	Cumulative	Cumulative
33. Valley Way/37th Street	--	--	Cumulative	Cumulative
34. Valley Way/SR-60 WB Off-Ramp	Cumulative	Cumulative	Cumulative	Cumulative
37. Valley Way/Mission Boulevard	--	--	Cumulative	Cumulative
38. Formosa St./Mission Boulevard	--	--	Cumulative	Cumulative
39. SR-60 EB Ramps/Mission Blvd.	--	Cumulative	Cumulative	Cumulative
40. Soto Avenue/Mission Boulevard	--	--	Cumulative	Cumulative
41. Maple Avenue/Slover Avenue	--	--	--	Cumulative
42. Linden Avenue/Slover Avenue	--	Cumulative	--	Cumulative
43. Cedar Avenue/Valley Boulevard	--	--	Cumulative	Cumulative
44. Cedar Avenue/I-10 WB Ramps	Cumulative	--	Cumulative	Cumulative
45. Cedar Avenue/I-10 EB Ramps	--	--	Cumulative	Cumulative
46. Cedar Avenue/Orange Street	--	--	Cumulative	Cumulative
47. Cedar Avenue/Slover Avenue	--	--	Cumulative	Cumulative
48. Cedar Avenue/Santa Ana Avenue	--	--	Cumulative	Cumulative
49. Cedar Avenue/Jurupa Avenue	--	--	Cumulative	Cumulative
51. Cedar Avenue/7th Street	--	--	Cumulative	Cumulative
52. Cedar Avenue/El Rivino Road	--	--	Cumulative	Cumulative
53. Rubidoux Boulevard/20th Street-	--	--	Cumulative	Cumulative

Intersection	Existing Plus Project		Cumulative Plus Project	
	Alternative 6 Prohibition of Trucks on Sierra Ave.	Currently Proposed Project (Trucks on Sierra Ave)	Alternative 6 Prohibition of Trucks on Sierra Ave.	Currently Proposed Project (Trucks on Sierra Ave)
Market Street				
54. Rubidoux Boulevard/24th Street	--	Cumulative	Cumulative	Cumulative
55. Rubidoux Boulevard/26th Street	--	Cumulative	Cumulative	Cumulative
56. Rubidoux Boulevard/28th Street	--	--	Cumulative	Cumulative
57. Rubidoux Boulevard/30th Street-SR-60 Westbound Off-Ramp	--	--	Cumulative	Cumulative
58. Rubidoux Boulevard/SR-60 Westbound On-Ramp	--	--	Cumulative	Cumulative
59. Rubidoux Boulevard/SR-60 Eastbound Off-Ramps-30th Street	--	--	Cumulative	Cumulative
60. Rubidoux Boulevard/34th Street	--	--	Cumulative	Cumulative
61. Agua Mansa Road/Market Street	--	--	Cumulative	Cumulative
62. Market Street Rivera Street	--	--	Cumulative	Cumulative
63. Market Street/SR-60 WB Ramps	--	--	Cumulative	Cumulative
64. Market Street/SR-60 EB Ramps	--	--	Cumulative	Cumulative
65. Market Street/Redwood Drive	--	--	Cumulative	Cumulative

Source: LSA Associates, August 2013; Urban Crossroads, October 2017.

[1] Cumulative = Cumulative Impact. A cumulative impact is identified when project traffic would contribute 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 would degrade an acceptable LOS to an unacceptable level below LOS standards set by the jurisdiction.

Utilities and Service Systems

Because Alternative 6 would involve the same development footprint, land uses, and development 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 to 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 increase some truck-related noise and traffic impacts. Similar impacts would occur for all other issue areas. This alternative 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.

One of the key critiques of Alternative 6, which was previously analyzed as the proposed project in the First Recirculated Draft EIR, was that it routed 100 percent of its truck traffic to and from the regional freeway system outside of the City of Fontana. This routing occurred due to the previously

proposed prohibition against project-related trucks using Sierra Avenue and the Sierra Avenue interchange on I-10. Comments on the First Recirculated Draft EIR from San Bernardino County and the City of Jurupa Valley argued that such routing of traffic was inequitable because it separated truck traffic from City of Fontana neighborhoods while resulting in significant unavoidable noise impacts outside of Fontana.

Table 5-8. Evaluation of the Proposed Project with Prohibition on Trucks Using Sierra Avenue Alternative in Relation to Project Objectives

Overarching Goal	
Implement the City of Fontana General Plan by providing clear, achievable plans and standards for development of a high-quality, state-of-the-art logistics center that will attract quality employers to the community.	This alternative would provide clear, achievable plans and standards for development of a high-quality, state-of-the-art logistics center that will attract quality employers to the community, equivalent to those of the proposed project.
Other WVLCSP Goals	
Facilitate the development of a functional, well serviced, and attractive logistics center that is sensitive to its setting in proximity to residential neighborhoods, and is economically competitive in the marketplace.	Alternative 6 would facilitate development of a functional, well serviced, and attractive logistics center that is sensitive to its setting in proximity to residential neighborhoods. This alternative would also provide the same separation of warehouse uses from existing residential neighborhoods as the proposed project. However, this alternative would increase the amount of truck traffic through communities outside of the City of Fontana, reducing impacts on residential neighborhoods in Fontana while increasing impacts on residential neighborhoods outside of Fontana.
Balance the need for warehouse distribution development with the preservation of on-site habitat in natural open space.	This alternative would provide the same balance between on-site warehouse development and open space preservation as the proposed project.
Facilitate economic development, build on Fontana's existing industrial base, increase the number of business enterprises located in Fontana, and assist in meeting the diverse needs of local and regional commerce.	This alternative would build on Fontana's existing industrial base, increase the number of business enterprises located in Fontana, and assist in meeting the diverse needs of local and regional commerce to the same degree as would the proposed project.
Establish development standards and design guidelines that facilitate business and employment opportunities, are adaptive to changing market conditions, and achieve local planning objectives.	Alternative 6 would achieve this goal.
Ensure that proposed development has a positive effect on the City of Fontana and surrounding communities.	By concentrating truck traffic outside of the City of Fontana, Alternative 6 would have a greater impact on surrounding communities than would the proposed project, and thereby achieve this goal to a lesser degree.

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, 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 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). The Reduced Intensity Logistics Center alternative has 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 and GHG impacts would be reduced during construction and operation, impacts would continue to be significant and unavoidable. In addition, although overall traffic generation would be reduced, traffic impacts would remain significant and unavoidable since 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 this alternative involves a reduced development potential (a reduction of 30 percent), it would not meet project objectives related to jobs creation and economic development opportunities to the same extent as would the proposed project. As noted above, Alternative 5 would result in an employment growth potential of 2,035 employees (compared to 2,907 for the proposed project). In addition, this alternative 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 percent 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 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

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 Prohibition on Trucks Using Sierra Avenue
Noise	Significant Unavoidable with Mitigation	Reduced	Reduced	Reduced	Similar	Reduced	Reduced
Population and Housing	Less than Significant	Reduced	Greater	Greater	Greater	Reduced	Similar
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	Similar
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 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 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 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

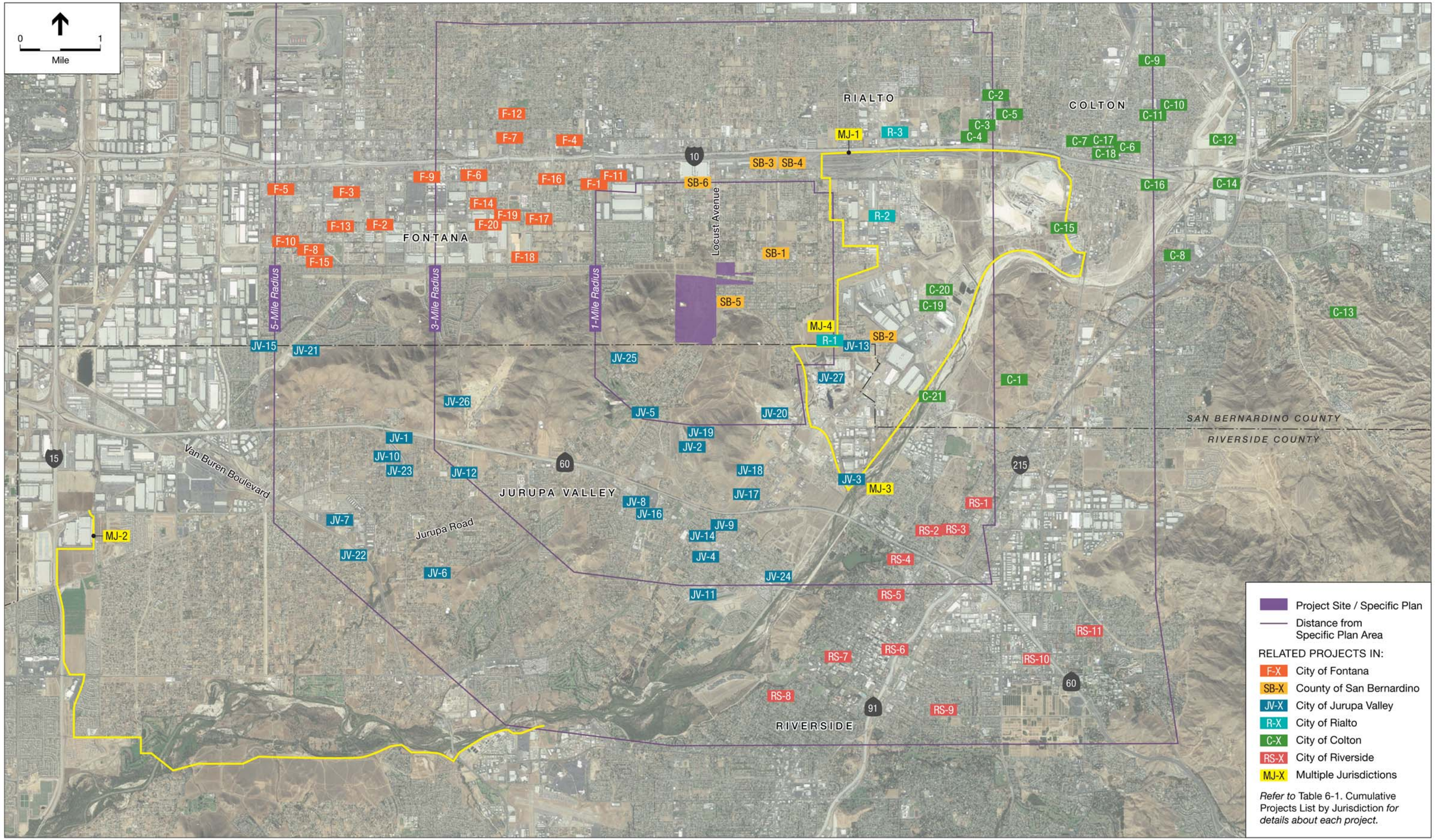
"Individual effects" refers to changes resulting from a single project or a number of separate projects; in contract, "cumulative impacts" are changes in the environment from the incremental impact of a project when added to other closely related past, present, and reasonably foreseeable future projects. 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) to analyze cumulative traffic conditions along proposed truck routes. 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), except along routes leading to State Route (SR) 60 along Rubidoux Boulevard and Market Street. All CMP locations, along with key intersections in the cities of Jurupa Valley and Riverside where the project is forecast to add 50 trips at intersections or 100 trips at freeway segments, have been included in the cumulative analysis for traffic. The existing (2016) traffic analysis was generated based on 2016 traffic counts.

Year 2040 traffic volumes were developed using the San Bernardino Traffic Analysis Model. The base year for the traffic model is 2008 and the forecast year is 2040. The difference between the modeled 2008 and 2040 peak period directional arterial traffic volumes (for each intersection approach and departure) was identified from loaded network model plots. This difference defines the growth in traffic over the 32-year period. This incremental growth in peak period approach and departure volumes was factored to develop the incremental change in peak hour volumes. The San Bernardino Traffic Analysis Model uses a 3-hour AM peak period and a 4-hour PM peak period. Southern California Association of Governments (SCAG), the regional Metropolitan Transportation Organization, has established that the AM peak hour comprises 38 percent of the AM peak period and that the PM peak hour comprises 28 percent of the PM peak period. Therefore, the incremental changes in peak period volumes were multiplied by the appropriate factor to develop incremental changes in peak hour volumes. The incremental growth in approach and departure volumes between 2008 and 2040 was factored to reflect the forecast growth between the year of the ground counts (2016) and 2040. For this purpose, linear growth between 2008 and forecast 2040 (and beyond) was assumed. Because the increment between 2016 and 2040 is 24 years of the 32-year time span, a factor of 0.89 (i.e., 24/27) was used. This forecast growth in approach and departure volumes were added to the 2016 ground counts, resulting in post-processed forecast year 2040 link volumes.

The traffic model and associated growth projections were prepared and refined specifically for use in the traffic, air quality, greenhouse gas emission, noise, and energy 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 cumulative impacts study area includes portions of the cities of Fontana, Rialto, Jurupa Valley, Colton, Riverside, San Bernardino, and the unincorporated 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.



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Figure 6-1
Related and Cumulative Projects
West Valley Logistics Center Specific Plan 2nd RDEIR

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 and greenhouse gas analyses, 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. Thus, 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 and cumulative greenhouse gas impacts have no fixed geographic boundary. 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.

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 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 EIR.

Table 6-1. Cumulative Projects List by Jurisdiction

#	Project Title	Status	Location	Description
City of Fontana				
F-1	Walmart Commercial Center	In entitlement process	10591 Sierra Ave.	194,000 sq. ft. store; 21,000 sq. ft. retail/food space
F-2	SAIA Trucking Terminal building expansion	In planning process	SW corner of Santa Ana Ave/Live Oak Ave.	50,000 sq. ft. truck terminal building
F-3	Questar Fueling Natural Gas Fueling Station	In planning process	14512 Aliso Dr.	Natural gas fueling station
F-4	Fontana Skilled Nursing Facility	In planning process	SW corner of Juniper Ave. and Valley Blvd	37,000 sq. ft. nursing facility
F-5	Santana Forming: Welding and Steel Forming Facility	In planning process	10588 Calabash Ave.	11,200 sq. ft. steel facility
F-6	Retail/Office Industrial Repair Facility	In planning process	15770 Slover Ave.	17,930 sq. ft. of retail/office uses
F-7	Retail center with gas station	In planning process	16111 Valley Blvd.	18,800 sq. ft. gas station
F-8	Warehouse Distribution Center	In planning process	14242 Jurupa Ave.	40,000 sq. ft. of warehouse distribution uses

#	Project Title	Status	Location	Description
F-9	Beech and Slover Auto, LLC Car Sales Facility	In planning process	10487 Beech Ave.	9,580 sq. ft. of used auto sales uses
F-10	Storage and warehousing	In planning process	11101 Calabash Ave.	6,740 sq. ft. of storage and warehouse uses
F-11	Starbucks with drive-thru	In planning process	NE corner of Slover Ave. and Production Ave.	2,500 sq. ft. of retail uses
F-12	Single-Family Homes	In planning process	16115 Mallory Dr.	7 single family dwelling units
F-13	West Fontana Logistics Center	In planning process	10918 Cherry Ave.	136,650 sq. ft. of light industrial uses
F-14	Light Industrial Building	In planning process	10798 Catawba Ave.	230,300 sq. ft. of light industrial uses
F-15	Jurupa Commerce Park Warehouse	In planning process	11236 Apricot Ave.	230,000 sq. ft. of warehouse uses
F-16	Arrow Recovery Group	In planning process	16477 Slover Ave.	73,020 sq. ft. of warehousing and manufacturing uses
F-17	Southwest Fontana Logistics Center	In entitlement process	Santa Ana Ave. between Oleander Ave. and Cypress Ave.	Two warehouse buildings totaling 1,628,936 sq. ft. and a 17.45-acre park option
F-18	Industrial Buildings	In planning process	NW corner of Oleander Ave. and Jurupa Ave.	1,457,000 sq. ft. industrial buildings
F-19	Warehouse	In planning process	NW corner of Citrus Ave. and Santa Ana Ave.	431,000 sq. ft. warehouse facility
F-20	Warehouse	In planning process	SE corner of Catawba Ave. and Santa Ana Ave.	319,000 sq. ft. warehouse facility
County of San Bernardino				
SB-1	High Cube Warehouse	In planning process	NW Corner of Cedar Ave and Jurupa Ave.	677,000 sq. ft. of high cube warehouse uses
SB-2	High Cube Warehouse	In planning process	El Rivino Rd and Kiningham Dr.	30,000 sq. ft. of high cube warehouse uses
SB-3	Warehouse	In planning process	NE Cedar Ave. and Orange St.	210,000 sq. ft. of warehouse uses
SB-4	Warehouse	In planning process	NE Cedar Ave. and Orange St.	180,000 sq. ft. of warehouse uses
SB-5	Residential Project	In planning process	East of Locust St. at 7th St.	196 residential units
SB-6	High Cube Warehouse	In planning process	SE Corner – Slover Ave. and Laurel Ave.	376,000 sq. ft. high cube warehouse

#	Project Title	Status	Location	Description
City of Jurupa Valley (County of Riverside)				
JV-1	Pedley Shopping Center	Entitlements approved 2015; construction timing unknown	SE corner of SR-60 and Pedley Rd.	256,000 sq. ft. of retail commercial shopping center on 30 acres
JV-2	Tentative Tract Map 31894 "Highland Park"	Entitlements approved; construction may begin in 2017	North of Canal Street and Union Pacific Railroad and east of Sierra Avenue/ 20th Street, near Rattlesnake Mountain/Rock Quarry	General Plan Amendment, Change of Zone, and Tentative Tract Map (TTM36391) for a residential subdivision on approximately 168 acres involving 398 single-family residential lots, 1 public park, several water quality treatment basins, and associated open space
JV-3	Market Street Commercial	Entitlements approved; construction timing unknown.	1890 Market St.	3,098 sq. ft. gas station with convenience store; 4,750 sq. ft. restaurant, 2,860 sq. ft. drive-thru restaurant, and 2,850 sq. ft. drive-thru car wash
JV-4	Palm Communities	Under construction	3901 Briggs St.	49 multi-family units
JV-5	Monarch at the Quarry	Under construction	Northwest side of Armstrong, south of Sierra in Sunnyslope.	86 single family units on minimum 7,000 sq. ft. lots
JV-6	Tentative Tract Map No. 36702	Entitlements approved; construction timing unknown.	5289 Stone Ave.	17 lot subdivision for half-acre equestrian estate lots
JV-7	Galena Business Park Bldg. E	Construction complete	Troy Ct.	47,500 sq. ft. of industrial building
JV-8	Legend Shopping Center	Under construction	South side of Mission Blvd., east of Opal	50,000 sq. ft. shopping center
JV-9	Avalon Court – TTM 33649	Entitlements approved; construction timing unknown.	NW corner of Avalon and 36th St. in Rubidoux.	24 single family lot R-4 subdivision
JV-10	Jurupa Valley Veterans Enriched Neighborhood – TTM 36720	Entitlements approved; construction to begin 2017/2018	At the terminus of Amarillo Rd.	26 single-family units on minimum 5,000 sq. ft. lots
JV-11	Flabob-River Springs Charter School	Entitlements approved; construction timing unknown.	SE corner of Mennes and Fort Dr.	7–12th grade charter school with several modular classroom buildings

#	Project Title	Status	Location	Description
JV-12	Mission Pyrite Plaza	Entitlements approved; construction timing unknown.	SW corner of Mission Blvd. and Pyrite Rd	32,000 sq. ft. commercial development with gas station and drive-thru car wash, fast food restaurant, sit down restaurant and multi-tenant retail building
JV-13	Inland Empire Cold Storage	Entitlements approved; construction timing unknown.	SE corner of El Rivino and Hall Ave.	40,800 sq. ft. cold storage facility
JV-14	Mission Plaza	In planning stages	SE corner of Riverview and Mission.	118,683 sq. ft. of shopping center
JV-15	Country Village Shopping Center	In planning process	SE corner of Country Village Rd. and Philadelphia Ave.	140,894 sq. ft. shopping center
JV-16	99 Cent Only Store	In planning process	6316 Mission Blvd	18,012 sq. ft. retail building
JV-17	Emerald Ridge South	In entitlement process	North of SR-60, West of Avalon St., East of Canal St., and South of Kenwood Pl.	118 condominium units and 97 single-family lots
JV-18	Emerald Ridge North	In entitlement process	North of SR-60, west of Canal St. and South of 28th St.	184 single-family units
JV-19	New Rio Vista Specific Plan 2016	In entitlement process	Between Armstrong Rd. and Rubidoux Blvd.	Specific Plan for a master planned community including 1,239 dwelling units of varying densities on 503 acres with a school site, parks, and 600 acres of open space
JV-20	Rubidoux Commercial Development LLC	In entitlement process	20th and Caterpillar	306,894 sq. ft. business park including 9 industrial buildings
JV-21	Philadelphia Subdivision TTM 37214	In entitlement process	9640 Philadelphia	44 single family units
JV-22	Karaki Western States	In planning process	9306 Jurupa Rd.	7,246 sq. ft. of canopy and convenience store
JV-23	Boureston Medical Clinic	In planning process	SW corner of Pedley Rd. and Mission Blvd.	40,000 sq. ft. of medical clinic building
JV-24	Northtown Housing Development Group	In planning process	5171 Mission Blvd.	31,375 sq. ft. commercial building and 96,446 sq. ft. multi-family housing with 68 apartment units

#	Project Title	Status	Location	Description
JV-25	Tentative Tract No. 33373	In planning process	Northeast side of Sierra, north of Sandra Lane and across from the Oak Quarry Golf Club	97 single family lots
JV-26	Pick-a-Part	In planning process	3760 Pyrite St.	50 acres of vehicle recycling, dismantling salvaging operation with impound yard, outdoor storage and retails sales
JV-27	Agua Mansa Commerce Park Specific Plan	In planning process	East of Rubidoux Blvd. between El Rivino Rd., Agua Mansa Rd, and Hall Ave.	Three high-cube warehouse distribution center buildings totaling 4,277,000 square feet, an approximately 74.5-acre municipal park, and 180,000 sq. ft. of light industrial (alternative 1) or 150,000 sq. ft. of light industrial and 25,000 sq. ft. of commercial retail (alternative 2).
City of Rialto				
R-1	Panattoni I-10/60 Logistics Center	In entitlement process	NW corner of Cactus Ave. and El Rivino Rd.	2,500,000 sq. ft. of warehouse uses
R-2	CapRock Distribution Center III	In entitlement process	NE corner of Willow Ave. and Santa Ana Ave.	582,000 sq. ft. of warehouse uses
R-3	Newmark Merrill Companies- Rialto Marketplace	In entitlement process	NW corner of Valley Blvd. and Riverside Ave.	198,000 sq. ft. of discount super store, 9,800 sq. ft. of tire store, 25,000 sq. ft. of retail and 5,500 sq. ft. of fast food with drive-thru
City of Colton				
C-1	Roquet Ranch Specific Plan	In entitlement process	West of I-215, west of La Cadena Dr., and north of Center St.	336.2-acre master-planned community with 450 detached single family homes, 293 detached paired and conventional detached single-family homes, and 131 attached townhomes; 1.2 acres of retail, 10.3 acre of elementary school, 0.8 acre fire station, 22.3 acres of recreational open space, and 199.7 acres of preserved natural habitat

#	Project Title	Status	Location	Description
C-2	Phase 1 Medical School	In planning process	1440 W. San Bernardino	100,000 sq. ft. of classrooms
C-3	Phase 2 Medical School	In planning process	300 N. Pepper Ave.	245,500 sq. ft. of school facilities
C-4	CUP for hotel, gas station/retail stores and drive-thru	Approved in 2016; construction timing unknown	1601 W. Valley Blvd.	CUP Hotel, gas station/retail stores and drive thru
C-5	Cal-Med Surgery Center	Approved in 2016; construction timing unknown	1281 W. C Street	Surgery center
C-6	G. Street Private Park & H Street Compact Lots Subdivision	Final map in plan review	G St.	Allow 23 compact lots
C-7	Bus Repair Business	In planning process	345 W. H St.	CUP to allow for operation of a 22,250 sq. ft. bus repair business
C-8	Commercial Multi-tenant Retail Store	In planning process	1175 S. Mt. Vernon	Commercial multi-tenant retail store
C-9	La Cadena Dr. Fitness Gym	In planning process	1427 N. La Cadena Dr.	CUP to allow 106 sq. ft. fitness gym and 50,000 sq. ft. hall with dance floor, office, kitchen, and stage
C-10	Smart and Final Extra	Under Construction	1023 N. Mt. Vernon	27,870 sq. ft. of retail
C-11	Colton Ave Lot Subdivision	In planning process	853-897 Colton Ave.	Compact lot subdivision including one common lot to develop 12 two-story, single family homes and private open space
C-12	Fairway Dr. Industrial Building	Under Construction	1601 Fairway Dr.	178,980 sq. ft. industrial building
C-13	Ridgeview Lane residential lots	In planning process	1600 Ridgeview Lane	18 residential lots and extension of a public street
C-14	Steel Rd. Industrial Building	Construction completed November 2016	1559 Steel Rd.	60,000 sq. ft. industrial building
C-15	CUP for industrial center	Approved November 2016	602 Agua Mansa Rd.	CUP to allow 20,000 sq. ft. industrial regional operations center with truck repair, equipment parking, and driver domicile facilities
C-16	Metal Industrial Building	Under construction	785 E. M Street	New 20,600 sq. ft. metal industrial building

#	Project Title	Status	Location	Description
C-17	W. Valley church	In planning process	495 W. Valley	CUP to allow a church in a 2,563 sq. ft. commercial building
C-18	Juan Colorado Family Restaurant	Opening early 2017	195 W. Valley Blvd	Restaurant
C-19	Warehouse	Building Plan Permit Check	2053 Miguel Bustamante Pkwy	174,996 sq. ft. warehouse
C-20	Warehouse	Building Plan Permit Check	2036 Miguel Bustamante Pkwy	124,588 sq. ft. warehouse
C-21	Warehouse	Building Plan Permit Check	2163 Riverside Ave.	447,330 sq. ft. warehouse
City of Riverside				
RS-1	P06-0782 (Tract Map 34908)	In planning process	1006 & 1008 Clark St.	15 single-family dwelling units
RS-2	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
RS-3	P06-1031 (Tract Map 31825)	In planning process	1562 Orange St.	7 Single family dwelling units.
RS-4	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 67-unit senior housing facility within an existing three-story, approximately 50,000 sq. ft. building
RS-5	P14-0183 (Centerpointe Apartments)	In planning process	3105 Market St.	146 apartments
RS-6	P-09-0835 P10-0002	In planning process	3372 University Ave.	132,136 sq. ft. of general office
RS-7	P06-1237 (Jacobs Medical Office)	Entitlements approved in 2008; construction completion unknown	14th and Brockton Ave.	65,281 sq. ft. of medical office
RS-8	P12-0799 & P12-0800 (Tract Map 36516)	Under construction	West side of Palm Ave. between Beechwood and Highland Pl.	7 single-family dwelling units
RS-9	P09-0808 & P08-0809	In planning process	2340 14th St.	Senior housing with 134 beds

#	Project Title	Status	Location	Description
RS-10	P08-0980 & P09-0095	In planning process	3549 Iowa Ave.	Revised Conditional Use Permit to allow double bedroom occupancy and to increase number of student beds by 114 from 760 to 874 at an existing student housing establishment
RS-11	P09-0717 & P09-0718	In planning process	807 Blaine St.	55 apartment units
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				
MJ-1	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
MJ-2	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 Buildings 1 and 2.	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)
MJ-3	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	Proposal to improve existing drainage conditions due to storm flow runoff and installation of storm drains adjacent to the Santa Ana River
MJ-4	Rialto Commerce Center	EIR and project approved in 2011	North of El Rivino Road at Cactus Road, in Rialto (previously unincorporated San Bernardino County)	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

#	Project Title	Status	Location	Description

Source: ICF compiled the list of cumulative projects based on a projects list provided by the City of Fontana and neighboring jurisdictions; 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); 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, and planning documents; and letters sent by the City of Fontana to nearby jurisdictions including the Cities of Colton, Jurupa Valley, Rialto, Riverside, and San Bernardino and the County of San Bernardino in January 2017 requesting information on cumulative projects.

For purposes of this cumulative analysis and as provided in Table 6-1, the cumulative study area contains 92 projects. As summarized in Table 6-2, the development potential of all cumulative projects combined includes 3,804 residential units (plus 201 senior dwelling units and an increase in 114 student beds within student housing), 15,948,410 square feet of warehousing development, 2,721,374 square feet of industrial development, 1,340,126 square feet of retail and commercial development, and 234,417 square feet of office development. In addition, four park facilities, four school facilities, one fire station, one church, and approximately 822 acres of open space are proposed in the cumulative study area.

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).

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	15,948,410 sq. ft.	1,195 sq. ft. per employee	13,346	--
Industrial	2,721,374 sq. ft.	834 sq. ft. per employee	3,263	--
Residential	7 (Fontana), 2,447 (Jurupa Valley), 239 (Riverside), 915 (Colton), 196 (San Bernardino County), 67 (senior) residential units plus 134 additional senior housing beds (Riverside) and 114 student beds (Riverside)	3.95 (Fontana), 3.27 (Riverside), 3.64 (Jurupa Valley) and 1.25 (senior) residents per household	--	14,551
Regional Retail	1,340,126 sq. ft.	1,009 sq. ft. per employee	1,328	--
Office	234,417 sq. ft.	697 sq. ft. per employee	336	
Total			**18,273**	**14,551**
Indirect Generation of Residents from new Employment				**18,045**

*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

Type of Use	Total in Study Area	Generation Factor (Average)*	Number of New Employees	Number of New Residents
To generate residential factors for each jurisdiction, persons per household, 2011–2015 data were used from U.S Census Bureau QuickFacts. The following factors were used for each jurisdiction: Fontana – 4.06, Jurupa Valley – 3.92, Riverside – 3.34, San Bernardino County – 3.33, and Colton – 3.44. For senior housing, a factor of 1.25 persons per unit was utilized and for senior and student housing, one person per bed was assumed. The indirect population growth generation factor is assumed to be 25% of employment multiplied by 3.95 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, which are analyzed in the following manner: first, the significance of the cumulative effect of the WVLCSP 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 significant cumulative effect is evaluated to determine whether the project's contribution is cumulatively considerable.[1] 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. In the case of environmental issues where the proposed project would have no impact, and would not, therefore, contribute to cumulative effects, no analysis of cumulative impacts is undertaken.

6.2.1 Aesthetics

Although 92 past, present, and 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 therefore 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 and associated landscaping. 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 build-out on scenic vistas, the Fontana General Plan EIR concluded that substantial increase in urban uses

[1] If it is determined that no significant cumulative impact will occur, no analysis is undertaken to determine the proposed project's contribution to a less-than-significant cumulative effect.

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.

The cumulative projects closest to the project site include cumulative project #MJ-2, which would include the construction of a 230-kilovolt (kV) transmission line, 230/69 kV electrical substation, and 69 kV sub-transmission lines, would interconnect to a transmission line through Fontana north of Buildings 1 and 2 and SB-5, which is a 196-unit residential project east of the WVLCSP area within an existing residential area.

Cumulative projects #JV-2, JV-17, JV-18, JV-19, and JV-20 would involve development within and around Rattlesnake Mountain and may alter views. Cumulative project #JV-25 would involve development in the existing residential area across from the Oak Quarry Golf Club adjacent to the Jurupa Hills but would not include disturbance to the hills. However, because (1) views of the Jurupa Hills and Rattlesnake Mountain from the residential areas surrounding the project site are already largely blocked by existing development and trees within those neighborhoods and (2) only the upper elevations of the Jurupa Hills and Rattlesnake Mountain are visible and will remain so following cumulative development, cumulative impacts on scenic vistas will not be significant.

Scenic Resources: Cedar Avenue, a San Bernardino County designated scenic route, is located about 0.75 mile east of the proposed project and is the only scenic route with the potential to have views of the proposed Specific Plan area. 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. Thus, the proposed project would not combine with other past, present, and reasonably foreseeable future projects to create a significant cumulative impact related to the Cedar Avenue scenic route. In addition, neither the proposed project nor any of the cumulative projects would involve physical modifications to the Jurupa Hills. Cumulative projects #JV-2, J-17, JV-18, JV-19, and JV-20 would result in some modifications to and around Rattlesnake Mountain; however, because only the upper elevations of the Jurupa Hills and Rattlesnake Mountain are currently visible from surrounding neighborhoods, and will remain so following cumulative development, there would be no substantial damage to the area's scenic resources themselves (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 lands. 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 extends 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 surrounded by and just west of the open space portion 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 would continue to modify the visual appearance of Fontana and surrounding communities in the area; however, the majority of these cumulative projects are more than 1 mile beyond the WVLCSP and are proposed within already developed areas.

Furthermore, these cumulative projects would all be required to undergo 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 will not be significant.

Nighttime Lighting and Daytime Glare: The majority of the cumulative projects identified in Table 6-1 that are within a 1-mile radius of the WVLCSP area would result in new sources of light and glare in the project site vicinity. The area surrounding the Specific Plan area is currently moderately lit at night, while the project site is not currently lit. 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 will 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 light downward to confine direct light rays to the project site (e.g., parking and roadway areas). Street lighting and parking lot lighting would be low-level and shielded to avoid effecting 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. Some of the cumulative projects include one or more of the following land use actions: specific plan, general plan amendment, or rezoning. These land use changes could affect an individual project's 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 neither recommends 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 (PM_{10}), 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 past, present, and reasonably foreseeable future projects, such as those listed in Table 6-1. Because past and present projects would not be under construction at the same time as the proposed project, only reasonably foreseeable future projects could combine with the WVLCSP to create cumulative impacts on localized air quality conditions during construction. These cumulative projects are 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 Rule 402 and 403 to control fugitive dust, but could combine with emissions associated with the proposed project to contribute to exceeding PM_{10}, $PM_{2.5}$, 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), PM_{10}, 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, PM_{10}, 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, resulting in a significant cumulative impact.

As discussed for Impact AQ-2, the proposed project would result in significant unavoidable impacts related to NO_X, volatile organic compound (VOC), and carbon monoxide (CO) emissions during the construction phase, and VOC and NO_X during the operational phase. Implementation of **Regulatory Requirements RR-AQ-1** through **RR-AQ-5**, and **Mitigation Measures AQ-1** through **AQ-10** would reduce the severity of the significant impact 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. With implementation of **Specific Plan Requirement SP-GHG-4**, **Regulatory Requirement AQ-6**, and **Mitigation Measures AQ-11** 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. Therefore, the proposed project would make a cumulatively considerable contribution of NO_X during the construction phase, and reactive organic gases 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 the analysis set forth in Section 4.2.2, *Air Quality*, 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 non-attainment 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 under construction at the same time in close enough proximity to any single sensitive receptor to result in cumulative pollutant concentrations that would significantly impact 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, in addition to the MATES IV cumulative toxic air contaminant (TAC)-source cancer risk, other new or proposed potential TAC-generating projects (related projects) within 1,320 feet of the project site and its proposed truck routes were identified and are reflected in this cumulative TAC analysis.

The primary TAC-source emission associated with the cumulative projects would be diesel particulate emissions associated with any truck trips accessing the cumulative projects and traveling on roadways in the study area. As such, the estimated health risks from these cumulative

projects were totaled. The total maximum estimated cancer risk associated with the cumulative projects identified above is estimated to be 24.68 in one million. This estimate is based on the proposed square footage of all industrial-related land uses and previously completed environmental documentation. It is important to note that the risk value of 24.68 from related projects is likely very conservative in relation to the actual risk that is likely to occur at any given location. As a conservative measure to overstate rather than understate the potential risk impacts, this analysis assumes that the maximum impact from each related project overlaps and would occur at the same location in the project vicinity, even though each project would have different routing of trucks.

Project-source TACs would incrementally increase the background cancer risk by a maximum of 3.79 incidents per million population. The applicable SCAQMD significance threshold for project-level TAC-source cancer risk impacts is 10 incidents per million population. Similarly, SCAQMD significance thresholds state that project contributions to cumulative TAC-source cancer risks would be cumulatively considerable if greater than 10 incidents per million population would occur. As a result, the project would not make a cumulatively considerable contribution to a regional significant cumulative impact because it does 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 vicinity would have a cumulatively significant construction impact related to odor generation. Many of the past, present, and future projects listed in Table 6-1, particularly those within a 1-mile radius of the WVLCSP area, are residential, warehousing, or retail uses that would not generate odors, and the remaining projects (e.g., F-2, SAIA Trucking Terminal building expansion) with the potential for odor generation during operations are located well separated from each other and the WVLCSP. 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 western portion of 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 within or partially within Riverside County, including those in the cities of Jurupa Valley and Riverside, 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 approved, the existing open land between the two mountains would be developed, removing the potential for 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 function. 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 the 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 is required by **Specific Plan Requirement SP-B-3**, 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 impacted 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 electrical transmission line 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 within individual project sites, without proper mitigation, would combine to create 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 on 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 for 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 Energy Resources

All development anticipated under the cumulative scenario, including the project site development and development of the cumulative projects identified in Table 6-1, would be required to comply with the energy efficiency standards in Title 24. In accordance with these requirements, all proposed developments would use site and building design strategies similar to those employed by project site development to avoid wasteful energy consumption. As a result, cumulative electricity and natural gas consumption would not be wasteful, and the cumulative impacts would be less than significant.

Petroleum consumption associated with the proposed project, along with past present, and reasonably foreseeable future new development as outlined in Table 6-1, would be primarily attributable to transportation, especially private automobile use and truck use for industrial

projects. However, the cumulative projects identified in Table 6-1 are within an urban area, and therefore have a range of alternative transportation options. As cumulative development occurs consistent with the Sustainable Communities Strategy for Southern California, development patterns would provide for greater use of transit and alternative modes of transportation. Increased population density and mixed-use development would allow residents to work, shop, and live within a small area, reducing average trip lengths, which would in turn result in lower consumption of fuels. These considerations would reduce wasteful petroleum consumption associated with unnecessary automobile trips and long commutes. State fuel efficiency standards and alternative fuels policies contained in the State Alternatives Fuels Plan would also contribute to a reduction in fuel use. For these reasons, the cumulative impact with regard to the consumption of energy resources would be less than significant.

Project site development, along with past, present, and reasonably foreseeable future projects shown in Table 6-1, would increase demand for energy resources. Such demand would be reduced with adherence to regulatory requirements related to energy conservation, as well as mitigation recommended for the proposed project and other cumulative projects in order to minimize the wasteful, inefficient, or unnecessary consumption of energy. For instance, the State of California has implemented a variety of energy conservation and efficiency laws and regulations, as described in the *Regulatory Setting* subsection of Section 4.2.5, *Energy*. Project Site development and the cumulative projects cited in Table 6-1 would be required to comply with these regulations in order to improve energy efficiency in new residential and non-residential developments.

On the utility side, the State of California has Renewables Portfolio Standard goals that seek to increase the amount of renewable energy resources used by certain utilities. The Renewables Portfolio Standard goal for California is to have 33 percent of an electricity seller's load served with renewable power by 2020 (Executive Order S-14-08 and Senate Bill X1 2). Based on the implementation of required energy conservation measures, the proposed project in combination with the cumulative projects cited in Table 6-1 would not result in wasteful use of energy, and cumulative impacts would therefore be less than significant.

6.2.6 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 to 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 impact 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 on off-site properties, cumulative impacts would be less than significant.

6.2.7 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, the cumulative effect of past, present and reasonably foreseeable future projects in the absence of implementing specific GHG emissions reduction strategies ("business as usual") (BAU) would be significant. SCAQMD methodology for analysis of GHG impacts for individual projects thus represents determining whether a project's contribution to this significant cumulative impact is considerable.

On January 20, 2017, the California Air Resources Board released the proposed Second Update to the Scoping Plan, which identifies the State's post-2020 reduction strategy. The Second Update would reflect the 2030 target of a 40 percent reduction below 1990 levels, set by Executive Order B-30-15 and codified by Senate Bill 32. Thus, projects that do not achieve such a 40 percent reduction would make a considerable contribution to the significant cumulative statewide GHG impact. As shown Section 4.2.7, *Greenhouse Gas Emissions*, the proposed project would exceed the GHG emissions reduction target, providing a 42.94 percent reduction in GHG emissions. In addition, as shown in Section 4.2.7, the WVLCSP is consistent with the City of Fontana's draft Climate Action Plan. Therefore, the proposed project's contribution to a cumulatively significant GHG impact related to global climate change would not be considerable.

6.2.8 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 use, 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 site 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-4**, **Standard Requirements SR-HM-1** and **SR-HM-2**, 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, only cumulative project #SB-5 is located immediately adjacent to the WVLCSP area. The majority of the other cumulative projects are located beyond a 1-mile radius of the Specific Plan area. 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-2** and **SR-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.

6.2.9 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 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 cumulative project #SB-5, a residential project located east of Locust Street at 7th Street in an unincorporated area of San Bernardino County. This project, in addition to other cumulative projects within the vicinity of the WVLCSP area (cumulative projects #SB-6, SB-1, JV-20, JV-19, JV-5, and JV-25), would be subject to similar water quality protection requirements and implementation of Best Management Practices as the WVLCSP, resulting in less-than-significant cumulative impacts.

The proposed WVLCSP project would also have less-than-significant impacts on hydrology and water quality with adherence to regulatory requirements, standard requirements, and mitigation measures. 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 **Specific Plan Requirements SP-HW-1** and **SP-HW-2**, **Regulatory**

Requirements RR-HW-1 through **RR-HW-4**, and **Standard Requirements SR-G-1** and **SR-HW-1**. While it is not likely that substantial construction of adjacent cumulative projects would occur at the same time, the implementation of Best Management Practices at the cumulative project sites and at the WVLCSP would ensure the combined impacts of the cumulative projects would not be cumulatively considerable, even if their construction would occur simultaneously.

6.2.10 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 in-migration 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 92 projects and specific plans. Cumulative projects #JV-2, JV-19, JV-27, C-1, RS-2, and MJ-1 include one or more of the following land use actions: specific plan, general plan amendment, or rezoning. With the exception of cumulative projects #JV-27 and MJ-1, 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 4.2.10, *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. 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 the area's land uses. As a result, there would be no significant cumulative impact to which project site development could contribute.

6.2.11 Noise

The cumulative impacts analysis for noise and vibration includes analysis of existing and future year (2040) noise 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 4.2.11, *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 three of the cumulative projects—#SB-1, High Cube Warehouse; #SB-5, residential project; and #J-25, Tentative Tract No. 33373—could be constructed in proximity to the proposed project. 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 its 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). In addition to the existing noise setting, a future year (2040) cumulative noise condition was evaluated for both *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 4.2.11-24, when considering future growth and development, the future noise levels would increase by 1 to 4 dB during future year (2040) conditions. 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 2040 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 Measure NOI-1**, 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 4.2.11, *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 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 SB-1, SB-5, and JV-25. While it is unlikely that these 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 since 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 4.2.11, *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.

6.2.12 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 3,804 residential units, 15,948,410 square feet of warehousing development, 2,721,374 square feet of industrial development, 1,340,126 square feet of regional retail and commercial development, and 234,417 square feet of office development. This would result in 14,551 new residents and 18,273 new employees within the cumulative analysis area. Up to an additional 18,045 additional residents could be attracted to the area as the indirect result of the jobs created by the new employment opportunities of cumulative projects.

The housing, commercial, and industrial developments proposed or under construction within approximately 3 miles of the project area, including developments within Fontana, Jurupa Valley, Rialto, Colton, Riverside, and unincorporated San Bernardino County and Riverside County, as shown in Figure 6-1, generally occur on undeveloped land. Because the WVLCSP does not involve displacement of residents or housing and the project would not contribute to a significant cumulative impact related to displacement should one exist, further discussion of potential cumulative effects of such displacement is unnecessary.

Development of the cumulative projects would create new housing and permanent jobs, and would thereby would 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 5 percent local unemployment rate, some employees may relocate to work within the cumulative impacts 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 18,045 residents to the area, the residential cumulative projects would provide housing for approximately 14,551 residents (see Table 6-1). As described above, the vacancy rate for residential units is 3.5 percent within the City of Fontana and 11.3 percent in 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.

6.2.13 Public Services

The geographic scope for cumulative effects on public services, also discussed below in Section 6.2.14, *Recreation*, and Section 6.2.16, *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 3,804 residential units, 15,948,410 square feet of warehousing development, 2,721,374 square feet of industrial development, 1,340,126 square feet of regional retail and commercial development, and 234,417 square feet of office development. This would result in 14,551 new residents and 18,273 new employees within the cumulative analysis area. Up to an additional 18,045 additional residents could be attracted to the area as the indirect result of the jobs created by the new employment opportunities of cumulative projects. These projects would collectively increase demand for police, fire, schools, parks/recreation, water, wastewater, and solid waste services and 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.

6.2.14 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 surrounding jurisdictions. At least four new parks would be built as part of the cumulative projects including parks within the Southwest Fontana Logistics Center (#F-17), Highland Park residential subdivision (#JV-2), and New Rio Vista Specific Plan (#JV-19), and a municipal park within the Agua Mansa Commerce Park Specific Plan (#M-1).

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 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 that the proposed project could contribute to.

6.2.15 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 4.2.15, *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 the 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 #JV-1 (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 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 (2040) cumulative scenario at 47 of the 65 intersections analyzed in the TIA, as well as at three queueing movement locations, eight of ten freeway segments, and eight of 11 merge/diverge locations analyzed in the WVLCSP TIA even without development of the proposed WVLCSP.

If improvements are installed as specified in Table 7-5 (Intersection Analysis for Horizon Year [2040] Conditions with Improvements) in Appendix L, all affected intersections would operate at acceptable LOS for the long-term (2040) cumulative with project scenario. However, because funding of needed improvements on regional roadways and through implementation of San Bernardino County's Nexus Study program and Riverside County's Transportation Uniform Mitigation Fee (TUMF) program would not address all improvement needs, the timing of such improvements cannot be ensured. 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 be significant. 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 San Bernardino County. However, as explained in Section 4.2.15, *Transportation and Traffic*, because there are no programs in place for improvements needed to address cumulative traffic impacts at locations outside of the Nexus Study and TUMF program and the City of Fontana does not have authority to require construction of needed improvements outside of Fontana, there is no assurance that needed physical mitigation measures would be constructed. Therefore, significant cumulative impacts would result. Because the proposed project would contribute traffic to locations where 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, as demonstrated in Impact TRA-1.

Hazardous Designs/Incompatible Uses: Past, present, and reasonably foreseeable future projects identified in Table 6-1 are generally built or proposed in accordance with the City of Fontana, Jurupa Valley, or Riverside; San Bernardino County; or California Department of Transportation design standards. Most of these projects are not near the project site and are too distant to cause a cumulative hazardous situation, with the exception of cumulative project #SB-5, located directly adjacent to the east of the WVLCSP area. However, cumulative project #SB-5 along with all the other cumulative projects, as well as the proposed WVLCSP 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, especially cumulative project #SB-5 adjacent to the WVLCSP, 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.

All other cumulative projects are 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 4.10, *Land Use and Planning*, its contribution to significant cumulative impacts would not be considerable.

6.2.16 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 projects closest to the proposed projects are located within unincorporated San Bernardino and within the city of Jurupa Valley, and would be served by different agencies than those serving the WVLCSP area, with the exception of electricity (Southern California Edison) 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 3,804 residential units, 15,948,410 square feet of warehousing development, 2,721,374 square feet of industrial development, 1,340,126

square feet of regional retail and commercial development, and 234,417 square feet of office development. This would result in 14,551 new residents and 18,273 new employees within the cumulative analysis area. Up to an additional 18,045 additional residents could be attracted to the area as the indirect result of the jobs created by the new employment opportunities of cumulative projects.

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.

Chapter 7
Growth Inducement

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 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 would result in the creation of approximately 2,907 new jobs, replacing the potential for direct population growth of 4,532

residents[1] that would have occurred 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 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 4.2.12, *Population and Housing*, the unemployment rate within the City of Fontana and County of San Bernardino is approximately 5.0 percent. 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 4.2.12, *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 2,959 new residents within the area from increased employment opportunities should new employees at the logistics center choose to move into 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 independent trucking companies. 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.

As discussed in Section 4.2.12, *Population and Housing*, the City of Fontana has a 2.0 percent homeowner vacancy rate and a 3.1 percent rental vacancy rate (U.S. Census Bureau 2016a). The County of San Bernardino has a 2.4 percent homeowner vacancy rate and a 5.8 percent rental

[1] The number of residents associated with the 1,154 dwelling units permitted by the Valley Trails Specific Plan is based on the City's current (2016) 4.07 residents per occupied housing and 3.5 percent vacancy rate.

vacancy rate (U.S. Census Bureau 2016b). 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 warehouse distribution 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 (4,532 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 2,959 residents.[2] 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 or the demands created by the proposed project.

Existing infrastructure would be extended to the site from adjacent areas, including roads, water, wastewater, stormwater, 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 provide needed sewer capacity for the WVLCSP. Off-site roadway improvements, including turning lanes and pavement improvements needed to support truck traffic generated by the proposed project, would also be provided.

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 detained on site, such that 100-year peak

[2] The population growth generation factor is assumed to be 25 percent of employment multiplied by 4.07 persons per household, which represents the average household size in the City of Fontana for the year 2016 (California Department of Finance 2017).

flows following buildout of the Specific Plan area are no greater than 90 percent of the 25-year peak flow rate for existing conditions. Thus, no new drainage facilities would be constructed that could remove an existing constraint to development. While the proposed project would increase the carrying capacity of existing storm drainage systems into which Specific Plan area runoff would flow, such excess capacity would not be an inducement to growth because all new development within the area would be required to meet the same storm flow detention standard as the proposed project.

All new infrastructure required to serve the proposed project would be sized according to City design requirements. No additional capacity beyond what is needed for the project would be made available by the construction of the off-site lift station and sewer 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 appropriate level of service capacity to existing, approved, and proposed development in Fontana, and to mitigate the impacts of the proposed WVLCSP on the street systems of surrounding communities.[3] On- and off-site transportation improvements are required to improve accessibility to the City-approved truck route plan for the project site through Fontana, the County of San Bernardino, and the cities of Jurupa Valley and Riverside. Improvements to adjacent streets—Locust Avenue, Armstrong Avenue, Jurupa Avenue, 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) program[4] 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 also provide fair share contributions to fund off-site improvements. These off-site improvements are detailed in Chapter 3, *Project Description*, and Section 4.2.15, *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.

[4] See Chapter 3 for discussion of proposed off-site roadway improvements to accommodate project-related truck turning movements along proposed truck routes between the WVLCSP and the area freeway system. See Section 4.2.15, *Transportation and Traffic*, for a discussion of San Bernardino County's Nexus Study and Riverside County's TUMF programs.

Chapter 8
List of Preparers

8.1 City of Fontana (Lead Agency)

Community Development Department

Debbie Brazill, Deputy City Manager

Zai AbuBakar, Director of Community Development

Orlando Hernandez, Planning Manager (Project Manager)

Public Works Department

Richardo Sandoval, P.E., PLS, Director of Engineering/City Engineer

Kathy Raasch, Senior Engineer

Kevin Ryan, Strategic Transportation Engineer Manager

8.2 Consultants

ICF (City Consultant)

Chad Beckstrom, Principal/Project Manager

Tanvi Lal, Senior Environmental Planner

Karen Crawford, MA RPA, Senior Archaeologist reviewer

Peter Hardie, Noise Specialist reviewer

Laura Rocha, Hydrology reviewer

Mario Barrera, Hazards/Geology reviewer

Marisa Flores, Biology reviewer

Saadia Byram, Technical Editor

Elizabeth Irvin, Technical Editor

Metis Environmental Group (EIR, Specific Plan, Environmental Consultant)

Lloyd Zola, Principal

Melyssa Sheeran, Environmental Planner

Patricia Berryhill, Principal, Environmental Planner

Julia King, Environmental Planner

Thienes Engineering, Inc. (Engineering, Hydrology, Water Quality, Sewer)

Brian L. Thienes, P.E.

Paul McClellan, P.E.

Urban Crossroads (Traffic, Air Quality, Climate Change, and Noise)

Aric Evatt, President (Traffic)

Charlene Hwang So, Senior Associate (Traffic)

Haseeb Qureshi, Senior Associate (Air Quality, Greenhouse Gas Emissions)

Alex Wolfe, Analyst (Noise)

RBF Consulting (Biological Resources)

Travis J. McGill, Biologist, Natural Resources

Thomas J. McGill, Natural Resources

Chris Johnson, PWS, Delineation of State and Federal Jurisdictional Waters

Golden State Land and Tree Assessment (Phase I Environmental Site Assessment)

George Wirtes, REA

BCR Consulting, LLC. (Cultural Resources)

David Brunzell, M.A., RPA

Leighton and Associates, Inc. (Geotechnical Investigation)

Philip A. Buchiarelli, Principal Geologist

David C. Smith, RCE 46222, Senior Principal

Engineering Resources of Southern California, Inc. (Water Supply)

Ronald Worthington, Civil Engineer

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Chapter 3 Project Description

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