

DRAFT
Environmental Impact Report
Rio Vista Specific Plan Project
City of Jurupa Valley, Riverside County, California
State Clearinghouse Number 2018121005

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ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius (Centigrade)
°F	degrees Fahrenheit
µg/m ³	micrograms per cubic meter
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
ACM	asbestos-containing material
ACP	Alternative Compliance Plan
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
AFY	acre-feet/year
AIA	Airport Influence Area
AIC	Archaeological Information Center
AICUZ	Air Installation Compatibility Use Zone
AIRFA	American Indian Religious Freedom Act
ALUC	Airport Land Use Commission
AMEC	AMEC Earth & Environmental, Inc.
AMI	Area Median Income
AMSL	above mean sea level
APA	American Planning Association
APCD	Air Pollution Control District
APE	Area of Potential Effect
APN	Assessor's Parcel Number
AQI	Air Quality Index
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
ARPA	Archaeological Resources Protection Act
ARU	Archaeological Research Unit
ASHRAE	American Society of Heating, Refrigerating, and Air Conditioning Engineers
AST	aboveground storage tank
ATCM	Airborne Toxic Control Measures
BAAQMD	Bay Area Air Quality Management District
BAU	business-as-usual
BCF	billion cubic feet

Acronyms and Abbreviations

BCF/year	billion cubic feet per year
BGS	below ground surface
BLM	Bureau of Land Management
BMP	Best Management Practice
BP	Before Present
BRA	Biological Resources Assessment
BRM	bedrock mortar
BTU	British Thermal Unit
BVOC	biogenic volatile organic compound
C ² ES	Center for Climate and Energy Solution
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CAGN	Coastal California gnatcatcher
CalEEMod	California Emissions Estimator Model
Cal/EPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
Cal/OSHA	California Occupational Health and Safety Administration
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CBC	California Building Standards Code
CBSC	California Building Standards Commission
CC&Rs	Covenants, Conditions, and Restrictions
CCCC	California Climate Change Center
CCR	California Code of Regulations
CCS	Carbon Capture and Sequestration
CDF	California Department of Finance
CDFW	California Department of Fish and Wildlife
CDP	Census Designated Places
CDR	Carbon Dioxide Removal
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System

CESA	California Endangered Species Act
CFC	chlorofluorocarbon
CFD	Community Facilities District
CFE	Community Facilities District
CFR	Code of Federal Regulations
CH ₄	methane
CHL	California Historical Landmarks
CHP	California Highway Patrol
CHRIS	California Historical Resources Information System
CIWMP	Countywide Integrated Waste Management Plan
CMP	Congestion Management Plan
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
CNUSD	Corona-Norco Unified School District
CO	carbon monoxide
CO ₂ e	carbon dioxide equivalent
CPHI	California Points of Historical Interest
CPUC	California Public Utilities Commission
CR	Commercial Retail
CRA	Cultural Resources Assessment
CREC	Controlled Recognized Environmental Conditions
CRHR	California Register of Historical Resources
CRIMP	Cultural Resources Impact Mitigation Plan
CRPR	California Rare Plant Rank
CSSF	Community Safety, Services, and Facilities
CTC	County Transportation Commission
CTR	California Toxics Rule
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
dBA/DD	dBA per each doubling of the distance
DBH	diameter at breast height
DEH	Riverside County Department of Environmental Health Hazardous Materials Branch
DOJ	Department of Justice
DPM	diesel particulate matter

Acronyms and Abbreviations

DSF	Delhi Sands flower-loving fly
DSN	Desert Side-notched
DTSC	California Department of Toxic Substances Control
du	dwelling unit
du/acre	dwelling unit per acre
DWR	California Department of Water Resources
EDD	California Employment Development Department
EIC	Eastern Information Center
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act
EJSM	Environmental Justice Screening Model
EMD	Emergency Management Department
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
EPA	United States Environmental Protection Agency
ESA	Environmentally Sensitive Area
EV	electric vehicle
EVA	Emergency Vehicle Access
FAA	Federal Aviation Administration
FAR	floor area ratio
FCS	FirstCarbon Solutions
FEMA	Federal Emergency Management Agency
FGC	Fish and Game Code
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GACN	coastal California gnatcatcher
GHG	greenhouse gas
GIS	Geographic Information System
GLO	General Land Office
GPA	General Plan Amendment
gpm	gallons per minute
GPR	ground-penetrating radar
GPS	Global Positioning System
GVWR	Gross Vehicle Weight Rating
GWh	gigawatt-hours
GWh/y	gigawatt-hours per year

GWP	global warming potential
HAP	Hazardous Air Pollutants
HBW	home-based work
HCD	California Department of Housing and Community Development
HCDA	Housing and Community Development Act
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HDR	High Density Residential
HDT	Heavy-Duty Trucks
HEPA	high-efficiency particulate air
HFC	hydrofluorocarbon
HHDR	Highest Density Residential
HMBP	Hazardous Materials Business Plan
HOA	Homeowner's Association
HOV/HOT	High Occupancy Vehicle/High Occupancy Toll
HRA	Health Risk Assessment
HREC	Historical Recognized Environmental Conditions
HRI	California Historic Resources Inventory
HSC	Health and Safety Code
HUD	United States Department of Housing and Urban Development
HVAC	heating, ventilation, and air conditioning
HWCL	Hazardous Waste Control Law
IETTC	Inland Empire Technical Trade Center
in/sec	inches per second
IPCC	United Nations Intergovernmental Panel on Climate Change
ISO	Independent System Operator
ISTEA	Intermodal Surface Transportation Efficiency Act
IT	Information Technology
JARPD	Jurupa Area Recreation and Park District
JCSD	Jurupa Community Services District
JUSD	Jurupa Unified School District
kW	kilowatts
L&L	L&L Environmental, Inc.
LAFCo	Local Agency Formation Commission
LBP	lead-based paint
LBPPA	Lead-Based Paint Poisoning Prevention Act
LCFS	Low Carbon Fuel Standard
LDC	Land Development Category

Acronyms and Abbreviations

L _{dn}	day/night average sound level
LDV	Light-Duty Vehicle
LED	light-emitting diode
LEED®	Leadership in Energy and Environmental Design
L _{eq}	equivalent sound level
LEV	Low Emission Vehicle
LHMP	Local Hazard Mitigation Plan
LI	Light Industrial
LID	Low Impact Development
L _{max}	maximum noise level
L _{min}	minimum noise level
LOS	Level of Service
LRA	Local Responsibility Area
LSA	LSA Associates, Inc.
LSE	load-serving entities
LST	Localized Significance Threshold
LUST	leaking underground storage tank
MBTA	Migratory Bird Treaty Act
MDR	Medium Density Residential
MERV	Minimum Efficiency Reporting Value
MG	million gallon
mg/L	milligrams per liter
mgd	million gallons per day
MHDR	Medium High Density Residential
MLD	Most Likely Descendant
MM	Mitigation Measure
MMRP	Mitigation Monitoring and Reporting Program
mph	miles per hour
MPO	Metropolitan Planning Organization
MRF	Material Recovery Facility
MRZ	Mineral Resources Zone
MS4	Municipal Separate Storm Sewer System
MSHCP	Multiple Species Habitat Conservation Plan
MT	metric tons
MTS	Metropolitan Transportation System
MW	megawatt
MWD	Metropolitan Water District of Southern California
MXD	mixed-use development

N/TDS	Nitrogen and Total Dissolved Solids
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NEHRP	National Earthquake Hazards Reduction Program
NEPA	National Environmental Policy Act
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NFIP	National Flood Insurance Program
NFPA	National Fire Protection Association
NHM	Natural History Museum of Los Angeles County
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NO ₂	nitrogen dioxide
NOAA Fisheries	National Marine Fisheries Service
NOC	Notice of Completion
NOI	Notice of Intent
NOP	Notice of Preparation
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRC	Noise Reduction Coefficient
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NTR	National Toxics Rule
NWIC	Northwest Information Center
O ₃	ozone
OAL	Office of Administrative Law
OEHHA	California Office of Environmental Health Hazard Assessment
OHWM	ordinary high water mark
ONAC	Federal Office of Noise Abatement and Control
OPR	Governor's Office of Planning and Research
OS-CH	Open Space Conservation Habitat
OSHA	Occupational Safety and Health Administration
OS-MIN	Open space-Mineral Resources
OSO	Insurance Service Office
OS-R	Open Space Recreation
OS-W	Open Space-Water

Acronyms and Abbreviations

PA	Planning Area
PCB	polychlorinated biphenyl
PCC	Portland cement concrete
PCE	Passenger Car Equivalent
pCi/L	picocuries per liter
PDF	Project Design Feature
PF	Public Facility
PFC	perfluorocarbon
PG&E	Pacific Gas and Electric Company
Phase I ESA	Phase I Environmental Site Assessment
PM ₁₀	particulate matter, including dust, 10 micrometers or less in diameter
PM _{2.5}	particulate matter, including dust, 2.5 micrometers or less in diameter
ppb	parts per billion
ppm	parts per million
PPP	Plans, Policies, and Programs
PPV	peak particle velocity
PQP	Public/Quasi Public
PRC	Public Resources Code
PRIMP	Paleontological Resources Impact Mitigation Program
PV	photovoltaic
PVC	polyvinyl chloride
RCA	Regional Conservation Authority
RCCD	Riverside Community College District
RCP	Regional Comprehensive Plan
RCRA	Resource Conservation and Recovery Act of 1976
RCSD	Rubidoux Community Services District
REC	Recognized Environmental Condition
Recology	Integrated Resource Recovery Company
RecycleSmart	Central Contra Costa County Solid Waste Authority
REL	Reference Exposure Level
RHNA	Regional Housing Needs Assessment
RivCo Parks	Riverside County Regional Parks and Open Space District
RIVCOM	Riverside County Transportation Model
RMP	Risk Management Plan
rms	root mean square
ROG	reactive organic gases
RPS	Renewables Portfolio Standard
RPW	relatively permanent water

RTA	Riverside Transit Agency
RTP	Regional Transportation Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
RWQCP	Riverside Water Quality Control Plant
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SED	socioeconomic data
SF ₆	sulfur hexafluoride
SFPUC	San Francisco Public Utilities Commission
SGMA	Sustainable Groundwater Management Act
SHWS	State/Tribal Hazardous Waste Sites
SIP	State Implementation Plan
SLIC	Spills, Leaks, Investigations, and Cleanups
SMARA	California Surface Mining and Reclamation Act
SMGB	California State Mining and Geology Board
SNAP	California Significant New Alternatives Policy
SO ₂	sulfur dioxide
SoCAB	South Coast Air Basin
SoCal APG	Southern California Climate Adaption Planning Guide
SoCalGas	Southern California Gas Company
SP	Specific Plan
SPCC	Spill Prevention, Control, and Countermeasure
SP Zone	Specific Plan Zone
SR	State Route
SRA	State Responsibility Area
State Water Board	California State Water Resources Control Board
STC	Sound Transmission Class
SVP	Society of Vertebrate Paleontology
SWPPP	Storm Water Pollution Prevention Plan
TAC	toxic air contaminants
TAZ	Traffic Analysis Zone
TCM	Transportation Control Measures

Acronyms and Abbreviations

TCR	Tribal Cultural Resource
TCRMP	Tribal Cultural Resource Management Plan
TDM	Transportation Demand Management
TDS	total dissolved solids
TEA-21	Transportation Equity Act for the 21 st Century
Tg	teragram
therms/y	therms per year
TIA	Traffic Impact Analysis
TIN	total inorganic nitrogen
TIS	Traffic Impact Study
TMA	Transportation Management Association
TMDL	Total Maximum Daily Load
TNW	traditional navigable water
TOD	Transit Oriented Development
TRU	Transport Refrigeration Unit
TSCA	Toxic Substances Control Act
UBC	Uniform Building Code
UFC	Uniform Fire Code
UMTA	Urban Mass Transit Administration
UPRR	Union Pacific Railroad
USACE	United States Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank
UWMP	Urban Water Management Plan
Valley Air District	San Joaquin Valley Air Pollution Control District
V/C	volume to capacity ratio
VdB	velocity in decibels
VDECS	Verified Diesel Emission Control Strategies
VHDR	Very High Density Residential
VLDR	Very Low Density Residential
VMT	Vehicle Miles Traveled
VOC	volatile organic compounds
WDR	Waste Discharge Requirements
WEAP	Worker Environmental Awareness Program

WMWD	Western Municipal Water District
WQMP	Water Quality Management Plan
WRCOG	Western Riverside Council of Governments
WSA	Water Supply Assessment
WWTP	Wastewater Treatment Plant
ZEV	Zero-Emission Vehicle
ZNE	zero net energy

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EXECUTIVE SUMMARY

Purpose

This Draft Environmental Impact Report (Draft EIR) is prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts associated with the implementation of the Rio Vista Specific Plan Project (State Clearinghouse No. 2018121005). This document is prepared in conformance with CEQA (Public Resources Code [PRC] § 21000, *et seq.*) and the CEQA Guidelines (California Code of Regulations [CCR], Title 14, § 15000, *et seq.*).

The purpose of this Draft EIR is to inform decision-makers, representatives of affected and responsible agencies, the public, and other interested parties of the potential environmental effects that may result from implementation of the proposed Rio Vista Specific Plan Project (proposed project). This Draft EIR describes potential impacts relating to a wide variety of environmental issues and methods by which these impacts can be mitigated or avoided.

Project Summary

Project Location

The project site is located north of State Route (SR) 60, between Armstrong Road and Rubidoux Boulevard, in the City of Jurupa Valley (City), in Riverside County, California. The project site is approximately 917.3 acres and consists of the Rio Vista Specific Plan Area. Regional access to the site is available off SR-60 from the south, via Armstrong Road and Rubidoux Boulevard. Interstate 10 (I-10) also provides regional access to the site from the north, via Sierra Avenue and Cedar Avenue. The project site includes the following 17 Assessor's Parcel Numbers (APNs): 175-080-010 and -021, 175-090-001, -002, -003, -004, and -005, 175-100-003, -005, and -006, 175-150-002, 175-160-001 and -005, 177-030-012 and -0014, and 177-040-002 and -008.

Project Description

The County of Riverside approved the Rio Vista Specific Plan No. 243 and certified the associated EIR (State Clearinghouse No. 1988122608—Comprehensive GPA No. 174 and Specific Plan No. 243, Rio Vista) on April 14, 1992. The Specific Plan area was, at that time, located in unincorporated Riverside County. When the City of Jurupa Valley was incorporated in 2011, the Rio Vista Specific Plan Area was included within the City's boundaries. The proposed project involves a new Rio Vista Specific Plan to replace the existing Rio Vista Specific Plan approved by the County of Riverside in 1992.

The proposed project involves a master planned community consisting of Very Low Density Residential (VLDR), Medium Density Residential (MDR), Medium High Density Residential (MHDR), High Density Residential (HDR), Highest Density Residential (HHDR), Light Industrial and Business Park, a public K-8 educational facility, open space and recreation areas, and circulation improvements. For the residential portions of the proposed project, a combination of attached and detached units is proposed, and maximum building heights would vary between 30 and 45 feet.

The proposed project includes the following major land use components on the 917.3 acres:

- Up to 1,697 dwelling units (du) on 204.4 acres, yielding an average density of 1.8 du per acre (du/acre).
- 1,269,774 square feet of Light Industrial building square footage on 58.3 acres.
- 1,428,768 square feet of Business Park building square footage on 82.0 acres.
- 510.8 acres of natural open space.
- 14.3 acres of recreational amenities.
- 13.4 acres for a new public elementary school.

Eleven Planning Areas (PAs) are planned for residential development. One PA (PA 18) would be reserved for a K-8 school development by Jurupa Unified School District (JUSD). If the JUSD does not proceed with the development of a school, the Planning Area would be available for recreational or residential development under its MDR land use designation.

Light Industrial and Business Park

Five PAs would be developed as a contemporary commerce center on 140.3 acres located in the eastern portion of the site. This would include Light Industrial uses (PAs 12 and 13) on approximately 58.3 acres, with a maximum of 1,269,774 square feet of building space, and Business Park uses (PAs 14, 15, and 16) on 82 acres, with a maximum of 1,428,768 square feet of building space. The maximum square feet includes approximately 391,476 square feet associated with the Inland Empire Technical Trade Center (IETTC), which is intended to be constructed and operated by the Riverside Community College District (RCCD).

Open Space

The proposed project would include approximately 529.2 acres (58 percent of the total acreage) of Open Space and Recreational land uses. In addition, a bike path and soft-surface trail would be provided within a 30-foot-wide easement along 20th Street in the central area of the project site. Open Space and Recreational land uses would include the following:

- Approximately 510.8 acres of open space, consisting of a combination of natural open space, revegetated manufactured slopes, and regraded and revegetated slopes. Many of the existing informal trails would remain, and no new trails into the open space would be created.
- Recreational amenities on 18.4 acres would include a 14.3-acre community park (PA 19) with sports fields, open turf play areas, sports courts, a tot lot/playground, and picnic areas; and approximately five Neighborhood Parks ranging from around 0.75 acre to 1 acre, located throughout the community, with features such as benches, planters, and open lawn areas.
- An integrated system of hard and soft-surface (decomposed granite) trails would provide access from the residential neighborhoods to the school site, Community Park, and informal dirt trails located in the Open Space. Trails for equestrians, bicyclists, and pedestrians would be provided.

Circulation

The proposed project would include the construction of approximately 19.6 acres of roadways, including an approximately 1.3-mile extension of 20th Street to be developed as a Modified

Secondary Highway (100-foot right-of-way) and enhanced with a 30-foot-wide trail easement; as well as Collector Roads (74-foot right-of-way) and Local Streets (56-foot right-of-way).

Utilities

The utility providers listed below would service the proposed project. Water and sewer are discussed in greater detail below.

- Electricity: Southern California Edison (SCE)
- Gas: Southern California Gas Company (SoCalGas)
- Water: Rubidoux Community Services District (RCSD), and Jurupa Community Services District (JCSD) for PA 7 only
- Sewer: RCSD and JCSD for PA 7 only

Off-site Improvements

Off-site sewer and stormwater drainage improvements would connect the project site to existing infrastructure. No off-site water improvements would be included as part of the proposed project.

Phasing

The proposed project is anticipated to be developed in four phases, which would be timed to respond to market demands and to provide for a logical and orderly extension of roadways, public utilities, and infrastructure. Development would generally start in the northwestern area of the Specific Plan, proceed east in Phase 2, then move to the southwest in Phases 3 and 4. PA 7, located in the far northwest portion of the project site, would likely be developed as part of Phase 5. However, the phases could be implemented in any order that would allow for logical and orderly development.

Phase 1 would include the development of residential PAs 4, 5, 6, as well as water tanks and a potential public school¹ in PAs 17 and 18 respectively; recreational open space in PA 19; and a water basin open space area in PA 20. Phase 2 would include the development of residential PAs 1, 2, and 3.

The proposed extension of 20th Street would be part of Phase 1, with full width improvements to be completed in Phase 2. The proposed Business Park, consisting of PAs 12, 13, 14, 15, and 16, would be developed under Phase 3, as would the residential PA 9. Finally, Phase 4 development would include residential PAs 7, 8, 10, and 11.

Project Objectives

As stated in the Rio Vista Specific Plan, the underlying purpose of the proposed project would establish a mixture of residential and employment generating land uses arranged in a functional and efficient manner which complements the surrounding community and provides convenient access to the nearby regional circulation system. Specifically, the objectives of the proposed project are to:

¹ As part of the proposed project, JUSD would have an option of purchasing PA 18 for the purpose of constructing a K-8 school.

1. Provide a long-range comprehensive planning approach to guide the development of Rio Vista.
2. Assist the City in meeting its housing goals and reflect anticipated market needs and public demand, by providing a diverse range of home types with the intent to blend into the City of Jurupa Valley's rural character.
3. Anticipate market demand by providing for a mixture of residential, light industrial, and business park land uses that are marketable and financially feasible within the City's evolving economic profile.
4. Provide economic growth and employment opportunities with the City by authorizing the development of light industrial and business park land uses at a sufficient scale to attract financially stable, long-term tenants and fund the necessary proposed critical infrastructure improvements that will serve Rio Vista and the greater Jurupa Valley community.
5. Adopt a Specific Plan that allows for a range of industrial uses, research and development uses, business park and other nonresidential uses that would encourage private capital investment sufficient to support the significant public infrastructure improvements proposed on the project site.
6. Provide for the establishment of a mixed-use master planned community that is sensitive to the environment and is aesthetically pleasing.
7. Create a community design that complements the land's topography by respecting and preserving the geology, rock formations, and basic landforms.
8. Protect valuable scenic resources within large expanses of open space, thereby preserving Rio Vista's character and identity and the surrounding region.
9. Provide a potential JUSD school site to serve the needs of Rio Vista and the surrounding area, if JUSD determines it is needed to serve projected demand.
10. Provide a community park and neighborhood parks to meet the needs of Rio Vista residents and surrounding neighborhoods.
11. Establish a cohesive trail system that promotes active recreational uses and provides pedestrian links between the school site, parks, residential neighborhoods, and open space.
12. Provide guidelines for architecture, landscaping, entry treatments, walls, fencing, parks, and trails that reinforce this community's identity and its relationship to the City of Jurupa Valley.

Significant Unavoidable Adverse Impacts

The proposed project would result in the following significant unavoidable impacts:

- **Project-level Inconsistency with Air Quality Management Plan:** The proposed would exceed the South Coast Air Quality Management District's (SCAQMD) regional operational significance thresholds and be inconsistent with the Air Quality Management Plan (AQMP), resulting in significant impacts.

- **Cumulative Inconsistency with AQMP:** In addition to project-level impacts, and because other projects within the South Coast Air Basin (SoCAB) also have the potential to conflict with the AQMP, the proposed project's impacts due to a conflict with the AQMP would be cumulatively considerable.
- **Project-level air quality standard violation:** The proposed project would exceed the regional emissions thresholds for VOCs, NO_x, CO, PM₁₀, and PM_{2.5} during construction and operations, resulting in significant impacts.
- **Project-level Sensitive Receptors:** Construction-related emissions and future permitted commercial and light industrial land uses have the potential to expose sensitive receptors to substantial concentrations of criteria air pollutant emissions toxic air contaminants (TACs) and result in a significant impact.
- **Cumulative Sensitive Receptors:** The potential cumulative impact to sensitive receptors from exposure to TACs is potentially significant and should be further evaluated at a project level for future developments.
- **Project-level Historic Resources:** Future development under the proposed project would result in additional residential and industrial development throughout the project site that would likely result in the alteration to two historically significant areas within the project site, *Hurunga* Oak and Rattlesnake Mountain (*Junā'av*), which would constitute a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5. Therefore impact to historic resources would be significant.
- **Project-level Archaeologic Resources:** Future development under the proposed project would result in additional residential and industrial development throughout the project site that would likely result in the demolition or alteration of numerous archaeologic resources present on-site including 10 prehistoric archaeological sites, one prehistoric component of a mixed component site, and two historically significant areas, of which archaeological resources are contributing elements, which would constitute a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5. Therefore impact to archaeologic resources would be significant.
- **Cumulative Historic and Archaeologic Resources:** Implementation of the proposed project has the potential to significantly alter the two on-site historical resources as well as destroy or significantly alter the 13 on-site archaeologic on-site resources, all of which are eligible for the California Register of Historical Resources (CRHR) individually and/or as contributors to the significance of a district resources. This could constitute a significant cumulative impact to historic and archaeologic resources in the surrounding area.
- **Project-level Conflict with SCAQMD Threshold for Greenhouse Gas Emissions:** The forecast year 2035 threshold of 4.1 metric tons (MT) of CO₂ equivalent (CO₂e) per service population per year would be exceeded in the project site. The increases in overall emissions would be attributable to the additional nonresidential and residential land uses proposed. Therefore, the proposed project's long-term greenhouse gas (GHG) emissions and conflict with the SCAQMD emissions threshold would be considered potentially significant.

- **Cumulative Greenhouse Gas Emissions:** The proposed project would generate a net increase in GHG emissions and would exceed the SCAQMD Working Group's bright-line threshold of 3,000 MT CO₂e for all land use types and the 2035 efficiency target of 4.1 MT CO₂e/service populations, and would therefore, contribute in significant cumulative impacts.
- **Project-level Impacts Related to Vehicle Miles Traveled:** The proposed project home based Vehicle Miles Traveled (VMT) per capita was determined to exceed the City's VMT per capita impact threshold by 22.4 percent in the baseline condition and 26.2 percent in the cumulative condition.
- **Project-level Tribal Cultural Resources:** Future development under the proposed project would result in additional residential and industrial development throughout the project site that would likely result in alteration or destruction of 13 cultural resources present on-site that are recommended eligible for the CRHR individually and/or as contributors to the significance of a district. These include 10 prehistoric archaeological sites, one prehistoric component of a mixed component site, and two historically significant areas, of which archaeological resources are contributing elements. Alteration and destruction of these resources, which would constitute a substantial adverse change in the significance of a Tribal Cultural Resource (TCR) pursuant to Section 15064.5. Therefore, impact to TCRs would be significant.
- **Cumulative Tribal Cultural Resources:** There are known TCRs in the cumulative geographic scope that may contribute to the significance of the cultural landscape and/or sites that are associated with tribes and may be considered eligible TCRs. Additionally, there is a potential for as yet unidentified tribal cultural resources on the surface or subsurface within the geographic scope. Past, present, and foreseeable projects have resulted in or could result in the demolition or material alteration to some aspects of TCRs or the tribal cultural landscape that convey its significance and the proposed project would have a significant and unavoidable impact to TCRs. Although implementation of existing regulations and site-specific mitigation would be required and would reduce cumulative impacts, when taken together, past, present, and foreseeable projects within the geographic scope could result in a significant cumulative impact to TCRs.

Summary of Project Alternatives

Below is a summary of the alternatives to the proposed project considered in Chapter 5, Alternatives to the proposed project.

Alternative 1: No Project, No Build. Under the No Project, No Build Alternative, the proposed project would not be developed. The 17 vacant parcels would remain vacant, and no development of any kind would occur. The informal, unpaved trails and dirt roads located throughout the site would remain in their current condition, and no changes to land use designation would take place. Additionally, none of the project-related improvements would take place and JUSD would not be able to construct a new school on a portion of the site.

Alternative 2: No Project, Develop Approved Specific Plan. Under this alternative, the project site would be developed in accordance with the existing Rio Vista Specific Plan No. 243 that was approved by the County of Riverside on April 14, 1992. This Specific Plan allowed for the development of 1,697 homes, a 5-acre commercial site, two elementary schools, three neighborhood parks, a 14-acre equestrian center and 405 acres of natural open space.

Alternative 3: Develop the 2017 Proposed Land Use Plan. Under this alternative, the project site would be developed in accordance with a previously-proposed, but not analyzed or approved, 2017 Land Use Plan. This previously contemplated land use plan would allow for the development of 1,799 homes, a school, a 12-acre community park, 23 acres of circulation, 14 acres of public facilities, and 579 acres of open space.

Areas of Controversy

Pursuant to CEQA Guidelines Section 15123(b), a summary section must address areas of controversy known to the lead agency, including issues raised by agencies and the public, and it must also address issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects.

A Notice of Preparation (NOP) for the proposed project was issued on November 26, 2021. The NOP describing the original concept for the project and issues to be addressed in the EIR was distributed to the State Clearinghouse, responsible agencies, and other interested parties for a 30-day public review period extending from December 6, 2021, through January 4, 2022. The NOP identified the potential for significant impacts on the environment related to the following topical areas:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Minerals
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Tribal Cultural Resources
- Utilities/Service Systems
- Wildfire

Disagreement Among Experts

This Draft EIR contains substantial evidence to support all the conclusions presented herein. It is possible that there will be disagreement among various parties regarding these conclusions, although the City of Jurupa Valley is not aware of any disputed conclusions at the time of this writing. Both the CEQA Guidelines and case law clearly provide the standards for treating disagreement among experts. Where evidence and opinions conflict on an issue concerning the environment, and the lead agency knows of these controversies in advance, the EIR must acknowledge the controversies, summarize the conflicting opinions of the experts, and include

sufficient information to allow the public and decision-makers to make an informed judgment about the environmental consequences of the proposed project.

Potentially Controversial Issues

Below is a list of potentially controversial issues that may be raised during the public review and hearing process of this Draft EIR:

- Air Quality
- Cultural Resources
- Greenhouse Gas Emissions
- Tribal Cultural Resources

It is also possible that evidence will be presented during the 45-day, statutory Draft EIR public review period that may create disagreement. Decision-makers would consider this evidence during the public hearing process.

In rendering a decision on a project where there is disagreement among experts, the decision-makers are not obligated to select the most environmentally preferable viewpoint. Decision-makers are vested with the ability to choose whatever viewpoint is preferable and need not resolve a dispute among experts. In their proceedings, decision-makers must consider comments received concerning the adequacy of the Draft EIR and address any objections raised in these comments. However, decision-makers are not obligated to follow any directives, recommendations, or suggestions presented in comments on the Draft EIR, and can certify the Final EIR without needing to resolve disagreements among experts.

Public Review of the Draft EIR

Upon completion of the Draft EIR, the City of Jurupa Valley filed a Notice of Completion (NOC) with the State Office of Planning and Research to begin the public review period (PRC § 21161). Concurrent with the NOC, this Draft EIR has been distributed to responsible and trustee agencies, other affected agencies, surrounding cities, and interested parties, as well as all parties requesting a copy of the Draft EIR in accordance with Public Resources Code 21092(b)(3). During the public review period, the Draft EIR, including the technical appendices, is available for review at the following City facilities:

City of Jurupa Valley Community Development Department 8930 Limonite Avenue Jurupa Valley, CA 92509 Hours: Sun.: closed Mon.-Fri.: 8:00 a.m. – 3:30 p.m. Sat.: closed	Louis Robidoux Library 5840 Mission Boulevard Jurupa Valley, CA 92509 Hours: Sunday: 1:00 p.m.–5:00 p.m. Mon.-Wed.: 10:00 a.m.–6:00 p.m. Thursday: 12:00 p.m.–8:00 p.m. Friday-Sat.: 10:00 a.m.–6:00 p.m.	Glen Avon Library 9244 Galena Street Jurupa Valley, CA 92509 Hours: Sunday: closed Mon.-Tue.: 10:00 a.m.–6:00 p.m. Wed.: 12:00 p.m.–8:00 p.m. Thu.: 10:00 a.m.–6:00 p.m. Fri.: 1:00 p.m.–5:00 p.m. Saturday: 10:00 a.m.–2:00 p.m.
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The Draft EIR is also available for review at the following website in the folder labeled “MA16045 Rio Vista Specific Plan:” <https://www.jurupavalley.org/DocumentCenter/Index/68>

Agencies, organizations, and interested parties have the opportunity to comment on the Draft EIR during the 45-day public review period. Written comments on this Draft EIR should be addressed to:

Jim Pechous, Principal Planner
City of Jurupa Valley
Community Development Department
8930 Limonite Avenue
Jurupa Valley, CA 92509
Phone: 951.322.6464
Fax: 925.655.2758
Email: jpechous@jurupavalley.org

Submittal of electronic comments in Microsoft Word or Adobe PDF format is encouraged. Upon completion of the public review period, written responses to all significant environmental issues raised will be prepared and made available for review by the commenting agencies at least 10 days prior to the public hearing before the City of Jurupa Valley Planning Commission and City Council on the project, at which the certification of the Final EIR will be considered. Comments received and the responses to comments will be included as part of the record for consideration by decision-makers for the project.

Executive Summary Matrix

Table ES-1 below summarizes the impacts, mitigation measures, and resulting level of significance after mitigation for the relevant environmental issue areas evaluated for the proposed project. The table is intended to provide an overview; narrative discussions for the issue areas are included in the corresponding section of this EIR. Table ES-1 is included in the EIR as required by CEQA Guidelines Section 15123(b)(1).

Table ES-1: Executive Summary Matrix

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Section 3.1—Aesthetics			
Threshold AES-1: Would the proposed project have a substantial adverse effect on a scenic vista?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold AES-2: Would the proposed project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a State Scenic Highway?	No impact.	No mitigation is required.	No impact.
Threshold AES-3: Would the proposed project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point)? If the proposed project is in an urbanized area, would the proposed project conflict with applicable zoning and other regulations governing scenic quality?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold AES-4: Would the proposed project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Cumulative Impact	Less than significant impact.	No mitigation is required.	Less than significant impact.
Section 3.2—Agriculture and Forestry Resources			
Threshold AG-1: Would the proposed project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold AG-2: Would the proposed project conflict with existing zoning for agricultural use or a Williamson Act Contract?	No impact.	No mitigation is required.	No impact.

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Threshold AG-3: Would the proposed project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	No impact.	No mitigation is required.	No impact.
Threshold AG-4: Would the proposed project result in the loss of forest land or conversion of forest land to non-forest use?	No impact.	No mitigation is required.	No impact.
Threshold AG-5: Would the proposed project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Important Farmland to nonagricultural use, or conversion of forest land to non-forest use?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Cumulative Impact	No impact.	No mitigation is required.	No impact.
Section 3.3—Air Quality			
Threshold AIR-1: Would the proposed project conflict with or obstruct implementation of the applicable air quality plan?	Potentially significant impact.	MM AIR-1a, MM AIR-1b, MM AIR-1c, MM AIR-1d, MM AIR-1e, MM AIR-1f, MM AIR-1g, MM AIR-1h, and MM AIR-1i.	Significant and unavoidable impact.
Threshold AIR-2: Would the proposed project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard?	Potentially significant impact.	Implement MM AIR-1a, MM AIR-1b, MM AIR-1c, MM AIR-1d, MM AIR-1e, MM AIR-1f, MM AIR-1g, MM AIR-1h, and MM AIR-1i.	Significant and unavoidable impact.
Threshold AIR-3: Would the proposed project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard?	Potentially significant impact.	MM AIR-1a, MM AIR-1b, MM AIR-1c, MM AIR-1d, MM AIR-1e, MM AIR-1f, MM AIR-1g, MM AIR-1h, and MM AIR-1i. MM Air-3a, MM AIR-3b, and MM AIR-3c.	Significant and unavoidable impact.

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Threshold AIR-1: Would the proposed project create objectionable odors affecting a substantial number of people?	Potentially significant impact.	MM AIR-4.	Less than significant impact.
Cumulative Impact	Potentially significant impact.	MM AIR-1a, MM AIR-1b, MM AIR-1c, MM AIR-1d, MM AIR-1e, MM AIR-1f, MM AIR-1g, MM AIR-1h, MM AIR-1i, MM Air-3a, MM AIR-3b, MM AIR-3c, and MM AIR-4.	Significant and unavoidable impact.
Section 3.4—Biological Resources			
Threshold BIO-1: Would the proposed project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service?	Potentially significant impact.	MM BIO-1a, MM BIO-1b, MM BIO-1c, MM BIO-1d, MM BIO-1e, MM BIO-1f, MM BIO-1g, MM BIO-1h, MM BIO-1i, MM BIO-1j, and MM BIO-1k.	Less than significant impact.
Threshold BIO-2: Would the proposed project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service?	Potentially significant impact.	MM BIO-2a and MM BIO-b.	Less than significant impact.
Threshold BIO-3: Would the proposed project have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Potentially significant impact.	MM BIO-3a and MM BIO-b.	Less than significant impact.
Threshold BIO-4: Would the proposed project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	Less than significant impact.	No mitigation is required.	Less than significant impact.

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Threshold BIO-5: Would the proposed project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Potentially significant impact.	MM BIO-5.	Less than significant impact.
Threshold BIO-6: Would the proposed project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan?	Potentially significant impact.	Implement MM BIO-1a, MM BIO-1b, MM BIO-1c, MM BIO-1e, MM BIO-1f, MM BIO-1i, MM BIO-2a, and MMBIO-2b.	Less than significant impact.
Cumulative Impact	Potentially significant impact.	Implement MM BIO-1a, MM BIO-1b, MM BIO-1c, MM BIO-1f, MM BIO-1h and MM BIO-1i.	Less than significant impact.
Section 3.5—Cultural Resources			
Threshold CUL-1: Would the proposed project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	Potentially significant impact.	MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-1d.	Significant and unavoidable impact.
Threshold CUL-2: Would the proposed project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	Potentially significant impact.	Implement MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-1d. MM CUL-2a, MM CUL-2b, MM CUL-2c, MM CUL-2d, MM CUL-2e, MM CUL-2f, MM CUL-2g, and MM CUL-2h.	Significant and unavoidable impact.
Threshold CUL-3: Would the proposed project disturb human remains, including those interred outside of formal cemeteries?	Potentially significant impact.	MM CUL-3a and MM CUL-3b.	Significant and unavoidable impact.
Cumulative Impact	Potentially significant impact.	Implement MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-1d, MM CUL-2a, MM CUL-2b, MM CUL-2c, MM CUL-2d, MM CUL-2e, MM CUL-2f, MM CUL-2g, MM CUL-2h, MM CUL-3a, and MM CUL-3b.	Significant and unavoidable impact.

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Section 3.6—Energy			
Threshold ENER-1: Would the proposed project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold ENER-2: Would the proposed project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Cumulative Impact	Less than significant impact.	No mitigation is required.	Less than significant impact.
Section 3.7—Geology and Soils			
Threshold GEO-1: Would the proposed project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving: i) Ground Rupture? ii) Strong Seismic Ground Shaking? iii) Seismic-related Ground Failure, including Liquefaction? iv) Landslides?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold GEO-2: Would the proposed project result in substantial soil erosion or the loss of topsoil?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold GEO-3: Would the proposed project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold GEO-4: Would the proposed project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold GEO-5: Would the proposed project have soils incapable of adequately supporting the use of	Less than significant impact.	No mitigation is required.	Less than significant impact.

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?			
Threshold GEO-6: Would the proposed project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Potentially significant impact.	MM GEO-6a and MM GEO-6b.	Less than significant impact.
Cumulative Impact	Potentially significant impact.	Implement MM GEO-6a and MM GEO-6b.	Less than significant impact.
Section 3.8—Greenhouse Gas Emissions and Energy			
Threshold GHG-1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Potentially significant impact.	Implement MM AIR-1a and MM AIR-1d to reduce emissions from construction equipment and with MM AIR-1e through MM AIR-1i. MM GHG-1a, MM GHG-1b, MM GHG-1c.	Significant and unavoidable impact.
Threshold GHG-2: Would the project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	Potentially significant impact.	Implement MM GHG-1a, MM GHG-1b, MM GHG-1c, MM TRANS-2a, MM TRANS-2c, and MM TRANS-2d.	Significant and unavoidable impact.
Cumulative Impact	Potentially significant impact.	Implement MM AIR-1a, MM AIR-1d, MM AIR-1e, MM AIR-1f, MM AIR-1g, MM AIR-1h, MM AIR-1j, MM GHG-1a, MM GHG-1b, and MM GHG-1c.	Significant and unavoidable impact.
Section 3.9—Hazards and Hazardous Materials			
Threshold HAZ-1: Would the proposed project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold HAZ-2: Would the proposed project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident	Potentially significant impact.	MM HAZ-2a and MM HAZ-2b.	Less than significant impact.

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
conditions involving the likely release of hazardous materials into the environment?			
Threshold HAZ-3: Would the proposed project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold HAZ-4: Would the proposed project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold HAZ-5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the proposed project result in a safety hazard or excessive noise for people residing or working the project area?	No impact.	No mitigation is required.	No impact.
Threshold HAZ-6: Would the proposed project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold HAZ-7: Would the proposed project expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Cumulative Impact	Less than significant impact.	No mitigation is required.	Less than significant impact.
Section 3.10—Hydrology and Water Quality			
Threshold HYD-1: Would the proposed project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Less than significant impact.	No mitigation is required.	Less than significant impact.

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Threshold HYD-2: Would the proposed project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold HYD-3: Would the proposed project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: i) Result in substantial erosion or siltation on- or off-site? ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? iv) Impede or redirect flood flows?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold HYD-4: Would the proposed project be located in a flood hazard zone, tsunami, or seiche zone, or risk release of pollutants due to project inundation?	No impact.	No mitigation is required.	Less than significant impact.
Threshold HYD-5: Would the proposed project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Cumulative Impact	Less than significant impact.	No mitigation is required.	Less than significant impact.
Section 3.11—Land Use and Planning			
Threshold LU-1: Would the proposed project physically divide an established community?	Less than significant impact.	No mitigation is required.	Less than significant impact.

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Threshold LU-2: Would the proposed project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Cumulative Impact	Less than significant impact.	No mitigation is required.	Less than significant impact.
Section 3.12—Mineral Resources			
Threshold MIN-1: Would the proposed project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold MIN-2: Would the proposed project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Cumulative Impact	Less than significant impact.	No mitigation is required.	Less than significant impact.
Section 3.13—Noise			
Threshold NOI-1: Would the proposed project expose persons to or generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Potentially significant impact.	MM NOI-1a and MM NOI-1b.	Less than significant impact.
Threshold NOI-2: Would the proposed project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	Potentially significant impact.	MM NOI-2.	Less than significant impact.
Threshold NOI-3: Would the proposed project expose people residing or working in the project area to excessive noise levels for a project located within the vicinity of a private airstrip or an airport land use plan	No impact.	No mitigation is required.	No impact.

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
or, where such a plan has not been adopted, within two miles of a public airport or public use airport?			
Cumulative Impact	Less than significant impact.	No mitigation is required.	Less than significant impact.
Section 3.14—Population and Housing			
Threshold POP-1: Would the proposed project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold POP-2: Would the proposed project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Cumulative Impact	Less than significant impact.	No mitigation is required.	Less than significant impact.
Section 3.15—Public Services			
Threshold PUB-1: Would the proposed project 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 fire protection?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold PUB-2: Would the proposed project 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 police protection?	Less than significant impact.	No mitigation is required.	Less than significant impact.

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Threshold PUB-3: Would the proposed project 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 schools?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold PUB-4: Would the proposed project 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 parks?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold PUB-5: Would the proposed project 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 other public facilities (including libraries)?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Cumulative Impact	Less than significant impact.	No mitigation is required.	Less than significant impact.
Section 3.16—Recreation			
Threshold REC-1: Would the proposed project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Less than significant impact.	No mitigation is required.	Less than significant impact.

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Threshold REC-2: Would the proposed project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Cumulative Impact	Less than significant impact.	No mitigation is required.	Less than significant impact.
Section 3.17—Tribal Cultural Resources			
Threshold TCR-1: Would the proposed project cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	Potentially significant impact.	Implement MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-1d, MM CUL-2a, MM CUL-2b, MM CUL-2c, MM CUL-2d, MM CUL-2e, MM CUL-2f, MM CUL-2g, MM CUL-2h, MM CUL-3a, and MM CUL-3b. MM TCR-1, MM TCR-2, MM TCR-3, MM TCR-4, MM TCR-5, MM TCR-6, MM TCR-7, MM TCR-8, MM TCR-9, MM TCR-10, MM TCR-11, MM TCR-12, MM TCR-13, and MM TCR-14.	Significant and unavoidable impact.
Threshold TCR-2: Would the proposed project cause a substantial adverse change in the significance of a tribal cultural resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?	Potentially significant impact.	Implement MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-1d, MM CUL-2a, MM CUL-2b, MM CUL-2c, MM CUL-2d, MM CUL-2e, MM CUL-2f, MM CUL-2g, MM CUL-2h, MM CUL-3a, and MM CUL-3b. MM TCR-1, MM TCR-2, MM TCR-3, MM TCR-4, MM TCR-5, MM TCR-6, MM TCR-7, MM TCR-8, MM TCR-9, MM TCR-10, MM TCR-11, MM TCR-12, MM TCR-13, and MM TCR-14.	Significant and unavoidable impact.
Cumulative Impact	Potentially significant impact.	Implement MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-1d, MM CUL-2a, MM CUL-2b, MM CUL-2c, MM CUL-2d, MM CUL-2e, MM CUL-2f, MM CUL-2g, MM CUL-2h, MM	Significant and unavoidable impact.

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		CUL-3a, MM CUL-3b, MM TCR-1, MM TCR-2, MM TCR-3, MM TCR-4, MM TCR-5, MM TCR-6, MM TCR-7, MM TCR-8, MM TCR-9, MM TCR-10, MM TCR-11, MM TCR-12, MM TCR-13, and MM TCR-14.	
Section 3.18—Transportation			
Threshold TRANS-1: Would the proposed project conflict with a program plan, ordinance, or policy of the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold TRANS-2: Would the proposed project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	Less than significant impact.	MM TRANS-2a, MM TRANS-2b, MM TRANS-2c, and MM TRANS-2d.	Less than significant impact.
Threshold TRANS-3: Would the proposed project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold TRANS-4: Would the proposed project result in inadequate emergency access?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Cumulative Impact	Less than significant impact.	No mitigation is required.	Less than significant impact.
Section 3.19—Utilities and Service Systems			
Threshold UTIL-1: Would the proposed project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Potentially significant impact.	Implementation of all construction-related mitigation measures in this table.	Less than significant impact.
Threshold UTIL-2: Would the proposed project have sufficient water supplies available to serve the project	Less than significant impact.	No mitigation is required.	Less than significant impact.

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
and reasonably foreseeable future development during normal, dry and multiple dry years?			
Threshold UTIL-3: Would the proposed project result in a determination by the wastewater treatment provider which serves or may serve the proposed project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold UTIL-4: Would the proposed project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold UTIL-5: Would the proposed project comply with federal, State, and local statutes and regulations related to solid waste?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Cumulative Impact	Less than significant impact.	No mitigation is required.	Less than significant impact.
Section 3.20—Wildfire			
Threshold WILD-1: Would the proposed project substantially impair an adopted emergency response plan or emergency evacuation plan?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold WILD-2: Would the proposed project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Threshold WILD-3: Would the proposed project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	Less than significant impact.	No mitigation is required.	Less than significant impact.

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Threshold WILD-4: Would the proposed project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	Less than significant impact.	No mitigation is required.	Less than significant impact.
Cumulative Impact	Less than significant impact.	No mitigation is required.	Less than significant impact.

CHAPTER 1: INTRODUCTION

1.1 - Overview of the CEQA Process

This Draft Environmental Impact Report (Draft EIR) is prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts associated with the implementation of the Rio Vista Specific Plan Project (proposed project) (State Clearinghouse [SCH] No. 2018121005). This document is prepared in conformance with CEQA (California Public Resources Code [PRC], § 21000, *et seq.*) and the CEQA Guidelines (California Code of Regulations [CCR], Title 14, § 15000, *et seq.*). This Draft EIR is intended to serve as an informational document for the public agency decision-makers and the public regarding the proposed project.

1.1.1 - Overview

The proposed project involves a new Specific Plan to replace the existing Rio Vista Specific Plan, approved by the County of Riverside in 1992. It would include a master planned community consisting of Very Low Density Residential (VLDR), Medium Density Residential (MDR), Medium High Density Residential (MHDR), High Density Residential (HDR), and Highest Density Residential (HHDR), Light Industrial and Business Park, a public K-8 educational facility, open space and recreation areas, and circulation improvements.

The Specific Plan includes the following major land use components on the 917.3 acres:

- Up to 1,697 dwelling units (du) on 204.4 acres, yielding an average density of 1.8 du per acre (du/acre).
- 1,269,774 square feet of Light Industrial building square footage on 58.3 acres.
- 1,428,768 square feet of Business Park building square footage on 82.0 acres.
- 510.8 acres of natural open space.
- 14.3 acres of recreational amenities.
- 13.4 acres for a new public elementary school.

The Specific Plan is divided into 21 Planning Areas (PAs). Eleven PAs are planned for residential development. One PA would be reserved for school development by Jurupa Unified School District (JUSD). If the JUSD does not proceed with the development of a school, the Planning Area would be available for recreational or residential development under its MDR land use designation. A contemporary commerce center consisting of Light Industrial and Business Park would occupy five PAs. One PA is reserved for Public Facility—Water Tanks, and the remaining three PAs would include Open Space (Water Basin and Conservation).

Approximately 19.6 acres of roadways, including an approximately 1.3-mile extension of 20th Street to be developed as a Modified Secondary Highway (100-foot right-of-way), would be included in the proposed project. A 30-foot-wide trail easement, Collector Roads (74-foot right-of-way), and Local

Streets (56-foot right-of-way) would be included as well. Off-site water, sewer, and stormwater drainage improvements would connect the project site to existing infrastructure.

Chapter 2, Project Description, provides a complete description of the proposed project.

1.1.2 - Purpose and Authority

This Draft EIR provides an analysis of the environmental effects of the proposed project. The environmental impacts of the proposed project are analyzed in the EIR to the degree of specificity appropriate in accordance with CEQA Guidelines Section 15146. This document addresses the potentially significant adverse environmental impacts that may be associated with the planning, construction, or operation of the proposed project.¹ It also identifies appropriate and feasible mitigation measures and alternatives that may be adopted to significantly reduce or avoid these impacts.

CEQA requires that an EIR contain, at a minimum, certain specific elements. These elements are contained in this Draft EIR and include:

- Table of Contents
- Introduction
- Executive Summary
- Project Description
- Environmental Setting, Significant Environmental Impacts, and Mitigation Measures
- Cumulative Impacts
- Significant Unavoidable Adverse Impacts
- Alternatives to the Proposed Project
- Growth-Inducing Impacts
- Areas of Known Controversy

1.1.3 - Lead Agency Determination

The City of Jurupa Valley is designated as the lead agency for the proposed project. CEQA Guidelines Section 15367 defines the lead agency as “. . . the public agency, which has the principal responsibility for carrying out or approving a project.” Other public agencies may use this Draft EIR in the decision-making or permit process and consider the information in this Draft EIR along with other information that may be presented during the CEQA process.

This Draft EIR reflects the independent judgment and analysis of the City of Jurupa Valley as required by CEQA. Lists of organizations and persons consulted and the report preparation personnel is provided in Section 6 of this Draft EIR.

¹ Later analyses for site-specific actions would be expected to focus on issues and impacts where detailed site-specific information was not available for this EIR, as those projects had not yet been formulated (see Chapter 2 Project Description, 2.4 Intended Uses of this Draft EIR).

1.2 - Scope of the Draft EIR

This Draft EIR addresses the potential environmental effects of the proposed project. The City of Jurupa Valley issued a Notice of Preparation (NOP) for the proposed project on November 26, 2021, which circulated between December 6, 2021, and January 4, 2022, for the statutory 30-day public review period. A Public Scoping Meeting was held on December 14, 2021. No public comments were made during this meeting. The scope of this Draft EIR includes the potential environmental impacts identified in the NOP and issues raised by agencies and the public in response to the NOP. The NOP is contained in Appendix A of this Draft EIR.

Three comment letters were received in response to the NOP. They are listed in Table 1-1 and provided in Appendix A of this Draft EIR.

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Table 1-1: Summary of EIR Scoping Comments

Agency/Organization	Author	Date	Comment Summary	Coverage in the DEIR
State Agencies				
California Department of Transportation (Caltrans), District 8	Rosa F. Clark, Office Chief, Land Development/ Intergovernmental Review	12/16/2021	<ul style="list-style-type: none"> • States that Caltrans is required to make recommendations to offset project impacts. • States its concerns include hydrology/flooding and the potentially significant transportation/traffic impacts. • Recommends a Traffic Study be provided and suggests several project design features. 	<ul style="list-style-type: none"> • Section 3.17, Transportation
Native American Heritage Commission	Andrew Green, Cultural Resources Analyst	12/7/2021	<ul style="list-style-type: none"> • Notes tribal consultation requirements according to CEQA and State and federal laws. • Recommends consultation with tribes affiliated with project area as early as possible. • Summarizes Assembly Bill (AB) 52, Senate Bill 18, and recommendations for cultural resources assessments. • Advises legal counsel consultation for compliance. • Recommends conducting an archaeological records search and a Sacred Lands File search. 	<ul style="list-style-type: none"> • Section 3.5, Cultural Resources • Section 3.18, Tribal Cultural Resources
South Coast Air Quality Management District (South Coast AQMD)	Lijin Sun, Program Supervisor, CEQA IGR; Planning, Rule Development and Area Sources	12/21/2021	<ul style="list-style-type: none"> • Recommends the use of South Coast AQMD's CEQA Air Quality Handbook, CalEEMod software, and additional guidance. • Provides general recommendations regarding disclosure of air quality impacts. • Provides resources to assist with identifying mitigation measures. • Provides health risk reduction strategies. 	<ul style="list-style-type: none"> • Section 3.3, Air Quality
Source: Compiled by FirstCarbon Solutions (FCS) 2022.				

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1.2.1 - Potentially Significant Environmental Issues

The NOP found that the following topical areas may contain potentially significant environmental issues that will require further analysis in the EIR. These sections are as follows:

- Air Quality
- Cultural Resources
- Greenhouse Gas Emissions
- Transportation
- Tribal Cultural Resources

1.3 - Organization of the Draft EIR

This Draft EIR is organized into the following main sections:

- **Chapter ES: Executive Summary.** This Chapter includes a summary of the proposed project and alternatives to be addressed in the Draft EIR. A brief description of the areas of controversy and issues to be resolved and overview of the Mitigation Monitoring and Reporting Program (MMRP), in addition to a table that summarizes the impacts, mitigation measures, and level of significance after mitigation, are also included in this section.
- **Chapter 1: Introduction.** This Chapter provides an introduction and overview describing the purpose of this Draft EIR, its scope and components, and its review and certification process.
- **Chapter 2: Project Description.** This Chapter includes a detailed description of the proposed project, including its location, site, and project characteristics. A discussion of the project objectives, intended uses of the Draft EIR, responsible agencies, and approvals needed for the proposed project are also provided.
- **Chapter 3: Environmental Impact Analysis.** This Chapter analyzes the environmental impacts of the proposed project. Impacts are organized into major topic areas. Each topic area includes a description of the environmental setting, methodology, significance criteria, impacts, mitigation measures, and significance after mitigation. The specific environmental topics that are addressed within Chapter 3 are as follows:
 - **Section 3.1—Aesthetics, Light, and Glare:** Addresses the potential visual impacts of development intensification and the overall increase in illumination produced by the proposed project.
 - **Section 3.2—Agriculture and Forestry Resources:** Addresses the potential for conversion of Important Farmland to nonagricultural use and forest land to non-forest use.
 - **Section 3.3—Air Quality:** Addresses potential air quality impacts associated with project implementation and emissions of criteria pollutants. In addition, the section also evaluates project emissions of toxic air contaminants.
 - **Section 3.4—Biological Resources:** Addresses potential impacts on habitat, vegetation, and wildlife; the potential degradation or elimination of important habitat; and impacts on listed, proposed, and candidate threatened and endangered species.

- **Section 3.5—Cultural Resources:** Addresses potential impacts on historical resources, archaeological resources, paleontological resources, and burial sites.
- **Section 3.6—Energy:** Addresses potential project impacts related to energy usage.
- **Section 3.7—Geology and Soils:** Addresses the potential impacts the project may have on soils and assesses the effects of project development in relation to geologic and seismic conditions.
- **Section 3.8—Greenhouse Gas Emissions:** Addresses potential project emissions of greenhouse gases.
- **Section 3.9—Hazards and Hazardous Materials:** Addresses potential for presence of hazardous materials or conditions on the project site and in the project area that may have the potential to impact human health.
- **Section 3.10—Hydrology and Water Quality:** Addresses the potential impacts of the project on local hydrological conditions, including drainage areas, and changes in the flow rates.
- **Section 3.11—Land Use and Planning:** Addresses the potential land use impacts associated with division of an established community and consistency with the City of Jurupa Valley General Plan and City of Jurupa Valley Municipal Code.
- **Section 3.12—Mineral Resources:** Addresses potential impacts to mineral resources and locally important mineral resources recovery sites.
- **Section 3.13—Noise:** Addresses potential noise impacts during construction and at project buildout from mobile and stationary sources. The section also addresses the impact of noise generation on neighboring uses.
- **Section 3.14—Population and Housing:** Addresses the potential of the proposed project to induce direct or indirect population growth.
- **Section 3.15—Public Services:** Addresses potential impacts upon public services, including fire protection, law enforcement, schools, parks, and recreational facilities.
- **Section 3.16—Recreation:** Addresses potential impacts related to parks and park usage.
- **Section 3.17—Transportation and Traffic:** Addresses potential impacts related to the local and regional roadway system and public transportation, bicycle, and pedestrian access.
- **Section 3.18—Tribal Cultural Resources:** Addresses potential project impacts related to tribal cultural resources.
- **Section 3.19—Utilities and Services Systems:** Addresses potential impacts related to service providers, including fire protection, law enforcement, water supply, wastewater, solid waste, and energy providers.
- **Section 3-20—Wildfire:** Addresses potential impacts related to wildfire, including lands within State Responsibility Areas and lands classified as very high fire hazard severity zones.
- **Chapter 4: Other CEQA Considerations.** This Chapter provides a summary of significant environmental impacts, including unavoidable and growth-inducing impacts. This section discusses the cumulative impacts associated with the proposed project, including the impacts of past, present, and probable future projects. In addition, the proposed project's energy demand is discussed.
- **Chapter 5: Alternatives to the Proposed Project.** This Chapter compares the impacts of the proposed project with three land use project alternatives: the No Project, No Build Alternative; the Develop Approved Specific Plan Alternative; and the Develop the 2017

Proposed Land Use Plan Alternative. An environmentally superior alternative is identified. In addition, alternatives initially considered but rejected from further consideration are discussed.

- **Chapter 6: Persons and Organizations Consulted/List of Preparers.** This Chapter contains a full list of persons and organizations that were consulted during the preparation of this Draft EIR. This Chapter also contains a full list of the authors who assisted in the preparation of the Draft EIR, by name and affiliation.
- **Appendices.** The Draft EIR appendices include all notices and other procedural documents pertinent to the Draft EIR as well as all technical material prepared to support the analysis.

1.4 - Documents Incorporated by Reference

As permitted by CEQA Guidelines Section 15150, this Draft EIR has referenced several technical studies, analyses, and previously certified environmental documentation. Information from the documents which have been incorporated by reference has been briefly summarized in the appropriate section(s). The relationship between the incorporated part of the referenced document and the Draft EIR has also been described. The documents and other sources that have been used in the preparation of this Draft EIR include but are not limited to:

- City of Jurupa Valley General Plan
- City of Jurupa Valley Municipal Code

In accordance with CEQA Guidelines Section 15150(b), the General Plan, City of Jurupa Valley Municipal Code, and the referenced documents and other sources used in the preparation of the Draft EIR are available for review at the Community Development Department at the address shown in Section 1.6 below.

1.5 - Documents Prepared for the Proposed Project

The following technical studies and analyses were prepared for the proposed project:

- Air Quality, Greenhouse Gas Emission and Energy Analyses (FCS 2022).
- Noise Impact Analysis (FCS 2022).
- Biological Resources Assessment, Jurisdictional Delineation, MSHCP Narrow Endemic Plant, Burrowing Owl Breeding Season, and Two-year Delhi Sands Flower-loving Fly Focused Surveys (L&L Environmental, Inc., 2016, Revised 2023).
- Jurisdictional Delineation (L&L Environmental, Inc. 2017, Revised 2023).
- Cultural Resources Assessment (L&L Environmental, Inc. 2017, Revised 2021).
- Geotechnical Grading Plan Review (Leighton and Associated, Inc. 2021).
- Preliminary Hydrology Study (Hunsaker and Associates Irvine, Inc. 2022).
- Project-Specific Water Quality Management Plan (Hunsaker and Associates Irvine, Inc. 2022).

- Phase I Paleontological Resources Inventory (L&L Environmental, Inc. 2015, Revised 2021).
- Phase I Environmental Site Assessment (Hillmann Consulting 2017).
- Traffic Impact Analysis (EPD Solutions, Inc. 2023).
- Vehicle Miles Traveled Analysis (Urban Crossroads 2023).
- Water Supply Assessment (Krieger and Stewart 2021).

1.6 - Review of the Draft EIR

Upon completion of the Draft EIR, the City filed a Notice of Completion (NOC) with the State Office of Planning and Research to begin the public review period (PRC §21161). Concurrent with the NOC, this Draft EIR has been distributed to responsible and trustee agencies, other affected agencies, surrounding cities, and interested parties, as well as all parties requesting a copy of the Draft EIR in accordance with Public Resources Code 21092(b)(3). During the public review period, the Draft EIR, including the technical appendices, is available for review at the following City facilities:

City of Jurupa Valley Community Development Department 8930 Limonite Avenue Jurupa Valley, CA 92509 Hours: Sun.: closed Mon.-Fri.: 8:00 a.m.–3:30 p.m. Sat.: closed	Louis Robidoux Library 5840 Mission Boulevard Jurupa Valley, CA 92509 Hours: Sunday: 1:00 p.m.–5:00 p.m. Mon.-Wed.: 10:00 a.m.–6:00 p.m. Thursday: 12:00 p.m.–8:00 p.m. Friday-Sat.: 10:00 a.m.–6:00 p.m.	Glen Avon Library 9244 Galena Street Jurupa Valley, CA 92509 Hours: Sunday: closed Mon.-Tue.: 10:00 a.m.–6:00 p.m. Wed.: 12:00 p.m.–8:00 p.m. Thu.: 10:00 a.m.–6:00 p.m. Fri.: 1:00 p.m.–5:00 p.m. Saturday: 10:00 a.m.–2:00 p.m.
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The Draft EIR is also available for review at the following website in the folder labeled “MA16045 Rio Vista Specific Plan:” <https://www.jurupavalley.org/DocumentCenter/Index/68>

Agencies, organizations, and interested parties have the opportunity to comment on the Draft EIR during the 45-day public review period. Written comments on this Draft EIR should be addressed to:

Jim Pechous, Principal Planner
City of Jurupa Valley
Community Development Department
8930 Limonite Avenue
Jurupa Valley, CA 92509
Phone: 951.322.6464
Fax: 925.655.2758
Email: jpechous@jurupavalley.org

Submittal of electronic comments in Microsoft Word or Adobe PDF format is encouraged. Upon completion of the public review period, written responses to all significant environmental issues raised will be prepared. Comments received and the responses to comments will be included as part of the record for consideration by decision-makers for the proposed project.

CHAPTER 2: PROJECT DESCRIPTION

This Draft Environmental Impact Report (Draft EIR) analyzes the potential environmental effects of the Rio Vista Specific Plan (proposed project) in the City of Jurupa Valley.

2.1 - Project Location and Setting

2.1.1 - Location

The project site is located north of State Route (SR) 60, between Armstrong Road and Rubidoux Boulevard, in the City of Jurupa Valley (City), in Riverside County, California (Exhibit 2-1 and Exhibit 2-2). The City covers approximately 43.5 square miles within the County of Riverside. The City is bordered by the City of Fontana and the County of San Bernardino to the north, the City of Ontario and Riverside County to the northwest, the City of Rialto and Riverside County to the northeast, the cities of Norco and Riverside to the south, and the City of Riverside to the east.

The proposed project site is approximately 917.3 acres. Regional access to the site is available off SR 60 from the south, via Armstrong Road and Rubidoux Boulevard. Interstate 10 (I-10) also provides regional access to the site from the north, via Sierra Avenue and Cedar Avenue. The project site includes the following 17 Assessor's Parcel Numbers (APNs): 175-080-010 and -021, 175-090-001, -002, -003, -004, and -005, 175-100-003, -005, and -006, 175-150-002, 175-160-001 and -005, 177-030-012 and -0014, and 177-040-002 and -008 (Exhibit 2-3).

2.1.2 - Project History

The County of Riverside approved the Rio Vista Specific Plan No. 243 and certified the associated EIR (State Clearinghouse No. 1988122608—Comprehensive General Plan Amendment (GPA) No. 174 and Specific Plan No. 243, Rio Vista) on April 14, 1992. Specific Plan No. 243 allows for the development of 1,697 homes, a 5-acre commercial site, two elementary schools, three neighborhood parks, a 14-acre equestrian center and 405 acres of natural open space (see Exhibit 2-4), and was at that time located in unincorporated Riverside County. An amendment to the Rio Vista Specific Plan No. 243 was proposed in 2005 through 2008 but was not completed. This amendment proposed increasing residential density in some locations, relocating residential planning areas, removing commercial land uses and adding light industrial land uses. When the City of Jurupa Valley was incorporated in 2011, the Rio Vista Specific Plan Area was included within the City's boundaries.¹

2.1.3 - Project Site

The site is vacant with no existing buildings and consists of 17 parcels of land totaling 917.3 acres. There are many informal, unpaved trails and dirt roads located throughout the site. Frequent trespassing by people in offroad trucks and motorcycles has occurred in the past. Increased security on-site and Sheriff presence has reduced this activity but continues to occur. According to historic aerial photographs, the project site appears to have been undeveloped since 1938 with no indication of building development. Historic topographic maps dated 1967 and 1973 show a small area in the

¹ T&B Planning, Inc. 2023. Rio Vista Specific Plan (SP16001) (MA16045) A Master Planned Community. May (8th Draft Screencheck).

northern part of the project site containing agricultural uses, but the majority of the property remained vacant. Subsequent topographic maps show the project site as vacant.²

The elevation of the project site ranges from approximately 900 feet at the southern corner to Pepe's Peak approximately 1,739 feet in the central area. The topography is a mixture of steep hillsides, rolling hills, rocky outcrops, and low-relief canyons combined with relatively flat areas. The project site is located outside the 100- and 500-year flood zones.^{3,4}

2.1.4 - Surrounding Land Uses

The project site and surrounding areas to the east, south, and west are within the City. The area north of the project site is within the City of Fontana and San Bernardino County. Surrounding land uses consist of residential and industrial uses, as well as undeveloped land. Adjacent residential communities include the Crestmore Heights community, located northeast of the site, Sunnyslope to the west, the approved Highland Park residential community, approved Emerald Ridge North and South and additional residential use to the south, and the Rubidoux residential community to the south (south of SR-60). Industrial uses are located to the east of the project site and commercial uses are to the southeast and southwest (beyond the residential uses). Stretches of developed land are located east, west, and north of the project site (Exhibit 2-2).

2.1.5 - Land Use Designations

Project Site

According to the City of Jurupa Valley 2017 General Plan (General Plan), the site is designated as a combination of Medium Density Residential, Medium High Density Residential, High Density Residential, Very High Density Residential, Commercial Retail, Open Space Conservation Habitat, and Open Space Recreation (Exhibit 2-5). These land uses are consistent with the 1992 Rio Vista Specific Plan No. 243 land uses. The site's current zoning designation is Specific Plan Zone (SP Zone) (Exhibit 2-6).

2.2 - Project Characteristics

2.2.1 - Proposed Project

The proposed project involves a new Rio Vista Specific Plan to replace the existing Rio Vista Specific Plan No. 243 approved by the County of Riverside in 1992.

The proposed project involves a master planned community consisting of Very Low Density Residential (VLDR), Medium Density Residential (MDR), Medium High Density Residential (MHDR), High Density Residential (HDR), Highest Density Residential (HHDR), Light Industrial and Business Park, a public K-8 educational facility, open space and recreation areas, and circulation improvements. The conceptual land use plan is shown in Exhibit 2-7.

² Hillman Consulting, 2017. Phase I Environmental Site Assessment Rio Vista Rubidoux, California. March 27.

³ Ibid.

⁴ L&L Environmental, Inc. 2021. Revised Updated Biological Resources Assessment, Jurisdictional Delineation, MSHCP Narrow Endemic Plant, Burrowing Owl Breeding Season, and Two-Year Delhi Sands Flower-Loving Fly Focused Surveys, Rio Vista, Specific Plan 16001, Jurupa Valley, Riverside County, California. August.

The Specific Plan includes the following major land use components on the 917.3 acres:

- Up to 1,697 dwelling units (du) on 204.4 acres, which matches the existing Rio Vista Specific Plan No. 243, yielding an average density of 1.8 du per acre (du/acre).
- 1,269,774 square feet of Light Industrial building square footage on 58.3 acres.
- 1,428,768 square feet of Business Park building square footage on 82.0 acres.
- 510.8 acres of natural open space.
- 14.3 acres of recreational amenities.
- 13.4 acres for a new public K-8 school.

The Specific Plan is divided into 21 Planning Areas (Pas) as detailed in Table 2-1.

Table 2-1: Specific Plan Land Use Summary

PA	Land Use	Acres	Target Dwelling Units	Maximum Dwelling Units	Target Density	Density Range ¹
1	Medium Density Residential (MDR)	24.9	113	125	4.5	2.0-5.0
2	Medium Density Residential (MDR)	22.7	107	114	4.7	2.0-5.0
3	Medium High Density Residential (MHDR)	19.4	149	155	7.7	5.0-8.0
4	High Density Residential (HDR)	18.2	225	455	12.4	8.0-14.0
5	High Density Residential (HDR)	13.3	116	186	8.7	8.0-14.0
6	High Density Residential (HDR)	27.1	258	379	9.5	8.0-14.0
7	Medium Density Residential (MDR)	11.1	45	56	4.1	2.0-5.0
8	Medium High Density Residential (MHDR)	39.6	259	317	6.5	5.0-8.0
9	Highest Density Residential (HHDR)	21.7	420	543	19.4	21.0-25.0
10	Very Low Density Residential (VLDR)	2.6	2	2	0.8	2.0
11	Very Low Density Residential (VLDR)	3.8	3	3	0.8	2.0
12	Light Industrial	38.1	–	–	–	–
13	Light Industrial	20.2	–	–	–	–
14	Business Park Area	31.9	–	–	–	–
15	Business Park Area	32.1	–	–	–	–
16	Business Park Area	18.0	–	–	–	–
17	Public Facility–Water Tanks (PF)	1.4	–	–	–	–
18	Public Facility–School (PF) ²	13.4	56	67	3.8	2.0-5.0
19	Open Space–Recreation (Parks and Trails)	14.3	–	–	–	–
20	Open Space–Water (Basin)	9.0	–	–	–	–
21 A-E	Open Space Conservation (Natural, Slopes)	510.8	–	–	–	–

Project Description

PA	Land Use	Acres	Target Dwelling Units	Maximum Dwelling Units	Target Density	Density Range ¹
–	Expanded Parkway (Trails) (OS-R)	4.1	–	–	–	–
–	Circulation	19.6	–	–	–	–
Project Totals		917.3	1,697¹	N/A	1.8	–

Notes:

- ¹. Dwelling unit count by Planning Area (PA) is approximate and may vary by PA and may increase or decrease by up to 10 percent provided that the overall Dwelling Units in Rio Vista do not exceed the target dwelling unit count of 1,697. The target density of each PA may increase or decrease provided that the target density remains below the maximum density of the land use designation.
 - ². The School Site in PA 18 may be developed with a Medium Density Residential use at a maximum of 56 dwelling units, if the School District does not purchase the school site. In response to market demands, nonresidential uses (mixed use, office, commercial, religious) may be developed in PA 18 subject to a Conditional Use Permit. The potential alternative 56 dwelling units are not included in the 'Project Totals.' If all of the approved number of units are developed, the additional 56 units may require subsequent environmental review.
 - ³. Park acreage is approximate and may be larger or smaller provided that the overall park acreage in the Specific Plan meets or exceeds the City's park requirements of 3-acres per 1,000 population.
 - ⁴. Open Space Conservation includes natural areas, common areas, landscaped slopes, and conservation areas. It does not include park acreage.
 - ⁵. Acreages are approximate – exact acreage will be defined through future implementing tract map(s).
- Source: City of Jurupa Valley 2021.

Eleven PAs are planned for residential development (Table 2-1). PA 18 would be reserved for school development by Jurupa Unified School District (JUSD). If the JUSD does not proceed with the development of a school, the Planning Area would be available for recreational, commercial, or residential development under its MDR land use designation.

Five categories of residential development intensity are proposed:

- **Very Low Density Residential:** located in two PAs in the eastern portions of the Specific Plan area, on 6.4 acres. With a density range of 2 du/acre, this category would have a target and maximum of 5 du.
- **Medium Density Residential:** located in three PAs in the northwestern and southwestern portions of the Specific Plan area, on 58.7 acres. With a density range of 2 to 5 du/acre, this category would have a target of 265 du and a maximum of 295 du.
- **Medium High Density Residential:** located in two PAs in the northern and central portions of the Specific Plan area, on 59 acres. With a density range of 5 to 8 du/acre, this category would have a target of 408 du and a maximum of 472 du.
- **High Density Residential:** located in three PAs in the western portion of the Specific Plan area, on 58.6 acres. With a density range of 8 to 14 du/acre, this category would have a target of 599 du and a maximum of 1,020 du.

- **Highest Density Residential:** located in one PA in the central portion of the Specific Plan area, on 21.7 acres. With a density range of 21 to 25 du/acre, this category would have a target of 420 du and a maximum of 543 du.

A combination of attached and detached units is proposed. Maximum building heights would vary between 30 and 45 feet.

Light Industrial and Business Park Development

The proposed project would provide for the development of a contemporary commerce center on 140.3 acres located in the eastern portion of the site. This would include Light Industrial uses (PAs 12 and 13) on approximately 58.3 acres, with a maximum of 1,269,774 square feet of building space, and Business Park uses (PAs 14, 15, and 16) on 82 acres, with a maximum of 1,428,768 square feet of building space. The maximum square footage includes the possibility of an approximately 391,476-square-foot technical college described below. The Light Industrial and Business Park land uses that would be established by the proposed project are intended to attract new businesses and encourage the expansion creation of new light industrial, light manufacturing, research, self-storage, professional and retail services to the City and the new residents that would live within the Rio Vista Specific Plan Area.

Riverside Community College District (RCCD) intends to construct and operate the Inland Empire Technical Trade Center (IETTC) in PA 14 and PA 16.⁵ The IETTC would address the need for local technical training capacity to support the region's residents and current and emerging employers by offering its students a pathway into a skilled workforce. At full buildout, the IETTC would employ approximately 300 full- and part-time employees and serve approximately 13,000 students (full- and part-time and remote students) from across the region in the fields of logistics, advanced manufacturing, Cybersecurity/Information Technology (IT), and green technologies. The IETTC would include nine buildings with a total footprint of approximately 391,476 square feet (included in the Light Industrial and Business Park maximum square feet described above), to accommodate classrooms, outdoor lab space, parking, and student and staff services (library, cafeteria, etc.).

School

PA 18 would be reserved for the JUSD for development of a K-8 school. As previously mentioned, if the JUSD does not choose to pursue development of the school, the parcel would be available for residential development for up to 56 du under the MDR development standards, a recreational use, or a commercial use. There would be no increase to the 1,697 du permitted within the Specific Plan should JUSD not purchase the school site and it is instead built with residential uses.

Open Space

The proposed project would include approximately 529.2 acres, or 58 percent, of Open Space and Recreational land uses. In addition, a bike path and soft-surface trail would be provided within a 30-foot-wide easement along 20th Street in the central area of the project site.

⁵ The development of the technical college is speculative and would depend on a various conditions, including local and State funding.

Project Description

Open Space

The project site would contain approximately 510.8 acres of open space, consisting of a combination of natural open space, revegetated manufactured slopes, and regraded and revegetated slopes. Many of the existing informal trails would remain, and no new trails into the open space would be created. A City-approved local conservation entity would be responsible for maintenance of the natural open space areas, which are currently designated as Open Space Conservation Habitat and Open Space Recreation (Section 2.1.5 above and Exhibit 2-5), and under the proposed project would be designated Open Space Conservation (Exhibit 2-7).

Recreation

The following recreational amenities would be provided on 18.4 acres:

- A 14.3-acre community park (PA 19) with sports fields, open turf play areas, sports courts, a tot lot/playground, and picnic areas.
- Approximately five Neighborhood Parks ranging from around 0.75 acre to 1 acre, located throughout the community, with features such as benches, planters, and open lawn areas.

In addition, an integrated system of hard and soft-surface (decomposed granite) trails would provide access from the residential neighborhoods to the school site, community park, and informal dirt trails located in the Open Space.

Trails

Trails for equestrians, bicyclists, and pedestrians would form an integrated system of hard and soft-surface (decomposed granite) paths throughout the project area. The trails would complement and improve access to the existing informal trails traversing the natural open space. The trail system would include:

- **Bike Path and Soft-Surface Trails.** An 8-foot-wide decomposed granite soft-surface trail and a 10-foot-wide Class I hard surface bicycle trail would be located within the 30-foot-wide trail easement along 20th Street forming a central spine of trails through the project site.
- **Sidewalks.** Sidewalks would be constructed on all Local Collectors and Local Streets, in order to provide a pedestrian network that connects residential areas to the trails and amenities located throughout the project site.
- **Existing Informal Trails.** The proposed project would retain the existing unimproved informal trails located within the open space for use by future residents of the proposed project and the public. Connections from the bike path and soft-surface trail would provide access to these existing informal trails, which would remain unimproved, and would continue to allow public access to the ridges and top of the hills within the proposed community.

Circulation

The proposed project would include the construction of approximately 19.6 acres of roadways, including an approximately 1.3-mile extension of 20th Street to be developed as a Modified Secondary Highway (100-foot right-of-way) enhanced with a 30-foot-wide trail easement, Collector

Roads (74-foot right-of-way), and Local Streets (56-foot right-of-way). 20th Street will be connected from the west to east ends of the project site in the first phase, though the improvements within the right-of-way will be developed in phases. The precise design and alignment of the proposed project's roadways would be determined with implementation of Tentative Tract Maps. 20th Street and Collector Roads would be developed as public streets. Local Streets would be a combination of public and private facilities.

Utilities

The utility providers listed below would service the proposed project. Water and sewer are discussed in greater detail below.

- Electricity: Southern California Edison (SCE)
- Gas: Southern California Gas Company (SoCalGas)
- Water: Rubidoux Community Services District (RCSD), and Jurupa Community Services District (JCSD) for PA 7 only
- Sewer: RCSD and JCSD for PA 7 only

Water

The majority of the project site would be annexed into the RCSD, which would provide water service to the proposed project. The project site is located within potable water pressure zones 1360 and 1440 of the RCSD. Because of its location adjacent to Armstrong Road and existing neighborhoods, PA 7 would remain in JCSD and connect to adjacent existing JCSD water facilities. The Master Water Plan is shown in Exhibit 2-8.

The project site water system (with the exception of PA 7) would be connected to the existing municipal water system via an extension of the existing 16-inch feeder main within 20th Street at the eastern side of the project site. The existing 16-inch feeder main within 20th Street is at a lower pressure (Zone 1066) than the two zones required to serve the project area (Zones 1360 and 1440); therefore, a pressure booster station would be required at or near the point of connection. The booster station would force water through the 16-inch feeder main to the three above-ground water reservoirs proposed to be located within PA 17. Two new 1.25 million gallon (MG) above-ground reservoirs would provide water for the Zone 1360 portion of the proposed project, while the other new 0.25 MG reservoir would provide water for the Zone 1440 portions of the proposed project.

Domestic water would be supplied to individual PAs by 8-inch lines located within local road right-of-way, which would connect to the 12-inch water mains located within 20th Street and Collector Roads that connect to the on-site water tanks. The water infrastructure would also provide fire hydrants and irrigation to the community's parks. On-site facilities would be sized in accordance with RCSD criteria based on the land uses identified within the Specific Plan. The Rio Vista Specific Plan does not provide for reclaimed water service on-site.

Sewer Service

RCSD would provide sewer service for the proposed project. Wastewater treatment for the proposed community would take place at the Riverside Regional Water Quality Treatment Plant located within the City of Riverside to the southwest. All wastewater for the proposed project would be transported eastward through the on-site system to the point of connection with existing sewer main at 20th Street, located at the eastern project site boundary. The sewer system for the proposed project would require a 12-inch gravity main and 8-inch gravity sewer lines within local roads to collect wastewater from individual PAs and transport the wastewater to the proposed off-site 15-inch gravity sewer main located southeast of the project site. Because of its location adjacent to Armstrong Road and existing neighborhoods, PA 7 would connect to the adjacent existing sewer facilities. Septic systems would be provided to serve PAs 10 and 11. The Master Sewer Plan is shown in Exhibit 2-9.

An alternate gravity design that would eliminate the need for lift stations may be needed if a future RCSD Community Facilities District (CFD) project is built in Pacific Avenue. The potential CFD project would need to construct a 15-inch sewer line to the west, in 20th Street, then south in Sierra Avenue, across the railroad tracks, turning into Pacific Avenue. The line would connect to a future CFD line terminating at Rustic Lane and Pacific Avenue. An 8-inch lateral line would also be constructed through a future local street to the southerly end of the project site.

Drainage

Stormwater management within the proposed project would include a combination of in-street catch basins and storm drains, which would consolidate storm flows into detention/water quality basins to treat stormwater prior to discharge into existing and/or proposed off-site stormwater facilities. The project site would be divided into five drainage areas based on topography and proposed stormwater management improvements. PA 7 would connect to adjacent existing JCSD facilities, and PAs 10 and 11 would be served by septic systems. The Master Drainage Plan is shown in Exhibit 2-10.

Fences and Walls

Fences and walls would generally be installed along the perimeter boundaries of residential PAs that interface with open space, roads, parks, or off-site land uses. Fence and wall types would include split-face block walls, precision block walls, tubular steel fences, vinyl fences, and 3-rail vinyl fences. Fences and walls would be used to provide privacy and noise attenuation, and would be generally up to 6 feet tall, except where a greater height is required, to reduce noise impacts or to reduce other site-specific impacts.

Off-site Improvements

Off-site sewer and stormwater drainage improvements would connect the project site to existing infrastructure.

As shown on Exhibit 2-8, Master Water Plan, the proposed project's 16-inch water main would connect to existing facilities at the eastern project site boundary, at 20th Street. No off-site water improvements would be included as part of the proposed project.

As shown on Exhibit 2-9, Master Sewer Plan, the proposed project's 8-inch sewer main would connect to existing facilities at three locations. Two points of connections would be located within the project site (one at the eastern project site boundary at 20th Street and one along the western project site boundary at 20th Street). A third point of sewer connection would require minimal off-site improvements to connect to existing facilities at Paramount Drive, located just outside the southern project site boundary.

Connection of the proposed project's drainage system to existing facilities would require off-site improvements, as shown in Exhibit 2-10, Master Drainage Plan. As part of the proposed project development, a drainage line would extend approximately 2,600 feet southeast of the proposed Business Park and connect to existing facilities in 20th Street and connect to existing facilities at the intersection of 20th Street and Avalon Street. A second point of connection to existing facilities would be located within the project site along the western project site boundary at 20th Street.

Phasing

The proposed project is anticipated to be developed in four phases. The phases would be timed to respond to market demands and to provide for a logical and orderly extension of roadways, public utilities, and infrastructure. Development would generally start in the northwestern area of the Specific Plan, proceed east in Phase 2, then move to the southwest in Phases 3 and 4. PA 7, located in the far northwest portion of the project site, would likely be developed as part of Phase 5. However, the phases could be implemented in any order that would allow for logical and orderly development.

Phase 1 would include the development of residential PAs 4, 5, 6, the water tanks and public school in PAs 17 and 18 respectively, recreational open space in PA 19, and water basin open space in PA 20. Phase 2 would the development of residential PAs 1, 2, and 3. The proposed extension of 20th Street would be part of Phase 1, with full width improvements to be completed in Phase 2. The proposed Business Park, consisting of PAs 12, 13, 14, 15, and 16 would be developed under Phase 3, as would be the residential PA 9. Finally, Phase 4 development would include residential PAs 7, 8, 10, and 11.

2.3 - Project Objectives

As stated in the Rio Vista Specific Plan, the proposed project would establish a mixture of residential and employment generating land uses arranged in a functional and efficient manner which complements the surrounding community and provides convenient access to the nearby regional circulation system. Specifically, the objectives of the proposed project are to:

1. Provide a long-range comprehensive planning approach to guide the development of Rio Vista.
2. Assist the City in meeting its housing goals and reflect anticipated market needs and public demand, by providing a diverse range of home types with the intent to blend into the City of Jurupa Valley's rural character.
3. Anticipate market demand by providing for a mixture of residential, light industrial, and business park land uses that are marketable and financially feasible within the City's evolving economic profile.

4. Provide economic growth and employment opportunities with the City by authorizing the development of light industrial and business park land uses at a sufficient scale to attract financially stable, long-term tenants and fund the necessary proposed critical infrastructure improvements that will serve Rio Vista and the greater Jurupa Valley community.
5. Adopt a Specific Plan that allows for a range of industrial uses, research and development uses, business park and other nonresidential uses that would encourage private capital investment sufficient to support the significant public infrastructure improvements proposed on the project site.
6. Provide for the establishment of a mixed-use master planned community that is sensitive to the environment and is aesthetically pleasing.
7. Create a community design that complements the land's topography by respecting and preserving the geology, rock formations, and basic landforms.
8. Protect valuable scenic resources within large expanses of open space, thereby preserving Rio Vista's character and identity and the surrounding region.
9. Provide a potential JUSD school site to serve the needs of Rio Vista and the surrounding area, if JUSD determines it is needed to serve projected demand.
10. Provide a community park and neighborhood parks to meet the needs of Rio Vista residents and surrounding neighborhoods.
11. Establish a cohesive trail system that promotes active recreational uses and provides pedestrian links between the school site, parks, residential neighborhoods, and open space.
12. Provide guidelines for architecture, landscaping, entry treatments, walls, fencing, parks, and trails that reinforce this community's identity and its relationship to the City of Jurupa Valley.

2.4 - Intended Uses of this Draft EIR

This Draft EIR is being prepared by the City to assess the potential environmental impacts that may arise in connection with actions related to implementation of the proposed project. Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15367, the City is the lead agency for the proposed project and has discretionary authority over the proposed project and project approvals. While this Draft EIR discusses potential impacts due to public infrastructure improvements and other future development that are within the parameters of the proposed project, additional environmental review may be required for implementation of specific elements of the proposed project.

Should this EIR be certified, the City intends to utilize this EIR in future analyses as appropriate in conjunction with all of CEQA's streamlining approaches, including available tiering and exemptions. The City will examine development of future projects proposed under the proposed project to determine what, if any, additional CEQA analysis and documentation may be required for subsequent approvals implementing the proposed project, such as tentative subdivision maps, development review permits, Conditional Use Permits (CUPs), or other discretionary entitlements, to determine consistency. In some instances, project specific review may determine that the proposed

project has appropriately addressed the effects of later projects and that no further analysis, or only focused analysis beyond this EIR, would be necessary. Later analyses for site-specific actions would be expected to focus on issues and impacts where detailed site-specific information was not available for this EIR, as those projects had not yet been formulated.

Future environmental review of actions necessary to implement the proposed project may also be streamlined pursuant to Public Resources Code Section 21083.3 and State CEQA Guidelines Section 15183. These provisions limit the scope of necessary environmental review for site-specific approvals following the certification of an EIR addressing zoning actions such as those identified in the proposed project. For later site-specific approvals, CEQA generally applies only to impacts that are “peculiar to the parcel or to the project” and have not been previously disclosed, except where “substantial new information” shows that previously identified impacts would be more significant than previously assumed. Notably, impacts are considered not to be “peculiar to the parcel or to the project” if they can be substantially mitigated pursuant to previously adopted, uniformly applied development policies or standards. It is the intent of the City that future residential projects separately may also rely on this EIR, if certified, to qualify for streamlining from further CEQA review per CEQA Guidelines Section 15162, 15182, or any other applicable provision.

2.4.1 - Discretionary and Ministerial Actions

Discretionary approvals and permits are required by the City for implementation of the proposed project. The proposed project would require the following City discretionary approvals and actions, as well as approvals and actions by an outside agency serving as a Responsible Agency or Trustee Agency, including:

- New Specific Plan, to replace the existing Rio Vista Specific Plan No. 243.
- General Plan Amendment.
- Change of Zone, to allow for adoption of a Zoning Ordinance for the project and to modify the zone from SP No. 243 to a new SP Zone.
- Development Agreement (an agreement between the applicant and the City that sets the required community benefits the applicant will provide and the flexibility in the Municipal Code and protection of the approvals through the duration of the development agreement).
- Tentative and Final Tract Maps.
- Annexation to water and sewer district.

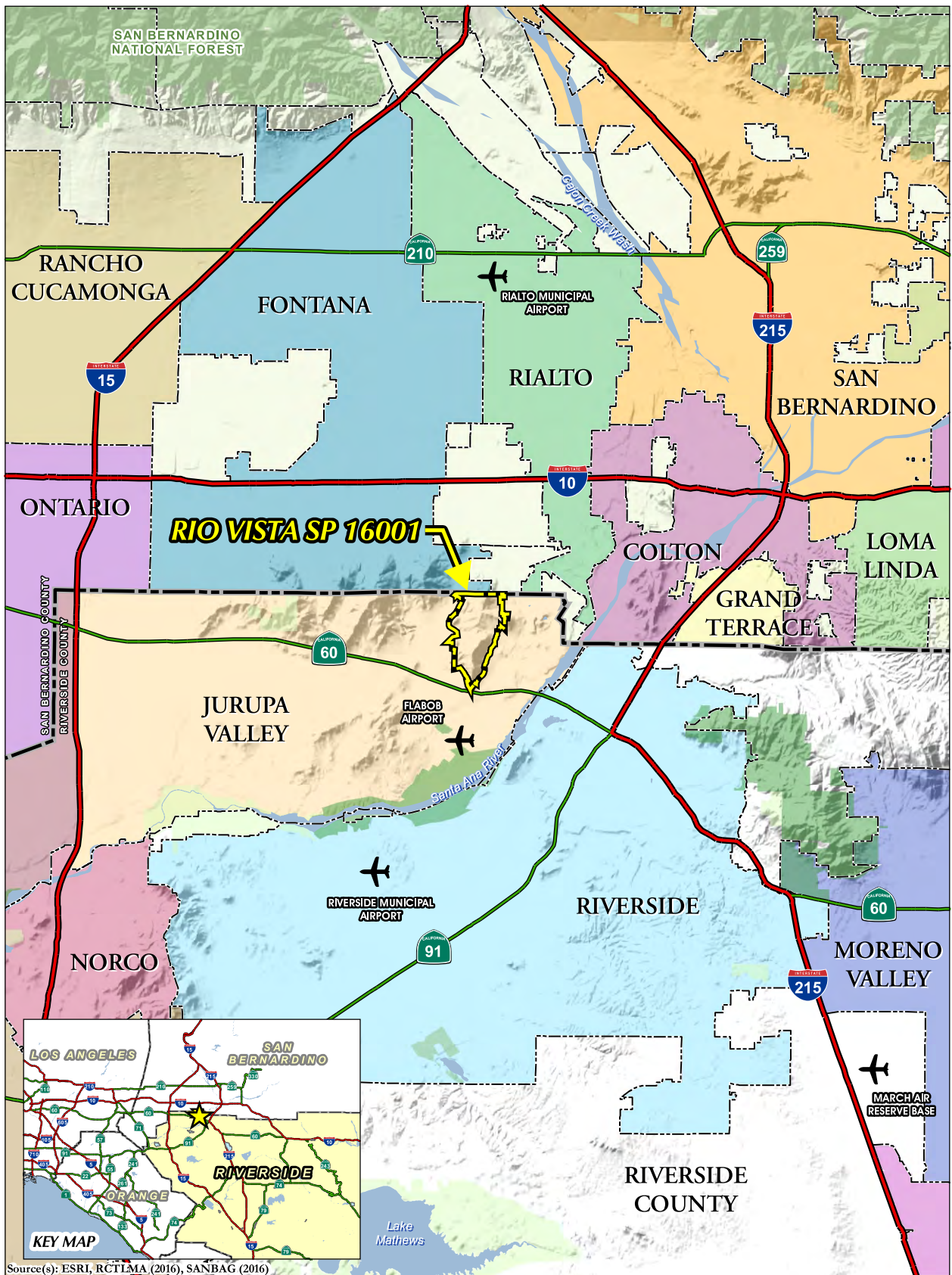
Subsequent ministerial actions would be required for the implementation of individual future projects within the proposed project including issuance of grading and building permits.

2.4.2 - Responsible and Trustee Agencies

A number of other agencies in addition to the City will serve as Responsible and Trustee Agencies, pursuant to CEQA Guidelines Section 15381 and Section 15386, respectively. This Draft EIR will provide environmental information to these agencies and other public agencies, which may be required to grant approvals or coordinate with other agencies, as part of project implementation and

construction of individual future projects. These agencies may include, but are not limited to, the following:

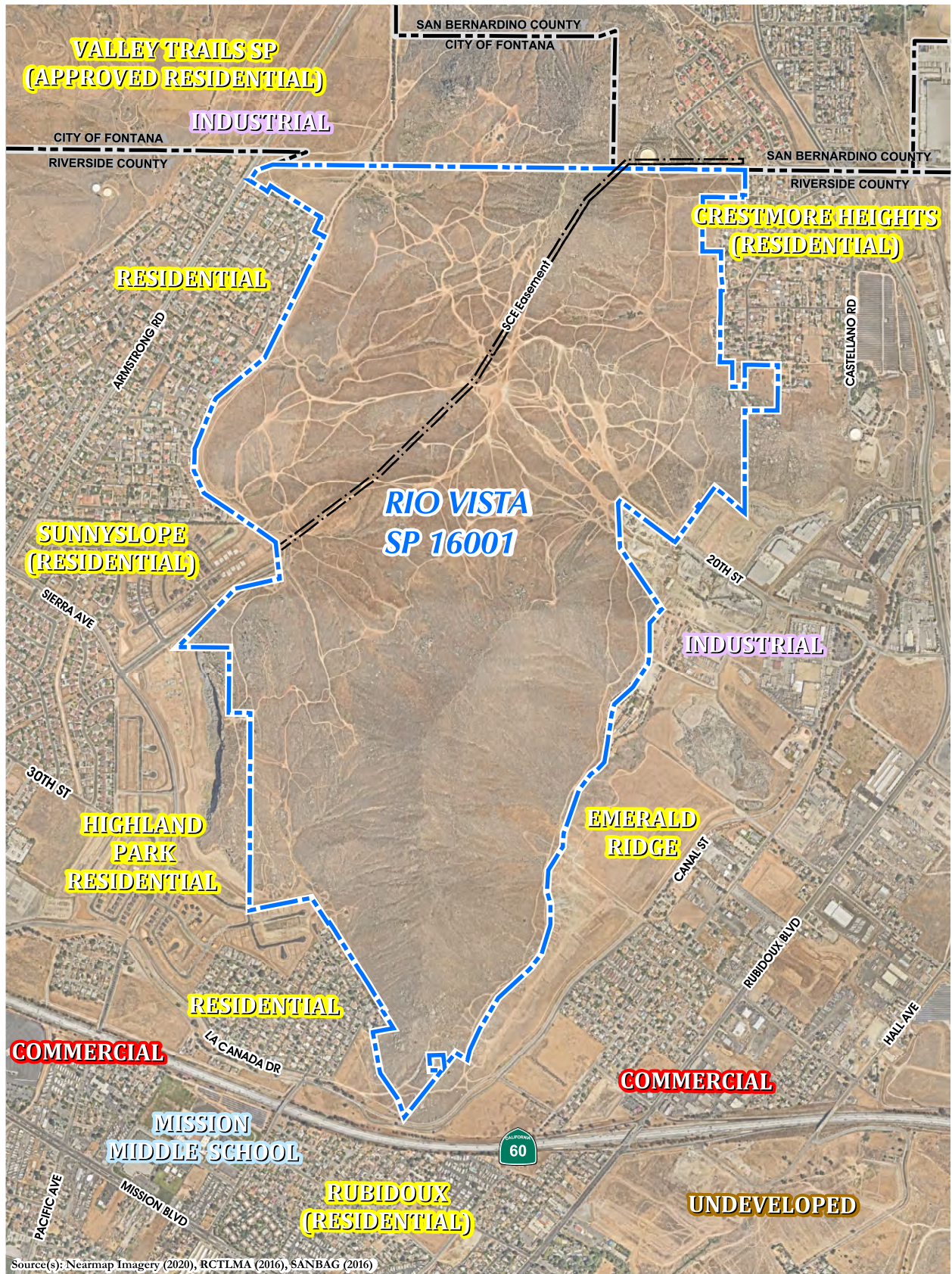
- United States Army Corps of Engineers (USACE) (Clean Water Act Section 404 Permit to regulate dredged or fill material into waters of the United States)
- Regional Water Quality Control Board (RWQCB) (Section 401 Permit)
- California Department of Fish and Wildlife (CDFW) (Section 1602, Streambed Alteration Agreement)
- South Coast Air Quality Management District (SCAQMD) (Construction Permit and Industrial Permits)
- Santa Ana Regional Water Quality Control Board (Santa Ana RWQCB) (Issuance of National Pollution Discharge Elimination System [NPDES] Permit; Issuance of Construction General Permit Coverage; and Issuance of Industrial General Permit Coverage)
- Riverside County Fire (ministerial)
- Rubidoux Community Services District
- Jurupa Community Services District
- Riverside County Local Agency Formation Commission (Approval of Project Site Annexation)
- Jurupa Unified School District
- Riverside Community College District



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Source: t&b planning

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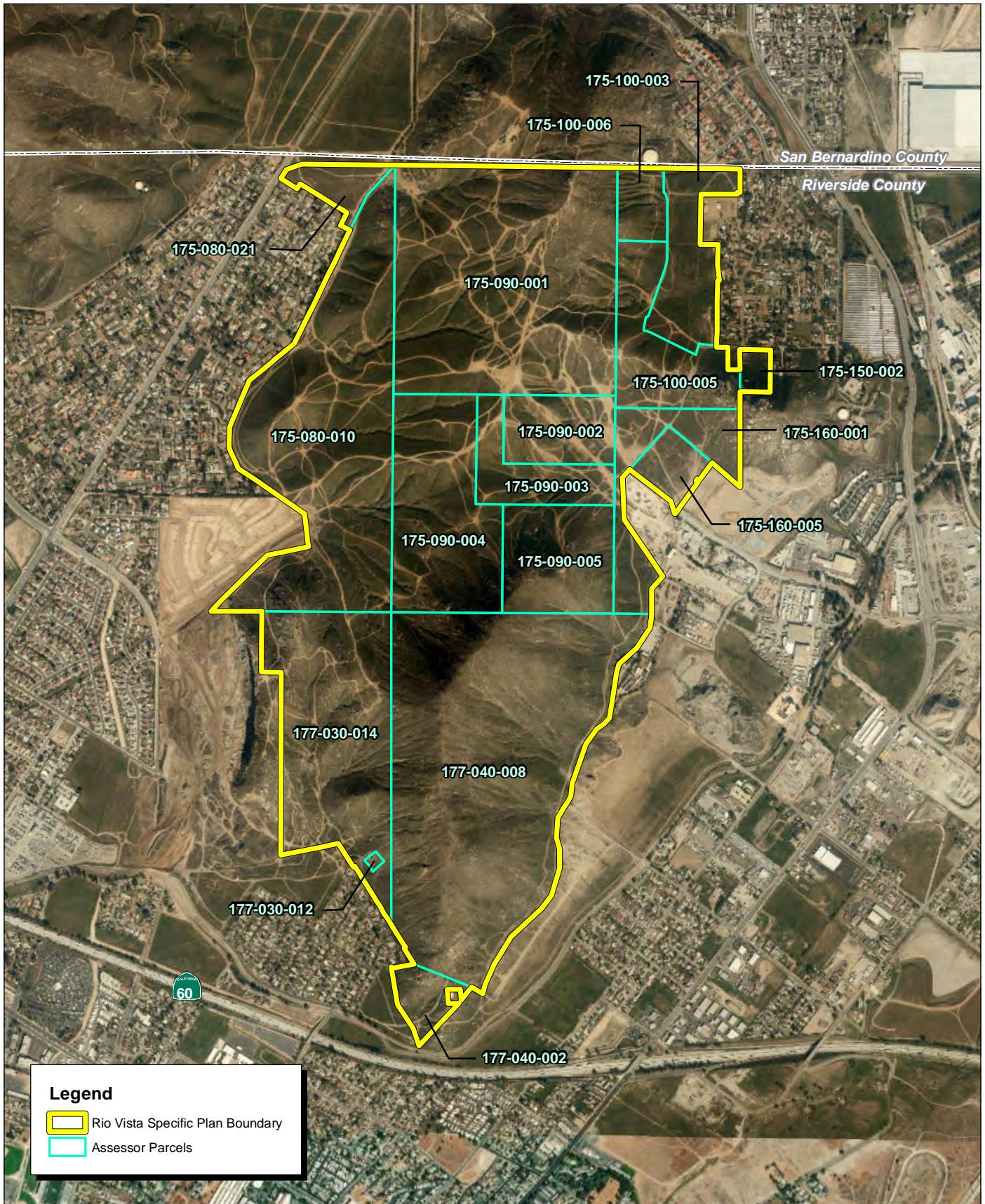


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Exhibit 2-2 Local Vicinity Map

CITY OF JURUPA VALLEY
RIO VISTA SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT

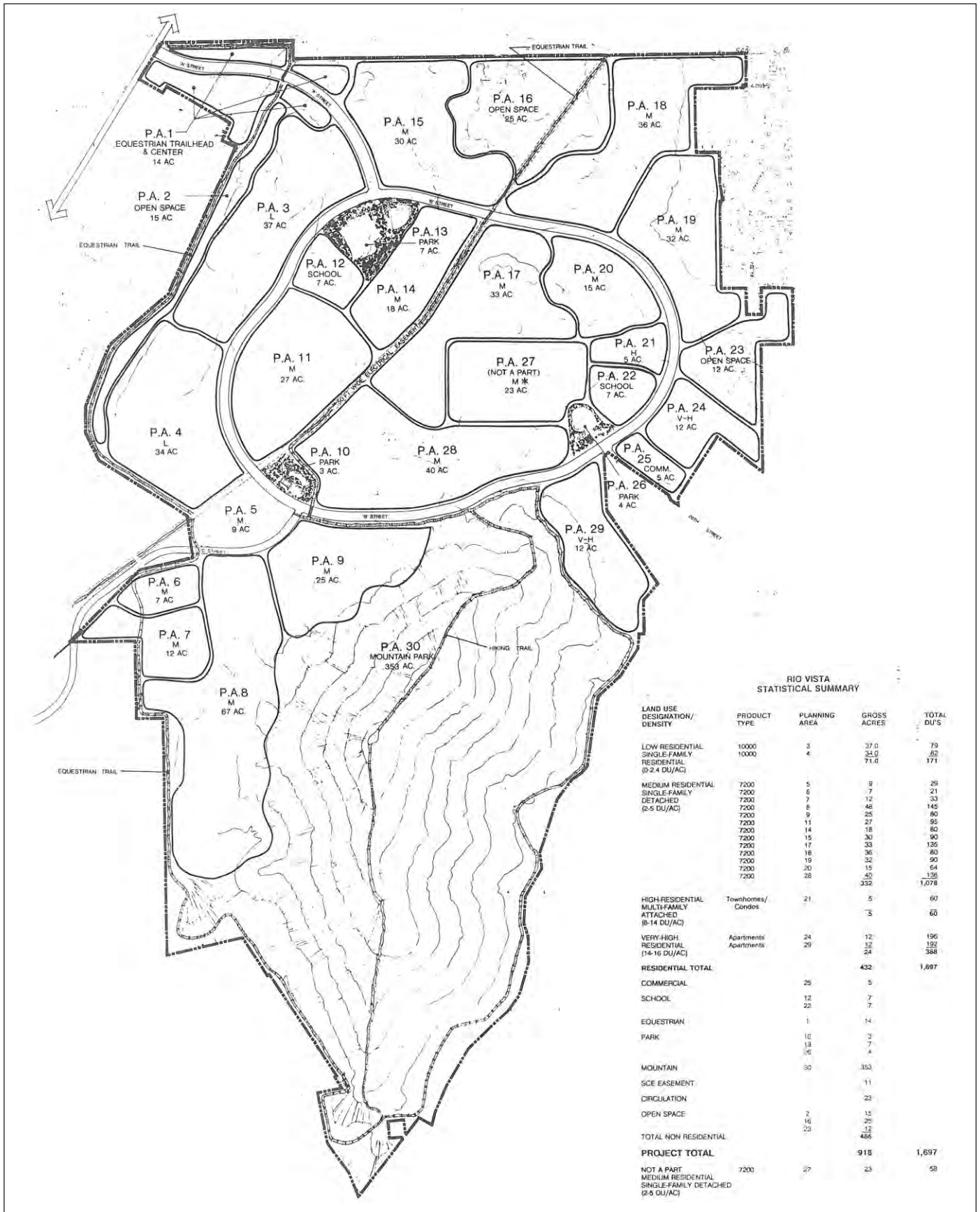
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Source: ESRI Aerial Imagery. Riverside County.



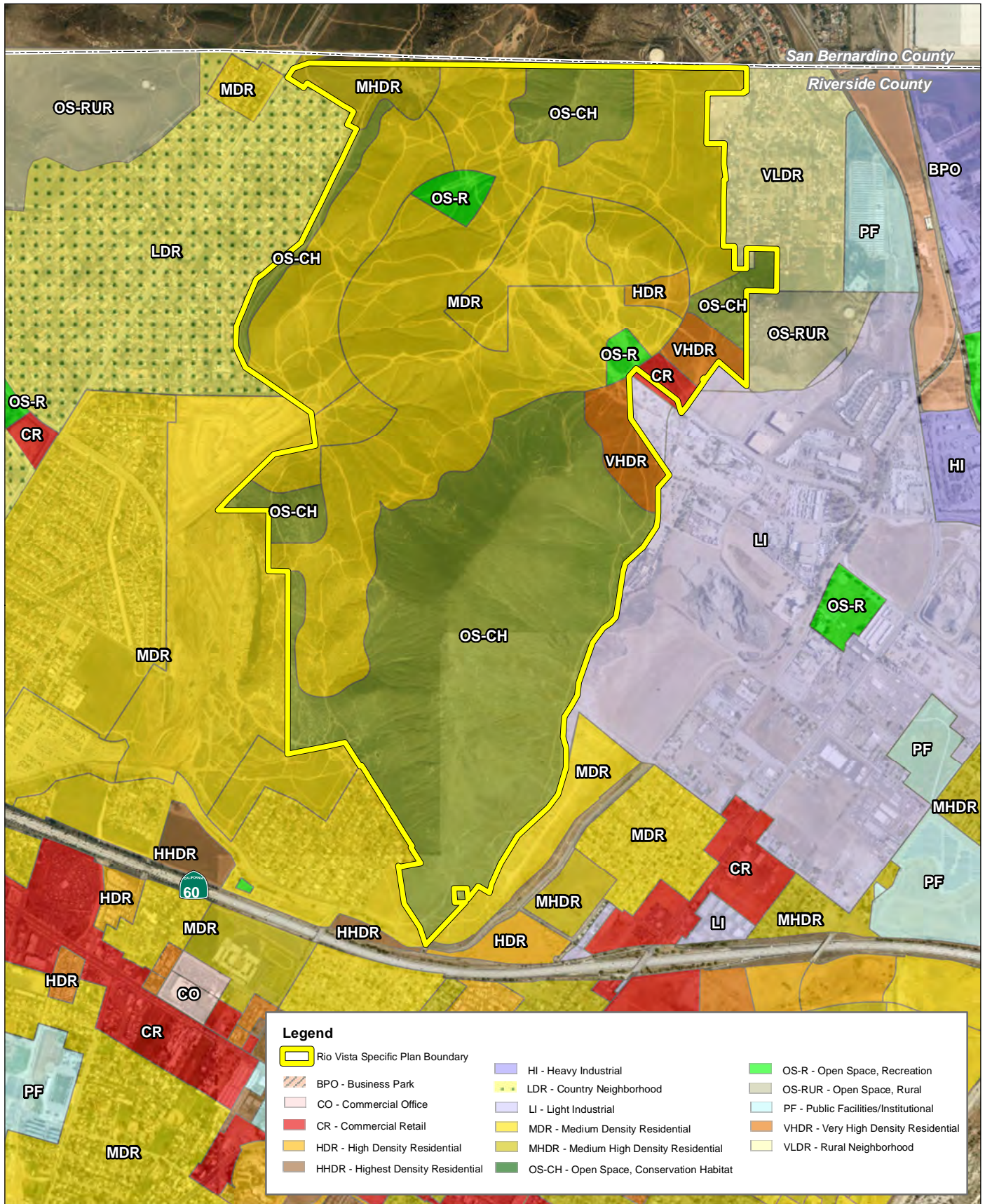
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Source: Florian Martinez Associates.



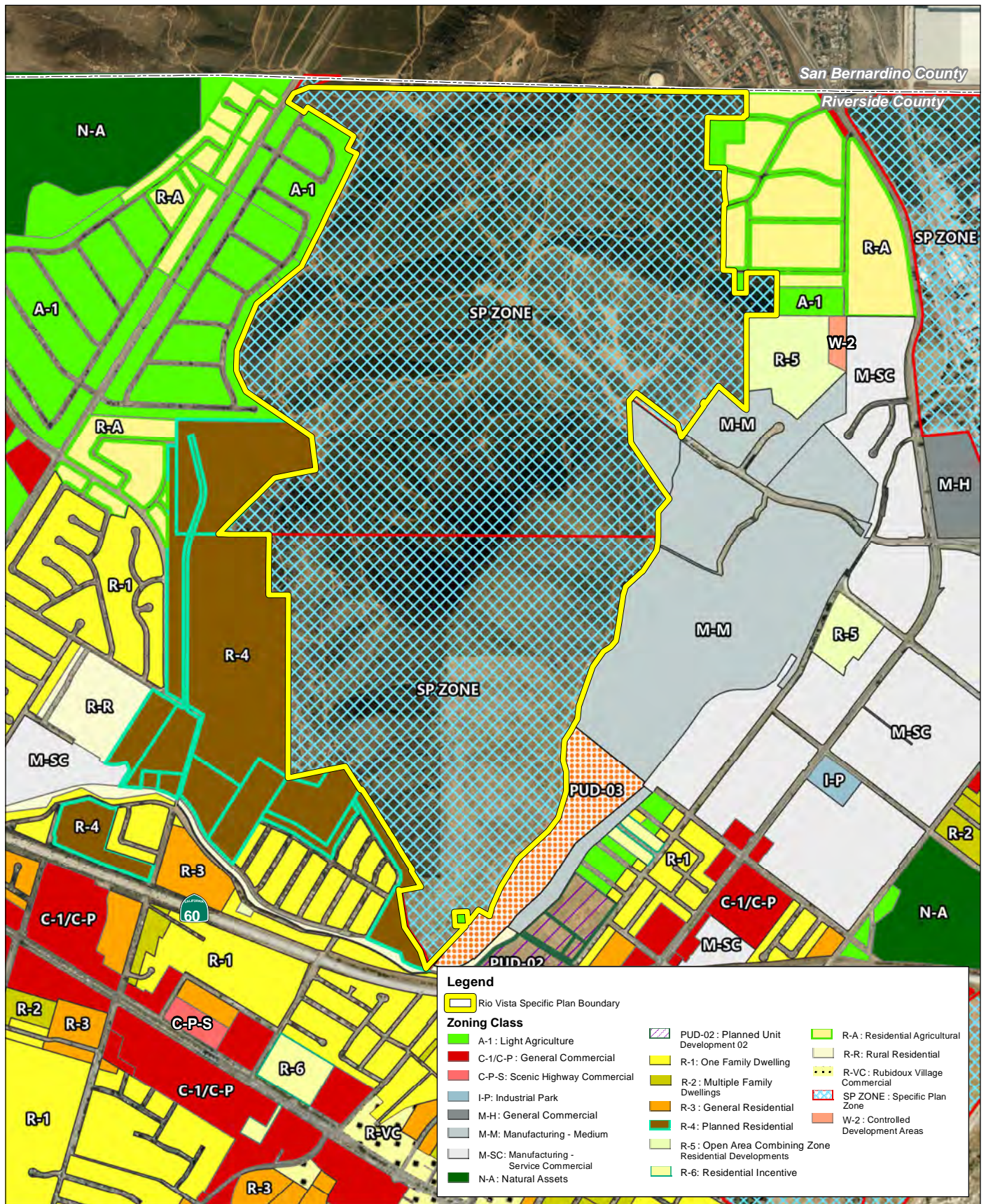
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Source: ESRI Aerial Imagery. City of Jurupa Valley.



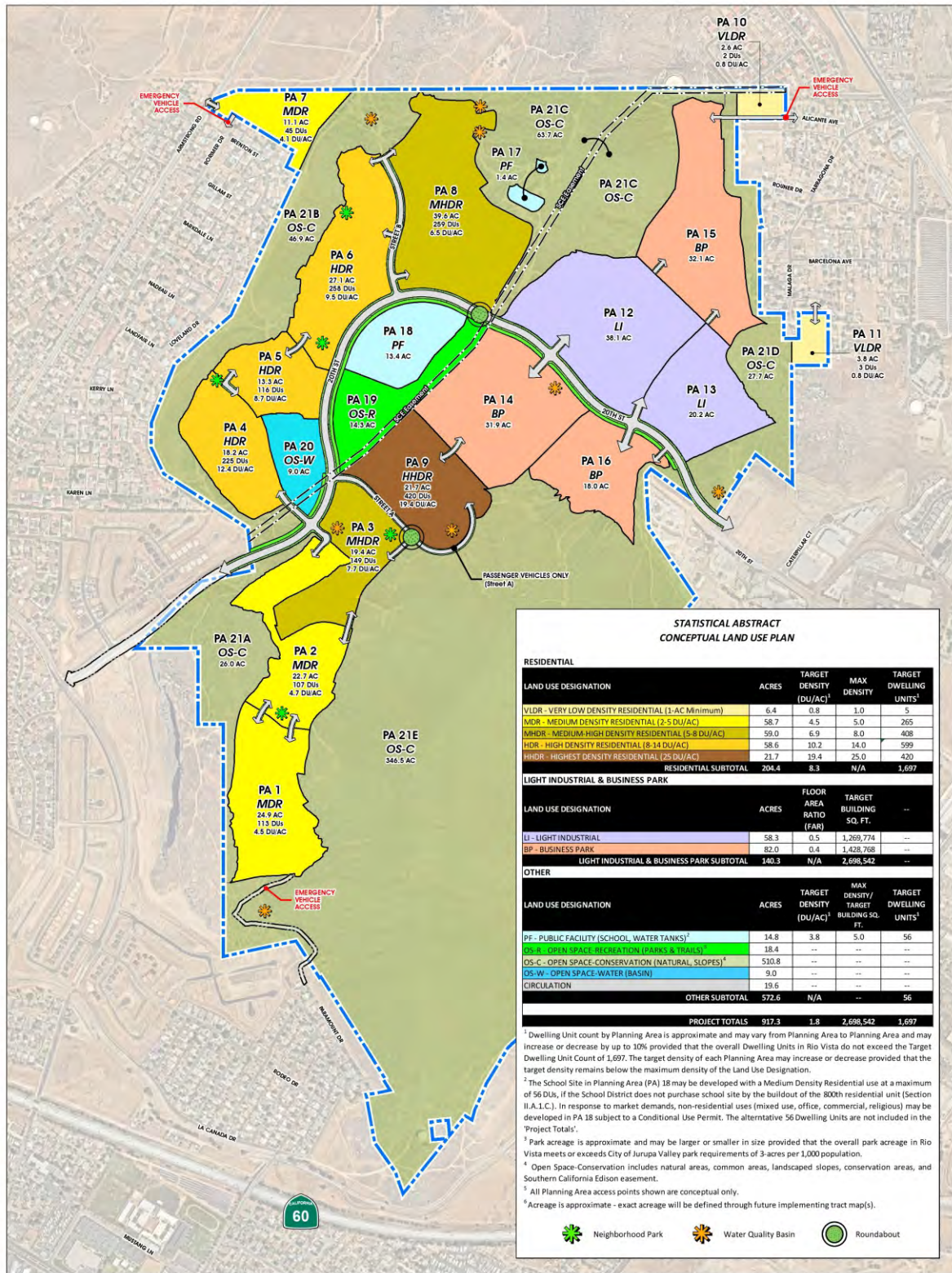
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Source: ESRI Aerial Imagery. City of Jurupa Valley.



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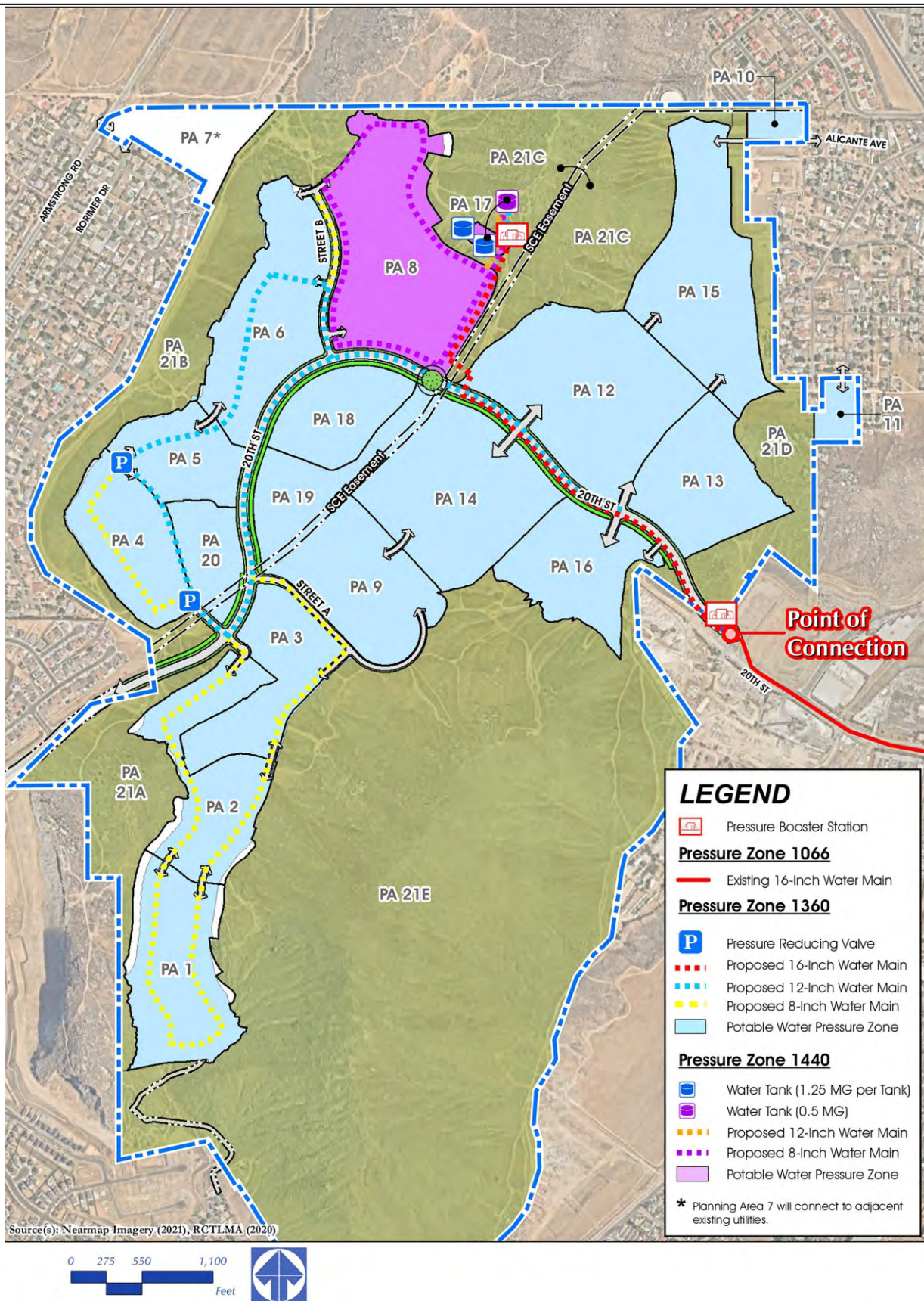


Source(s): Nearmap Imagery (2020), RCTLMA (2020)
 Composite: Hunsaker and Associates (07-22-2021)



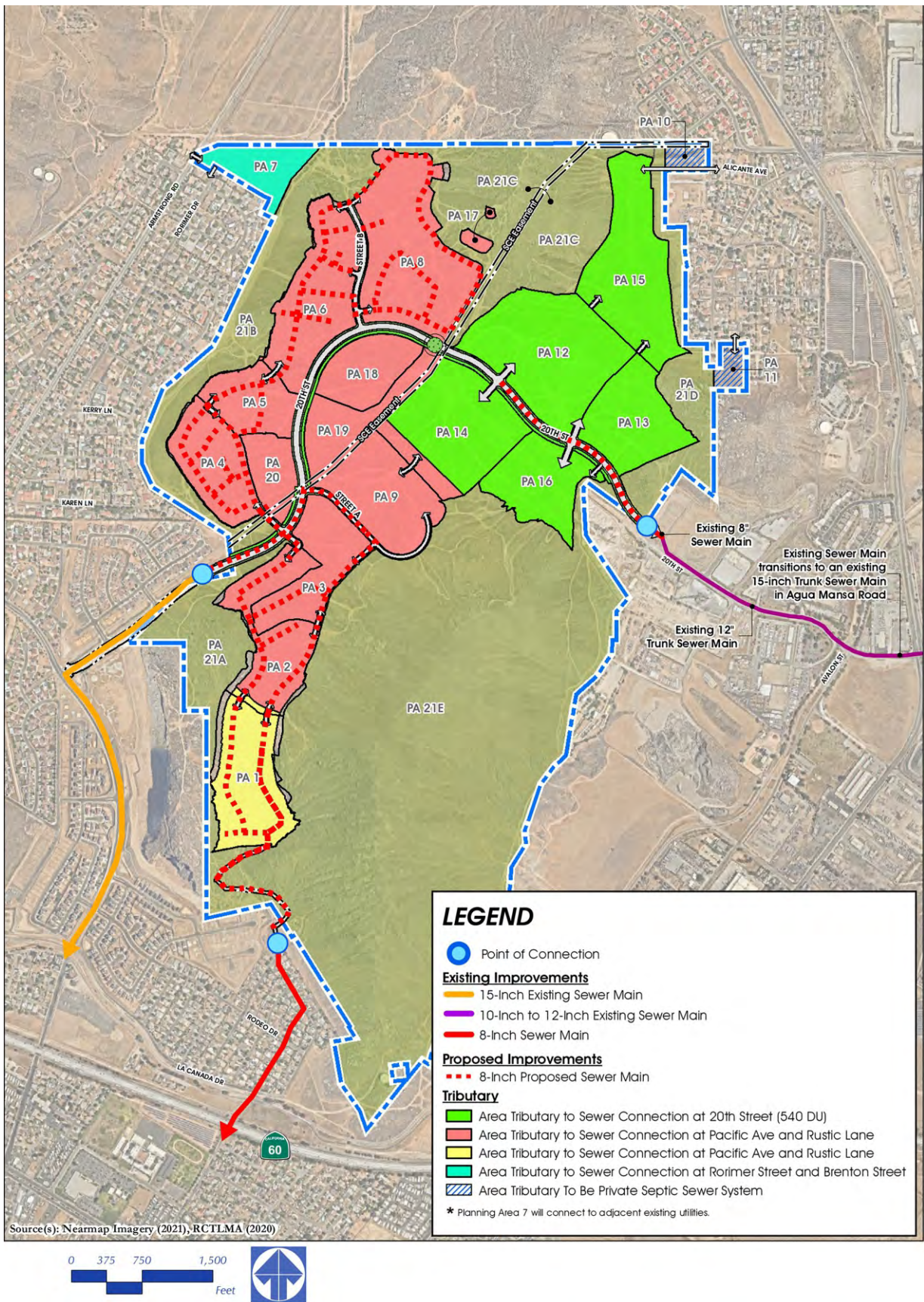
Source: t&b planning, August 5, 2021.

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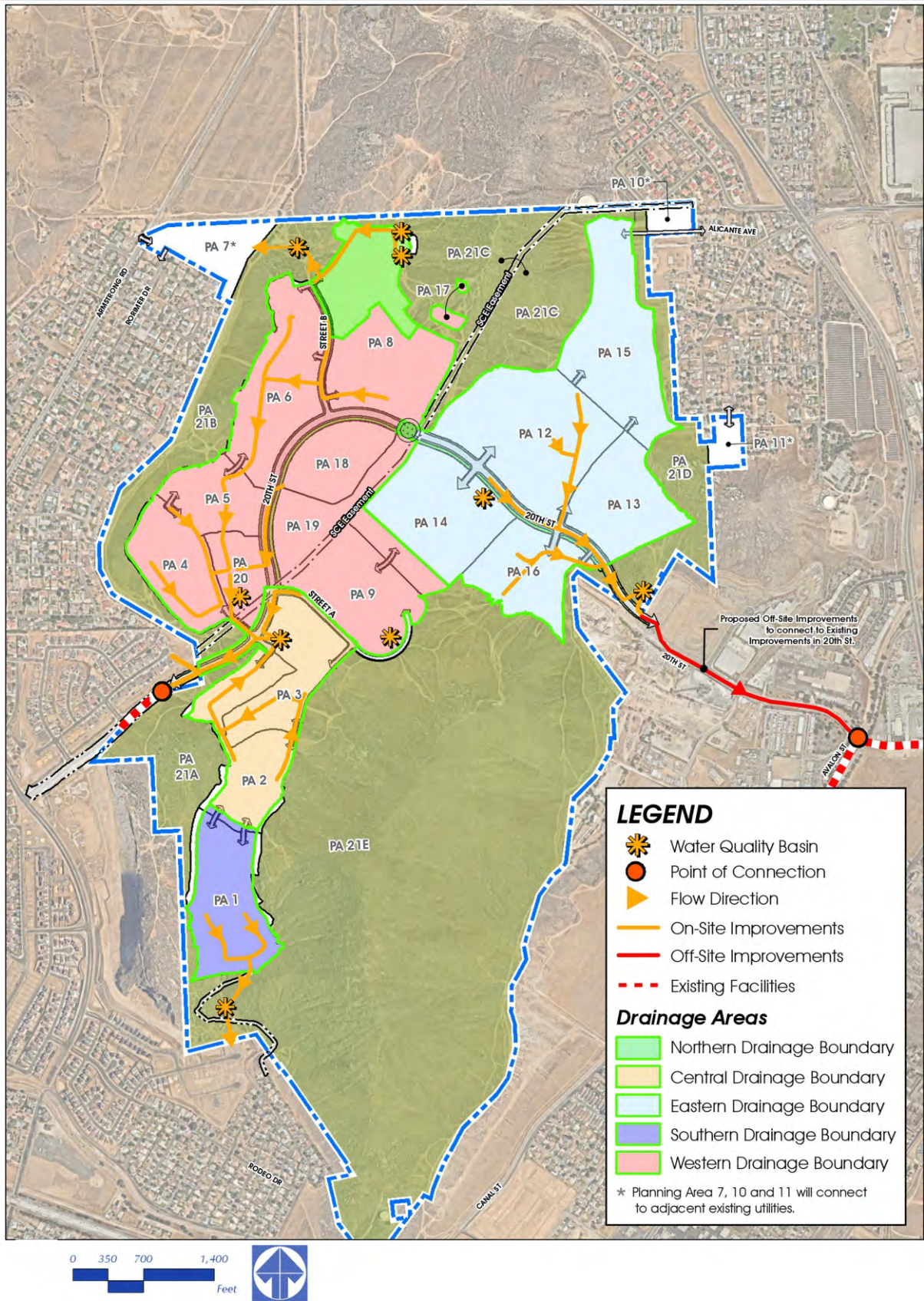
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CHAPTER 3: ENVIRONMENTAL IMPACT ANALYSIS

Organization of Issue Areas

This Chapter sets forth the physical and regulatory environmental setting and addresses the environmental impacts of the proposed project with respect to 20 environmental resource areas. The discussions of the environmental setting describe the present physical conditions, or baseline conditions, in the project area. The baseline used for the analysis of environmental impacts under the California Environmental Quality Act (CEQA) reflects the conditions present at the time the Notice of Preparation (NOP) for this Draft Environmental Impact Report (Draft EIR) was published on December 6, 2021. The potential impacts of the proposed project are compared against the existing baseline conditions for each environmental resource.

Issues Addressed in this Draft EIR

The following environmental issues are addressed in Chapter 3:

- Aesthetics
- Agriculture Resources and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

Format of the Environmental Analysis

Each resource area analyzed in this Chapter includes the subsections summarized below.

Introduction

This subsection summarizes what will be discussed in the respective environmental topic section, states what informational documents are used as the basis for the section, and indicates what related comments, if any, were received during the EIR public scoping period.

Environmental Setting

This subsection describes the existing, baseline physical conditions of the project site and surroundings (e.g., existing land uses, transportation conditions, noise environment) with respect to each resource topic at the time the NOP was issued. Conditions are described in sufficient detail and breadth to allow a general understanding of the environmental impacts of the proposed project.

Regulatory Framework

This subsection describes the relevant federal, State, and local regulatory requirements that are directly applicable to the environmental topic being analyzed.

Impacts, Regulatory Requirements, Project Design Features, and Mitigation Measures

This subsection evaluates the potential for the proposed project to result in direct and indirect adverse impacts on the existing physical environment, with consideration of both short-term and long-term impacts. The analysis covers all phases of the proposed project, including construction and operation. The significance thresholds for environmental impacts are defined at the beginning of this subsection, and the discussion of the approach to the analysis explains how the significance thresholds have been applied to evaluate the impacts of the proposed project.

Impacts

Indirect impacts are discussed only for those resources for which they have the potential to occur (e.g., cultural resources, air quality, and biological resources). Both project-level and cumulative impacts are analyzed. Project-level impacts could result from actions related to implementation of the project. Cumulative impacts could result from implementation of the proposed project in combination with other cumulative projects in the study area. As discussed in “Cumulative Impacts,” below, the projects listed in Table 3-1, in conjunction with the proposed project, are considered the cumulative scenario for the analysis of cumulative impacts.

Impacts are analyzed and the respective assessment and findings are included in this Draft EIR, applying the following levels of significance:

- **No impact.** A conclusion of No Impact is reached if no potential exists for impacts or if the environmental resource does not occur in the project area or the area of potential impacts.
- **Less than significant impact.** This determination applies if the impact does not exceed the defined significance criteria or would be eliminated or reduced to a less than significant level through compliance with existing local, State, and federal laws and regulations. No mitigation is required for impacts determined to be less than significant.
- **Less than significant impact with mitigation.** This determination applies if the proposed project would result in a significant impact, exceeding the established significance criteria, but feasible mitigation is available that would reduce the impact to a less than significant level.
- **Significant and unavoidable impact.** This determination applies if the proposed project would result in an adverse impact that exceeds the established significance criteria, and no feasible mitigation is available to reduce the impact to a less than significant level. Therefore, the residual impact would be significant and unavoidable.
- **Significant and unavoidable impact with mitigation.** This determination applies if the proposed project would result in an adverse impact that exceeds the established significance criteria, and although feasible mitigation might lessen the impact, the residual impact would be significant, and, therefore, the impact would be unavoidable.

Impacts are defined in terms of their context and intensity. Context is related to the uniqueness of a resource; intensity refers to the severity of the impact. Where applicable, Best Management Practices (BMPs) or project improvement measures, or both, are incorporated into the proposed project to limit the potential for a significant impact. Where necessary, mitigation measures are identified for significant impacts to limit the degree or lower the magnitude of the impact; rectify the impact by repairing, rehabilitating, or restoring the affected environment; or compensate for the impact by replacing or providing substitute resources or environments. These impacts conclude with a finding of Less than Significant Impact with Mitigation. Where no mitigation measures are necessary, relevant impacts are concluded to be Less than Significant or to have No Impact.

Regulatory Requirements

Plans, Policies, Programs (PPP) include existing regulatory requirements such as plans, policies, or programs applied to the proposed project on the basis of federal, state, or local law currently in place that effectively reduce environmental impacts. If applicable, they are identified in the Impact Analysis section for each topic. PPPs were assumed and accounted for in the assessment of impacts for each topical area.

Project Design Features

Project Design Features (PDFs) are part of the project that is undergoing environmental review and effectively reduce environmental impacts. PDFs that address environmental impacts may include construction traffic management plans, use of energy efficient lighting, solar panels, construction lighting that will be shielded and directed away from neighboring properties, and building standards in excess of the requirements of Title 24 Building Code. PDFs were assumed and accounted for in the assessment of impacts for each topical area.

Mitigation Measures

As part of the impact analysis, mitigation measures are identified, where feasible, for impacts considered significant or potentially significant consistent with CEQA Guidelines Section 15126.4, which states that an EIR “shall describe feasible measures which could minimize significant adverse impacts.” CEQA requires that mitigation measures have an essential nexus and be roughly proportional to the significant impact identified in the EIR. The project sponsor is required to implement all identified mitigation measures identified in this Chapter, and the lead agency (in this case, City of Jurupa Valley) is responsible for overseeing the project sponsor’s implementation of such mitigation measures. Pursuant to CEQA Guidelines Section 15126.4, mitigation measures are not required for environmental impacts that are found not to be significant.

Impacts are numbered and shown in bold type. The corresponding mitigation measures, where identified, are numbered and indented, and follow the impact statements. Impacts and mitigation measures are numbered consecutively within each topic and include an abbreviated reference to the impact section (e.g., “LAND” for Land Use and Planning). The following abbreviations are used for individual topics:

- Aesthetics (AES)
- Agricultural Resources and Forest Resources (AG)

- Air Quality (AIR)
- Biological Resources (BIO)
- Cultural Resources (CUL)
- Energy (ENER)
- Geology and Soils (GEO)
- Greenhouse Gas Emissions (GHG)
- Hazards and Hazardous Materials (HAZ)
- Hydrology and Water Quality (HYD)
- Land Use and Planning (LAND)
- Mineral Resources (MIN)
- Population and Housing (POP)
- Noise (NOI)
- Public Services (PUB)
- Recreation (REC)
- Transportation (TRANS)
- Tribal Cultural Resources (TCR)
- Utilities and Service Systems (UTIL)
- Wildfire (WILD)

Cumulative Impacts

The discussion of cumulative impacts in this subsection analyzes the cumulative impacts of the proposed project, taken together with other past, present, and reasonably foreseeable future projects producing related impacts. The goal of this analysis is to determine whether the overall long-term impacts of all such projects would be cumulatively significant, and to determine whether the project itself would cause a “cumulatively considerable” incremental contribution to any such cumulatively significant impacts. To determine whether the overall long-term impacts of all such projects would be cumulatively significant, the analysis generally considers the following:

- The area in which impacts of the proposed project would be experienced.
- The impacts of the proposed project that are expected in the area.
- Other past, proposed, and reasonably foreseeable projects that have had or are expected to have impacts in the same area.
- The impacts or expected impacts of these other projects.
- The overall impact that can be expected if the individual impacts from each project are allowed to accumulate.

“Cumulative impacts” refers to two or more individual impacts that, when considered together, are considerable, or that compound or increase other environmental impacts (CEQA Guidelines § 15355). Cumulative impacts can result from individually minor but collectively significant impacts taking place over time (40 Code of Federal Regulations [CFR] 1508.7). If the analysis determines that the potential exists for the project, taken together with other past, present, and reasonably foreseeable future projects, to result in a significant or adverse cumulative impact, the analysis then

determines whether the project's incremental contribution to any significant cumulative impact is itself significant (i.e., "cumulatively considerable"). CEQA Guidelines (Section 15130 [b][1]) state that the information utilized in an analysis of cumulative impacts should come from one of two sources:

- A. A list of past, present and probable future projects producing related cumulative impacts, including, if necessary, those projects outside the control of the agency, or
- B. A summary of projections contained in an adopted General Plan or related planning document designed to evaluate regional or area-wide conditions.

The cumulative impact analysis in this EIR uses both methods as described more specifically in each cumulative impact section. The geographic area in which cumulative impacts are considered varies depending on the specific environmental topic in Chapter 3, Environmental Impact Analysis, of this EIR, and is identified in the Cumulative Impacts subsection of each section of Chapter 3. For instance, for utilities and service systems, the area considered is the service area of each utility provider; and the geographic scope of air quality is the South Coast Air Basin, which is the air basin where the project site is located.

Table 3-1 lists the relevant cumulative projects considered for the environmental analysis, and Exhibit 3-1 shows the locations of the cumulative projects (Projects A through X).

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Table 3-1: Cumulative Projects

No.	Project	Development Type	Detail	Location	Distance from Proposed Project	Status
County of San Bernardino						
A	Slover and Alder Avenue Industrial Project	Industrial	259,481 SF	<p>Alder Avenue between Slover Avenue and I-10, Bloomington, Unincorporated San Bernardino County</p> <p>Address: 17761 Slover Avenue, Bloomington, CA 92316</p> <p>APNs: 0256-031-19, 0256-031-18, 0256-031-17, 0256-031-07, 0256-031-08, -09, -10</p>	2 miles	CUP Application currently “In Review”
B	Bloomington Business Center	Commercial/ Industrial	344,000 SF	<p>South of Slover Avenue between Laurel Avenue and Locust Avenue, Bloomington, Unincorporated San Bernardino County</p> <p>Addresses: 10590 Locust Avenue, Bloomington, CA 92316 17975 Slover Avenue, Bloomington, CA 92316 18089 Slover Avenue, Bloomington, CA 92316</p> <p>APNs: 0256-041-01, 02, 03, 47, and 48</p>	2 miles	Approved
C	Slover High-Cube	Commercial	16 acres (site size)	<p>Southwest corner of Cedar Avenue and Slover Avenue, Bloomington, Unincorporated San Bernardino County</p> <p>Addresses: 18653 Slover Ave., Bloomington, CA 92316 10598 Cedar Ave., Bloomington, CA 92316</p>	2 miles	County of San Bernardino has confirmed there is no project with this name on record. However, a Chevron Gas Station with convenience store (4,533 SF) and a car wash (1,050 SF) has been approved on this site.

No.	Project	Development Type	Detail	Location	Distance from Proposed Project	Status
				APNs: 0257-013-12; 0257-013-13		
D	Chevron Slover	Industrial		North of Slover Avenue between Locust Avenue and Linden Avenue, Bloomington, Unincorporated San Bernardino County	2 miles	County of San Bernardino has confirmed they have no project with this name on record.
E	Slover/Cactus Avenue Warehouse	Industrial	257,855 SF	Southwest corner of Cactus Avenue and Slover Avenue, Bloomington, Unincorporated San Bernardino County Addresses: 19221 Slover Ave., Bloomington, CA 92316 APNs: 0257-071-03, -04, and 39	2 miles	CUP to construct warehouse “In Review”
F	Bloomington Business Park	Commercial/ Industrial	3,235,836 SF	North of Jurupa Avenue between Alder Avenue and Linden Avenue, Bloomington, Unincorporated San Bernardino County Address: 11048 Laurel Ave., Bloomington, CA 92316 APN: 0256091070000	1 mile	CUPs “In Review”
City of Fontana						
G	Goodman Industrial Park	Industrial	1,118,460 SF	North of Jurupa Avenue between Juniper Avenue and Cypress Avenue, Fontana Address: 11007 Cypress Avenue, Fontana, CA APN: 025509129	2 miles	Approved 2/4/2019

No.	Project	Development Type	Detail	Location	Distance from Proposed Project	Status
H	Fontana Foothills Commerce Center	Commercial	754,408 SF	Northeast corner of Juniper Avenue and Jurupa Avenue, Fontana Address: 11259 Juniper Avenue, Fontana, CA APN: 025510114	2 miles	Approved 12/5/2019
I	West Valley Logistics Center	Industrial	3,600,000 SF	South of Jurupa Avenue east of Locust and along both sides of Armstrong Road, Fontana Address: 11490 Locust Avenue, Fontana, CA APN: 025613111	0.5 mile	Approved with conditions 1/25/2021
City of Jurupa Valley						
J	Agua Mansa Commerce Park Specific Plan	Commercial	4,302,000 SF	1500 Rubidoux Boulevard, Jurupa Valley	0.5 mile	Approved – on 5-7-2022 under construction
K	Agua Mansa Road Development Project	Industrial	335,000 SF	Northwest corner of Hall Avenue and Agua Mansa Road, Jurupa Valley	1 mile	Approved – completion date 2024-2025
L	Rubidoux Commerce Park Project	Industrial	1,194,170 SF	Between 25 th Street and 28 th Street, west of Avalon Street	340 feet (0.06 mile)	In Process
M	Drive-through Restaurant and Gas Station/Convenience Store	Commercial	10,636 SF	Southeast corner of Rubidoux Boulevard and Market Street, Jurupa Valley Address: 5620 Market Street APN: 178-330-004	0.7 mile	Pre-application Letter provided on 9-9-2020 No formal entitlements have been submitted

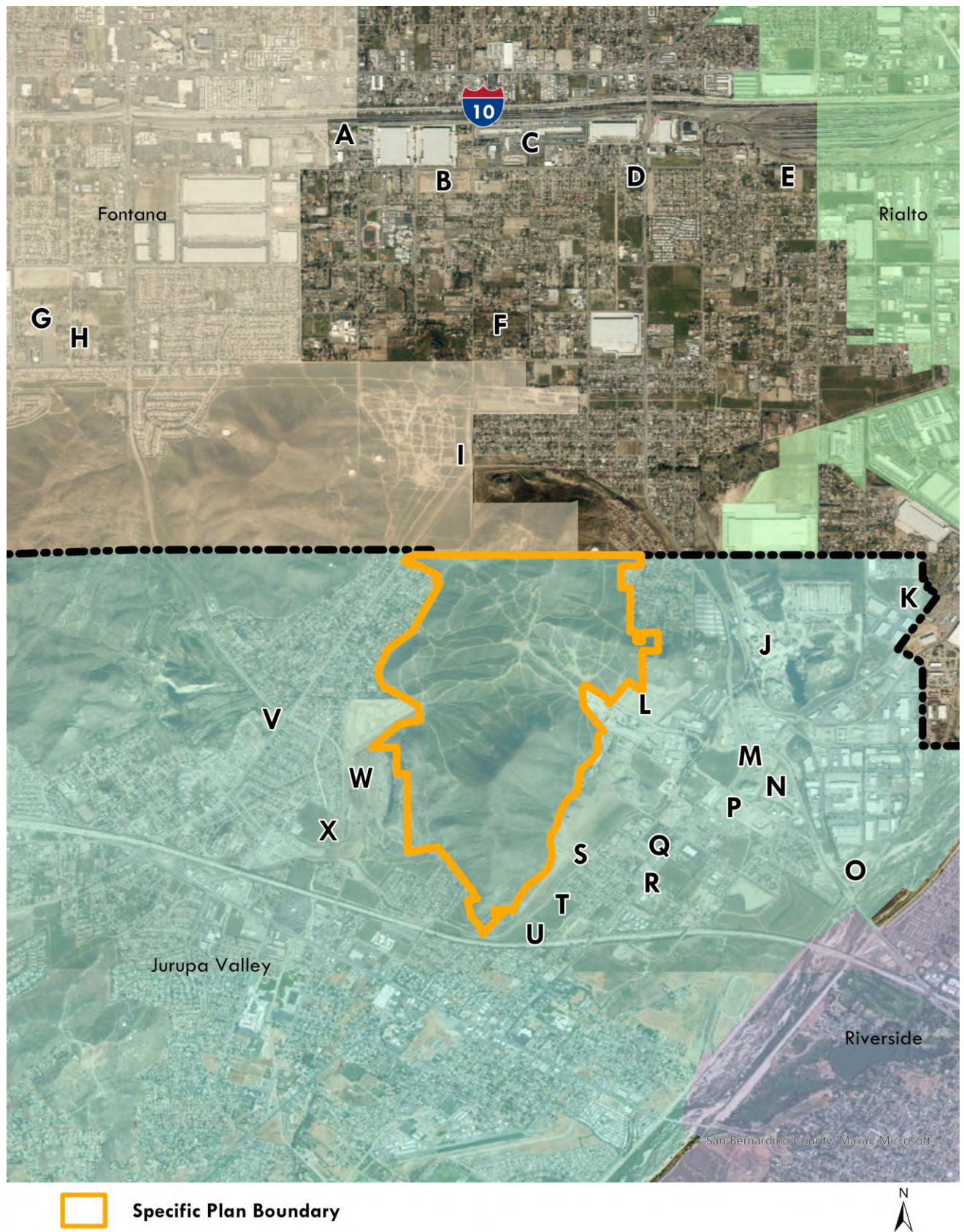
No.	Project	Development Type	Detail	Location	Distance from Proposed Project	Status
N	Wheeler Trucking, Inc.	Industrial	25,910 SF	Southeast of Rubidoux Boulevard and Market Street at Agua Mansa Road, Jurupa Valley	1 mile	Approved, completion date 2022
O	Market Street Commercial	Commercial	13,558 SF	1890 Market Street, Jurupa Valley	1.3 miles	Approved
P	Kiewit Conditional Use Permit No. 18002	Industrial	63,000 SF	Southeast corner of Rubidoux Boulevard and 24 th Street, Jurupa Valley	0.7 mile	Approved, under construction
Q	Ice Box Developers, Inc. /West Coast Cold Storage	Industrial	303,059 SF	South of 26 th Street between Rubidoux Boulevard and Avalon Street, Jurupa Valley	0.5 mile	Completed 11/2021
R	Mt. Jurupa Industrial Park	Industrial	190,005 SF	East of Rubidoux Boulevard and north of 28 th Street, Jurupa Valley	0.5 mile	Approved 10/2020
S	Emerald Ridge North	Residential	184 DU	North of State Route (SR) 60, west of Canal Street, and South of 28 th Street, Jurupa Valley	600 feet (0.1 mile)	Approved
T	Emerald Ridge South	Residential	215 DU	North of SR-60, west of Avalon Street, east of Canal Street, and South of Kenwood Place, Jurupa Valley	1,000 feet (0.2 mile)	Approved
U	TTM 33373	Residential	75 DU	East of Canal Street, south of Alta Street, and north of SR-60, Jurupa Valley	800 feet (0.15 mile)	Pre-application review (PAR 1314) is complete; a formal application is in process
V	Tractor Supply Center	Commercial	24,710 SF	Southwest corner of Sierra Avenue and Armstrong, Jurupa Valley	0.5 mile	Approved 2/2022
W	Shadow Rock	Residential	398 DU	North of Canal Street and east of Sierra Avenue, Jurupa Valley	860 feet (0.16 mile)	Approved, under construction
X	Shadow Rock	Residential	34 DU	South of 30 th Street and West of Sierra Avenue, Jurupa Valley	0.4 mile	Approved 3/2019

Notes:

DU = dwelling units

SF = square feet

Source: EPD Solutions, Inc. 2022; FirstCarbon Solutions (FCS) 2022. Kimley-Horn and Associates, Inc. 2022. City of Jurupa Valley 2022.



Source: EPD Solutions, Inc., 2022.



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3.1 - Aesthetics

3.1.1 - Introduction

This section describes the existing aesthetics, light, and glare conditions in the project area, as well as the relevant regulatory framework. This section also evaluates the possible impacts related to aesthetics that could result from implementation of the proposed project. Information included in this section is based, in part, upon review of the Jurupa Valley General Plan (General Plan), the Jurupa Valley Municipal Code (Municipal Code), and visual simulations (view sims) included in Appendix B.

A Notice of Preparation (NOP) was released for public review on December 6, 2021, and an Environmental Impact Report (EIR) Scoping Meeting was held on December 14, 2021. No public comments were received during the scoping period related to aesthetics.

3.1.2 - Environmental Setting

Visual Character

The City of Jurupa Valley (City) still retains much of the visual character of a smaller, slower-paced, rural community. Open space is a critical part of what gives the City its unique visual character.¹ With Jurupa Valley poised to continue experiencing significant growth in the next 10 to 15 years, protected open spaces ensure that future generations can continue to enjoy these visual and recreational amenities. In 2017, approximately 11 percent, or 6,500 acres, of City land remained undeveloped, or essentially so, in the forms of parkland, open space, and, to a lesser degree, agricultural uses. Thus, open space and related land uses can play a key role in maintaining distinct community boundaries or “edges” and by buffering the City from adjacent, more urbanized areas in order to protect the City’s visual character. The City is literally “shaped,” in terms of both geography and scenic character, by its open spaces.²

Enhancing aesthetic experiences for residents and visitors to the City and to Riverside County is essential to preserving the visual character of Jurupa Valley. The General Plan considers the following to be valuable open space resources in the City:

1. Santa Ana River and adjacent riparian corridors with natural banks and vegetation.
2. Natural and manmade creeks, arroyos, lakes, groundwater, and other water bodies.
3. Wetlands and vernal pools.
4. Jurupa Mountains and Pedley Hills.
5. Undeveloped land within the City’s limits not intended for urban uses.
6. Grassland communities and woodlands.
7. Wildlife habitat and corridors for the health and mobility of individuals and of the species.
8. Habitats of species listed as threatened or endangered by State or federal governments.
9. Prime agricultural soils and economically viable farmland.

¹ City of Jurupa Valley. 2017. Jurupa Valley General Plan. Website: <https://www.jurupavalley.org/DocumentCenter/View/217/2017-Master-General-Plan-PDF>. Accessed December 1, 2021.

² Ibid.

10. Hills, ridgelines, box canyons, scenic rock outcroppings, and other significant land features.
11. Unique plant and animal communities, including “species of local concern.”

The General Plan does not designate any Protected Open Space within the project site.³ However, Rattlesnake Mountain (1,604 feet) and Pepe’s Peak (1,739 feet), are located within the project site. Both would be preserved and incorporated into Open Space Planning Areas (PAs).

Scenic Resources

Scenic resources in the City generally include natural areas that are visible to the public, 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 include hillsides and ridges that rise above or adjacent to urban or rural areas or highways. Scenic vistas are points or corridors that are accessible to the public and that provide a view of scenic areas and/or landscapes.⁴

The General Plan Figure 4-23, Jurupa Valley Scenic Corridors and Roadways, does not identify any Scenic Corridors or Roadways within the project site.⁵ However, this Figure identifies the following Major Arterial Scenic Roadways in the vicinity of the project site:

- Armstrong Road, from the San Bernardino County line to State Route (SR) 60; located between approximately 20 feet (at the northwest corner) and approximately 1.4 miles (at the southern tip) west of the project site.
- Rubidoux Boulevard, from the San Bernardino County line to Mission Boulevard, south of SR-60; located between approximately 0.3 mile (at the northeastern portion) and 0.6 mile (in the central eastern portion) east of the project site.
- Market Street, from its intersection with Rubidoux Boulevard to the Riverside city limits; located approximately 0.63 mile east of the project site.
- Mission Boulevard, south of SR-60; located south of the project site, across SR-60.

Scenic Highways

The California Department of Transportation (Caltrans) California State Scenic Highway System Map does not identify any scenic highway in the vicinity of the project site.⁶ The nearest designated or eligible State Scenic Highways are approximately 11.65 miles southwest of the project site, at the intersection of Interstate 15 (I-15) and SR-91 (designated), and approximately 12.5 miles northeast of the project site, near the intersection of I-10 and SR-38 (designated). Because of the distance and

³ City of Jurupa Valley. 2017. Jurupa Valley General Plan. Website: <https://www.jurupavalley.org/DocumentCenter/View/217/2017-Master-General-Plan-PDF>. Accessed December 1, 2021.

⁴ City of Jurupa Valley. 2017. Jurupa Valley General Plan. Website: <https://www.jurupavalley.org/DocumentCenter/View/217/2017-Master-General-Plan-PDF>. Accessed December 1, 2021.

⁵ Ibid.

⁶ California Department of Transportation (Caltrans). 2022. California State Scenic Highway System Map. Website: <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>. Accessed January 13, 2022.

intervening development, the project site is not visible from these designated California Scenic Highways.

Views

The City has outstanding views of nearby mountains and the Santa Ana River plain. Many streets and highways in Jurupa Valley provide views of its scenic resources. The project site is visible from SR-60, located to the south of the site.

The Jurupa Mountains and Mount Jurupa are visible from the project site. Within the City, the Jurupa Mountains are north of SR-60 and directly west of the project site. Mount Jurupa, the highest point of the Jurupa Mountains (2,208 feet), is located approximately 1.7 miles west of the project site in the northeast portion of the City of Jurupa Valley. The summit, which is located just south of the San Bernardino County line, offers views of Riverside, Fontana, San Bernardino, and Moreno Valley.⁷

The San Gabriel and San Bernardino mountain ranges are located roughly 20 miles north of the project site. These mountain ranges are partially visible from the higher elevation areas of the project site; however, the views are obstructed in the lower elevation areas on the project site due to the site's topography, vegetation, and intervening development. Additionally, the Pedley Hills are approximately 2.5 miles southwest of the project site.

Rattlesnake Mountain (1,604 feet) and Pepe's Peak (1,739 feet) are located within the project site. Both would be preserved and incorporated into Open Space PAs. Rattlesnake Mountain and Pepe's Peak provide spectacular scenic views of the surrounding areas, including the Jurupa Mountains, Pedley Hills, San Gabriel Mountains, San Bernardino Mountains, and San Jacinto Mountains, as well as the surrounding urbanized areas.

Light and Glare

Existing light sources in the City include unshielded outdoor residential and commercial lighting, public street lighting, and temporary sources such as sports field lighting or construction lighting. When properly aimed and shielded, most glare that affects the nighttime sky can be prevented or minimized. Many areas in the City are semi-rural and do not require the same lighting levels or public street lighting that is common in more urbanized areas. Where exterior lighting is appropriate, it is the City's intent to require all new public and private lighting, including public street lighting, to be properly shielded and to retrofit unshielded lighting wherever possible.⁸ The project site is undeveloped and does not currently have light or glare sources present.

3.1.3 - Regulatory Framework

Federal

No federal plans, policies, regulations, or laws related to aesthetics are applicable to the proposed project.

⁷ PeakVisor. 2021. Mount Jurupa. Website: <https://peakvisor.com/peak/mount-jurupa.html>. Accessed December 2, 2021.

⁸ City of Jurupa Valley. 2017. Jurupa Valley General Plan Conservation and Open Space Element. Website: <https://www.jurupavalley.org/DocumentCenter/View/217/2017-Master-General-Plan-PDF>. Accessed December 1, 2021.

State

Title 24 of the California Code of Regulations Building Energy Efficiency Standards

California Building Standards Code (California Code of Regulations [CCR], Title 24)—including Title 24, Part 6—includes Section 132 of the Building Energy Efficiency Standards, which regulates lighting characteristics, such as maximum power and brightness, shielding, and sensor controls to turn lighting on and off. Different lighting standards are set by classifying areas by lighting zone.

Local

City of Jurupa Valley General Plan 2017

The following General Plan policies are directly related to the project in regard to aesthetics.

Land Use Element

- LUE 1.1 Compatible Structures.** Require that structures be designed and operated in a manner that preserves and is compatible with the environmental character where they are located, including lighting, telecommunications equipment and other facilities and equipment.
- LUE 2.9 Design Compatibility.** Ensure that new residential developments are designed to be compatible with their surroundings and to enhance visually the appearance of neighborhoods and adjacent structures.
- LUE 3.8 Architectural Compatibility.** Require commercial development to be designed to enhance and be architecturally compatible with its surroundings and with designated scenic highways or public view corridors by providing high quality architecture, landscaping, and site improvements. Architectural styles that reflect the City's small town rural, agricultural history shall be utilized in the design of new commercial developments in or near the Town Centers, consistent with the applicable design guidelines.
- LUE 3.19 Architectural Compatibility.** Ensure that new industrial and business park development is designed to enhance and be architecturally compatible with its surroundings and with designated scenic highways or public view corridors by providing high quality architecture, landscaping, and site improvements.
- LUE 4.5 Architectural Compatibility.** Public Facility/Institutional development shall be designed to enhance and be architecturally compatible with its surroundings and with designated scenic highways or public view corridors by providing high-quality architecture, landscaping, and site improvements.
- LUE 8.2 High Quality Development.** Require that all development be of high quality and enhance the positive characteristics and unique features of the project site, neighboring properties and the surrounding community.

- LUE 9.1 Hillside Development Limitations.** Limit development in areas that contain natural slopes, canyons, ravines, or other significant elevation changes, regardless of land use designation, and apply the following policies: [See LUE 9.2, 9.3, 9.5 and 9.7]
- LUE 9.2 Natural Landforms.** Require that hillside development preserve and protect the site's natural landforms and native vegetation, and preserve established trails.
- LUE 9.3 Cluster Development.** Require that development clustering be used, where appropriate, to retain natural slopes, protect native trees, vegetation, wildlife corridors, riparian areas and springs, cultural resources, and open space, and preserve scenic views.
- LUE 9.5 Visually Sensitive Areas.** Development on visually significant ridgelines, canyon edges, and hilltops shall use sensitive siting, architectural design, and appropriate landscaping to ensure that development is visually unobtrusive and compatible with its setting.
- LUE 9.7 Grading.** Limit grading, cut, and fill to the minimum quantities necessary to provide stable areas for structural foundations, street right-of-way, parking facilities, and other intended uses.
- LUE 11.2 Design Standards.** Comply with the design standards of the appropriate General Plan and community plan land use category.
- LUE 11.11 Landscape Maintenance.** Require development projects to include landscaping in all site areas, including street trees, parking lots, setback areas, open spaces, and other exterior use areas. Landscaping shall include trees, shrubs and ground covers, and an automatic, water-conserving irrigation system, and shall be designed and maintained in accordance with City Landscape Standards. In addition, a priority should be placed on preserving mature trees in place wherever possible. Where mature trees must be removed, they shall be replaced with an equivalent number of large trees of the same or compatible species.
- LUE 11.12 Natural Features.** Require development projects, including public projects, utilities, and earthworks/grading, to protect and preserve natural features, such as unique natural terrain, rocky outcrops, ridgelines, drainage ways, mature trees, and native vegetation, wherever possible, particularly where they provide continuity with more extensive regional systems.
- LUE 11.17 Screened Trash and Recycling Areas.** Require new development to provide clean, safe, secure, visually screened trash and recycling enclosures that are architecturally compatible with the development. Existing development and uses are encouraged to provide safe, secure, and visually screened trash and recycling enclosures.

*Mobility Element***Policies**

- ME 7.9** **Landscape Buffers.** Require parking areas of all commercial and industrial land uses that abut residential areas to be buffered and shielded by adequate landscaping and/or other effective visual screens.
- ME 8.37** **Tree Preservation in Right-of-Way.** Preserve mature trees with street or highway right-of-way that are identified as superior examples of California native species or naturalized tree species.

Conservation and Open Space Element

- COS 9.1** Protect scenic resources, especially skylines, undeveloped ridgelines, rocky hillsides, river view corridors, and outstanding scenic vistas not designated for urban uses from development, and maintain those resources in their current patterns of use.
- COS 9.1.3** **Undergrounding Utilities.** Place existing overhead utilities underground, with highest priority for scenic roadways and entries to the City, and require utilities, community services districts, and other responsible agencies to do likewise).
- COS 9.2** Ensure that development in areas with scenic values, including natural or agricultural landscapes, is visually subordinate to and compatible with the dominant landscape features, colors, and textures. Development includes but is not limited to buildings, signs (including billboard signs), roads, utility and telecommunication lines, and structures. Such development shall:
1. Avoid visually prominent locations such as ridgelines, and slopes exceeding 20 percent, particularly in the visually sensitive Jurupa Mountains.
 2. Avoid unnecessary grading, vegetation removal, and site lighting.
 3. Incorporate building forms, architectural materials, and landscaping that respect the setting, including the historical pattern of development in similar settings, and avoid stark contrasts with its setting.
 4. Preserve scenic or unique landforms; significant trees in terms of size, age, species, or rarity; historical features; and rock outcroppings.
- COS 9.4** **View Protection in New Development.** The City will include in all environmental review and carefully consider effects of new development, streets and road construction, grading and earthwork, and utilities on views and visual quality.
- COS 9.5** **Views to and from Public Places, Including Scenic Corridors.** The City will preserve and improve views of important scenic resources from public places, and encourage other agencies with jurisdiction to do so. Public places include parks, plazas, the grounds of civic buildings, streets and roads, and publicly accessible open space. In particular, the route segments shown in Figure 4-23 [of the General Plan] are designated as local scenic corridors.

- COS 10.1 Outdoor Lighting.** Require outdoor lighting to be shielded and prohibit outdoor lighting that:
1. Operates at unnecessary locations, levels, and times.
 2. Spills onto areas off-site or to areas not needing or warranting illumination.
 3. Produces glare (intense line-of-site contrast).
 4. Includes lighting frequencies (colors) that interfere with astronomical viewing.
- COS 10.2 New Residential Development and Remodeling Projects.** Require development projects and major remodel projects to minimize light pollution and trespass while enhancing safety and aesthetics.
- COS 10.3 Public Facilities, Buildings, and Streets.** Use outdoor light-shielding measures for new and existing lighting fixtures, including signs, to minimize light trespass and glare while enhancing safety and aesthetics.
- COS 10.4 Commercial and Industrial Buildings.** Require that site lighting for commercial and industrial uses is unobtrusive and constructed or located so that only the intended area is illuminated, off-site glare is prevented, and adequate safety is provided.

City of Jurupa Valley Municipal Code

Section 9.235.040.—Development Standards.

As required by Municipal Code 9.235.040, uses shall conform to the development standards, conditions, and any special restrictions contained in the adopted specific plan and any associated amendments. However, if the specific plan lacks one or more standards, the applicable standards from the zoning classification which most closely fits the land use assigned to the site shall be utilized.⁹

3.1.4 - Thresholds of Significance

Significance Criteria

In accordance with Section 15064.7 of the State California Environmental Quality Act (CEQA) Guidelines, the City of Jurupa Valley adopted local CEQA Guidelines. The City's local CEQA Guidelines are based, in part, on the CEQA checklist included in Appendix G of the State CEQA Guidelines. The City of Jurupa Valley Guidelines recognizes the following significance thresholds and Significance Criteria related to aesthetics. Based on these significance thresholds, a project would have a significant impact on aesthetics if it would:

- a) Have a substantial adverse effect on a scenic vista.

⁹ City of Jurupa Valley. 2021. Jurupa Valley Municipal Code Section 9.235.040. Website: https://library.municode.com/ca/jurupa_valley/codes/municipal_code?nodeId=TIT9PLZO_CH9.235SPZOSPPL_S9.235.040DEST. Accessed February 7, 2022.

Under the City's local significance threshold, the project would have significant effects if: The project would substantially block public views of a scenic vista that is visible from a scenic corridor as identified by General Plan Figure 4-23.

Note: Scenic vistas are points or corridors that are accessible to the public and that provide a view of scenic areas and/or landscape. In general, scenic resources include natural areas that are visible to the public and include 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 include hillsides and ridges that rise above or adjacent to urban or rural areas or highways.

- b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a State Scenic Highway.

Screening Criteria: If the project is not located within a State Scenic Highway, it may be presumed to have a less than significant impact absent substantial evidence to the contrary.

Under the City's local significance threshold, the project would have significant effects if: The project is located within a State Scenic Highway corridor pursuant to the Streets and Highways Code, Sections 260 through 263 and the project will damage trees, rock outcroppings, and historic buildings.

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

Under the City's local significance threshold, the project would have significant effects if: The project is inconsistent with General Plan policies or Municipal Code requirements pertaining to scenic quality.

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

Under the City's local significance threshold, the project would have significant effects if: The project is inconsistent with General Plan Policy COS 10.1, which requires outdoor lighting to be shielded and prohibits outdoor lighting that:

1. Operates at unnecessary locations, levels, and times.
 2. Spills onto areas off-site or to areas not needing or wanting illumination.
 3. Produces glare (intense line-of-site contrast).
 4. Includes lighting frequencies (colors) that interfere with astronomical viewing.
 5. Includes building materials (e.g., exterior materials, windows, etc.) that create glare.
- Daytime glare impacts would be considered significant if buildings, signage or thematic elements that incorporate substantial amounts of reflective building materials were to be developed on the project site in areas that are highly visible to

off-site glare-sensitive uses. Nighttime glare impacts would be considered significant if future buildings, signage or thematic elements which incorporate highly reflective building materials were to be developed on the project site in close proximity to both glare-sensitive uses and motor vehicle traffic or would be illuminated by high brightness special effects or event lighting associated with the proposed project. Daytime glare-sensitive uses generally include residential areas, freeways, and outdoor activity areas (recreational areas and parks). Uses sensitive to nighttime glare generally include residential uses, some commercial and institutional uses, and wildlife habitat within natural areas.

Approach to Analysis

This analysis provides a discussion of the visual impacts associated with the proposed project and the area surrounding the project site. Several variables affect the degree of visibility, visual contrast, and ultimately project impacts: (1) scale and size of facilities, (2) viewer types and activities, (3) distance and viewing angle, and (4) influences of adjacent scenery or land uses. Viewer response and sensitivity vary depending on viewer attitudes and expectations.

3.1.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Scenic Vistas

Threshold AES-1: Would the proposed project have a substantial adverse effect on a scenic vista?

Under the City's local significance threshold, the project would have significant effects if: The project would substantially block public views of a scenic vista that is visible from a scenic corridor as identified by General Plan Figure 4-23.

Note: Scenic vistas are points or corridors that are accessible to the public and that provide a view of scenic areas and/or landscape. In general, scenic resources include natural areas that are visible to the public and include 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 include hillsides and ridges that rise above or adjacent to urban or rural areas or highways.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

These include existing regulatory requirements such as plans, policies, or programs applied to the proposed project based on federal, State, or local law currently in place which effectively reduce impacts to aesthetics.

The following PPP applies to the proposed project and would reduce impacts related to aesthetics:

PPP 3.1-1 As required by the Rio Vista Specific Plan Chapter 2 (Land Use Element), Chapter 3 (Mobility Element), and Chapter 4 (Conservation and Open Space).

Project Design Features

The proposed project includes design guidelines that are intended to create aesthetically pleasing urban development and site design. Accordingly, all architectural design elements that are proposed as components of the proposed project, as described in Section IV of the Rio Vista Specific Plan, are considered PDFs for the purposes of this EIR. There are no PDFs that are relevant to scenic vistas.

Impact Analysis

The General Plan defines a scenic vista as points or corridors that are accessible to the public and provide a view of scenic areas and/or landscapes.¹⁰ Unique features located within the City that could be considered scenic vistas include the Santa Ana River, located 1.3 miles to the southwest of the project site; the Jurupa Mountains, located more than 0.5 mile west of the project site; and Pedley Hills, located more than 1.4 miles to the southwest of the project site; as well as the San Gabriel and San Bernardino mountain ranges, roughly 20 miles north of the project site. Unique features within the project site include hills and mountain peaks, such as Rattlesnake Mountain (1,604 feet) and Pepe's Peak (1,739 feet), and mature trees, such as the Palmer's oak discussed in Section 3-3, Biological Resources. Other scenic vistas considered in the General Plan, such as the Santa Ana River or floodplains, are not present within the project site.

As discussed in Section 2, Project Description, the proposed project includes the designation of 510.8 acres as Open Space-Conservation (OS-C), thereby preserving a significant portion of the project site's natural topography and character (Exhibit 2-7). Specifically, Rattlesnake Mountain, located in the northern portion of the project site, and Pepe's Peak, located in the southern portion of the project site, would be located within separate OS-C areas. Other areas to be designated as OS-C include buffers along the project site's western and eastern boundaries and would include the location of the Palmer's oak (Exhibit 2-7). Approximate visual simulations of the project as viewed from multiple publicly accessible locations are provided in Appendix B.

The proposed project does not propose development within the OS-C areas and would retain the existing unimproved informal trails enabling their continued use by the public including future residents of the project. Trail connections would provide access to the existing unimproved trails, and therefore, the proposed project would continue to allow public access to the mountains and hilltops within the OS-C designated areas. Urban development proposed as a part of the project would be situated in lower elevation areas, avoiding the prominent on-site peaks including Rattlesnake Mountain, Pepe's Peak, as well as other prominent visual features, including a significant rock outcropping within PA 21D near the end of Malaga Drive and the Palmer's oak.

Views From Designated Scenic Corridors

As determined by the City's significance criteria, the proposed project could have a potentially significant impact if it would substantially block public views of a scenic vista that is visible from a

¹⁰ City of Jurupa Valley. 2017. Jurupa Valley General Plan Conservation and Open Space Element. Website: <https://www.jurupavalley.org/DocumentCenter/View/217/2017-Master-General-Plan-PDF>. Accessed December 1, 2021.

scenic corridor as identified by General Plan Figure 4-23, Jurupa Valley Scenic Corridors and Roadways. As indicated therein, the closest scenic corridors are Limonite Avenue (located approximately 0.44 mile to the southwest), 46th Street (located approximately 1.25 miles to the south and southeast), and Camino Real (located approximately 2.18 miles to the west and southwest). General Plan Figure 3-30, Scenic Corridors, also designates Sierra Avenue as a scenic corridor from its intersection with Armstrong Road, approximately 0.45 mile west of the project site, continuing northwest to the City of Fontana city limits.

Views of the project site from these City-designated scenic corridors and roadways are often obstructed by existing vegetation, development, and terrain and are limited primarily to the upper slopes and elevations within the project site. A substantial portion of the project site (510.8 acres) would be designated as open space, thereby prohibiting development on higher elevations within the project site and maintaining views of the project site as seen from scenic corridors and roadways. Furthermore, views of development within the project site, if any, would only represent a small portion of the view from the scenic corridors and roadways due to distance and such views would likely be seen from moving vehicles, which further reduces the viewer's focus on specific points off in the distance.

Therefore, due to the distance from and intervening features between the scenic corridors and roadways and the preservation of undeveloped lands within the project site, the proposed project would not substantially block or alter public views of the project site as seen from established Scenic Corridors or Roadways identified by General Plan Figure 4-23 or Figure 3-10. Impacts would be less than significant in this regard.

Other Public Views of the Project

Other public views of the project site are accessed via existing streets surrounding the project site, the most significant of which are characterized in the following discussion. Note that while these streets are not designated Scenic Corridors or Roadways, they do have views of the project site and of the significant topographical features on-site.

20th Street east of the project site. Views of the project site from the end of 20th Street where it terminates at the eastern project site boundary consist of lower-lying grasslands, a significant rock outcropping, Pepe's Peak, and lower hills located between the rock outcropping and Pepe's Peak. In addition, views to the south are dominated by industrial land use consisting of concrete production operations. With development of the proposed project, Pepe's Peak and the rock outcropping would be left undeveloped and preserved within OS-C designated areas. The lower hills would be graded as part of the proposed development of PAs 12 and 13 with light industrial uses. As such, a portion of the view of the project site from this location would change from lower-lying hills to that of light industrial uses (refer to Appendix B, View Sim 5 and 6). Grading of the hills would result in elevation reductions of approximately 80 feet in some locations. However, this area is not visible from a designated scenic corridor or roadway and 20th Street east of the project site is not designated as a scenic corridor or roadway. Therefore, impacts would be less than significant.

Note that the proposed project's visual character impacts related to grading of hills within Pas 12 and 13 and General Plan policy consistency are addressed under Threshold AES-3.

20th Street west of the project site. Views of the project site from end of the 20th Street, west of the project site, consist of lower-lying grass lands, lower hills, and higher slopes and elevations within the project site, including Pepe's Peak and Rattlesnake Peak. As previously noted, higher slopes and elevations would be preserved within OS-C designated areas. Development would occur within lower-lying areas, consistent with adjoining development, and in compliance with the Rio Vista Specific Plan Design Guidelines and the Municipal Code regarding building height limitations (refer to Appendix B, View Sim 7). As a result, and because 20th street is not designated as a scenic corridor or roadway, impacts to scenic vistas would be less than significant.

Armstrong Road to the northwest of the project site. Views of the project site from Armstrong Road, northwest of the project site, consist of lower-lying grasslands and hills leading up to higher slopes and elevations within the project site. Significant portions of the northern portion of the project site, particularly near its western and northern boundaries, would be preserved within OS-C designated areas. This would preserve the higher slopes and elevations as viewed from Armstrong Road (refer to Appendix B, View Sim 8 and 9). As a result, and because Armstrong Road is not designated as a scenic corridor or roadway, impacts to scenic vistas would be less than significant.

I-60 and Canal Street to the south of the project site. Views of the project site from I-60 and Canal Street, south of the project site, consist of lower-lying grasslands and hills leading up to higher slopes and elevations within the southern tip of the project site, particularly Pepe's Peak. As indicated on Exhibit 2-7, no development would occur within the southern portion of the project site and land features would be preserved through the OS-C designation. As a result, and because I-60 and Canal Street are not designated as Scenic Corridors or Roadways, impacts to scenic vistas would be less than significant.

Public streets to the east and northeast of the project site. Views of the project site from various locations east and northeast of the project site consist of lower-lying grasslands and hills leading up to higher slopes and elevations within the project site, including views of Pepe's Peak and Rattlesnake Peak. However, these views are often partially or fully obscured by intervening topography, vegetation and development depending upon the viewer's location. Significant portions of the north and northeastern area of the project site would be preserved within OS-C designated areas. This would preserve the higher slopes and elevations as viewed from publicly accessible areas. Lower-lying areas within the project site would be graded and developed as part of PA 15 (light industrial uses) and PAs 10 and 11 (Very Low Density Residential). A corridor of land designated as OS-C in PA 21D would buffer the light industrial uses in PA 15 from adjacent, existing residential uses (Exhibit 2-7). As such, views from publicly accessible streets in this area would change from undeveloped grasslands and lower-lying hills, with higher elevation areas in the distance to that of landscaped hills and, in some locations, views of the light industrial uses backed by higher elevations (refer to Appendix B, View Sim 1, 2, 3, and 4). Eastern and northeastern portions of the project site are not visible from a designated scenic corridor or roadway and views of higher elevations, including views of Pepe's Peak and Rattlesnake Peak would not be obscured by the project. Therefore, impacts would be less than significant.

Public Views from the Project Site

Scenic vistas as seen from the project site are publicly available from on-site undeveloped trails. Depending on the location within the project site, publicly available scenic vistas of surrounding mountains are obstructed due to the site's topography, vegetation, and intervening development. However, the two most prominent peaks located within the project site, Rattlesnake Mountain and Pepe's Peak, are accessible to the public and provide scenic vistas of the surrounding landscape. Views from the project site, especially those from Rattlesnake Mountain and Pepe's Peak, include the Jurupa Mountains and Mount Jurupa, Pedley Hills, San Gabriel Mountains, San Bernardino Mountains, and San Jacinto Mountains, as well as the surrounding, lower-lying, urbanized areas. As previously indicated, both peaks and related trails, as well as other areas within the plan area totaling 510.8 acres would be designated as Open Space-Conservation (OS-C) by the Specific Plan, (Exhibit 2-7). Existing public access to the trails, and therefore the views, would be maintained and would not be impacted by the proposed project.

Scenic vistas as seen from publicly accessible areas within the project site would change in that lower-lying areas, outside the OS-C designated areas, would be developed with various land uses and densities. Development within the project site area would be regulated by the Rio Vista Specific Plan Design Guidelines and the Municipal Code regarding building height limitations and would therefore not include new development that would obstruct views from Rattlesnake Mountain and Pepe's Peak. As viewed from on-site publicly accessible trails, this development would be consistent with other existing development in the City's lower-lying hillside areas. Furthermore, views of the development would be viewed at a distance and as a part of, and consistent with, the overall mix of urban and undeveloped lands typical in the City. For these reasons, scenic views from on-site trails would not be significantly impacted by the proposed project. Therefore, the proposed project would not obstruct scenic views or scenic vistas as viewed from the project site and impacts would be less than significant.

Level of Significance

Less than significant impact.

Scenic Highways

Threshold AES-2:	Would the proposed project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a State Scenic Highway?
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Screening Criteria: If the project is not located within a State Scenic Highway, it may be presumed to have a less than significant impact absent substantial evidence to the contrary.

Under the City's local significance threshold, the project would have significant effects if: The project is located within a State Scenic Highway corridor pursuant to the Streets and Highways Code, Sections 260 through 263 and the project will damage trees, rock outcroppings, and historic buildings.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)*Plans, Policies, and Programs*

There are no PPPs applicable to the proposed project related to State Scenic Highways.

Project Design Features

There are no PDFs applicable to the project related to State Scenic Highways.

Impact Analysis

There are no officially designated or eligible State Scenic Highways surrounding the project site or within the project area. The nearest designated or eligible State Scenic Highways are approximately 11.65 miles southwest of the project site, at the intersection of I-15 and SR-91 (designated), and approximately 12.5 miles northeast of the project site, near the intersection of I-10 and SR-38 (designated). Because of distance and intervening geography and development, the proposed project would not have impact on views from these State Scenic Highways.

According to the General Plan Figure 3-30, Scenic Corridors, and Figure 4-23, Jurupa Valley Scenic Corridors and Roadways, there are no City-designated Scenic Corridors or Roadways within the project site. The nearest City-identified Scenic Corridor is Sierra Avenue, from its intersection with Armstrong Road approximately 0.45 mile west of the project site and continuing northwest to the Fontana city line. The project site is not visible from the City-designated Scenic Corridor due to distance and intervening urban development. There would be no impact.

Level of Significance

No impact.

Visual Character

Threshold AES-3: Would the proposed project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point)? If the proposed project is in an urbanized area, would the proposed project conflict with applicable zoning and other regulations governing scenic quality?

Under the City's local significance threshold, the project would have significant effects if: The project is inconsistent with General Plan policies or Municipal Code requirements pertaining to scenic quality.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)*Plans, Policies, and Programs*

The following PPPs apply to the proposed project and would reduce impacts related to aesthetics:

PPP 3.1-1 As required by the Rio Vista Specific Plan Chapter 2 (Land Use Element), Chapter 3 (Mobility Element), and Chapter 4 (Conservation and Open Space).

PPP 3.1-2 Jurupa Valley Municipal Code Section 7.50.010 requires that all utilities serving and within the Project site shall be placed underground unless exempted by this section.

- PPP 3.1-3** All outdoor lighting shall be designed and installed to comply with California Green Building Standard Code Section 5.106 or Municipal Section 9.150.040(11), whichever is more stringent.

Project Design Features

The proposed project includes design guidelines that are intended to create aesthetically pleasing buildings and site design. Accordingly, all architectural design elements that are proposed as components of the project, as described in Section IV of the Rio Vista Specific Plan, are considered PDFs for the purposes of this EIR.

PDFs from Section IV of the Rio Vista Specific Plan would include guidelines that define the design concept, physical character, and theme of the City. The architectural design guidelines include elements such as architectural theme, building massing and scale, materials and colors, and site planning guidelines to create an aesthetically cohesive thematic concept for the community. The landscape design guidelines consist of the key community components, such as monumentation, streetscapes, interfaces between land uses, community walls and fences, parks, and trails, and the plant palette provides a specific list of plants that are compatible with the community design theme and the surrounding environment. The Rio Vista Specific Plan recognizes the evolving nature of architectural styles and therefore allows creativity and flexibility in design and implementation. There would be five unique architectural styles that adhere to the overall Community Theme, including American/Modern Farmhouse, Bungalow, California Ranch, Craftsman, and Transitional Spanish. The architectural styles would allow individual developers to utilize styles that complement the landscape and hardscape features. Staggered buildings with second-story balconies, porches, courtyards, and varied front setbacks are encouraged. Additionally, the architectural style of the commerce center would work in concert with the residential architectural styles and would focus on reducing the appearance of building massing with the use of structural articulation. Buildings are characterized by simple and distinct cubic masses with interlocking volumes of wall planes, colors, and materials to create visual appeal, aesthetically pleasing proportions, and strong shadow patterns. Colors, materials, and textures can be mixed to create interest. For example, building forms must use simple geometric shapes, and architectural and trim detailing must be clean, simplistic, and not overly complicated. Implementation of these design guidelines as PDFs would ensure the project site's visual appearance and character would be of high quality and cohesive, thus ensuring compliance with applicable zoning and regulations regarding scenic quality.

Impact Analysis

The project site is located in an “urbanized area” as defined by Public Resources Code Section 21071 because the City is an incorporated city with a population of at least 100,000 persons.¹¹ In addition, according to the 2010 United States census, the project site is in the Riverside-San Bernardino,

¹¹ California Legislative Information. Public Resources Code Division 13 Environmental Quality, Chapter 2.5. Definitions [21060 - 21074]. Website: https://leginfo.ca.gov/faces/codes_displayText.xhtml?lawCode=PRC&division=13.&title=&part=&chapter=2.5.&article=. Accessed February 7, 2022.

California, Urbanized Area.¹² As such, the proposed project would be subject to the City's applicable regulations governing scenic quality.

Construction

During construction, the proposed project would result in a temporary change to the visual character of the project site from a predominantly undeveloped site to an active construction site with construction equipment, staging areas, and construction machinery. Following the completion of the construction activities, all construction equipment would be removed from the project site. Project-related changes to local visual character and quality during project construction would be less than significant due to the temporary nature of construction activities. Further, the temporary presence of construction equipment within a property under construction is common and would not conflict with applicable zoning and other regulations governing scenic quality.

Operation

The proposed project's design, including site layout, architecture, and landscaping, is discussed and illustrated in detail in Section 2.0, Project Description. As previously described, the proposed project's architecture incorporates five unique architectural styles that adhere to the overall Community Theme, including American/Modern Farmhouse, Bungalow, California Ranch, Craftsman, and Transitional Spanish, as well as design guidelines that would reduce the appearance of building massing in the commerce center. Additionally, the proposed project's landscape design guidelines contain key community components, such as monumentation, streetscapes, interfaces between land uses, community walls and fences, parks, and trails, and the plant palette provides a specific list of plants. The design elements would ensure a high-quality and cohesive thematic aesthetic for the community. Below is an analysis of the proposed project's consistency with applicable regulations related to scenic quality.

City of Jurupa Valley General Plan

As previously stated, the project site is designated as a combination of Medium Density Residential (MDR), Medium High Density Residential (MHDR), High Density Residential (HDR), Very High Density Residential (VHDR), Commercial Retail (CR), Open Space Conservation Habitat (OS-CH), and Open Space Recreation (OS-R) (Refer to Section 2.0 Project Description, Exhibit 2-4). The proposed project would include five categories of residential development intensity, including Very Low Density Residential (VLDR), MDR, MHDR, HDR, and Highest Density Residential (HHDR); Business Park (BP) and Light Industrial (LI) nonresidential uses; OS-C, OS-R, Open Space-Water (OS-W), Public Facilities (PF), and circulation public uses. The proposed project would require a General Plan Amendment to allow the establishment of a mixed-use community, which would include more varied residential and nonresidential uses, as well as additional public uses.

The proposed project's consistency with the City's General Plan policies related to project design, visual character, scenic quality, and scenic vistas is provided in Table 3.1-1, below.

¹² United States Department of Commerce, United States Census Bureau. 2012. 2010 Census – Urbanized Reference Map – Riverside-San Bernardino, CA. Website: https://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua75340_riverside--san_bernardino_ca/DC10UA75340.pdf. May 22. Accessed February 7, 2022.

As shown, the proposed project would generally be consistent with the General Plan. It is within the City's discretion to weigh whether the project would be consistent with the use, scale, and character of existing development and the surrounding natural environment. Deference is given to a public agency's finding of consistency unless no reasonable person could have reached the same conclusion on the evidence before it. Additionally, it is recognized that a general plan consists of policies reflecting a wide range of sometimes competing interests and a project need not satisfy or show perfect consistency with each and every policy. Strict conformity with all aspects of a general plan, or related plans, is not required. As such, impacts to visual character and scenic quality would be less significant in relation to consistency with the General Plan.

Table 3.1-1: General Plan Consistency Analysis

Policy		Consistency Determination
No.	Text	
LUE 1.1	Compatible Structures. Require that structures be designed and operated in a manner that preserves and is compatible with the environmental character where they are located, including lighting, telecommunications equipment and other facilities and equipment.	No Conflict. As discussed under Threshold AES-3, the proposed project's design elements, including specific architectural styles, building mass reduction, and landscape design, would ensure a high-quality and cohesive thematic aesthetic for the community. As required by Municipal Code Section 7.50.010, the proposed project would be required to place all existing and new electrical power, telephone or other communication, street lighting, and cable television lines underground. In addition, a significant portion of the project site would be designated as Open Space-Conservation (OS-C), thereby maintaining open space. As such, the proposed project's structures would be compatible with the existing environmental character.
LUE 2.9	Design Compatibility. Ensure that new residential developments are designed to be compatible with their surroundings and to enhance visually the appearance of neighborhoods and adjacent structures.	No Conflict. Development would be consistent with the Rio Vista Specific Plan Design Guidelines and the Municipal Code, thereby ensuring appropriate development architecture, landscaping, and site improvements. Furthermore, the proposed project would be consistent with adjacent development types, particularly residential development to the west. As a result, the proposed project would enhance and be architecturally compatible with its surroundings.
LUE 3.8	Architectural Compatibility. Require commercial development to be designed to enhance and be architecturally compatible with its surroundings and with designated scenic highways or public view corridors by providing high quality architecture,	No Conflict. Implementation of the Rio Vista Specific Plan's design guidelines as Project Design Features (PDFs) would ensure the visual quality and character of the project site and ensure compliance with applicable zoning and regulations regarding scenic quality. As such,

Policy		Consistency Determination
No.	Text	
	landscaping, and site improvements. Architectural styles that reflect the City's small town rural, agricultural history shall be utilized in the design of new commercial developments in or near the Town Centers, consistent with the applicable design guidelines. (Applicable to Commercial designated properties, as shown on the General Plan Land Use Map).	commercial development within the project site would be compatible with its surroundings and would not detract from scenic views.
LUE 3.19	Architectural Compatibility. Ensure that new industrial and business park development is designed to enhance and be architecturally compatible with its surroundings and with designated scenic highways or public view corridors by providing high quality architecture, landscaping, and site improvements. (Applicable to Industrial and Business Park designated properties, as shown on the General Plan Land Use Map).	No Conflict. The proposed project's Light Industrial and Business Park designated areas would not be visible from designated scenic highways but would be visible from public view corridors, particularly from 20 th Street. Development would be consistent with the Rio Vista Specific Plan Design Guidelines and the Municipal Code, thereby ensuring appropriate development architecture, landscaping and site improvements. Furthermore, the areas to be developed as Light Industrial and Business Park would be consistent with such uses located east of the project site and on 20 th Street.
LUE 4.5	Architectural Compatibility. Public Facility/Institutional development shall be designed to enhance and be architecturally compatible with its surroundings and with designated scenic highways or public view corridors by providing high-quality architecture, landscaping, and site improvements. (Applicable to Public Facility/Institutional designated properties, as shown on the General Plan Land Use Map).	No Conflict. The proposed project's Public Facility/Institutional designated areas would not be visible from designated scenic highways but would be visible from public view corridors, particularly from 20 th Street within the project site. Development would be consistent with the Rio Vista Specific Plan Design Guidelines and the Municipal Code, thereby ensuring appropriate development architecture, landscaping and site improvements.
LUE 8. 2	High Quality Development. Require that all development be of high quality and enhance the positive characteristics and unique features of the project site, neighboring properties and the surrounding community.	No Conflict. As discussed under Threshold AES-3, the proposed project's design elements, including specific architectural styles, building mass reduction, and landscape design, would ensure a high-quality and cohesive thematic aesthetic for the community. In addition, a significant portion of the project site would be designated as OS-C, thereby preserving the unique features of the project site. Furthermore, the proposed project would be consistent with adjacent development types, particularly residential development to the west and Light Industrial to the east. As a result, the proposed project would enhance and be architecturally compatible with its surroundings.

Policy		Consistency Determination
No.	Text	
LUE 9.1	Hillside Development Limitations. Limit development in areas that contain natural slopes, canyons, ravines, or other significant elevation changes, regardless of land use designation, and apply the following policies:	See LUE 9.2 through LUE 9.5 No Conflict. The proposed project would result in development on lower-lying hills and slopes within the project site. Grading of the project site would enable site usage while maintaining topographical connection with undeveloped areas.
LUE 9.2	Natural Landforms. Require that hillside development preserve and protect the site's natural landforms and native vegetation, and preserve established trails.	No Conflict. While the proposed project would result in development on lower-lying hills and slopes within the project site, it would preserve areas of more significant slope an elevation within 510.8 acres of Open Space-Conservation designated lands. Informal trails, landforms, and natural vegetation located within these areas would also be preserved.
LUE 9.3	Cluster Development. Require that development clustering be used, where appropriate, to retain natural slopes, protect native trees, vegetation, wildlife corridors, riparian areas and springs, cultural resources, and open space, and preserve scenic views	No Conflict. As shown on Exhibit 2-7, proposed development has been clustered and situated on-site to retain, to the extent feasible, significant natural slopes and the vegetation, habitat, open space, and scenic views located within the project site.
LUE 9.5	Visually Sensitive Areas. Development on visually significant ridgelines, canyon edges, and hilltops shall use sensitive siting, architectural design, and appropriate landscaping to ensure that development is visually unobtrusive and compatible with its setting.	No Conflict. The proposed project includes 510.8 acres of OS-C designated lands to conserve significant on-site hilltops. No development would occur within these lands. Development within the lower-lying areas of the project site would be consistent with the Rio Vista Specific Plan Design Guidelines and the Municipal Code, thereby ensuring appropriate architectural design and landscaping.
LUE 9.7	Grading. Limit grading, cut, and fill to the minimum quantities necessary to provide stable areas for structural foundations, street right-of-way, parking facilities, and other intended uses.	Potential Conflict: The proposed project would include grading that would result in elevation reductions of as much as 80 feet, particularly in PA 12 and PA 13, thereby reducing an area of lower-lying hills within the project site's eastern portion. This grading is necessary to create usable pads for development of the proposed on-site Light Industrial and Business Park uses. Such uses would be consistent with existing uses located to the east of the project site, particularly along 20 th Street.
LUE 11.2	Design Standards. Comply with the design standards of the appropriate General Plan and community plan land use category.	No Conflict. Development within the project site would be required to exhibit compliance with the Rio Vista Specific Plan Design

Policy		Consistency Determination
No.	Text	
		Guidelines, PDFs, zoning, and land use design standards as a part of project approval.
LUE 11.11	Landscape Maintenance. Require development projects to include landscaping in all site areas, including street trees, parking lots, setback areas, open spaces, and other exterior use areas. Landscaping shall include trees, shrubs and ground covers, and an automatic, water-conserving irrigation system, and shall be designed and maintained in accordance with City Landscape Standards. In addition, a priority should be placed on preserving mature trees in place wherever possible. Where mature trees must be removed, they shall be replaced with an equivalent number of large trees of the same or compatible species.	No Conflict. The Rio Vista Specific Plan's landscape design guidelines consist of key community components, such as monumentation, streetscapes, interfaces between land uses, community walls and fences, parks, and trails, and a plant palette which provides a specific list of plants that are compatible with the community design theme and the surrounding environment. Development within the project site would be required to implement design guidelines and demonstrate compliance with City Landscape Standards.
LUE 11.12	Natural Features. Require development projects, including public projects, utilities, and earthworks/grading, to protect and preserve natural features, such as unique natural terrain, rocky outcrops, ridgelines, drainage ways, mature trees, and native vegetation, wherever possible, particularly where they provide continuity with more extensive regional systems.	No Conflict. Through the preservation of 510.8 acres of OS-C designated lands, the proposed project would protect on-site significant natural features including Pepe's Peak and Rattlesnake Mountain. This would also maintain continuity with higher elevation lands extending north of the project site in the City of Fontana and in unincorporated San Bernardino County.
LUE 11.17	Screened Trash and Recycling Areas. Require new development to provide clean, safe, secure, visually screened trash and recycling enclosures that are architecturally compatible with the development. Existing development and uses are encouraged to provide safe, secure, and visually screened trash and recycling enclosures.	No Conflict. Development within the project site would be required to comply with trash and recycling area enclosure regulations stated in the Rio Vista Specific Plan Design Guidelines, which require that trellis and arbor elements are included on all trash enclosures for screening.
ME 7.9	Landscape Buffers. Require parking areas of all commercial and industrial land uses that abut residential areas to be buffered and shielded by adequate landscaping and/or other effective visual screens.	No Conflict. Implementation of the Rio Vista Specific Plan's design guidelines as would ensure landscaping buffers are planted between the Business Park and adjacent off-site residential areas and between the Light Industrial and on-site open space areas and residential areas.
ME 8.37	Tree Preservation in Right-of-Way. Preserve mature trees with street or highway right-of-way that are identified as	No Conflict. The Palmer's oak present on the project site, a superior example of California native species, would be preserved and protected.

Policy		Consistency Determination
No.	Text	
	superior examples of California native species or naturalized tree species.	
COS 9.1	Protect scenic resources, especially skylines, undeveloped ridgelines, rocky hillsides, river view corridors, and outstanding scenic vistas not designated for urban uses from development, and maintain those resources in their current patterns of use.	No Conflict. Development of the proposed project would not substantially block public views of the San Gabriel Mountains, San Bernardino Mountains, La Loma Hills, Blue Mountain, Sugarloaf Mountain, or Rattlesnake Mountain due to distance, topography, and intervening development. Furthermore, as shown on Exhibit 2-7, approximately 510.8 acres of the project site would be designated as OS-C, including Rattlesnake Mountain and Pepe's Peak. Informal trails within the OS-C areas would remain publicly accessible. Accordingly, the proposed project would not interfere with the City's efforts to protect scenic resources and maintain current patterns of use.
COS 9.1.3	Undergrounding Utilities. Place existing overhead utilities underground, with highest priority for scenic roadways and entries to the City, and require utilities, community services districts, and other responsible agencies to do likewise).	No Conflict. As required by Municipal Code Section 7.50.010, the proposed project would be required to place all existing and new electrical power, telephone or other communication, street lighting, and cable television lines underground.
COS 9.1	Protect scenic resources, especially skylines, undeveloped ridgelines, rocky hillsides, river view corridors, and outstanding scenic vistas not designated for urban uses from development and maintain those resources in their current patterns of use.	No Conflict. Development of the Project would not substantially block public views of the San Gabriel Mountains, San Bernardino Mountains, La Loma Hills, Blue Mountain, Sugarloaf Mountain, or Rattlesnake Mountain due to distance, topography, and intervening development. Furthermore, as shown on Exhibit 2-7, approximately 510 acres of the project site would be designated as OS-C, including Rattlesnake Mountain and Pepe's Peak. Accordingly, the proposed project would not interfere with the City's efforts to protect scenic resources.
COS 9.2	Ensure that development in areas with scenic values, including natural or agricultural landscapes, is visually subordinate to and compatible with the dominant landscape features, colors, and textures. Development includes, but is not limited to buildings, signs (including billboard signs), roads, utility and telecommunication lines, and structures. Such development shall: 1. Avoid visually prominent locations such as ridgelines, and slopes exceeding 20	Potential Conflict. The proposed project has been designed to avoid significant on-site natural features via the inclusion of 510.8 acres of OS-C designated lands. On-site development would be located in lower-lying areas and would be consistent with the Rio Vista Specific Plan Design Guidelines and the Municipal Code, thereby ensuring appropriate architectural style and landscaping. The proposed project would avoid grading in the majority of the lands with a slope greater than 20 percent would not require significant unnecessary vegetation removal or

Policy		Consistency Determination
No.	Text	
	<p>percent, particularly in the visually sensitive Jurupa Mountains.</p> <ol style="list-style-type: none"> Avoid unnecessary grading, vegetation removal, and site lighting. Incorporate building forms, architectural materials, and landscaping, that respect the setting, including the historical pattern of development in similar settings, and avoid stark contrasts with its setting. Preserve scenic or unique landforms, significant trees in terms of size, age, species or rarity, historical features, and rock outcroppings. 	<p>site lighting; would include cohesive building styles, materials, and landscaping; and would preserve Pepe's Peak, Rattlesnake Mountain, and other on-site higher elevation areas and the vegetation and rock outcroppings included therein. The proposed project would, however, include grading in PA 12 and 13 that would reduce existing elevations by up to approximately 80 feet. However, the area to be graded is not the most visually prominent on-site and is limited to views as seen from the current end of 20th Street east of the project site. The development with PA 12 and 13 would be visually consistent with the light industrial development located along 20th Street.</p>
COS 9.4	View Protection in New Development. The City will include in all environmental review and carefully consider effects of new development, streets and road construction, grading and earthwork, and utilities on views and visual quality.	No Conflict. As required by Municipal Code Section 7.50.010, the proposed project would be required to place all existing and new electrical power, telephone or other communication, street lighting, and cable television lines underground. As discussed in Section 3.1, Aesthetics, herein, development within the project site would not significantly conflict with existing views or visual quality.
COS 9.5	Views to and from Public Places, Including Scenic Corridors. The City will preserve and improve views of important scenic resources from public places, and encourage other agencies with jurisdiction to do so. Public places include parks, plazas, the grounds of civic buildings, streets and roads, and publicly accessible open space. In particular, the route segments shown in Figure 4-23 below are designated as local scenic corridors	Potential Conflict. As discussed in Threshold AES-1, the proposed project would maintain and connect to informal trails within the proposed project's OS-C designated land. The proposed project would not significantly change views as seen from scenic corridors and roadways or public places with the exception of views from the current terminus of 20 th Street at the project's eastern boundary. As previously noted, the proposed project would include grading in PA 12 and 13 that would reduce existing elevations by up to approximately 80 feet. However, views of this area are limited to views as seen from the current end of 20 th Street east of the project site. The development with PA 12 and 13 would be visually consistent with the light industrial development located along 20 th Street.
COS 10.1	Outdoor Lighting. Require outdoor lighting to be shielded and prohibit outdoor lighting that: (1) Operates at unnecessary locations, levels, and times (2) Spills onto areas off-site or to areas not needing or wanting illumination (3) Produces glare	No Conflict. As required by PPP 3.1-3, all outdoor lighting shall be designed and installed to comply with California Green Building Standard Code Section 5.106 or Municipal Section 9.150.040(11), whichever is more stringent. All proposed lighting plans would be

Policy		Consistency Determination
No.	Text	
	(intense line-of-site contrast) and (4) Includes lighting frequencies (colors) that interfere with astronomical viewing.	required to comply with applicable City requirements, including those listed in General Plan Policy 10.1, and lighting requirements as identified in the Municipal Code. Furthermore, development within the project site would be required to comply with the project development standards and design guidelines related to lighting.
COS 10.2	New Residential Development and Remodeling Projects. Require development projects and major remodel projects to minimize light pollution and trespass while enhancing safety and aesthetics.	No Conflict. As discussed in Threshold AES-4, all proposed lighting plans would be required to comply with applicable City requirements, including those listed in General Plan Policy 10.1, and lighting requirements as identified in the Municipal Code. Furthermore, development within the project site would be required to comply with the project development standards and design guidelines related to lighting. As such, light pollution would be minimized.
COS 10.3	COS 10.3 Public Facilities, Buildings, and Streets. Use outdoor light-shielding measures for new and existing lighting fixtures, including signs, to minimize light trespass and glare while enhancing safety and aesthetics.	No Conflict. The proposed project would follow the requirements in the Rio Vista Specific Plan Design Guidelines requiring that exterior pole-mounted lights be shielded, with the light source oriented away from public streets and/or adjacent properties.
COS 10.4	Commercial and Industrial Buildings. Require that site lighting for commercial and industrial uses is unobtrusive and constructed or located so that only the intended area is illuminated, off-site glare is prevented, and adequate safety is provided.	No Conflict. As discussed in Threshold AES-4, all proposed lighting plans would be required to comply with applicable City requirements, including those listed in General Plan Policy 10.1, and lighting requirements as identified in the Municipal Code. Furthermore, development within the project site would be required to comply with the project development standards and design guidelines related to lighting. As such, commercial and industrial projects within the project site would be appropriately lighted.

City of Jurupa Valley Municipal Code and Underlying Zoning Classification

Currently, the project site's underlying zoning classification is Specific Plan Zone (SP Zone). As a specific plan, the proposed project is, and future development would be, consistent with this zoning designation. The proposed project includes residential, commercial, open space, institutional and industrial uses, all of which are permitted uses within the SP Zone. Consistent with the SP Zone regulations, future development within the project site would be required to conform to the development standards, conditions, and any special restrictions contained in the adopted specific plan and any amendments thereto. As such, the proposed project would be consistent with the SP Zone.

Future development within the project site would also be subject to applicable Municipal Code regulations pertaining to scenic quality. This may include, but not be limited to, Chapter 15.15 (underground utility districts), Chapter 9.245 (advertising regulations), and Chapter 7.55 (street trees), or as otherwise superseded by regulations of the Rio Vista Specific Plan and the SP Zone. As such, the proposed project would not conflict with any Municipal Code regulations pertaining to scenic quality. Impacts would be less than significant.

Level of Significance

Less than significant impact.

Light and Glare

Threshold AES-4: Would the proposed project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Under the City's local significance threshold, the project would have significant effects if: The project is inconsistent with General Plan Policy COS 10.1, which requires outdoor lighting to be shielded and prohibits outdoor lighting that:

1. Operates at unnecessary locations, levels, and times.
2. Spills onto areas off-site or to areas not needing or wanting illumination.
3. Produces glare (intense line-of-site contrast).
4. Includes lighting frequencies (colors) that interfere with astronomical viewing.
5. Includes building materials (e.g., exterior materials, windows, etc.) that create glare. Daytime glare impacts would be considered significant if buildings, signage or thematic elements that incorporate substantial amounts of reflective building materials were to be developed on the project site in areas that are highly visible to off-site glare-sensitive uses. Nighttime glare impacts would be considered significant if future buildings, signage or thematic elements which incorporate highly reflective building materials were to be developed on the project site in close proximity to both glare-sensitive uses and motor vehicle traffic or would be illuminated by high brightness special effects or event lighting associated with the proposed project. Daytime glare-sensitive uses generally include residential areas, freeways, and outdoor activity areas (recreational areas and parks). Uses sensitive to nighttime glare generally include residential uses, some commercial and institutional uses, and wildlife habitat within natural areas.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

The following PPP applies to the proposed project and would reduce impacts related to aesthetics:

- PPP 4.1-4** All outdoor lighting shall be designed and installed to comply with California Green Building Standard Code Section 5.106 or Municipal Section 9.150.040(11), whichever is more stringent.

Project Design Features

The following PDFs applicable to light and glare are identified in the Rio Vista Specific Plan:

- Roof materials should have a matte finish to minimize glare. Lighting within the public right-of-way shall adhere to the City's outdoor light requirements, and other applicable City standards. All other lighting on private property in the project site should adhere to the following guidelines.
 - (1) Minimize glare and "spill over" light onto public streets and adjacent properties by using downward-directed lights and/or cutoff devices on outdoor lighting fixtures, including spotlights, floodlights, electrical reflectors, and other means of illumination for signs, structures, parking, loading, unloading, and similar areas.
 - (2) Select all lighting fixtures used in the project site area from the same—or complementary—family of fixtures with respect to design, materials, fixture color, and light color. Use of LED lighting is encouraged.
 - (3) Lights should be unbreakable plastic, recessed, or otherwise designed to reduce the problems associated with damage and replacement of fixtures.
 - (4) Neon and similar types of lighting are prohibited in all areas within the project site.
 - (5) Locate all electrical meter pedestals and light switch/control equipment in areas with minimum public visibility or screen them with appropriate plant materials.
 - (6) Illuminate parking lots, loading dock areas, pedestrian walkways, building entrances, and public sidewalks to the level necessary for building operation and security reasons. Dimmers and motion detectors are permitted.
 - (7) Along sidewalks and walkways, the use of low mounted fixtures (ground or bollard height), which reinforce the pedestrian scaled, are encouraged.
 - (8) Use exterior lights to accent entrances, plazas, activity areas, and special features.
 - (9) To illuminate parking lots or parking structures and their pedestrian links that provide more than five parking spaces for use by the general public, provide a minimum coverage of one foot-candle of light with a maximum of eight foot-candles on the parking or walkway surface, unless otherwise approved by the City of Jurupa Valley for visibility and security.
 - (10) To illuminate aisles and passageways within a building complex, provide a maximum of one-half to one foot-candle of maintained lighting.
 - (11) High Pressure Sodium (HPS) light fixtures are prohibited for site lighting.

Impact Analysis

Because the project site is vacant and undeveloped, no light or glare sources are present on-site. Light and glare from surrounding uses are limited to residential uses to the northeast, southeast, west, and south of the project site, as well as industrial uses and undeveloped land to the north, east, south, and west. Additionally, surrounding roadways are sources of light and glare from vehicle headlights and street lighting.

The proposed project would designate approximately 57.7 percent (529.2 acres) of the site for Open Space and Recreational land uses (this includes OS-C and OS-R proposed land use designations). Implementation of the proposed project on the remaining portion of the site would result in new

sources of light in the project area to provide nighttime illumination for residential homes and buildings, streetlights, and sidewalks. Lighting would be used to enhance security and safety for pedestrians and vehicles within the project site. These new sources of light and glare would be visible from surrounding areas and would create new sources of light and glare on the project site.

However, all proposed lighting plans would comply with City requirements, including those listed in General Plan Policy 10.1, reducing potential impacts. Additionally, project-related lighting would adhere to the proposed Rio Vista Specific Plan development standards and design guidelines related to lighting, such as exterior lighting, outdoor lighting, and residential architectural elements.

The Rio Vista Specific Plan Design Guidelines would minimize or prevent glare and light pollution while enhancing safety for pedestrians and drivers and providing exterior nighttime lighting for future residents. The lighting would be similar to that of the residential areas surrounding the project site. Furthermore, additional requirements, such as a requirement that roof materials should have a matte finish to reduce glare, would contribute to minimization of this potential.

The General Plan Goal 10 aims, among other objectives, to preserve dark nighttime skies. To achieve this goal, the General Plan defines five policies, COS 10.1 through COS 10.5. Table 3.1-1, General Plan Consistency Analysis, above, demonstrates that the proposed project would not conflict with Policies COS 10.1 through COS 10.4 (Policy COS 10.5 addresses support for public education programs and therefore does not apply to the proposed project). Specifically, outdoor lighting at the proposed project would comply with California Green Building Standard Code, all applicable City requirements, and development standards and design guidelines. As such, light pollution and potential impacts to nighttime skies would be minimized.

The proposed project does not include any components that would include large expanses of reflective materials that would result in the generation of substantial amounts of glare. Moreover, proposed landscaping would screen some potential sources of glare from affecting nearby motorists or residents. Compliance with the Rio Vista Specific Plan development standards and design guidelines related to light and glare would ensure new sources of light and glare are minimized and impact due to light and glare would be less than significant.

Level of Significance

Less than significant impact.

3.1.6 - Cumulative Impacts

The proposed project is located within an urbanized area and is surrounded by residential, industrial, and commercial land uses and open space. The geographic area for cumulative analysis includes the cumulative development projects listed in Table 3-1, Cumulative Projects.

Cumulative development would be required to comply with the overall land use vision, design review regulations, and policies in local and regional planning documents. Similarly, potential cumulative aesthetic impacts to eligible scenic highways would be reduced to below a level of significance through participation in the State Scenic Highway program and local ordinances and policies. Cumulative projects would be required to comply with applicable City and County policies

and programs and adhere to development and design standards in the Municipal Code that address aesthetics, the alteration of scenic resources and natural features, the alteration of views of scenic resources and natural features, and development on or visible from hilltops. The proposed project, as well as any future development in the vicinity of the project site, would adhere to all City regulations regarding light and glare, by which these potential cumulative impacts would be at less than significant levels. For these reasons, cumulative impacts to aesthetics, State Scenic Highways, or nighttime lighting and daytime glare would be less than significant.

Moreover, the proposed project's incremental contribution to the less than significant impacts would not be cumulatively considerable. As discussed under Threshold AES-1, the City's General Plan specifies the Pedley Hills, Jurupa Mountains, and Santa Ana River as scenic resources, and publicly accessible vantage points that provide views of these scenic resources are considered scenic vistas. Because of the project site's distance from these resources, intervening development, and topography relative to these scenic resources, the development of the proposed project would not block public views of the Pedley Hills, Jurupa Mountains, or Santa Ana River. The reasonably foreseeable development projects listed in Table 3-1, Cumulative Projects, would not have impacts that would directly combine with the aesthetic effects of the proposed project. Therefore, impacts to scenic vistas are less than cumulatively considerable. Furthermore, other scenic resources listed in the General Plan, such as ridgelines and floodplains, are not present in the project site and would, therefore, not be impacted.

As discussed under Threshold AES-2, there are no designated or eligible State Scenic Highways or Scenic Corridors or Roadways surrounding the project site. Therefore, the proposed project has no potential to directly impact a scenic resource or to contribute to a cumulatively significant impact on scenic resources within a scenic highway.

As discussed under Threshold AES-3, the proposed project would not result in direct impacts related to conflicts with applicable zoning and other regulations governing scenic quality. The proposed project would be required to comply with the applicable development standards of the City's Municipal Code and would implement the design guidelines of the Rio Vista Specific Plan. The reasonably foreseeable development projects listed in Table 3-1, Cumulative Projects, would not have any aesthetic impacts that would directly combine with the aesthetic effects of the proposed project due to distance and intervening topography and development. Therefore, the proposed project has no potential to contribute to a cumulatively significant impact associated with degradation of visual character and/or quality.

As discussed under Threshold AES-4, mandatory compliance with the applicable requirements of the City's Municipal Code and the incorporation of the Rio Vista Specific Plan's development standards and PPPs and PDFs would ensure the proposed project would result in less than significant impacts to light and glare and to daytime and nighttime views. Additionally, there are no cumulative projects in the immediate vicinity that would cumulatively increase light pollution to a substantial level. Other development projects in the region also would be subject to the same or similar lighting standards. Other proposed development projects in the area would also be evaluated for the potential to create a new substantial source of glare. Accordingly, the proposed project would result

in a less than cumulatively considerable impact concerning light/glare impacts to daytime or nighttime views in the project site.

Level of Cumulative Significance

Less than significant impact.

3.2 - Agriculture and Forestry Resources

3.2.1 - Introduction

This section describes the existing agricultural and forestry conditions in the project area as well as the relevant regulatory framework. This section also evaluates the possible impacts related to agriculture and forestry resources that could result from implementation of the proposed project. Information included in this section is based upon the City of Jurupa Valley General Plan (General Plan) and the City of Jurupa Valley Municipal Code (Municipal Code).

A Notice of Preparation (NOP) was released for public review on December 6, 2021, and an Environmental Impact Report (EIR) Scoping Meeting was held on December 14, 2021. No public comments were received during the scoping period related to Agriculture and Forestry Resources.

3.2.2 - Environmental Setting

City of Jurupa Valley

According to the Conservation and Open Space Element of the General Plan, agriculture was once the dominant land use and economic activity in Jurupa Valley. Over time, land use and economic changes have largely displaced farming, grazing, vineyards, dairies, orchards, and other agricultural activities to less urbanized areas. The City of Jurupa Valley (City) continues to have areas in agricultural use, particularly along the Interstate 15 (I-15) corridor and near the Santa Ana River. Agriculture continues to be important as a contributor to the local economy in Jurupa Valley, a key open space resource, and a defining feature of communities' overall visual character and rural heritage. Moreover, agriculture is fundamental to the notion of "sustainability"—it helps to preserve productive soils and Jurupa Valley's capacity to grow food for local use.¹

Project Site

The project site is located near the northern boundary of Riverside County, near the City of Fontana. It is currently vacant and undeveloped. Surrounding land uses include residential communities to the northeast, west, and southwest; commercial uses to the southeast and southwest; and industrial uses to the east. The project site itself is designated as Medium Density Residential (MDR), Medium High Density Residential (MHDR), High Density Residential (HDR), Very High Density Residential (VHDR), Commercial Retail (CR), Open Space Conservation Habitat (OS-CH), and Open Space Recreation (OS-R) and is zoned Specific Plan (SP Zone). State Route (SR) 60 is located approximately 245 feet south of the project site, and I-10 is approximately 2.3 miles north of the site.

Historic aerial photographs show that the project site has never been used for agricultural purposes and has been vacant and undeveloped dating back to 1896, with no indication of building development. In addition, the site is not currently used for agriculture.²

¹ City of Jurupa Valley. 2017. Jurupa Valley General Plan, Conservation and Open Space Element. Website: <https://www.jurupavalley.org/DocumentCenter/View/217/2017-Master-General-Plan-PDF>. Accessed November 22, 2021.

² Hillman Consulting. 2017. Phase I Environmental Site Assessment, Rio Vista, Rubidoux, California 92509. March 27.

The California Department of Conservation Farmland Mapping and Monitoring Program (FMMP) categorizes the majority of the project site as Other Land (866.59 acres), as discussed below in Section 3.2.3, Regulatory Framework, and shown in Exhibit 3.2-1. A small portion of the site is categorized as Farmland of Local Importance (55.57 acres) and as Urban and Built-up Land (5.36 acres). Land surrounding the project site is categorized as Urban and Built-Up Land, Other Land, and Farmland of Local Importance.³ In addition, the project site is not subject to a Williamson Act Contract (as defined below).⁴

3.2.3 - Regulatory Framework

Federal

No federal plans, policies, regulations, or laws related to Agricultural Resources are applicable to the proposed project.

State

Farmland Mapping and Monitoring Program

The FMMP is a non-regulatory program that provides a consistent and impartial analysis of agricultural land use and land use changes throughout California. The FMMP produces maps and statistical data used for analyzing impacts on California's agricultural resources. The best-quality farmland is land that contains a combination of physical and chemical features able to sustain long-term agricultural production and is classified as Prime Farmland. Additional classifications include Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance.

California Land Conservation Act

The California Land Conservation Act, better known as the Williamson Act, was enacted by the State Legislature in 1965 to encourage the preservation of agricultural lands. Under the provisions of the act, landowners agreeing to keep their lands under agricultural production for a minimum of 10 years receive property tax adjustments. Williamson Act Contracts limit the use of the properties to agricultural, open space, and other compatible uses. Assessments of Williamson Act lands are based on agricultural value rather than potential market value under nonagricultural uses.

Local

City of Jurupa Valley General Plan

According to the General Plan, agriculture is allowed in several Open Space land use categories. However, the proposed project does not propose any agricultural use. Therefore, no General Plan policies are directly related to the proposed project regarding agriculture and forestry resources.

³ California Department of Conservation. 2016. California Important Farmland Finder. Website: <https://maps.conservation.ca.gov/dlrp/ciff/>. Accessed November 22, 2021.

⁴ City of Jurupa Valley. 2016. City of Jurupa Valley 2017 General Plan Draft Environmental Impact Report, SCH No. 2016021025. December 22.

City of Jurupa Valley Municipal Code

The City of Jurupa Valley Municipal Code Section 5.55—City of Jurupa Valley Right to Farm Regulations/Right to Farm Ordinance contains the following regulations related to Agricultural Resources:

Section 5.55.020—Findings: The City Council finds that where nonagricultural land uses extend into agricultural areas or exist side-by-side, agricultural operations often become the subject of nuisance complaints. As a result, some agricultural operations are forced to cease or curtail operations, others are discouraged from making investments in farm improvements, and efficient agricultural production is generally discouraged due to burdensome litigation against farmers.

Section 5.55.050 (A)—Policy: No agricultural activity, operation or facility, or appurtenances thereof, conducted or maintained for commercial purposes, and in a manner consistent with proper and accepted customs and standards, as established and followed by similar agricultural operations in the same locality, shall be or become a nuisance, private or public, due to any changed condition in or about, the locality, after the same has been in operation for more than three (3) years if it was not a nuisance at the time it began.

3.2.4 - Thresholds of Significance

Significance Criteria

In accordance with Section 15064.7 of the State California Environmental Quality Act (CEQA) Guidelines, the City of Jurupa Valley adopted local CEQA Guidelines. The City's local CEQA Guidelines are based, in part, on the CEQA checklist included in Appendix G of the State CEQA Guidelines. The City of Jurupa Valley Guidelines recognizes the following significance thresholds and Significance Criteria related to Agriculture and Forestry Resources. Based on these significance thresholds, a project would have a significant impact on Agriculture and Forestry Resources if it would:

- a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use.

Under the City's local significance threshold, the project would have significant effects if: The project is identified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on General Plan Figure 4-13, Farmland in Jurupa Valley and the project will convert such land to nonagricultural use.

- b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?

Under the City's local significance threshold, the project would have significant effects if: The project is located within the A-P (Light Agriculture with Poultry); A-2 (Heavy Agriculture); or A-D (Agriculture-Dairy) zone and if the project proposes a use inconsistent with the permitted or conditionally permitted uses in these zones; and/or the proposed project is under an existing Williamson Act Contract pursuant to the California Land Conservation Act of 1965 and implemented by Riverside County Ordinance No. 509 and a Notice of Cancellation.

- c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

Under the City's local significance threshold, the project would have significant effects if: N/A. There is no land within Jurupa Valley that meets the criteria to be classified as "forest land" or "timberland."

- d) Result in the loss of forest land or conversion of forest land to non-forest use?

Under the City's local significance threshold, the project would have significant effects if: N/A. There is no land within Jurupa Valley that meets the criteria to be classified as "forest land."

- e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forest land to non-forest use?

Under the City's local significance threshold, the project would have significant effects if: The project is located on "Farmland of Local Importance" as shown on General Plan Figure 4.13, Farmland in Jurupa Valley, (or by the Farmland Maps maintained by the California Department of Conservation) and the project is inconsistent with General Plan Policy COS 4.2 Agricultural Land Conversion which states: "Discourage the conversion of productive agricultural lands to urban uses unless the property owner can demonstrate overarching Community-wide benefits or need for conversion."

Approach to Analysis

The analysis of whether the proposed project would result in impacts to agriculture and forestry resources is based on a review of information presented in the General Plan and the Rio Vista Specific Plan. Analysis is also based on a GIS-based overlay of the proposed project's land uses (as shown in Exhibit 2-7), FMMP data (as shown in Exhibit 3.2-1), and the General Plan EIR.

3.2.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Convert Farmland to Nonagricultural Use

Threshold AG-1: **Would the proposed project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?**

Under the City's local significance threshold, the project would have significant effects if: The project is identified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on General Plan Figure 4-13 Farmland in Jurupa Valley, and the project will convert such land to nonagricultural use.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

These include existing regulatory requirements such as plans, policies, or programs applied to the proposed project based on federal, State, or local laws currently in place which effectively reduce impacts to agriculture and forestry.

There are no PPPs applicable to agriculture and forestry resources.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of agriculture and forestry.

Impact Analysis

According to the FMMP, the land within the project area is considered “Other Land.” A small portion of land (approximately 55.7 acres) is considered “Farmland of Local Importance,” despite not being zoned for agricultural uses. As discussed under Threshold 5, the project site was previously used for farming for a short period of time, although historic aerial photographs and historic topographic maps obtained as part of the Phase I Environmental Site Assessment (Phase I ESA) do not show agricultural land use activity and depict the project site as undeveloped land, at least since 1975. Therefore, the loss of potential Farmland of Local Importance on-site would not be significant because the project site has not been used for farming for nearly 50 years (see additional discussion of Farmland of Local Importance under Threshold 5).

Therefore, there is no land within the project area that is considered Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (collectively “Important Farmland”). In accordance with the City Screening Criteria for Threshold AG-1, the project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, and therefore it may be presumed to have a less than significant impact. Thus, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on maps prepared pursuant to the California Resources Agency FMMP to nonagricultural use, and impacts would be less than significant.

Level of Significance

Less than significant impact.

Conflict with Existing Zoning or Williamson Act Contract

Threshold AG-2:	Would the proposed project conflict with existing zoning for agricultural use or a Williamson Act Contract?
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Under the City’s local significance threshold, the project would have significant effects if: The project is located within the A-P (Light Agriculture with Poultry); A-2 (Heavy Agriculture); or A-D (Agriculture-Dairy) zone and if the proposes a use inconsistent with the permitted or conditionally permitted uses in these zones; and/or the proposed project is under an existing Williamson Act Contract pursuant to the California Land Conservation Act of 1965 and implemented by Riverside County Ordinance No, 509 and a Notice of Cancellation.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)*Plans, Policies, and Programs*

There are no PPPs applicable to agriculture and forestry resources.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of agriculture and forestry.

Impact Analysis

According to the General Plan Draft EIR, there are no active Williamson Act Contracts within the City. Until recently, there were only two contracts within the City (both located in the southwest portion of the City, just east of I-15 and just north of the Santa Ana River), but both have been canceled. Furthermore, the 2017 General Plan does not propose any agricultural zones.⁵

The project site does not contain land that is eligible for or land that is currently under a Williamson Act Contract. The site is currently designated for residential land uses (MDR, MHDR, HDR, VHDR), commercial uses (CR), and open space uses (OS-CH and OS-R), and it is zoned SP Zone. No portion of the site is zoned for agricultural uses. Therefore, consistent with the City's Screening Criteria, the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act Contract. There would be no impact.

Level of Significance

No impact.

Nonagricultural Uses

Threshold AG-3: Would the proposed project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

Under the City's local significance threshold, the project would have significant effects if: N/A. There is no land within Jurupa Valley that meets the criteria to be classified as "forest land" or "timberland."

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)*Plans, Policies, and Programs*

There are no PPPs applicable to agriculture and forestry resources.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of agriculture and forestry.

⁵ City of Jurupa Valley. 2016. City of Jurupa Valley 2017 General Plan Draft Environmental Impact Report, SCH No. 2016021025. December 22.

Impact Analysis

The project site and surrounding area are currently designated for residential uses (MDR, MHDR, HDR, VHDR), as well as CR and Open Space (OS-CH and OS-R) uses and are zoned SP Zone. The project site is not zoned for forest land. Most of the surrounding land uses are urban and built-up land. The proposed project would therefore not conflict with existing zoning for forest land or cause rezoning of forest land or timberland zoned Timberland Production. No impact would occur.

Level of Significance

No impact.

Conversion of Forest Land

Threshold AG-4: Would the proposed project result in the loss of forest land or conversion of forest land to non-forest use.

Under the City's local significance threshold, the project would have significant effects if: N/A. There is no land within Jurupa Valley that meets the criteria to be classified as "forest land."

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to agriculture and forestry resources.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of agriculture and forestry.

Impact Analysis

The project site is vacant, undeveloped, and does not contain forest land. This precludes the possibility that forest lands would be lost or converted to non-forest uses. Therefore, conversion of forest land resulting from implementation of the proposed project would not occur. There would be no impact.

The General Plan Draft EIR states that "there are no areas of forest lands in the City," and therefore no impact would occur due to loss or conversion of forest land.⁶ As such, the proposed project would result in no impact due to loss of forest land or conversion of forest land to non-forest use.

Level of Significance

No impact.

Conversion of Important Farmland or Forest Land

Threshold AG-5: Would the proposed project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Important Farmland to nonagricultural use, or conversion of forest land to non-forest use?

⁶ City of Jurupa Valley. 2016. City of Jurupa Valley 2017 General Plan Draft Environmental Impact Report, SCH No. 2016021025. December 22.

Under the City's local significance threshold, the project would have significant effects if: The project is located on "Farmland of Local Importance" as shown on General Plan Figure 4.13, Farmland in Jurupa Valley (or by the Farmland Maps maintained by the California Department of Conservation) and the project is inconsistent with General Plan Policy COS 4.2 Agricultural Land Conversion which states: "Discourage the conversion of productive agricultural lands to urban uses unless the property owner can demonstrate overarching Community-wide benefits or need for conversion."

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to agriculture and forestry resources.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of agriculture and forestry.

Impact Analysis

As discussed above, under Threshold AG-1, the project site does not contain any Important Farmland (defined as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance). It does contain a small portion that is categorized as Farmland of Local Importance (55.7 acres, Exhibit 3.2-1). The closest Important Farmland includes Prime Farmland located at Rancho Jurupa Regional Park, located approximately 1.30 miles south of the project site, and along Jurupa Road, approximately 3.45 miles west of the project site. As discussed above, under Threshold AG-4, the project site does not contain forest land and there are no forest lands near the project site.

Land use surrounding the project site includes residential, commercial, and industrial uses. These land uses are not currently used for agricultural purposes. Because of the distance between the project site and the closest Farmland and forest land, as well as the size and scale of intervening development, the proposed project is not expected to have a significant impact involving changes to the existing environment that would result in the conversion of Farmland to nonagricultural use or forest land to non-forest use. Further, the project site itself is not currently zoned for agricultural uses.

According to the FMMP, the farmland category Farmland of Local Importance is considered "land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee." For reference purposes, the County of Riverside defines Farmland of Local Importance as:

Soils that would be classified as Prime and Statewide but lack available irrigation water. Lands planted to dryland crops of barley, oats, and wheat.

Lands producing major crops for Riverside County but that are not listed as Unique crops. These crops are identified as returning one million or more dollars on the 1980 Riverside County Agriculture Crop Report. Crops identified are permanent pasture (irrigated), summer squash, okra, eggplant, radishes, and watermelons.

Dairylands, including corrals, pasture, milking facilities, hay and manure storage areas if accompanied with permanent pasture or hayland of 10 acres or more.

Lands identified by city or county ordinance as Agricultural Zones or Contracts, which includes Riverside City “Proposition R” lands. Lands planted to jojoba which are under cultivation and are of producing age.

The project site was previously used for farming for a short period of time, although historic aerial photographs obtained as part of the Phase I Environmental Site Assessment (Phase I ESA) do not show any agricultural land use activity. Historic topographic maps dated 1967 and 1973, located for preparation of the Phase I ESA, identify agricultural land toward the northern portion of the project site. Historic topographic maps dated before (1954) and after (1975), depict the project site as undeveloped land and do not reference agricultural uses. Therefore, the loss of potential Farmland of Local Importance on-site—approximately 55.7 acres—would not be significant because the project site has not been used for farming for nearly 50 years.

Furthermore, although the site is considered Farmland of Local Importance, the project site is currently zoned SP Zone and is designated by the Specific Plan for residential, commercial retail, and open space uses. The fact that the City has not designated the project site under any of the General Plan designations that would allow for larger-scale agricultural use is indicative of the City’s policy decision that the project site would not be suitable for the types of use that would meet the County of Riverside’s definition of Farmland of Local Importance.

Although the current zoning and land use designation allow for small-scale agricultural activities such as grazing, the site has not been used for agricultural purposes in more than 50 years. Potential future use of the site for small-scale agriculture uses would not maximize the potential of the site or provide any of the benefits currently proposed by the proposed project as it would not meet any of the Project Objectives (see Chapter 2, Project Description), and it would likely not be a financially viable endeavor given the size of the project site. Lastly, the site is not considered suitable for agricultural uses from a water-usage standpoint given the significant irrigation demand associated with such uses and given that a zone change and General Plan Amendment would be required to allow larger-scale agricultural uses on the site.

Level of Significance

Less than significant impact.

3.2.6 - Cumulative Impacts

The geographic scope of the cumulative impact analysis for agriculture and forestry is the project vicinity. This analysis evaluates whether the impacts of the proposed project, together with the impacts of cumulative development, could result in a cumulatively significant impact to agriculture and forestry resources. This analysis then considers whether incremental contribution to cumulative impacts associated with the implementation of the proposed project would be significant. Both conditions must be fulfilled for a project’s cumulative effects to rise to a level of significance.

Agriculture

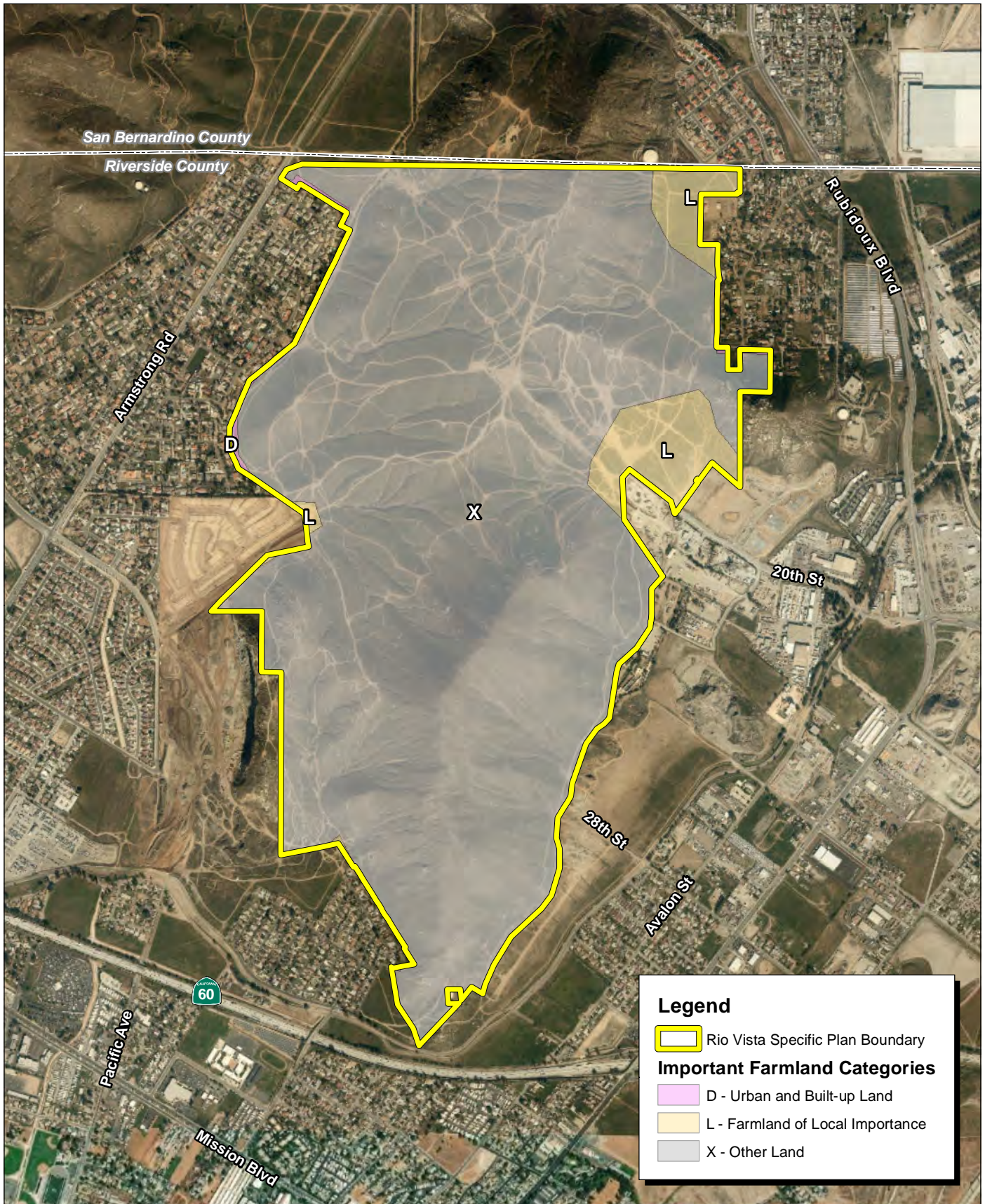
As discussed in Section 3.2.5, Project Impacts, the project site does not contain Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. In addition, the site and surrounding areas are not currently under Williamson Act Contracts or used for agricultural purposes and have not been used for such purposes in the past. Consequently, the geographic context for cumulative impacts does not contain any Important Farmland or agricultural land under a Williamson Act Contract and cumulative impacts are less than significant. The nearest Important Farmland is located approximately 0.74 miles north of the project site in San Bernardino County and within the City approximately 1.5 miles south of the project site; there are no active Williamson Act Contracts within the City. The proposed project's contribution to less than significant cumulative impacts is not cumulatively considerable. The project site contains a small area categorized as Farmland of Local Importance (55.57 acres). This area was used for agricultural uses for a brief period of time nearly 50 years ago and it is not currently zoned or designated by the City for agricultural uses. The Draft EIR prepared for the General Plan states that the "General Plan would result in significant cumulative impact due to its contribution to regional losses of agriculture and farmland," but it does not identify significant cumulative impacts unique to the loss of Farmland of Local Importance. Therefore, the loss of the Farmland of Local Importance area located within the project site would not represent a considerable contribution. Therefore, the proposed project, in conjunction with other similar projects, would not result in a cumulatively considerable impact to agriculture or Farmland, including Farmland of Local Importance.

Forest

The geographic scope for purposes of addressing impacts to forestry resources is the project vicinity. There is no Forest or Timber (or similar) land use designation within the City. As discussed above in Section 3.2.2, Environmental Setting, the project site and surrounding areas are currently designated for residential, commercial retail, and open space uses. Neither the project vicinity nor the project site is zoned as forest land or timberland, and Timberland Production does not occur in the project vicinity. Therefore, there are no cumulative impacts to forestry resources. Additionally, the proposed project, in conjunction with other similar projects, would not result in a cumulatively considerable impact to or cause the rezoning of forest land, forest resources, or timberland.

Level of Cumulative Significance

No impact.



Source: ESRI Aerial Imagery. Riverside County FMMP, 2016.



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3.3 - Air Quality

This section describes existing air quality conditions regionally and locally as well as the relevant regulatory framework. This section describes the existing air quality setting and potential effects from the implementation of the proposed project on the site and its surrounding area. The air quality impacts discussed in this section is based on project-specific air quality modeling results included in Appendix C.

A Notice of Preparation (NOP) was released for public review on December 6, 2021, and an Environmental Impact Report (EIR) Scoping Meeting was held on December 14, 2021. One public comment letter was received during the scoping period related to air quality.

- The South Coast Air Quality Management District (SCAQMD) made the following comments:
 - Recommends the use of SCAQMD's California Environmental Quality Act (CEQA) Air Quality Handbook, California Emissions Estimator Model (CalEEMod) software, and additional guidance.
 - Provides general recommendations regarding disclosure of air quality impacts.
 - Provides resources to assist with identifying mitigation measures.
 - Provides health risk reduction strategies.

3.3.1 - Environmental Setting

South Coast Air Basin

The project site is approximately 917.3 acres and consists of the Rio Vista Specific Plan Area, which is in the City of Jurupa Valley, in Riverside County, California. The entire project site is within the South Coast Air Basin (SoCAB). The SoCAB consists of Orange County, Los Angeles County (except for the Antelope Valley), the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County. The San Gabriel, San Bernardino, and San Jacinto Mountains bound the SoCAB on the north and east while the Pacific Ocean lies to the west of the SoCAB. The southern limit of the SoCAB is the San Diego County line. The SoCAB is under the jurisdiction of SCAQMD.

Regional Climate

The regional climate factors such as temperature, wind, humidity, precipitation, and amount of sunshine have a substantial influence on air quality in the SoCAB. The annual average temperatures throughout the SoCAB vary from the low to middle 60°F (degrees Fahrenheit). Because of a decreased marine influence, the eastern portion of the SoCAB shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the SoCAB, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the SoCAB have recorded maximum temperatures above 100°F.

Although the climate of the SoCAB can be characterized as semi-arid, the air near the land surface is relatively humid on most days because of the presence of a marine layer from the Pacific Ocean. This shallow layer of sea air is an important modifier of SoCAB climate. Humidity restricts visibility in the

SoCAB, 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 SoCAB is 71 percent along the coast and 59 percent inland. Since the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature of the coastal areas. These effects decrease with distance from the coast.

More than 90 percent of the SoCAB'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 SoCAB with frequency being higher near the coast.

Because of its generally clear weather, about three-quarters of available sunshine is received in the SoCAB. 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 SoCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to 10 periods of strong, dry offshore winds, locally termed "Santa Ana winds," each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind. Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over Southern California. Nighttime drainage begins with the radiational cooling of the mountain slopes. Heavy, cool air descends the slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Another characteristic wind regime in the SoCAB is the "Catalina Eddy," a low level cyclonic (counterclockwise) flow centered over Santa Catalina Island, which results in an offshore flow to the southwest. On most spring and summer days, some indication of an eddy is apparent in coastal sections.

In the SoCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire SoCAB. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level.

A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions

occur primarily in the winter when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as oxides of nitrogen (NO_x) and carbon monoxide (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.

3.3.2 - Air Pollutant Description and Health Effects

The following provides a discussion of air pollutants and related potential health effects.

Toxic Air Contaminants

A toxic air contaminant (TAC) is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. There are no ambient air quality standards for TAC emissions. TACs are regulated in terms of health risks to individuals and populations exposed to the pollutants. The 1990 Clean Air Act Amendments significantly expanded the United States Environmental Protection Agency's (EPA's) authority to regulate Hazardous Air Pollutants (HAP). Section 112 of the Clean Air Act (CAA) lists 187 HAPs to be regulated by source category. Authority to regulate these pollutants was delegated to individual states. The California Air Resources Board (ARB) and local air districts regulate TACs and HAPs in California.

Air Pollutant Description and Health Effects

The federal and State ambient air quality standards, relevant effects, properties, and sources of the air pollutants are summarized in Table 3.3-1.

Table 3.3-1: Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard ^a	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Ozone	1 Hour	0.09 ppm	—	Irritate respiratory system; reduce lung function; breathing pattern changes; reduction of breathing capacity; inflame and damage cells that line the lungs; make lungs more susceptible to infection; aggravate asthma; aggravate other chronic lung diseases; cause permanent lung damage; some immunological changes; increased mortality risk; vegetation and property damage.	Ozone is a photochemical pollutant as it is not emitted directly into the atmosphere, but is formed by a complex series of chemical reactions between volatile organic compounds (VOC), nitrous oxides (NO _x), and sunlight. Ozone is a regional pollutant that is generated over a large area and is transported and spread by the wind.	Ozone is a secondary pollutant; thus, it is not emitted directly into the lower level of the atmosphere. The primary sources of ozone precursors (VOC and NO _x) are mobile sources (on-road and off-road vehicle exhaust).
	8 Hour	0.070 ppm	0.070 ppm			
Carbon monoxide (CO)	1 Hour	20 ppm	35 ppm	Ranges depending on exposure: slight headaches; nausea; aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; possible increased risk to fetuses; death.	CO is a colorless, odorless, toxic gas. CO is somewhat soluble in water; therefore, rainfall and fog can suppress CO conditions. CO enters the body through the lungs, dissolves in the blood, replaces oxygen as an attachment to hemoglobin, and reduces available oxygen in the blood.	CO is produced by incomplete combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). Sources include motor vehicle exhaust, industrial processes (metals processing and chemical manufacturing), residential wood burning, and natural sources.
	8 Hour	9.0 ppm	9 ppm			
Nitrogen dioxide ^b (NO ₂)	1 Hour	0.18 ppm	0.100 ppm	Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; contributions to atmospheric discoloration; increased visits to hospital for respiratory illnesses.	During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides— NO _x (NO, NO ₂ , NO ₃ , N ₂ O, N ₂ O ₃ , N ₂ O ₄ , and N ₂ O ₅). NO _x is a precursor to ozone, PM ₁₀ , and PM _{2.5} formation. NO _x can react with compounds to form nitric acid and related small particles and result in PM related health effects.	NO _x is produced in motor vehicle internal combustion engines and fossil fuel-fired electric utility and industrial boilers. Nitrogen dioxide forms quickly from NO _x emissions. NO ₂ concentrations near major roads can be 30 to 100 percent higher than those at monitoring stations.
	Annual	0.030 ppm	0.053 ppm			

Air Pollutant	Averaging Time	California Standard	Federal Standard ^a	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Sulfur dioxide ^c (SO ₂)	1 Hour	0.25 ppm	0.075 ppm	Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient sulfur dioxide levels. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.	Sulfur dioxide is a colorless, pungent gas. At levels greater than 0.5 ppm, the gas has a strong odor, similar to rotten eggs. Sulfur oxides (SO _x) include sulfur dioxide and sulfur trioxide. Sulfuric acid is formed from sulfur dioxide, which can lead to acid deposition and can harm natural resources and materials. Although sulfur dioxide concentrations have been reduced to levels well below State and federal standards, further reductions are desirable because sulfur dioxide is a precursor to sulfate and PM ₁₀ .	Human caused sources include fossil fuel combustion, mineral ore processing, and chemical manufacturing. Volcanic emissions are a natural source of sulfur dioxide. The gas can also be produced in the air by dimethylsulfide and hydrogen sulfide. Sulfur dioxide is removed from the air by dissolution in water, chemical reactions, and transfer to soils and ice caps. The sulfur dioxide levels in the State are well below the maximum standards.
	3 Hour	—	0.5 ppm			
	24 Hour	0.04 ppm	0.14 (for certain areas)			
	Annual	—	0.030 ppm (for certain areas)			
Particulate matter (PM ₁₀)	24 hour	50 µg/m ³	150 µg/m ³	<ul style="list-style-type: none"> Short-term exposure (hours/days): irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravate existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias. Long-term exposure: reduced lung function; chronic bronchitis; changes in lung morphology; death. 	Suspended particulate matter is a mixture of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM ₁₀ refers to particulate matter that is between 2.5 and 10 microns in diameter, (one micron is one-millionth of a meter). PM _{2.5} refers to particulate matter that is 2.5 microns or less in diameter, about one-thirtieth the size of the average human hair.	Stationary sources include fuel or wood combustion for electrical utilities, residential space heating, and industrial processes; construction and demolition; metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal, and recycling. Mobile or transportation-related sources are from vehicle exhaust and road dust. Secondary particles form from reactions in the atmosphere.
	Mean	20 µg/m ³	—			
Particulate matter (PM _{2.5})	24 Hour	—	35 µg/m ³			
	Annual	12 µg/m ³	12.0 µg/m ³			
Visibility-reducing particles	8 Hour	See note below ^d				
Sulfates	24 Hour	25 µg/m ³	—	(a) Decrease in ventilatory function; (b) aggravation of asthmatic symptoms; (c) aggravation of cardiopulmonary disease; (d) vegetation damage;	The sulfate ion is a polyatomic anion with the empirical formula SO ₄ ²⁻ . Sulfates occur in combination with metal and/or	Sulfates are particulates formed through the photochemical oxidation of sulfur dioxide. In California, the main source of

Air Pollutant	Averaging Time	California Standard	Federal Standard ^a	Most Relevant Effects from Pollutant Exposure	Properties	Sources
				(e) degradation of visibility; (f) property damage.	hydrogen ions. Many sulfates are soluble in water.	sulfur compounds is combustion of gasoline and diesel fuel.
Lead ^e	30-day	1.5 µg/m ³	—	Lead accumulates in bones, soft tissue, and blood and can affect the kidneys, liver, and nervous system. It can cause impairment of blood formation and nerve conduction, behavior disorders, mental retardation, neurological impairment, learning deficiencies, and low IQs.	Lead is a solid heavy metal that can exist in air pollution as an aerosol particle component. Leaded gasoline was used in motor vehicles until around 1970. Lead concentrations have not exceeded State or federal standards at any monitoring station since 1982.	Lead ore crushing, lead ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources include dust from soils contaminated with lead-based paint, solid waste disposal, and crustal physical weathering.
	Quarter	—	1.5 µg/m ³			
	Rolling 3-month average	—	0.15 µg/m ³			
Vinyl chloride ^e	24 Hour	0.01 ppm	—	Short-term exposure to high levels of vinyl chloride in the air causes central nervous system effects, such as dizziness, drowsiness, and headaches. Epidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of a rare cancer, liver angiosarcoma, and have suggested a relationship between exposure and lung and brain cancers.	Vinyl chloride, or chloroethene, is a chlorinated hydrocarbon and a colorless gas with a mild, sweet odor. In 1990, the ARB identified vinyl chloride as a toxic air contaminant (TAC) and estimated a cancer unit risk factor.	Most vinyl chloride is used to make polyvinyl chloride plastic and vinyl products, including pipes, wire and cable coatings, and packaging materials. It can be formed when plastics containing these substances are left to decompose in solid waste landfills. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites.
Hydrogen sulfide	1 Hour	0.03 ppm	—	High levels of hydrogen sulfide can cause immediate respiratory arrest. It can irritate the eyes and respiratory tract and cause headache, nausea, vomiting, and cough. Long exposure can cause pulmonary edema.	Hydrogen sulfide (H ₂ S) is a flammable, colorless, poisonous gas that smells like rotten eggs.	Manure, storage tanks, ponds, anaerobic lagoons, and land application sites are the primary sources of hydrogen sulfide. Anthropogenic sources include the combustion of sulfur containing fuels (oil and coal).
Volatile organic compounds (VOC)		There are no State or federal standards for VOCs because they are not classified as criteria pollutants.		Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations because of interference with oxygen uptake. In general,	Reactive organic gases (ROGs), or VOCs, are defined as any compound of carbon—excluding carbon monoxide, carbon dioxide, carbonic acid, metallic	Indoor sources of VOCs include paints, solvents, aerosol sprays, cleansers, tobacco smoke, etc. Outdoor sources of VOCs are from combustion and fuel evaporation.

Air Pollutant	Averaging Time	California Standard	Federal Standard ^a	Most Relevant Effects from Pollutant Exposure	Properties	Sources
				concentrations of VOCs are suspected to cause eye, nose, and throat irritation; headaches; loss of coordination; nausea; and damage to the liver, the kidneys, and the central nervous system. Many VOCs have been classified as TACs.	carbides or carbonates, and ammonium carbonate—that participates in atmospheric photochemical reactions. Although there are slight differences in the definition of ROGs and VOCs, the two terms are often used interchangeably.	A reduction in VOC emissions reduces certain chemical reactions that contribute to the formulation of ozone. VOCs are transformed into organic aerosols in the atmosphere, which contribute to higher PM ₁₀ and lower visibility.
Benzene		There are no ambient air quality standards for benzene.		Short-term (acute) exposure of high doses from inhalation of benzene may cause dizziness, drowsiness, headaches, eye irritation, skin irritation, and respiratory tract irritation, and at higher levels, loss of consciousness can occur. Long-term (chronic) occupational exposure of high doses has caused blood disorders, leukemia, and lymphatic cancer.	Benzene is a VOC. It is a clear or colorless light-yellow, volatile, highly flammable liquid with a gasoline-like odor. The EPA has classified benzene as a “Group A” carcinogen.	Benzene is emitted into the air from fuel evaporation, motor vehicle exhaust, tobacco smoke, and from burning oil and coal. Benzene is used as a solvent for paints, inks, oils, waxes, plastic, and rubber. Benzene occurs naturally in gasoline at 1 to 2 percent by volume. The primary route of human exposure is through inhalation.
Diesel particulate matter (DPM)		There are no ambient air quality standards for DPM.		Some short-term (acute) effects of DPM exposure include eye, nose, throat, and lung irritation, coughs, headaches, lightheadedness, and nausea. Studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Human studies on the carcinogenicity of DPM demonstrate an increased risk of lung cancer, although the increased risk cannot be clearly attributed to diesel exhaust exposure.	Diesel PM is a source of PM _{2.5} —diesel particles are typically 2.5 microns and smaller. Diesel exhaust is a complex mixture of thousands of particles and gases that is produced when an engine burns diesel fuel. Organic compounds account for 80 percent of the total particulate matter mass, which consists of compounds such as hydrocarbons and their derivatives, and polycyclic aromatic hydrocarbons and their derivatives. Fifteen polycyclic aromatic hydrocarbons are confirmed carcinogens, a number of which are found in diesel exhaust.	Diesel exhaust is a major source of ambient particulate matter pollution in urban environments. Typically, the main source of DPM is from combustion of diesel fuel in diesel-powered engines. Such engines are in on-road vehicles such as diesel trucks, off-road construction vehicles, diesel electrical generators, and various pieces of stationary construction equipment.

Air Pollutant	Averaging Time	California Standard	Federal Standard ^a	Most Relevant Effects from Pollutant Exposure	Properties	Sources
<p>Notes:</p> <p>µg/m³ = micrograms per cubic meter</p> <p>30-day = 30-day average</p> <p>Annual = Annual Arithmetic Mean</p> <p>ppm = parts per million (concentration)</p> <p>Quarter = Calendar quarter</p> <p>^a Federal standard refers to the primary national ambient air quality standard, or the levels of air quality necessary, with an adequate margin of safety to protect the public health. All standards listed are primary standards except for 3-Hour SO₂, which is a secondary standard. A secondary standard is the level of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.</p> <p>^b To attain the 1-hour nitrogen dioxide national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (0.100 ppm).</p> <p>^c On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.</p> <p>^d Visibility-reducing particles: In 1989, the ARB converted both the general Statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are “extinction of 0.23 per kilometer” and “extinction of 0.07 per kilometer” for the Statewide and Lake Tahoe Air Basin standards, respectively.</p> <p>^e The ARB has identified lead and vinyl chloride as “toxic air contaminants” with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.</p> <p>Sources:</p> <p>California Office of Environmental Health Hazard Assessment (OEHHA). 2001. Health Effects of Diesel Exhaust. Website: https://oehha.ca.gov/air/health-effects-diesel-exhaust. Accessed February 3, 2022.</p> <p>National Archives and Records Administration. 2009. Part II, United States Environmental Protection Agency. 40 Code of Federal Regulations Parts 50 and 58, Primary National Ambient Air Quality Standard for Nitrogen Dioxide; Proposed Rule. July 15. Website: https://www.gpo.gov/fdsys/pkg/FR-2009-07-15/pdf/E9-15944.pdf. Accessed February 3, 2022.</p> <p>National Toxicology Program. 2016. Report on Carcinogens, 14th Edition; U.S. Department of Health and Human Services, Public Health Service. Benzene. November 3. Website: http://ntp.niehs.nih.gov/ntp/roc/twelfth/profiles/Benzene.pdf. Accessed February 3, 2022.</p> <p>National Toxicology Program. 2016. Report on Carcinogens, 14th Edition; U.S. Department of Health and Human Services, Public Health Service. Diesel Exhaust Particles. November 3. Website: https://ntp.niehs.nih.gov/ntp/roc/content/profiles/dieselexhaustparticulates.pdf. Accessed February 3, 2022.</p> <p>South Coast Air Quality Management District (SCAQMD). 2007. Final 2007 Air Quality Management Plan. June. Website: https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2007-air-quality-management-plan/2007-aqmp-final-document.pdf?sfvrsn=2. Accessed February 3, 2022.</p> <p>United States Environmental Protection Agency (EPA). 2016. Nitrogen Dioxide (NO₂) Pollution. Basic Information about NO₂. Website: https://www.epa.gov/no2-pollution/basic-information-about-no2#What%20is%20NO2. Accessed February 3, 2022.</p>						

Several pollutants listed in Table 3.3-1 are not addressed in this analysis. Analysis of lead is not included in this EIR because no new sources of lead emissions are anticipated with the proposed project. Visibility-reducing particles are not explicitly addressed in this analysis because particulate matter is addressed as PM₁₀ and PM_{2.5}. No components of the proposed project would result in vinyl chloride or hydrogen sulfide emissions in any substantial quantity.

Toxic Air Contaminants Health Effects

A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. The California Almanac of Emissions and Air Quality—2013 Edition presents the relevant concentration and cancer risk data for the 10 TACs that pose the most substantial health risk in California based on available data.¹ The 10 TACs are acetaldehyde, benzene, 1,3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and DPM.

Some studies indicate that DPM poses the greatest health risk among the TACs listed above. A 10-year research program demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk.² In addition to increasing the risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.

DPM differs from other TACs in that it is not a single substance, but a complex mixture of hundreds of substances. Although DPM is emitted by diesel-fueled, internal combustion engines, the composition of the emissions varies, depending on the engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present. However, no ambient monitoring data are available for DPM because no routine measurement method currently exists. The ARB has made preliminary concentration estimates based on a DPM exposure method. This method uses the ARB emissions inventory's PM₁₀ database, ambient PM₁₀ monitoring data, and the results from several studies to estimate concentrations of DPM.

Table 3.3-2 provides a summary of the types, sources, and effects of TACs.

¹ California Air Resource Board (ARB). 2013. California Almanac of Emissions and Air Quality. Website: <https://ww2.arb.ca.gov/our-work/programs/resource-center/technical-assistance/air-quality-and-emissions-data/almanac>. Accessed February 3, 2022.

² California Air Resource Board (ARB). 2012. Overview: Diesel Exhaust and Health. Website: <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health>. Accessed February 3, 2022.

Table 3.3-2: Description of Toxic Air Contaminants of National and California Concern

Toxic Air Contaminant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
Diesel particulate matter (DPM)	DPM is a source of PM _{2.5} —diesel particles are typically 2.5 microns and smaller. Diesel exhaust is a complex mixture of thousands of particles and gases that is produced when an engine burns diesel fuel. Organic compounds account for 80 percent of the total PM mass, which consists of compounds such as hydrocarbons and their derivatives and polycyclic aromatic hydrocarbons and their derivatives. Fifteen polycyclic aromatic hydrocarbons are confirmed carcinogens, a number of which are found in diesel exhaust.	Diesel exhaust is a major source of ambient PM pollution in urban environments. Typically, the main source of DPM is from combustion of diesel fuel in diesel-powered engines. Such engines are in on-road vehicles such as diesel trucks, off-road construction vehicles, diesel electrical generators, and various pieces of stationary construction equipment.	Some short-term (acute) effects of DPM exposure include eye, nose, throat, and lung irritation, coughs, headaches, lightheadedness, and nausea. Studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Human studies on the carcinogenicity of DPM demonstrate an increased risk of lung cancer, although the increased risk cannot be clearly attributed to diesel exhaust exposure.
VOCs	Reactive organic gases (ROGs), or VOCs, are defined as any compound of carbon—excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate—that participates in atmospheric photochemical reactions. Although there are slight differences in the definition of ROGs and VOCs, the two terms are often used interchangeably.	Indoor sources of VOCs include paints, solvents, aerosol sprays, cleansers, tobacco smoke, etc. Outdoor sources of VOCs are from combustion and fuel evaporation. A reduction in VOC emissions reduces certain chemical reactions that contribute to the formation of ozone. VOCs are transformed into organic aerosols in the atmosphere, which contribute to higher PM ₁₀ and lower visibility.	Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations because of interference with oxygen uptake. In general, concentrations of VOCs are suspected to cause eye, nose, and throat irritation; headaches; loss of coordination; nausea; and damage to the liver, the kidneys, and the central nervous system. Many VOCs have been classified as toxic air contaminants (TACs).
Benzene	Benzene is a VOC. It is a clear or colorless light-yellow, volatile, highly flammable liquid with a gasoline-like odor. The EPA has classified benzene as a “Group A” carcinogen.	Benzene is emitted into the air from fuel evaporation, motor vehicle exhaust, tobacco smoke, and from burning oil and coal. Benzene is used as a solvent for paints, inks, oils, waxes, plastic, and rubber. Benzene occurs	Short-term (acute) exposure of high doses from inhalation of benzene may cause dizziness, drowsiness, headaches, eye irritation, skin irritation, and respiratory tract irritation, and at higher levels, loss of consciousness

Toxic Air Contaminant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
		naturally in gasoline at one to 2 percent by volume. The primary route of human exposure is through inhalation.	can occur. Long-term (chronic) occupational exposure of high doses has caused blood disorders, leukemia, and lymphatic cancer.
Asbestos	Asbestos is the name given to a number of naturally occurring fibrous silicate minerals that have been mined for their useful properties, such as thermal insulation, chemical and thermal stability, and high tensile strength. The three most common types of asbestos are chrysotile, amosite, and crocidolite.	Chrysotile, also known as white asbestos, is the most common type of asbestos found in buildings. Chrysotile makes up approximately 90 to 95 percent of all asbestos contained in buildings in the United States.	Exposure to asbestos is a health threat; exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest, and abdominal cavity), and asbestosis (a non-cancerous lung disease that causes scarring of the lungs). Exposure to asbestos can occur during demolition or remodeling of buildings that were constructed prior to the 1977 ban on asbestos for use in buildings. Exposure to naturally occurring asbestos can occur during soil-disturbing activities in areas with deposits present.
Hydrogen Sulfide	Hydrogen sulfide (H ₂ S) is a flammable, colorless, poisonous gas that smells like rotten eggs.	Manure, storage tanks, ponds, anaerobic lagoons, and land application sites are the primary sources of hydrogen sulfide. Anthropogenic sources include the combustion of sulfur containing fuels (oil and coal).	High levels of hydrogen sulfide can cause immediate respiratory arrest. It can irritate the eyes and respiratory tract and cause headache, nausea, vomiting, and cough. Long exposure can cause pulmonary edema.
Sulfates	Sulfates occur in combination with metal and/or hydrogen ions. Many sulfates are soluble in water.	Sulfates are particulates formed through the photochemical oxidation of sulfur dioxide. In California, the main source of sulfur compounds is combustion of gasoline and diesel fuel.	Sulfates can cause a decrease in ventilatory function, aggravation of asthmatic symptoms; and aggravation of cardiopulmonary disease, as well as vegetation damage, degradation of visibility, property damage.
Visibility-Reducing Particles	Suspended PM is a mixture of small particles that consist of dry solid fragments,	Stationary sources include fuel or wood combustion for electrical utilities, residential	<ul style="list-style-type: none"> Short-term exposure (hours/days): irritation of the eyes, nose, throat;

Toxic Air Contaminant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
	droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM ₁₀ refers to particulate matter that is between 2.5 and 10 microns in diameter (1 micron is one-millionth of a meter). PM _{2.5} refers to particulate matter that is 2.5 microns or less in diameter, about one-thirtieth the size of the average human hair.	space heating, and industrial processes; construction and demolition; the use of metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal; and recycling. Mobile or transportation-related sources are from vehicle exhaust and road dust. Secondary particles form from reactions in the atmosphere.	coughing; phlegm; chest tightness; shortness of breath; aggravates existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias. <ul style="list-style-type: none"> Long-term exposure can result in reduced lung function, chronic bronchitis, changes in lung morphology, and death.
Vinyl Chloride	Vinyl chloride, or chloroethene, is a chlorinated hydrocarbon and a colorless gas with a mild, sweet odor. In 1990, the California Air Resources Board (ARB) identified vinyl chloride as a toxic air contaminant (TAC) and estimated a cancer unit risk factor.	Most vinyl chloride is used to make polyvinyl chloride plastic and vinyl products, including pipes, wire and cable coatings, and packaging materials. It can be formed when plastics containing these substances are left to decompose in solid waste landfills. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites.	Short-term exposure to high levels of vinyl chloride in the air causes central nervous system effects, such as dizziness, drowsiness, and headaches. Epidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of a rare cancer, liver angiosarcoma, and have suggested a relationship between exposure and lung and brain cancers.
Lead (Pb)	Lead is a solid heavy metal that can exist in air pollution as an aerosol particle component. Leaded gasoline was used in motor vehicles until around 1970. Lead concentrations have not exceeded State or federal standards at any monitoring station since 1982.	Lead ore crushing, lead ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources include dust from soils contaminated with lead-based paint, solid waste disposal, and crustal physical weathering.	Lead accumulates in bones, soft tissue, and blood and can affect the kidneys, liver, and nervous system. It can cause impairment of blood formation and nerve conduction, behavior disorders, mental retardation, neurological impairment, learning deficiencies, and low IQs.

Toxic Air Contaminant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
<p>Sources:</p> <p>California Air Resources Board (ARB). 2021. Vinyl Chloride and Health. Website: https://ww2.arb.ca.gov/resources/vinyl-chloride-and-health. Accessed February 22, 2022.</p> <p>California Office of Environmental Health Hazard Assessment (OEHHA). 2001. Health Effects of Diesel Exhaust. Website: https://oehha.ca.gov/media/downloads/calenviroscreen/indicators/diesel4-02.pdf. Accessed February 22, 2022.</p> <p>National Archives and Records Administration. 2009. Part II, United States Environmental Protection Agency. 40 Code of Federal Regulations Parts 50 and 58, Primary National Ambient Air Quality Standard for Nitrogen Dioxide; Proposed Rule. July 15. Website: https://www.gpo.gov/fdsys/pkg/FR-2009-07-15/pdf/E9-15944.pdf. Accessed February 22, 2022.</p> <p>National Toxicology Program. 2016. Report on Carcinogens, 14th Edition; U.S. Department of Health and Human Services, Public Health Service. Benzene. November 3. Website: http://ntp.niehs.nih.gov/ntp/roc/twelfth/profiles/Benzene.pdf. Accessed February 22, 2022.</p> <p>National Toxicology Program. 2016. Report on Carcinogens, 14th Edition; U.S. Department of Health and Human Services, Public Health Service. Diesel Exhaust Particles. November 3. Website: https://ntp.niehs.nih.gov/ntp/roc/content/profiles/dielexhaustparticulates.pdf. Accessed February 22, 2022.</p> <p>South Coast Air Quality Management District (SCAQMD). 2007. Final 2007 Air Quality Management Plan. June. Website: https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2007-air-quality-management-plan/2007-aqmp-final-document.pdf?sfvrsn=2. Accessed February 22, 2022.</p> <p>United States Environmental Protection Agency (EPA). 2016. Nitrogen Dioxide (NO₂) Pollution. Basic Information about NO₂. Website: https://www.epa.gov/no2-pollution/basic-information-about-no2#What%20is%20NO2. Accessed February 22, 2022.</p>			

Asbestos

Asbestos is the name given to a number of naturally occurring fibrous silicate minerals that have been mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The three most common types of asbestos are chrysotile, amosite, and crocidolite. Chrysotile, also known as white asbestos, is the most common type of asbestos found in buildings. Chrysotile makes up approximately 90 to 95 percent of all asbestos contained in buildings in the United States. Exposure to asbestos is a health threat; exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest, and abdominal cavity), and asbestosis (a non-cancerous lung disease that causes scarring of the lungs). Exposure to asbestos can occur during demolition or remodeling of buildings that were constructed prior to the 1977 ban on asbestos for use in buildings. Exposure to naturally occurring asbestos can occur during soil-disturbing activities in areas with deposits present. No naturally occurring asbestos is located near the project site.³

3.3.3 - Existing Air Quality Conditions

The local air quality can be evaluated by reviewing relevant air pollution concentrations near the project area. Table 3.3-3 summarizes 2018 through 2020 published monitoring data, which is the most recent 3-year period available. The table displays data from the Rubidoux—Mission Boulevard station (located approximately 4,700 feet south of the project site). The data shows that during the past few years, the project area has exceeded the standards for ozone (State and national), PM₁₀ (State), and PM_{2.5} (national). The data in the table reflects the concentration of the pollutants in the air, measured using air monitoring equipment. This differs from emissions, which are calculations of

³ California Department of Conservation, Division of Mine Reclamation. 2000. A General Location Guide for Ultramafic Rocks in California—Areas More likely to Contain Naturally Occurring Asbestos. Website: https://ww2.arb.ca.gov/sites/default/files/classic/toxics/asbestos/ofr_2000-019.pdf. Accessed June 24, 2022.

a pollutant being emitted over a certain period. No recent monitoring data for Riverside County was available for CO or SO₂. Generally, no monitoring is conducted for pollutants that are no longer likely to exceed ambient air quality standards.

Table 3.3-3: Air Quality Monitoring Summary at Rubidoux–Mission Boulevard Station

Air Pollutant ¹	Averaging Time	Item	2018	2019	2020
Ozone	1 Hour	Max 1 Hour (ppm)	0.123	0.123	0.143
		Days > State Standard (0.09 ppm)	22	24	46
	8 Hours	Max 8 Hour (ppm)	0.101	0.096	0.115
		Days > State Standard (0.07 ppm)	57	63	86
		Days > National Standard (0.07 ppm)	53	59	82
Carbon monoxide (CO)	8 Hours	Max 8 Hour (ppm)	ND	ND	ND
		Days > State Standard (9.0 ppm)	ND	ND	ND
		Days > National Standard (9 ppm)	ND	ND	ND
Nitrogen dioxide (NO ₂)	Annual	Annual Average (ppm)	14	14	14
	1 Hour	Max 1 Hour (ppm)	55.4	56	62
		Days > National Standard (100 ppb)	0	0	0
Sulfur dioxide (SO ₂)	Annual	Annual Average (ppm)	ND	ND	ND
	24 Hours	Max 24 Hour (ppm)	ND	ND	ND
		Days > State Standard (0.04 ppm)	ND	ND	ND
Inhalable coarse particles (PM ₁₀)	Annual	State Annual Average (µg/m ³)	43.9	40.9	ND
	24 Hours	24 Hour (µg/m ³)	126	182.4	137.7
		Days > State Standard (50 µg/m ³)	127	110	115
		Days > National Standard (150 µg/m ³)	0	0	ND
Fine particulate matter (PM _{2.5})	Annual	State Annual Average (µg/m ³)	12.6	11.2	14.1
	24 Hours	24 Hour (µg/m ³)	68.3	57.6	61.9
		Days > National Standard (35 µg/m ³)	3	5	12

Notes:

> = exceed

µg/m³ = micrograms per cubic meter

Bold = exceedance

max = maximum ppb = parts per billion

National Standard = National Ambient Air Quality Standard

ND = no data

ppb = parts per billion

ppm = parts per million

State Standard = California Ambient Air Quality Standard

¹ Riverside-Rubidoux site

Source: California Air Sources Board (ARB). Air Quality Data Statistics. Website: <https://www.arb.ca.gov/adam>. Accessed February 3, 2022.

The health impacts of the various air pollutants of concern can be presented in a number of ways. The clearest comparison is to the State and federal ozone standards. Air concentration below standards indicate that health risks are sufficiently low enough to have a minimal impact on public health, as there is no such thing as a zero-risk level. When concentrations exceed the standards, impacts will vary based on the amount by which the standard is exceeded. The EPA developed the Air Quality Index (AQI) as an easy-to-understand measure of health impacts compared with concentrations in the air. Table 3.3-4 provides a description of the health impacts of ozone at different concentrations.

Table 3.3-4: Air Quality Index and Health Effects from Ozone

Air Quality Index/ 8-hour Ozone Concentration	Health Effects Description
AQI (51 -100)—Moderate	Sensitive Groups: Children and people with asthma are the groups most at risk.
Concentration 55-70 ppb	<p>Health Effects Statements: Increasing likelihood of respiratory symptoms and breathing discomfort in active children and adults, and people with respiratory disease, such as asthma.</p> <p>Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.</p>
AQI (101-150)—Unhealthy for Sensitive Groups	Sensitive Groups: Children and people with asthma are the groups most at risk.
Concentration 71-85 ppb	<p>Health Effects Statements: Increasing likelihood of respiratory symptoms and breathing discomfort in active children and adults, and people with respiratory disease, such as asthma.</p> <p>Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.</p>
AQI (151-200)—Unhealthy	Sensitive Groups: Children and people with asthma are the groups most at risk.
Concentration 86-105 ppb	<p>Health Effects Statements: Greater likelihood of respiratory symptoms and breathing difficulty in active children and adults and people with respiratory disease, such as asthma; possible respiratory effects in general population.</p> <p>Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion.</p>
AQI (201-300)—Very Unhealthy	Sensitive Groups: Children and people with asthma are the groups most at risk.
Concentration 106-200 ppb	Health Effects Statements: Increasingly severe symptoms and impaired breathing likely in active children and adults and people with respiratory disease, such as asthma; increasing likelihood of respiratory effects in general population.

Air Quality Index/ 8-hour Ozone Concentration	Health Effects Description
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should avoid all outdoor exertion; everyone else, especially children, should limit outdoor exertion.
Notes: ppb = parts per billion Source: AirNow. AQI Calculator. Website: https://www.airnow.gov/aqi/aqi-calculator/ . Accessed February 3, 2022.	

Based on the AQI scale for the 8-hour ozone standard, the Riverside-Rubidoux monitoring station identified up to 86 days in the category of “Very Unhealthy,” with the highest 8-hour reading being 115 parts per billion (ppb) in 2020.

Environmental Justice

As stated in the General Plan Environmental Justice Element: “As outlined by CalEnviroScreen2, environmental justice communities are those areas of a city that have higher pollution burdens and vulnerabilities than other areas, and therefore are most in need of assistance.” Environmental justice communities can be defined both by characteristics of the population and the pollution burden they bear. Characteristics of the population include the number of people most vulnerable to pollution, i.e., “sensitive receptors” (children, pregnant women, the sick, and the elderly), and their socioeconomic status, such as poverty level and unemployment status. Social factors that may also contribute to increased environmental vulnerabilities include a lack of access to fresh food, a lack of park and recreation opportunities, as well as an overabundance of liquor stores and fast-food facilities.

Pollution burden is measured by the presence of direct environmental threats (i.e., proximity to a toxic cleanup site) as well as exposure to other toxics such as air and water pollution. A number of resources are available to help identify environmental justice communities, such as CalEnviroScreen and the Environmental Justice Screening Model (EJSM). Using multiple environmental “indicators,” these resources scientifically determine what areas of the City face disproportionate environmental burdens. The City Planning Department uses these resources to map environmental justice communities in Jurupa Valley. By identifying these areas, the City can work to mitigate existing adverse conditions and ensure that new development does not affect vulnerable populations.”

Air Quality

As outlined in the 2017 General Plan Air Quality Element, the Inland Empire, including the City of Jurupa Valley, has some of the worst air pollution in the State, primarily due to land use patterns, weather systems, and topography. Prior to the 1970s, the area was a major agricultural center. Agricultural uses declined over time as land was converted to residential, industrial, and commercial development. The concentration of many highways and railroads has made the Inland Empire a major shipping hub, and many manufacturing companies have located their distribution facilities in the area. Trucks and rail lines accessing these facilities generate increased levels of diesel emissions. In addition, the prevailing wind pattern of sea breezes from throughout Southern California blowing

east brings emissions from cars, trucks, ports, construction equipment, power plants, and refineries, which are blocked by the San Bernardino Mountains and tend to concentrate over the Inland Empire. This issue is further compounded as the pollution mixes with oxygen in the presence of sunlight to form ozone.

As required by General Plan Policy EJ 1.11 Environmental Screening, Exhibit 3.3-1 shows the existing CalEnviroScreen attributes related to Ozone, fine particulate matter (PM_{2.5}), and diesel particulate matter (DPM).

Attainment Status

The EPA and the ARB designate air basins where ambient air quality standards are exceeded as “nonattainment” areas. If standards are met, the area is designated as an “attainment” area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered “unclassified.” National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards.

Each standard has a different definition, or “form” of what constitutes attainment, based on specific air quality statistics. For example, the federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the federal annual PM_{2.5} standard is met if the 3-year average of the annual average PM_{2.5} concentration is less than or equal to the standard.

The current attainment designations for the SoCAB are shown in Table 3.3-5. With respect to the California Ambient Air Quality Standards (CAAQS), the Riverside County portion of the SoCAB is designated as a nonattainment area for ozone, PM_{2.5}, and PM₁₀, and is designated as being in attainment, or unclassified, for all other pollutants. With respect to the National Ambient Air Quality Standards (NAAQS), the Riverside County portion of the SoCAB is extreme nonattainment for ozone, serious nonattainment for PM_{2.5}, and attainment or unclassified for all other pollutants.

Table 3.3-5: South Coast Air Basin Attainment Status

Pollutant	State	Federal
Ozone–1-hour	Nonattainment	Nonattainment (Extreme)
Ozone–8-hour	Nonattainment	Nonattainment (Extreme)
PM ₁₀	Nonattainment	Attainment (Maintenance)
PM _{2.5}	Nonattainment	Nonattainment (Serious)
CO	Attainment	Attainment (Maintenance)
NO ₂ –1-hour	Attainment	Unclassifiable/Attainment
NO ₂ –annual	Attainment	Attainment (Maintenance)
SO ₂	Unclassifiable/Attainment	Designations Pending (expected Unclassifiable/Attainment)

Pollutant	State	Federal
Lead (Riverside County)	N/A	Attainment
All others	Attainment	N/A
<p>Notes:</p> <p>CO = carbon monoxide</p> <p>NO₂ = nitrogen dioxide</p> <p>PM₁₀ = particulate matter with an aerodynamic resistance diameter of 10 micrometers or less.</p> <p>PM_{2.5} = particulate matter with an aerodynamic resistance diameter of 2.5 micrometers.</p> <p>SO₂ = sulfur dioxide</p> <p>Source: South Coast Air Quality Management District (SCAQMD). 2018. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) Attainment Status for South Coast Air Basin. September. Website: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf. Accessed February 3, 2022.</p>		

Air Quality in the South Coast Air Basin Has Significantly Improved Over Time

The SoCAB has been one of the most unhealthful air basins in the United States and has experienced unhealthful air quality since World War II.⁴ However, as a result of the region's air pollution control efforts over the last 60+ years, criteria pollutant concentrations in the SoCAB have reduced dramatically and are expected to continue to improve in the future as State regulations become more stringent.⁵ Emissions of O₃, NO_x, VOC, and CO have been decreasing in the SoCAB since 1975 and are projected to continue to decrease beyond 2020.⁶ These decreases result primarily from motor vehicle controls and reductions in evaporative emissions. Although vehicle miles traveled (VMT) in the SoCAB continue to increase, NO_x and VOC levels are decreasing because of federal and State mandated controls on motor vehicles and the replacement of older polluting vehicles with lower-emitting vehicles.⁷ NO_x emissions from electric utilities have also decreased due to use of cleaner fuels and renewable energy.⁸ O₃ contour maps show that the number of days exceeding the 8-hour NAAQS decreased between 1997 and 2007.⁹ In the 2007 period, there was an overall decrease in exceedance days compared with the 1997 period.¹⁰ However, as shown on Figure 3-3.1, O₃ levels have increased in the past 2 years due to higher temperatures and stagnant weather conditions. Notwithstanding, O₃ levels in the SoCAB have decreased substantially over the last 30 years with the current maximum measured concentrations being approximately one-third of concentrations within the late 1970s.¹¹

As with other pollutants, the most recent PM₁₀ statistics show an overall improvement as illustrated in Figure 3.3-2 and Figure 3.3-3. During the period for which data are available, the 24-hour national annual average concentration for PM₁₀ decreased by approximately 54 percent, from 103.7 microgram per cubic meter (µg/m³) in 1988 to 47.5 µg/m³ in 2019.¹² Although the values are below the federal standard, it should be noted that there are days within the year where the

⁴ Urban Crossroads. 2023. SoCAB Regional Air Quality Improvement. October 6.

⁵ Ibid.

⁶ Ibid.

⁷ Ibid.

⁸ Ibid.

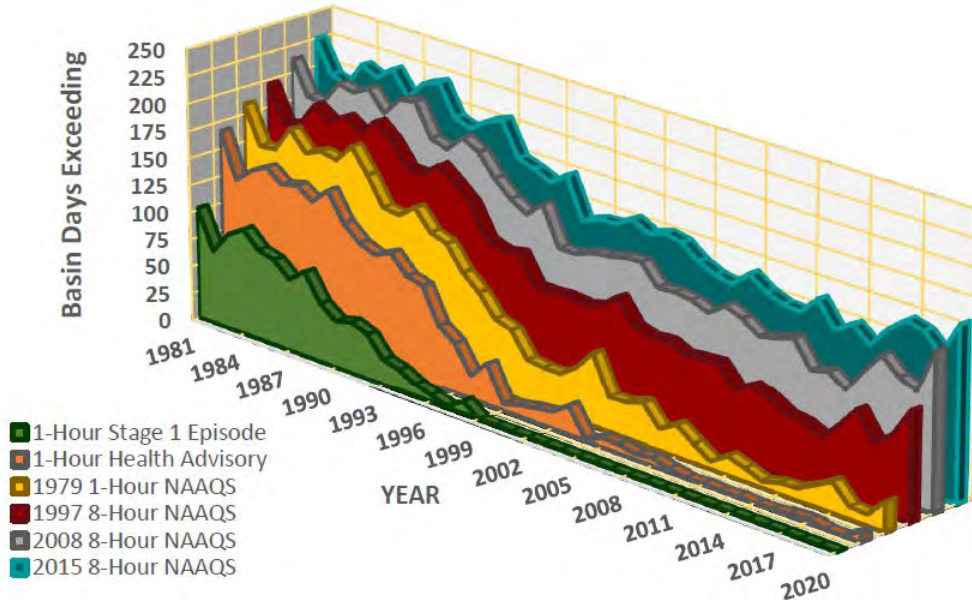
⁹ Ibid.

¹⁰ Ibid.

¹¹ Ibid.

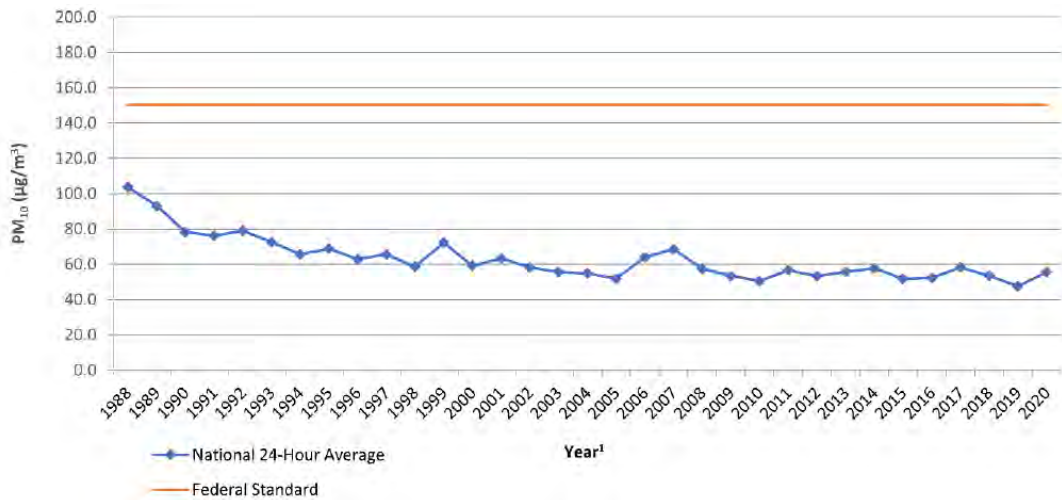
¹² Ibid.

concentrations will exceed the threshold.¹³ Although data in the late 1990s show some variability, this is likely due to the advances in meteorological science rather than a change in emissions.¹⁴ Similar to the ambient concentrations, the calculated number of days above the 24-hour PM₁₀ standards has also shown an overall drop.¹⁵



Source: Urban Crossroads. 2023. SoCAB Regional Air Quality Improvement. October 6.

Figure 3.3-1: South Coast Air Basin Ozone Trend



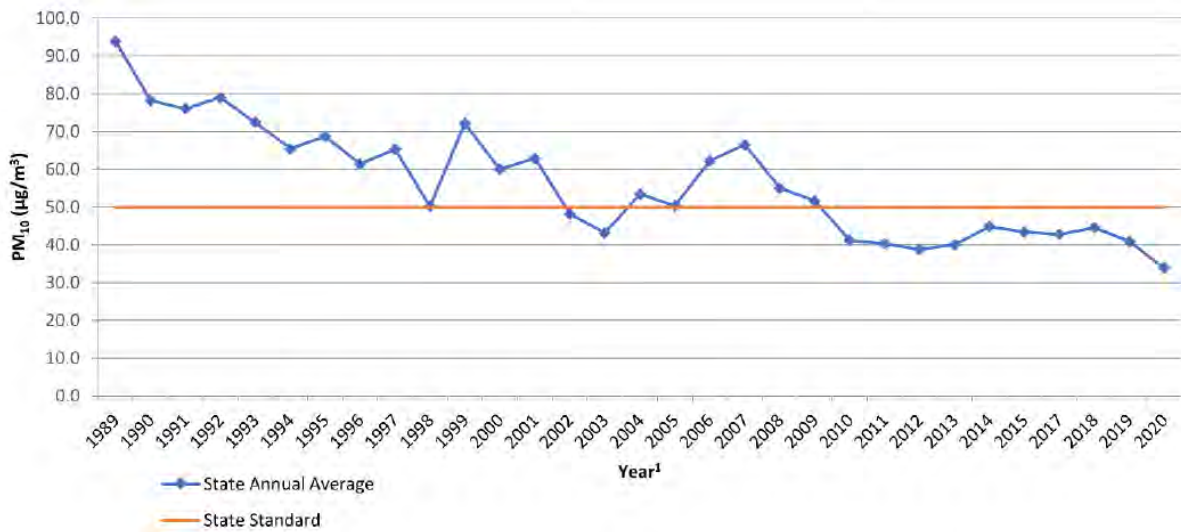
Source: Urban Crossroads. 2023. SoCAB Regional Air Quality Improvement. October 6.

Figure 3.3-2: South Coast Air Basin PM₁₀ Trend (Federal Standard)

¹³ Urban Crossroads. 2023. SoCAB Regional Air Quality Improvement. October 6.

¹⁴ Ibid.

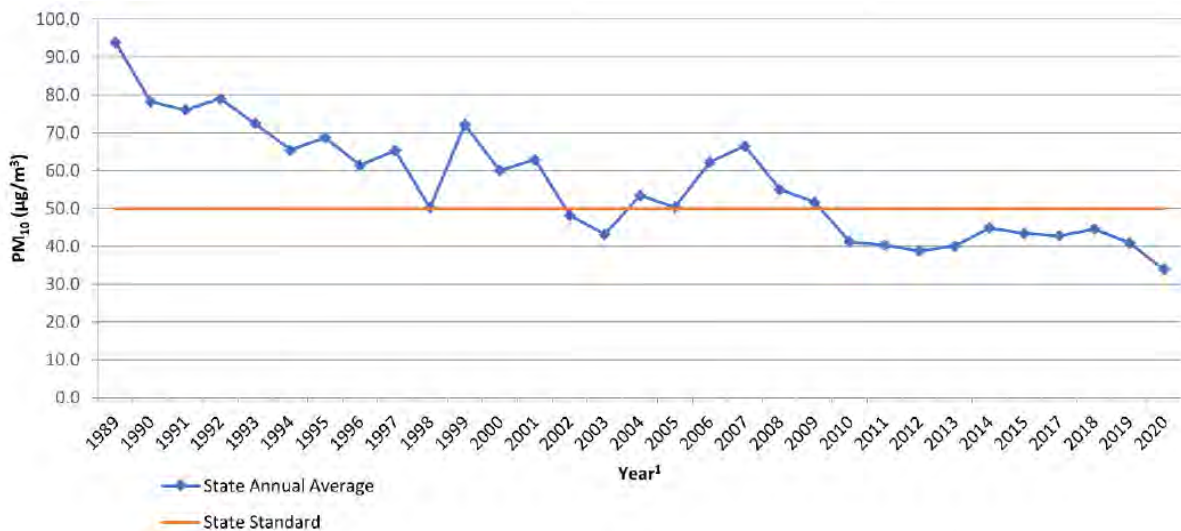
¹⁵ Ibid.



Source: Urban Crossroads. 2023. SoCAB Regional Air Quality Improvement. October 6.

Figure 3.3-3: South Coast Air Basin PM₁₀ Trend (State Standard)

Figure 3.3-4, South Coast Air Basin PM_{2.5} Trend (Federal Standard), and Figure 3.3-5, South Coast Air Basin PM_{2.5} Trend (State Standard), show the most recent 24-hour average PM_{2.5} concentrations in the SoCAB from 1999 through 2019. Overall, the national and State annual average concentrations decreased by almost 58 percent and 35 percent, respectively.¹⁶ It should be noted that the SoCAB is currently designated as nonattainment for the State and federal PM_{2.5} standards.¹⁷

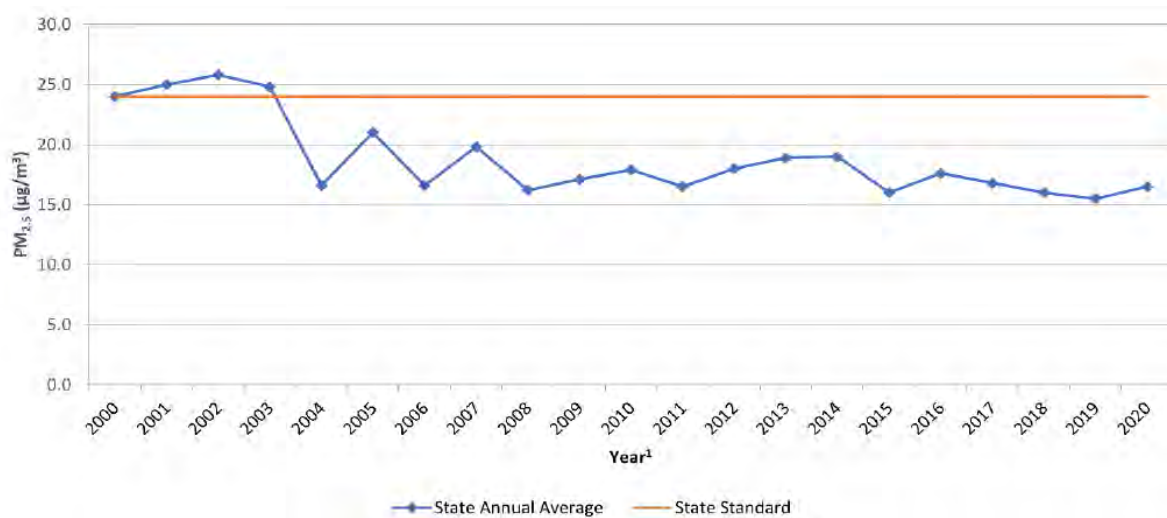


Source: Urban Crossroads. 2023. SoCAB Regional Air Quality Improvement. October 6.

Figure 3.3-4: South Coast Air Basin PM_{2.5} Trend (Federal Standard)

¹⁶ Urban Crossroads. 2023. SoCAB Regional Air Quality Improvement. October 6.

¹⁷ Ibid.



Source: Urban Crossroads. 2023. SoCAB Regional Air Quality Improvement. October 6.

Figure 3.3-5: South Coast Air Basin PM_{2.5} Trend (State Standard)

As mentioned above, toxic air contaminants (TACs) are a classification of air pollutants that have been attributed to carcinogenic and non-carcinogenic health risks. Beginning in the mid-1980s, the ARB adopted a series of regulations to reduce the amount of air toxic contaminant emissions resulting from mobile and stationary sources, such as cars, trucks, stationary sources, and consumer products. As a result of ARB's regulatory efforts, ambient concentrations of TACs have declined substantially across the State.¹⁸

To reduce TAC emissions from mobile sources, ARB has required that all light- and medium-duty vehicles sold in California since 1996 be equipped with an on-board diagnostic system to alert drivers of potential engine problems (as approximately half of all tailpipe emissions result from malfunctioning emissions control devices). Also, since 1996, ARB has required the use of cleaner burning, reformulated gasoline in all light- and medium-duty vehicles. These two regulations resulted in an over 80 percent reduction in TAC emissions from light- and medium-duty vehicles in the State between 1990 and 2012.¹⁹ The ARB also implemented programs to retrofit diesel-fueled engines and facilitate the use of diesel fuels with ultra-low sulfur content to minimize the amount of diesel emissions and their associated TACs. As a result of ARB's programs, diesel emissions and their associated TACs fell by approximately 68 percent since 2000 despite an approximately 81 percent increase in miles traveled by diesel vehicles during that same time period, as shown on Figure 3.3-6, *Diesel Particulate Matter and Diesel Vehicle Miles Trend*.²⁰ Moreover, the average Statewide diesel particulate matter (DPM) emissions for Heavy-Duty Trucks (HDT), in terms of grams of DPM generated per mile traveled, are projected to dramatically reduce due to regulatory requirements on vehicular emissions adopted by ARB and the Ports of Los Angeles and Long Beach.²¹ ARB's efforts at reducing stationary source TACs have been focused mainly on the dry cleaning and

¹⁸ Urban Crossroads. 2023. SoCAB Regional Air Quality Improvement. October 6.

¹⁹ Ibid.

²⁰ Ibid.

²¹ Ibid.

paint/architectural coating industries, which have resulted in a greater than 85 percent reduction of stationary source TACs across the State between 1990 and 2012.²²

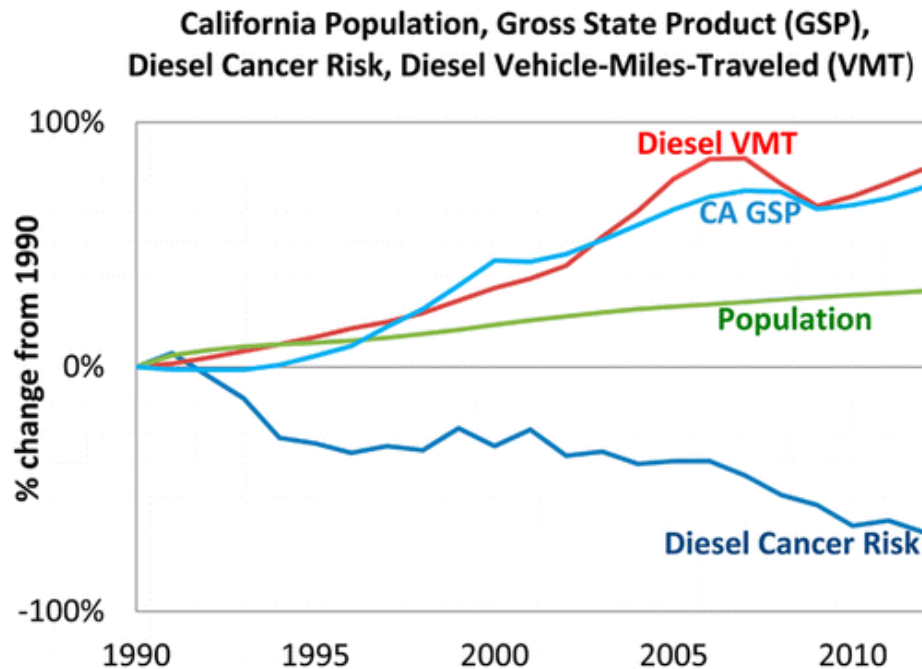


Figure 3.3-6: DPM and Diesel Vehicle Miles Trend

In 2000, the SCAQMD prepared a comprehensive urban toxic air pollution study to evaluate the TAC concentration levels in the SoCAB and their associated health risks, called *MATES-II (Multiple Air Toxics Exposure Study in the South Coast Air Basin)*. *MATES-II* showed an average regional excess cancer risk of about 1,400 in one million. As part of the *MATES-II* study, the SCAQMD concluded that diesel particulate matter (DPM) accounted for more than 70 percent of the identified excess cancer risk in the SoCAB.²³ The SCAQMD has updated their urban toxic air pollution survey twice since 2000, with the 2008 (*MATES-III*) and 2014 updates (*MATES-IV*), both showing reductions in the average excess cancer risk within the SoCAB relative to the levels disclosed in *MATES-II*. The current version of the urban toxic air pollution survey, *MATES-IV*, is the most comprehensive data set of ambient air toxic levels and health risks within the SoCAB. The *MATES-IV* report estimates the average Basin-wide excess cancer risk level within the SoCAB to be 418 in one million, an approximately 70 percent improvement from the findings of *MATES-II* report just 15 years earlier.²⁴ According to SCAQMD, DPM accounts for approximately 68 percent of the total risk shown in *MATES-IV*.²⁵

3.3.4 - Regulatory Setting

Air pollutants are regulated to protect human health and for secondary effects such as visibility and building soiling. The CAA of 1970 tasks the EPA with setting air quality standards. The State of

²² Urban Crossroads. 2023. SoCAB Regional Air Quality Improvement. October 6.

²³ Ibid.

²⁴ Ibid.

²⁵ Ibid.

California also sets air quality standards that are in some cases more stringent than federal standards and address additional pollutants. The following section describes these federal and State standards and the health effects of the regulated pollutants. This section also includes a discussion of the regional and local air quality management plans and regulations.

Federal

Clean Air Act

Congress established much of the basic structure of the CAA in 1970 and made major revisions in 1977 and 1990. Six common air pollutants (also known as criteria pollutants) are addressed in the CAA. The EPA calls these pollutants criteria air pollutants because it regulates them by developing human health-based and environmentally based criteria (science-based guidelines) for setting permissible levels. The criteria pollutants are:

- Ozone
- Nitrogen dioxide (NO₂)
- Lead
- Particulate matter (PM₁₀ and PM_{2.5})
- Carbon monoxide (CO)
- Sulfur dioxide (SO₂)

Primary federal standards are the levels of air quality necessary, with an adequate margin of safety, to protect the public health. Another set of limits intended to prevent environmental and property damage are called secondary standards.²⁶ The federal standards are called NAAQS. The air quality standards provide benchmarks for determining whether air quality is healthy at specific locations and whether development activities will cause or contribute to a violation of the standards. The federal standards were set to protect public health, including that of sensitive individuals; thus, the EPA is tasked with updating the standards as more medical research is available regarding the health effects of the criteria pollutants.

State

California Clean Air Act

The California Legislature enacted the California Clean Air Act (CCAA) in 1988 to address air quality issues of concern not adequately addressed by the federal CAA at the time. California's air quality problems were and continue to be some of the most severe in the nation and required additional actions beyond the federal mandates. The ARB administers the CAAQS for the 10 air pollutants designated in the CCAA. The 10 State air pollutants are the six federal standards listed above as well as visibility-reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride. The EPA authorized California to adopt its own regulations for motor vehicles and other sources that are more stringent than similar federal regulations implementing the CAA. Generally, the planning requirements of the CCAA are less stringent than the federal CAA; therefore, consistency with the CAA will also demonstrate consistency with the CCAA.

²⁶ United States Environmental Protection Agency (EPA). 2021. NAAQS Table. Website: <https://www.epa.gov/criteria-air-pollutants/naaqs-table>. Accessed February 3, 2022.

Air pollutants are regulated at the national, State, and air basin or county level; each agency has a different level of regulatory responsibility. The EPA regulates at the national level, and the ARB regulates at the State level. SCAQMD regulates at the air basin level.

The EPA is responsible for national and interstate air pollution issues and policies. The EPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans (SIPs), provides research and guidance for air pollution programs, and sets the NAAQS, as described earlier.

A SIP is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain federal air standards. The SIP for the State of California is administered by the ARB, which has overall responsibility for Statewide air quality maintenance and air pollution prevention. California's SIP incorporates individual federal attainment plans for regional air districts—an air district prepares their federal attainment plan, which is sent to the ARB to be approved and incorporated into the California SIP. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms.

Areas designated nonattainment must develop air quality plans and regulations to achieve standards by specified dates, depending on the severity of the exceedances. For much of the country, implementation of federal motor vehicle standards and compliance with federal permitting requirements for industrial sources are adequate to attain air quality standards on schedule. For many areas of California, however, additional State and local regulation is required to achieve the standards. Regulations adopted by California are described below.

Low Emission Vehicle Program

The ARB first adopted Low Emission Vehicle (LEV) program standards in 1990. These first LEV standards were in effect between the years 1994 to 2003. LEV II regulations, running from 2004 through 2010, represent continuing progress in emission reductions. As the State's passenger vehicle fleet continues to grow and more sport utility vehicles and pickup trucks are used as passenger cars rather than work vehicles, the more stringent LEV II standards were adopted to provide reductions necessary for California to meet federally mandated clean air goals outlined in the 1994 State Implementation Plan. In 2012, ARB adopted the LEV III amendments to California's LEV regulations. These amendments, also known as the Advanced Clean Car Program, include more stringent emission standards for model years 2017 through 2025 for both criteria pollutants and greenhouse gas (GHG) emissions for new passenger vehicles.²⁷

On-Road Heavy-Duty Vehicle Program

The ARB has adopted standards for emissions from various types of new on-road heavy-duty vehicles. Section 1956.8, Title 13, California Code of Regulations contains California's emission standards for on-road heavy-duty engines and vehicles, and test procedures. The ARB has also adopted programs to reduce emissions from in-use heavy-duty vehicles including the Heavy-Duty

²⁷ California Legislative Information. 2002. Clean Car Standards—Pavley, Assembly Bill 1493. Website: https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=200120020AB1493. Accessed February 22, 2022.

Diesel Vehicle Idling Reduction Program, the Heavy-Duty Diesel In-Use Compliance Program, the Public Bus Fleet Rule and Engine Standards, and the School Bus Program and others.²⁸

ARB Regulation for In-Use Off-Road Diesel Vehicles

On July 26, 2007, the ARB adopted a regulation to reduce DPM and NO_x emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. Such vehicles are used in construction, mining, and industrial operations. The regulation limits idling to no more than 5 consecutive minutes, requires reporting and labeling, and requires disclosure of the regulation upon vehicle sale. Performance requirements of the rule are based on a fleet's average NO_x emissions, which can be met by replacing older vehicles with newer, cleaner vehicles or by applying exhaust retrofits. The regulation was amended in 2010 to delay the original timeline of the performance requirements, making the first compliance deadline January 1, 2014, for large fleets (over 5,000 horsepower), 2017 for medium fleets (2,501-5,000 horsepower), and 2019 for small fleets (2,500 horsepower or less).

The latest amendments to the Truck and Bus regulation became effective on December 31, 2014. The amended regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet PM filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent.

The regulation applies to nearly all privately and federally owned diesel-fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating greater than 14,000 pounds. The regulation provides a variety of flexibility options tailored to fleets operating low use vehicles, fleets operating in selected vocations like agricultural and construction, and small fleets of three or fewer trucks.²⁹

ARB Airborne Toxic Control Measure for Asbestos

In July 2001, the ARB approved an Air Toxic Control Measure (ATCM) for construction, grading, quarrying and surface mining operations to minimize emissions of naturally occurring asbestos. The regulation requires application of Best Management Practices (BMPs) to control fugitive dust in areas known to have naturally occurring asbestos and requires notification to the local air district prior to commencement of ground-disturbing activities. The measure establishes specific testing, notification and engineering controls prior to grading, quarrying, or surface mining in construction zones where naturally occurring asbestos is located on projects of any size. There are additional notification and engineering controls at work sites larger than 1 acre in size. These projects require the submittal of a "Dust Mitigation Plan" and approval by the air district prior to the start of a project.

Construction sometimes requires the demolition of existing buildings where construction occurs. Older buildings, which may be demolished as a part of a development project, often include materials containing asbestos. In addition, asbestos is also found in a natural state, known as

²⁸ California Air Resource Board (ARB). On-Road Heavy-Duty Vehicle Programs. Website: <https://ww2.arb.ca.gov/road-heavy-duty-regulations-certification-programs>. Accessed February 22, 2022.

²⁹ California Air Resources Board (ARB). 2015. On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation. Website: <https://ww2.arb.ca.gov/our-work/programs/truck-and-bus-regulation/about>. Accessed February 3, 2022.

naturally occurring asbestos. Exposure and disturbance of rock and soil that naturally contain asbestos can result in the release of fibers into the air and consequent exposure to the public. Asbestos most commonly occurs in ultramafic rock that has undergone partial or complete alteration to serpentine rock (serpentine) and often contains chrysotile asbestos. In addition, another form of asbestos, tremolite, can be found associated with ultramafic rock, particularly near faults. Sources of asbestos emissions include unpaved roads or driveways surfaced with ultramafic rock, construction activities in ultramafic rock deposits, or rock quarrying activities where ultramafic rock is present.

Areas may be subject to the ARB ATCM if they are identified on maps published by the Department of Conservation as ultramafic rock units or if the Air Pollution Control Officer or owner/operator has knowledge of the presence of ultramafic rock, serpentine, or naturally occurring asbestos on the site. The measure also applies if ultramafic rock, serpentine, or asbestos is discovered during any operation or activity. Review of the Department of Conservation maps indicates that no ultramafic rock has been found in proximity to the proposed project.³⁰

Diesel Risk Reduction Plan

The ARB's Diesel Risk Reduction Plan has led to the adoption of new California regulatory standards for all new on-road, off-road, and stationary diesel-fueled engines and vehicles to reduce DPM emissions by about 90 percent overall from year 2000 levels. The projected emission benefits associated with the full implementation of this plan, including federal measures, have been reductions in DPM emissions and associated cancer risks of 75 percent by 2010, and 85 percent by 2020.³¹

The ARB Air Quality Land Use Handbook lists the following ARB advisory recommendations that address the issue of siting "sensitive land uses" near specific sources of air pollution:³²

- Chrome plating facilities
- Distribution centers
- Dry cleaners
- High traffic freeways and roads
- Large gas dispensing facilities
- Ports
- Rail yards
- Refineries

The ARB recommended screening distances are shown in Table 3.3-6 below.

Table 3.3-6: Recommendations on Siting New Sensitive Land Uses

Source Category	Advisory Recommendations
Freeways and High Traffic Roads	Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.

³⁰ California Department of Conservation, Division of Mine Reclamation. 2000. A General Location Guide for Ultramafic Rocks in California—Areas More likely to Contain Naturally Occurring Asbestos. Website: https://www2.arb.ca.gov/sites/default/files/classic/toxics/asbestos/ofr_2000-019.pdf. Accessed June 24, 2022.

³¹ California Air Resources Board (ARB). 2000. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-fueled Engines and Vehicles. Website: <http://www.arb.ca.gov/diesel/documents/rrpfinal.pdf>. Accessed February 23, 2022.

³² California Air Resources Board (ARB). 2005. Air Quality and Land Use Handbook. Website: <https://www.arb.ca.gov/ch/handbook.pdf>. Accessed February 23, 2022.

Source Category	Advisory Recommendations
Distribution Centers	Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating Transport Refrigeration Units (TRUs) per day, or where TRU unit operations exceed 300 hours per week). Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the ARB on the status of pending analyses of health risks.
Refineries	Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloroethylene	Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with three or more machines, consult with the local air district. Do not site new sensitive land uses in the same building with perchloroethylene dry cleaning operations.
Gasoline Dispensing Facilities	Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50-foot separation is recommended for typical gas dispensing facilities.
<p>Notes:</p> <p>These recommendations are advisory. Land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.</p> <p>Source: California Air Resources Board (ARB). 2005. Air Quality and Land Use Handbook. Website: https://www.arb.ca.gov/ch/handbook.pdf. Accessed February 23, 2022.</p>	

Regional

South Coast Air Quality Management District

Standard Conditions

During construction and operation, the proposed project must comply with applicable rules and regulations. The following are rules and regulations the proposed project may be required to comply with, either directly or indirectly.

SCAQMD Rule 402 prohibits a person from discharging 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 endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause injury or damage to business or property.

SCAQMD Rule 403 governs emissions of fugitive dust during construction and operation activities. Compliance with this rule is achieved through the application of standard BMPs, such as the application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour (mph), sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent ground cover on finished sites.

Rule 403 requires that fugitive dust be controlled with the best available control measures, so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Applicable dust suppression techniques from Rule 403 are summarized below. Implementation of these dust suppression techniques can reduce the fugitive dust generation (and thus the PM₁₀ component). Compliance with these rules would reduce impacts on nearby sensitive receptors.

Rule 403 measures may include but are not limited to the following:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least three times daily. (Locations where grading is to occur will be thoroughly watered prior to earthmoving.)
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 0.6 meters (2 feet) of freeboard (vertical space between the top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.
- Reduce traffic speeds on all unpaved roads to 15 mph or less.
- Suspension of all grading activities when wind speeds (including instantaneous wind gusts) exceed 25 mph.
- Bumper strips or similar BMPs shall be provided where vehicles enter and exit the construction site onto paved roads, or wash off trucks and any equipment leaving the site each trip.
- Replanting disturbed areas as soon as practical.
- During all construction activities, construction contractors shall sweep on-site and off-site streets if silt is carried to adjacent public thoroughfares, to reduce the amount of particulate matter on public streets. All sweepers shall be compliant with SCAQMD Rule 1186.1, Less Polluting Sweepers.

SCAQMD Rule 481 applies to all spray painting and spray coating operations and equipment. This rule would apply to the application of architectural coatings to the exterior and interior or of the building walls.

SCAQMD Rule 1108 governs the sale, use, and manufacturing of asphalt and limits the VOC content in asphalt used in the SoCAB. This rule would regulate the VOC content of asphalt used during construction. Therefore, all asphalt used during construction of the proposed project must comply with SCAQMD Rule 1108.

SCAQMD Rule 1113 governs the sale, use, and manufacturing of architectural coating and limits the VOC content in paints and paint solvents. This rule regulates the VOC content of paints available during construction. Therefore, all paints and solvents used during construction and operation of the proposed project must comply with SCAQMD Rule 1113.

SCAQMD Rule 1143 governs the manufacture, sale, and use of paint thinners and solvents used in thinning of coating materials, cleaning of coating application equipment and other solvent cleaning operations by limiting their VOC content. This rule regulates the VOC content of solvents used during construction. Solvents used during the construction phase must comply with this rule.

SCAQMD Rule 1186 limits the presence of fugitive dust on paved and unpaved roads and sets certification protocols and requirements for street sweepers that are under contract to provide sweeping services to any federal, State, county, agency or special district such as water, air, sanitation, transit, or school district.

SCAQMD Rule 1403 specifies the work practice requirements to limit asbestos emissions and exposure from building demolition and renovation activities. Requirements include asbestos surveying; notification; asbestos-containing material (ACM) removal procedures and time schedules; ACM handling and cleanup procedures; and storage, disposal, and landfilling requirements for asbestos-containing waste material (ACWM).

SCAQMD Rule 2305 is an indirect source rule that regulates warehouse facilities with at least 100,000 square feet of indoor floor space in a single building. The rule requires the implementation of emission reduction measures, or the payment of an annual mitigation fee, as well as requiring reporting on facility operations. The intent of the rule is to reduce emissions from the goods movement industry.

Air Quality Management Plans

The agency for air pollution control for the Riverside County portion of the SoCAB is the SCAQMD. The SCAQMD is responsible for controlling emissions primarily from stationary sources. The SCAQMD maintains air quality monitoring stations throughout the SoCAB and a portion of the Salton Sea Air Basin. The SCAQMD is also responsible for developing, updating, and implementing the Air Quality Management Plan (AQMP) for the region, in coordination with the Southern California Association of Governments (SCAG).

An AQMP is a plan prepared and implemented by an air pollution district for a county or region designated as nonattainment of the NAAQS and/or CAAQS. The term nonattainment area is used to refer to an air basin where one or more ambient air quality standards are exceeded.

2016 AQMP

On March 3, 2017, the SCAQMD adopted the 2016 AQMP. The 2016 AQMP address strategies and measures to attain the 2008 federal 8-hour ozone standard by 2032, the 2012 federal annual PM_{2.5} standard by 2021 to 2025, and the 2006 federal 24-hour PM_{2.5} standard by 2019. The 2016 AQMP also examined the regulatory requirements for attaining the 2015 federal 8-hour ozone standard. The 2016 AQMP also updates previous attainment plans for ozone and PM_{2.5} that have not yet been met.³³ In general, the AQMP is updated every 3 to 4 years. However, the air quality planning process for the AQMP is continuous and each iteration is an update of the previous plan.

To ensure air quality goals will be met while minimizing impacts to the regional economy, the following policy objectives guided the development of the plan:

- Eliminate reliance on “black box” (future technologies) to the maximum extent possible by providing specific pathways to attainment with specific control measures.
- Calculate and take credit for co-benefits from other planning efforts (e.g., GHG reduction targets, energy efficiency, transportation).
- Develop a strategy with fair-share emission reductions at the federal, State, and local levels such as new federal engine emission standards and/or additional authority provided to the State or SCAQMD for mobile sources.
- Seek significant funding for incentives to implement early deployment and commercialization of known zero and near-zero technologies.
- Invest in strategies and technologies meeting multiple objectives regarding air quality, climate change, air toxic exposure, energy, and transportation.
- Enhance the socioeconomic analysis and select the most efficient and cost-effective path to achieve multi-pollutant and multi-deadline targets.
- Prioritize non-regulatory, innovative and “win-win” approaches for emission reductions.

The 2016 AQMP also demonstrates attainment of the 2008 Ozone Standard in Coachella Valley by 2026. The AQMP also demonstrates compliance with all applicable federal CAA requirements pertaining to nonattainment areas pursuant to the EPA approved Implementation Rules, such as the annual average and summer planning emission inventory for criteria and precursor pollutants, attainment demonstrations, reasonably available control measure and reasonably available control technology analyses, reasonable further progress, particulate matter precursor requirements, VMT demonstrations, and transportation conformity budgets for SoCAB and Coachella Valley.

³³ South Coast Air Quality Management District (SCAQMD). 2017. Final 2016 Air Quality Management Plan. Website: <http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp>. Accessed February 23, 2022.

The control measures in the 2016 AQMP are based on implementing all feasible control measures through the accelerated deployment of available cleaner technologies, BMPs, co-benefits from existing programs, and incentive measures. The 2016 AQMP control measures consist of three main components: (1) the SCAQMD's Stationary and Mobile Source Control Measures; (2) suggested State and federal Source Control Measures; and (3) Regional Transportation Plan Transportation Control Measures provided by SCAG. These measures rely on not only the traditional command-and-control approach, but also public incentive programs, as well as advanced technologies expected to be developed and deployed in the next several years.

SCAQMD is currently in the process of updating the AQMP to address the recently strengthened primary and secondary NAAQS for ozone, which were lowered to 70 ppb by EPA in 2015. The SoCAB is classified as an "extreme" nonattainment area for the 2015 Ozone NAAQS.

SCAQMD CEQA Guidance

The SCAQMD has two roles under CEQA:

1. **Lead Agency:** responsible for preparing environmental analyses for its own projects (adoption of rules, regulations, or plans) or permit projects filed with the SCAQMD where the SCAQMD has primary approval authority over the project.
2. **Commenting Agency:** the SCAQMD reviews and comments on air quality analyses prepared by other public agencies (such as the proposed project).

The SCAQMD also provides guidance and thresholds for CEQA air quality and GHG analyses.

Local

City of Jurupa Valley General Plan

The following General Plan policies are directly related to the proposed project regarding air quality.

Air Quality Element

- AQ 2.1 Site Plan Designs.** Require City land use planning efforts and site plan designs to protect people and land uses sensitive to air pollution, using barriers and/or distance from emissions sources, and protect sensitive receptors from polluting sources, wherever possible.
- AQ 2.2 Pollution Control Measures.** Strongly encourage the use of pollution control measures such as landscaping, vegetation and other materials that trap particulate matter or control pollution.
- AQ 2.4 Tree Planting.** Consider creating a citywide program to plant trees that help to filter pollutants from the air, provide shade, and add oxygen to the atmosphere.
- AQ 3.1 Efficient Building Materials/Equipment.** Encourage the use of building materials/methods and heating equipment that are efficient and reduce emissions.

- AQ 3.4 Emissions Mitigation.** Require every project to mitigate any of its anticipated emissions that exceed allowable levels as established by the SCAQMD, the EPA, and ARB, to the greatest extent possible.

Environmental Justice Element: Land Use and the Environment

- EJ 2.1 Separation of Land Uses.** Require that proposals for new sensitive land uses are located adequate distances from freeways and major roadways based on an analysis of physical and meteorological conditions at the project site.
- EJ 2.2 Sensitive Land Use Buffers.** Require that proposals for new sensitive land uses incorporate adequate setbacks, barriers, landscaping, or other measures as necessary to minimize air quality impacts.
- EJ 2.3 School Buffers.** Provide adequate buffers between schools and industrial facilities and transportation corridors.
- EJ 2.4 Stationary Source Emissions.** Require, wherever possible, existing sources of stationary emissions near sensitive land uses to relocate and/or incorporate measures to minimize emissions.
- EJ 2.5 Residential Buffers.** Require that zoning regulations provide adequate separation and buffering of residential and industrial uses.
- EJ 2.6 Mitigate Air Quality.** Identify resources for the existing sensitive receptors experiencing adverse air quality issues to incorporate measures to improve air quality such as separation/setbacks, landscaping, barriers, ventilation systems, air filters/cleaners, and other measures.
- EJ 2.8 Separation of Uses.** Build new sensitive land uses with sufficient buffering from industrial facilities and uses that pose a significant hazard to human health and safety. The California ARB recommends that sensitive land uses be located at least 1,000 feet from hazardous industrial facilities.
- EJ 2.14 Truck Idling.** Seek the necessary funding and resources to enforce the Statewide idling limit of five minutes for heavy-duty diesel vehicles with a Gross Vehicle Weight Rating (GVWR) of 10,000 pounds or more.
- EJ 2.1.1 Truck Routes.** Designate truck routes to avoid residential areas including low income and minority neighborhoods.

The EIR prepared for the General Plan found that the potential air quality impacts of future developments within the General Plan area should be further evaluated at a project level, but that no further mitigation measures, beyond the wide-ranging goals and policies of the General Plan, were feasible for implementation at a programmatic level.³⁴

³⁴ LSA Associates, Inc. (LSA). 2016. City of Jurupa Valley 2017 General Plan Draft Environmental Impact Report.

3.3.5 - Methodology

Model Selection and Guidance

CalEEMod Version 2020.4.0 was used to estimate the proposed project's construction and operation-related air pollutant emissions. The CalEEMod model was developed in cooperation with air districts throughout the State and is designated as a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant emissions associated with construction and operation from a variety of land uses.

Construction

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. Construction emissions result from both on-site and off-site activities. On-site emissions consist of exhaust emissions from the activity levels of heavy-duty construction equipment, motor vehicle operation, and fugitive dust (mainly PM₁₀) from disturbed soil. Additionally, paving operations and application of architectural coatings would release ROG emissions. Off-site emissions result from motor vehicle exhaust from delivery vehicles, worker traffic and road dust (PM₁₀ and PM_{2.5}).

Construction emissions are generally calculated as the product of an activity factor and an emission factor. The activity factor for construction equipment is a measure of how active a piece of equipment is and can be represented as the amount of material processed, elapsed time that a piece of equipment is in operation, horsepower of a piece of equipment used, or the amount of fuel consumed in a given amount of time. The emission factor relates the process activity to the amount of pollutant emitted. Examples of emission factors include grams of emissions per miles traveled and grams of emissions per horsepower-hour. The operation of a piece of equipment is tempered by its load factor which is the average power of a given piece of equipment while in operation compared with its maximum rated horsepower. A load factor of 1.0 indicates that a piece of equipment continually operates at its maximum operating capacity.

Construction Schedule and Activities

Pursuant to information provided by the applicant, the proposed project is anticipated to start in 2024 and conclude in 2034. The default construction schedule in CalEEMod was adjusted to reflect this anticipated buildout schedule. For the purposes of estimating reasonable worst-case emissions, construction was modeled to be completed in a single phase. Table 3.3-7 shows the construction schedule used to estimate construction emissions.

Table 3.3-7: Anticipated Construction Schedule

Phase Name	Start Date	End Date	Days/Week	Total Days
Site Preparation	1/1/2024	4/19/2024	5	80
Grading	4/20/2024	1/31/2025	5	205
Building Construction	2/1/2025	11/19/2032	5	2,035
Paving	11/20/2032	6/10/2033	5	145

Phase Name	Start Date	End Date	Days/Week	Total Days
Architectural Coating	6/11/2033	12/30/2033	5	145

Construction Equipment

The CalEEMod model contains built-in inventories of construction equipment for a variety of land use construction projects that incorporate estimates of the type of construction equipment required, number of equipment, their age, their horsepower, load factor, and level or tier of emission control equipment from which rates of emissions are developed. Table 3.3-8 presents the construction equipment used on the proposed project as derived from the CalEEMod model.

Table 3.3-8: Construction Equipment

Phase Name	Off-Road Equipment Type	Equipment Amount	Usage Hours	Load Factor
Site Preparation	Rubber Tired Bulldozers	3	8	0.4
Site Preparation	Tractors/Loaders/Backhoes	4	8	0.37
Grading	Excavators	2	8	0.38
Grading	Graders	1	8	0.41
Grading	Rubber Tired Bulldozers	1	8	0.4
Grading	Scrapers	2	8	0.48
Grading	Tractors/Loaders/Backhoes	2	8	0.37
Building Construction	Cranes	1	7	0.29
Building Construction	Forklifts	3	8	0.2
Building Construction	Generator Sets	1	8	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7	0.37
Building Construction	Welders	1	8	0.45
Paving	Pavers	2	8	0.42
Paving	Paving Equipment	2	8	0.36
Paving	Rollers	2	8	0.38
Architectural Coating	Air Compressors	1	6	0.48

Operation

Operational emissions are generated by area, energy, and mobile sources once a project commences operation. The proposed project was assumed to be fully operational in 2034. The major emission sources associated with project operation are summarized below.

Motor Vehicles

Motor vehicle emissions refer to exhaust and road dust emissions from the motor vehicle traffic that would travel to and from the project site each day. An estimate of the number of vehicle trips that the proposed project would generate for the different land use types comprising the proposed project was provided in the Traffic Impact Analysis (TIA) prepared for the proposed project.³⁵

Architectural Coatings (Painting)

Paints release VOC emissions during application and drying. The buildings in the proposed project would be periodically repainted as warranted for maintenance needs and the VOC emissions from reapplication are calculated in CalEEMod 2020.4.0. SCAQMD Rule 1113 was applied, which requires the VOC coating concentration of architectural coatings to be no greater than 50 grams per liter of product (g/L).

Consumer Products

Consumer products are various solvents used in non-industrial applications, which emit VOCs during their product use. “Consumer Product” means a chemically formulated product used by household and institutional consumers, including, but not limited, to detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products; but does not include other paint products, furniture coatings, or architectural coatings. The default emission factor developed for the CalEEMod model was used.

Landscape Equipment

The CalEEMod model estimates the landscaping equipment (e.g., leaf blowers, chainsaws, mowers) and emissions based on land use types. The default emission factors were used in the model.

Energy Sources

Energy source emissions would be generated by natural gas combustion required for space and water heating. CalEEMod includes calculations for indirect GHG emissions for electricity consumption, which are only pertinent to GHG emissions.

3.3.6 - Significance Criteria

In accordance with Section 15064.7 of the State CEQA Guidelines, the City of Jurupa Valley adopted local CEQA Guidelines. The City’s local CEQA Guidelines are based, in part, on the CEQA checklist included in Appendix G of the State CEQA Guidelines. The City of Jurupa Valley Guidelines recognizes the following significance thresholds and Significance Criteria related to air quality. Based on these significance thresholds, a project would have a significant impact on air quality if it would:

- a) Conflict with or obstruct implementation of the applicable air quality plan.

Under the City’s local significance threshold, the project would have significant effects if: The proposed project would result in an increase in the frequency or severity of existing air

³⁵ Environment Planning Development Solutions, Inc. (EPD Solutions Inc.). 2022. Rio Vista Specific Plan Traffic Impact Analysis. January 26.

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 current South Coast Air Quality Management District's Air Quality Management Plan and the project would significantly exceed the growth assumptions used to prepare the current South Coast Air Quality Management District's (SCAQMD) Air Quality Management Plan.

- b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard.

Under the City's local significance threshold, the project would have significant effects if: The project's air emissions exceed the applicable regional significance thresholds established by the South Coast Air Quality Management District.

Note: According to the SCAQMD, individual projects that do not generate operational or construction emissions that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact.

- c) Expose sensitive receptors to substantial pollutant concentrations.

Under the City's local significance threshold, the project would have significant effects if:

- The project would exceed the SCAQMD Localized Significance Thresholds (LSTs) which were developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities.
- The project would create a Maximum Incremental Cancer Risk of 10 in 1 million at the nearest sensitive receptor or off-site worker; or a Hazard Index (project increment) 1.0 or greater at the nearest sensitive receptor or off-site worker.
- The project emissions would contribute traffic volumes to an intersection in the vicinity of the project site which exceeds 100,000 vehicles per hour.

- d) Create objectionable odors affecting a substantial number of people.

Screening Criteria: If the project is not any of the following, it may be presumed to have a less than significant impact absent substantial evidence to the contrary.

- Agricultural uses (livestock and farming)
- Wastewater treatment plants
- Food processing plants
- Chemical plants
- Composting operations
- Refineries
- Landfills
- Dairies
- Fiberglass molding facilities

Under the City's local significance threshold, the project would have significant effects if: The project 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 endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

3.3.7 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Consistency with Air Quality Management Plan

Threshold AIR-1: **Would the proposed project conflict with or obstruct implementation of the applicable air quality plan?**

Under the City's local significance threshold, the project would have significant effects if: The proposed project would 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 current SCAQMD Air Quality Management Plan and the proposed project would significantly exceed the growth assumptions used to prepare the current SCAQMD Air Quality Management Plan.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

These include existing regulatory requirements such as plans, policies, or programs applied to the proposed project based on federal, State, or local laws currently in place which effectively reduce impacts to air quality.

There are no PPPs related to consistency with an Air Quality Management Plan.

Project Design Features

The project design includes high-density development and a priority on locating development near high-quality transit, which would help to reduce VMT on a per capita basis, as well as including features that promote alternative modes of transportation such as access to pedestrian networks and bicycle paths. These project design features would reduce air quality impacts by reducing mobile source emissions associated with the operation of the proposed project.

Impact Analysis

To evaluate whether or not a project conflicts with or obstructs the implementation of the applicable air quality plan (2016 AQMP for the SoCAB), the SCAQMD CEQA Air Quality Handbook states that there are two key indicators. These indicators are identified by the criteria discussed below.

1. **Indicator:** Whether the project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
2. **Indicator:** According to Chapter 12 of the SCAQMD CEQA Air Quality Handbook, the purpose of the General Plan consistency findings is to determine whether a project is inconsistent with the growth assumptions incorporated into the air quality plan, and thus, whether it would interfere with the region's ability to comply with the NAAQS and CAAQS.

Considering the recommended criteria in the SCAQMD's 1993 Handbook, this analysis uses the following criteria to address this potential impact:

- **Step 1:** Project's contribution to air quality violations (SCAQMD's first indicator)
- **Step 2:** Assumptions in the AQMP (SCAQMD's second indicator)
- **Step 3:** Compliance with applicable emission control measures in the AQMPs

Step 1: Project's Contribution to Air Quality Violations

Step 1 represents an assessment of the overall impacts associated with the proposed project. As shown in Impacts AIR-2 through AIR-4, the proposed project would generate regional or localized construction or operational emissions that would exceed SCAQMD's thresholds of significance. The proposed project would be potentially significant under Criteria 1.

Step 2: Assumptions in AQMP

Step 2 examines the proposed project's consistency with assumptions made in the AQMP. The AQMP is based on land use patterns and forecasts contained in local general plans and other land use planning documents. Therefore, it is reasonable to conclude that if a project is consistent with the applicable general plan land use designation, and if the general plan was adopted prior to the applicable AQMP, then the growth of VMT and/or population generated by proposed project would be consistent with the growth in VMT and population assumed within the AQMP.

SCAG is SCAQMD's partner in the preparation of the AQMP, providing the latest economic and demographic forecasts and developing transportation measures. Regional population, housing, and employment projects developed by SCAG are based, in part, on a city's general plan land use designations. These projections form the foundation for the emissions inventory of the AQMP and are incorporated into the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) prepared by SCAG to determine priority transportation projects and VMT in the SCAG region. Because the AQMP strategy is based on projections from local general plans, projects that are consistent with the local general plan are considered consistent with the air quality-related regional plan.

Additionally, only large projects have the potential to substantially affect the demographic forecasts in the AQMP.

CEQA Guidelines Section 15206(b) states that a proposed project is of Statewide, regional, or area-wide significance if the project is a residential development of more than 500 dwelling units or a

commercial office building of 250,000 square feet or more or that employs 1,000 or more employees. The proposed project would introduce a net increase of approximately 2,698,542 square feet of nonresidential building space, 1,697 new dwelling units, a new public elementary school, and 3,786 new employees. It should be noted that Riverside County adopted the existing Rio Vista Specific Plan in 1992, which was incorporated into the 2017 City of Jurupa Valley General Plan after incorporation of the planning area into the City boundaries. The land use assumptions and associated population and employment forecasts that were included in the 1992 Rio Vista Specific Plan were included in the General Plan, as well as in the 2016 AQMP. However, compared to the 1992 Rio Vista Specific Plan, the proposed project would replace the 1992 Plan and would increase the area of proposed Light Industrial and Business Park uses by approximately 135.3 acres, exceeding the CEQA Guidelines Section 15206(b) threshold of commercial office building space of 250,000 square feet or more. Therefore, the proposed project is a project of Statewide, regional, or area-wide significance.

Furthermore, analyses in the response to Impact AIR-2 demonstrate that the proposed project would generate long-term emissions of criteria air pollutants that would exceed SCAQMD's regional operation-phase significance thresholds, which were established to determine whether a project has the potential to cumulatively contribute to the SoCAB's nonattainment designations. Thus, implementation of the proposed project would result in an increase in the frequency or severity of existing air quality violations; cause or contribute to new violations; or delay timely attainment of the Ambient Air Quality Standards (AAQS). Therefore, overall, the proposed project would be considered inconsistent with the AQMP under the second criterion. Additionally, the proposed project has the potential to significantly alter the demographic and employment projections beyond what is accounted for in the current AQMP. Since the proposed project would include a General Plan Amendment, the proposed project would not be consistent with the growth assumptions within the current AQMP. The proposed project would be potentially significant under Criteria 2.

Step 3: Control Measures

Step 3 is an analysis of the proposed project's compliance with applicable emission control measures included in the AQMP, which includes SCAQMD rules and regulations that apply to this proposed project. The City's General Plan also requires compliance with applicable air district rules and control measures. As discussed in the Regulatory Framework section of this document, additional policies included as part of the General Plan, and proposed to be included as a part of the Specific Plan PPPs, would also reduce the impacts of both construction and operational emissions from the proposed project.

The proposed project would comply with all applicable SCAQMD rules and regulations. Therefore, the proposed project complies with this criterion.

Summary

The proposed project includes objectives that emphasizes development of mixed-use areas and increased development intensity. It would create a combination of Very Low Density Residential, Medium Density Residential, Medium High-Density Residential, High-Density Residential, Highest Density Residential, Light Industrial and Business Park, a public K-8 educational facility, open space

and recreation areas, and circulation improvements. These planning areas would allow residences and open spaces, in addition to job opportunities, to be in proximity of each other. In addition to creating and emphasizing mixed-use areas, the proposed project also outlines improvements to active transportation, such as including bike lanes, soft-surface trails, and a connected pedestrian network in the project area. Development of mixed-use areas and improvement of active travel infrastructure would contribute to reducing vehicle trips and VMT.

However, the project would represent a substantial increase in emissions compared to existing conditions. The implementation of the City's General Plan goals and policies, and Mitigation Measure (MM) AIR-1a through MM AIR-1i would be required to reduce regional and localized emissions to the extent feasible. However, the estimated construction emissions and long-term emissions generated under full buildout of the proposed project would exceed the SCAQMD's regional operational significance thresholds (see Table 3.3-11) and would cumulatively contribute to the nonattainment designations in the SoCAB. In addition, implementation of the proposed project would contribute to exceedances of the current population and employment estimates for the project area.

Therefore, the proposed project would be considered inconsistent with the AQMP, resulting in a significant impact in this regard.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Measures required to reduce the impact of construction-related emissions from future development projects included in the planning area include MM AIR-1a through MM AIR-1d.

MM AIR-1a To identify potential implementing development project-specific impacts resulting from construction activities, proposed development projects requiring discretionary approvals or are otherwise subject to CEQA shall have construction-related air quality impacts analyzed using the latest available California Emissions Estimator Model (CalEEMod)—or other analytical method determined in conjunction with the South Coast Air Quality Management District (SCAQMD)—and shall be compared with the applicable thresholds of significance in effect as recommended by the SCAQMD or as established by the City of Jurupa Valley as the lead agency. The results of the construction-related air quality impacts analysis shall be included in the development project's CEQA documentation. To address potential localized impacts, the air quality analysis shall incorporate the SCAQMD Localized Significance Threshold (LST) analysis or other appropriate analyses as determined in conjunction with SCAQMD. If such analyses identify potentially significant regional or local air quality impacts, the City of Jurupa Valley shall require the incorporation of appropriate mitigation to reduce emissions to the extent feasible, in accordance with mitigation measures recommended by the SCAQMD and the California Air Resources Board (ARB). Proposed mitigation measures to reduce construction-related criteria pollutant emissions may include:

- Extending the construction period as feasible in order to ensure air quality daily thresholds are not exceeded.
- The use of zero-emission or electric construction fleets to reduce emissions from NO_x, PM_{2.5} exhaust, and PM₁₀ exhaust.
- Grading activity limitations to reduce fugitive dust or use of construction equipment.
- Construction traffic control plans to reduce sensitive receptor exposure to emissions from NO_x, PM_{2.5} exhaust, and PM₁₀ exhaust.
- The analysis shall address pollution levels near sensitive receptors and require mitigation to reduce emissions.

MM AIR-1b As part of a standard building permit submittal, prior to the issuance of building or grading permits, the project applicant shall provide the City of Jurupa Valley with documentation demonstrating that project construction will use “super-compliant” low-volatile organic compound (VOC) Architectural Coatings, as defined by the South Coast Air Quality Management District (SCAQMD), with VOC content of 10 grams per liter (g/L) or less.

MM AIR-1c Each individual implementing development project shall apply paints using either high volume low pressure (HVLP) spray equipment or other application techniques with a minimum transfer efficiency of at least 65 percent or other application techniques with equivalent or higher transfer efficiency.

MM AIR-1d As part of a standard grading permit submittal, the project applicant shall submit documentation to the City of Jurupa Valley that demonstrates that all off-road construction equipment in excess of 50 horsepower is equipped with engines meeting the United States Environmental Protection Agency (EPA) Tier IV Final off-road engine emission standards or cleaner. The construction contractor shall maintain records concerning its efforts to comply with this requirement during construction, including equipment lists. Off-road equipment descriptions and information may include but are not limited to equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, and engine serial number. The project applicant and/or construction contractor shall submit the construction operations plan and records of compliance to the City of Jurupa Valley.

If engines that comply with Tier IV Final off-road emission standards are not commercially available, then the construction contractor shall use the next cleanest piece of off-road equipment (e.g., Tier IV Interim) available. For purposes of this mitigation measure, “commercially available” shall mean the availability of Tier IV Final engines taking into consideration factors such as (i) critical-path timing of construction; and (ii) geographic proximity to the project site of equipment. The contractor can maintain records for equipment that is not commercially available by providing letters from at least two rental companies for each piece of off-road equipment where the Tier IV Final engine is not available.

Measures designed to reduce the impact of operational emissions from future projects included in the planning area include MM AIR-1e through MM AIR-1i.

MM AIR-1e To identify potential implementing development project-specific impacts resulting from operational activities, proposed development projects that are subject to CEQA shall have long-term operational-related air quality impacts analyzed using the latest available California Emissions Estimator Model (CalEEMod), or other analytical method determined by the City of Jurupa Valley as lead agency in conjunction with the South Coast Air Quality Management District (SCAQMD). The results of the operational-related air quality impacts analysis shall be included in the development project's CEQA documentation and shall be compared against thresholds of significance recommended by the SCAQMD or the City of Jurupa Valley as the lead agency. To address potential localized impacts, the air quality analysis shall incorporate SCAQMD's Localized Significance Threshold (LST) analysis, carbon monoxide (CO) Hot Spot analysis, or other appropriate analyses as determined by the City of Jurupa Valley in conjunction with SCAQMD. For industrial uses, such as warehouses and distribution centers, the analysis shall consider mitigation measures included in the 2021 California Department of Justice guidance, "Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act," or the latest appropriate guidance available at the time, as determined by the City in conjunction with SCAQMD. For warehouse or distribution center projects, the CEQA analysis shall specify the amount of cold storage space proposed as part of the project and quantify the air pollutant (including toxic air contaminants [TACs]) and greenhouse gas (GHG) emissions associated with refrigerant use. If such analyses identify potentially significant regional or local air quality impacts, the City shall require the incorporation of appropriate mitigation documented on applicable site plans or operational plans prior to issuance of grading permits or as part of Conditions of Approval. Mitigation should reduce identified impacts to the maximum extent feasible using, among others, measures identified in the Air Quality Element Policies of the General Plan and the most recent Air Quality Management Plan, as well as mitigation from the most recent CEQA Air Quality Handbook available at the SCAQMD. Example topics include, but are not limited to, energy conservation, reduction of Vehicle Miles Traveled (VMT), overall trip reduction, and reduction of particulate matter emissions. The identified measures shall be included as part of the Project Conditions of Approval and approved by the City of Jurupa Valley Community Development Department.

MM AIR-1f Industrial projects in the planning area shall place signs that identify the California Air Resources Board (ARB) anti-idling regulations prior to the issuance of a Certificate of Occupancy for each industrial building. At a minimum, each sign shall include: (1) instructions for truck drivers to shut off engines when not in use; (2) instructions for trucks drivers to restrict idling to no more than 5 minutes once the vehicle is stopped, the transmission is set to "neutral" or "park," and the parking

brake is engaged; and (3) telephone numbers of the building facilities manager and ARB to report violations. Project applicants shall submit plans (1) identifying the location of the signs, (2) required details of the signs that meets this mitigation measure, and (3) dimensions of the sign prior to the issuance of any building permit for each industrial building.

MM AIR-1g All nonresidential buildings shall be designed to provide infrastructure to support use of electric-powered forklifts and/or other on-site equipment with a charging stations on the interior and a charging station in the yard for outdoor equipment. Additionally, the City of Jurupa Valley shall require use of off-road equipment be zero-emissions, such as forklifts and yard trucks for indoor areas. Outdoor cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other outdoor on-site equipment) will be powered by compressed natural gas, propane, or electric engines. These requirements shall be noted on all site plans submitted to the City. Installation of the infrastructure to support electric equipment shall be verified by the City of Jurupa Valley prior to issuance of occupancy permits. During operation, the building tenant and/or building owner shall maintain a list of all off-road equipment used on-site. The equipment list shall state the makes, models, and numbers. These records shall be made available to the City of Jurupa Valley upon request.

MM AIR-1h Prior to issuance of building permits for non-single-family residential and mixed-use residential development projects in the planning area, the project applicant shall indicate on the building plans that the following features have been incorporated into the design of the building(s). Proper installation of these features shall be verified by the City of Jurupa Valley prior to the issuance of a Certificate of Occupancy.

- Electric vehicle charging shall be provided as specified in Section A4.106.8.2 (Residential Voluntary Measures) of the California Green Building Standards Code (CALGreen) Code.
- Bicycle parking shall be provided as specified in Section A4.106.9 (Residential Voluntary Measures) of the CALGreen Code.

MM AIR-1i Prior to the issuance of building permits for nonresidential development projects in the planning area, project applicants shall indicate on the building plans that the following features have been incorporated into the design of the building(s). Proper installation of these features shall be verified by the City of Jurupa Valley prior to the issuance of a Certificate of Occupancy.

- For buildings with more than 10 tenant-occupants, changing/shower facilities shall be provided as specified in Section A5.106.4.3 (Nonresidential Voluntary Measures) of the California Green Building Standards Code (CALGreen) Code.
- Preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles shall be provided as specified in Section A5.106.5.1 (Nonresidential Voluntary Measures) of the CALGreen Code.

- Facilities shall be installed to support future electric vehicle charging at each nonresidential building with 30 or more parking spaces. Installation shall be consistent with Section A5.106.5.3 (Nonresidential Voluntary Measures) of the CALGreen Code.

Level of Significance After Mitigation

With implementation of, and compliance with, regulatory programs, ordinances, PPPs, and General Plan policies, as well as new MM AIR-1a through MM AIR-1i, air pollution emissions from future developments envisioned under the proposed project would be reduced, but still would potentially exceed regulatory thresholds for the SoCAB. Given the potential increase in growth and associated increase in criteria air pollutant emissions in the region, the project would continue to be potentially inconsistent with the assumptions in the AQMP, even after the implementation of mitigation. Therefore, Impact AIR-1 would remain significant and unavoidable.

Potential for Air Quality Standard Violation

Threshold AIR-2: **Would the proposed project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard?**

Under the City's local significance threshold, the project would have significant effects if: The project's air emissions exceed the applicable regional significance thresholds established by the South Coast Air Quality Management District.

Note: According to the SCAQMD, individual projects that do not generate operational or construction emissions that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

The following PPPs apply to the proposed project and would reduce impacts related to air quality standard violations.

- PPP 3.3-1** The project is required to comply with the provisions of South Coast Air Quality Management District Rule 403, "Fugitive Dust." Rule 403 requires implementing best available dust control measures during construction activities that generate fugitive dust, such as earthmoving and stockpiling activities, grading, and equipment travel on unpaved roads.
- PPP 3.3-2** The project is required to comply with California Code of Regulations Title 13, Division 3, Chapter 1, Article 4.5, Section 2025, "Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants from In-Use Heavy-Duty Diesel-Fueled Vehicles" and California Code of Regulations Title 13, Division 3, Chapter 10, Article 1, Section 2485, "Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling."

- PPP 3.3-3** The project is required to comply with the provisions of South Coast Air Quality Management District Rule 1113, “Architectural Coatings” and Rule 431.2, “Sulfur Content of Liquid Fuels.” Adherence to Rule 1113 limits the release of volatile organic compounds (VOCs) into the atmosphere during painting and application of other surface coatings. Adherence to Rule 431.2 limits the release of sulfur dioxide (SO₂) into the atmosphere from fuel burning.
- PPP 3.3-4** The project is required to comply with the provisions of South Coast Air Quality Management District Rule 1186 “PM₁₀ Emissions from Paved and Unpaved Roads and Livestock Operations” and Rule 1186.1, “Less-Polluting Street Sweepers.” Adherence to Rule 1186 and Rule 1186.1 reduces the release of criteria pollutant emissions into the atmosphere during construction.
- PPP 3.3-6** The project must comply with the Provisions of South Coast Air Quality Management District Rules 2305 and 316 (Warehouse Indirect Source Rule). Adherence to Rules 2305 and 316 would implement the WAIRE program designed to reduce harmful air pollution caused by warehouse-related activities.

Project Design Features

As discussed in detail in Impact AIR-1, the project design includes high-density development that would help to reduce VMT on a per capita basis. This project design feature would reduce air quality impacts by reducing mobile source emissions associated with the operation of the proposed project. PPPs for the proposed project, along with compliance with local, regional, and State regulations will assist in reducing emissions from both construction and operation of the proposed project.

Impact Analysis

This impact is related to the cumulative effect of a project’s regional criteria pollutant emissions.

By its nature, air pollution is largely a cumulative impact resulting from emissions generated over a large geographic region. The nonattainment status of regional pollutants is a result of past and present development within the air basin, and this regional impact is a cumulative impact. In other words, new development projects (such as the proposed project) within the air basin would contribute to this impact only on a cumulative basis. No single project would be sufficient in size, by itself, to result in nonattainment of regional air quality standards. Instead, a project’s emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects. All new development that would result in an increase in air pollutant emissions above those assumed in regional air quality plans would contribute to cumulative air quality impacts.

The cumulative analysis focuses on whether a specific project would result in cumulatively considerable emissions. According to Section 15064(h)(4) of the CEQA Guidelines, the existence of significant cumulative impacts caused by other projects alone does not constitute substantial evidence that the project’s incremental effects would be cumulatively considerable.

Rather, the determination of cumulative air quality impacts for construction and operational emissions is based on whether the project would result in regional emissions that exceed the SCAQMD regional thresholds of significance for construction and operations on a project level. Projects that generate emissions below the SCAQMD significance thresholds would be considered consistent with regional air quality planning efforts would not generate cumulatively considerable emissions.

The nonattainment regional pollutants of concern are ozone, PM₁₀ and PM_{2.5}. Ozone is a regional pollutant formed by a photochemical reaction in the atmosphere and not directly emitted into the air. Ozone precursors, such as VOC and NO_x, react in the atmosphere in the presence of sunlight to form ozone. Therefore, the SCAQMD ozone threshold is based on the emissions of the ozone precursors VOC and NO_x. This impact section includes analysis of, and significance determinations for, those pollutants. The project's regional construction and operational emissions, which include both on- and off-site emissions, are evaluated separately below. The concentration and operational emissions from the proposed project were estimated using the CalEEMod Version 2020.4.0.

Construction Emissions

Construction activities would temporarily increase PM₁₀, PM_{2.5}, VOC, NO_x, SO_x, and CO regional emissions in the SoCAB. The primary source of NO_x, CO, and SO_x emissions is the operation of construction equipment. The primary sources of particulate matter (PM₁₀ and PM_{2.5}) emissions are activities that disturb the soil, such as grading and excavation, road construction, and building demolition and construction. The primary source of VOC emissions is the application of architectural coating and off-gas emissions associated with asphalt paving. A discussion of health impacts associated with air pollutant emissions generated by construction activities is included in Section 3.3.2, Environmental Setting, Air Pollutant Description and Health Effects.

Construction activities associated with buildout of the proposed project are anticipated to occur sporadically over approximately 10 years or longer. Buildout would consist of multiple smaller projects, each having its own construction timeline and activities. Development of multiple properties could occur at the same time. However, there is no defined development schedule for these future projects at this time. For this analysis, the estimate of maximum daily emissions is based on a very conservative scenario, where multiple construction projects occur at one time, and all construction phases overlap. The amount of construction assumed is consistent with the anticipated 10-year buildout of the proposed project. An estimate of maximum daily construction emissions is provided in Table 3.3-9. The table shows the highest daily emissions that would be generated over the anticipated development period.

Table 3.3-9: Construction Maximum Daily Regional Emissions—Unmitigated

Category	Maximum Daily Emissions (Pounds per Day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Site Preparation	2.72	27.21	18.95	0.04	9.10	5.13
Grading	3.29	32.42	28.41	0.06	5.15	2.71

Category	Maximum Daily Emissions (Pounds per Day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Building Construction	50.57	219.14	519.95	2.17	189.14	52.74
Paving	1.77	7.14	16.19	0.03	0.50	0.38
Architectural Coating	363.27	3.53	63.41	0.21	30.65	8.19
Worst-Case Day¹	421.62	289.44	646.91	2.51	234.54	69.15
SCAQMD Regional Thresholds	75	100	550	150	150	55
Significant?	Yes	Yes	Yes	No	Yes	Yes
Notes: CO = carbon monoxide NO _x = oxides of nitrogen PM ₁₀ = particulate matter with an aerodynamic resistance diameter of 10 micrometers or less. PM _{2.5} = particulate matter with an aerodynamic resistance diameter of 2.5 micrometers. SCAQMD = South Coast Air Quality Management District VOC = Volatile Organic Compounds ¹ Worst-Case Day accounts for possible overlap of building construction, paving, and architectural coating phases. The PM ₁₀ and PM _{2.5} emissions reflect the exhaust and “mitigated” fugitive dust emissions in accordance with SCAQMD Rule 403. All emissions are drawn from the greatest amount between the summer and winter modeling output files. Source of emissions: Appendix C.						

As shown in the table above, construction activities associated with development of the project could potentially exceed the SCAQMD regional threshold for VOC, NO_x, CO, PM₁₀, and PM_{2.5}. The primary source of NO_x emissions is vehicle and construction equipment exhaust. NO_x is a precursor to the formation of both O₃ and particulate matter (PM₁₀ and PM_{2.5}). VOC is a precursor to the formation of O₃. Project-related emissions of VOC and NO_x would contribute to the O₃, NO₂, PM₁₀, and PM_{2.5} nonattainment designations of the SoCAB. Emissions of CO, PM₁₀, and PM_{2.5} would contribute to the respective nonattainment designations. As previously discussed, existing General Plan policies, including AQ 3.5 and 3.6, would help minimize construction emissions from projects in the planning area. To further reduce the impacts of future development projects envisioned under the proposed project, MM AIR-1a through MM AIR-1d are required. Specifically, MM AIR-1a would reduce all air pollutant emissions by requiring future development to include more stringent construction measures, MM AIR-1b and -1c would reduce VOC emissions by requiring “super-compliant” low-volatile organic compound VOC Architectural Coatings and high volume low pressure (HVLP) spray equipment or other application techniques with a minimum transfer efficiency of at least 65 percent, and MM AIR-1d would reduce NO_x, PM₁₀, and PM_{2.5} by requiring all construction equipment with engines greater than 50 HP to use equipment meeting Tier IV Final off-road engine emission standards or cleaner.

Table 3.3-10: Construction Maximum Daily Regional Emissions—Mitigated

Category	Maximum Daily Emissions (Pounds per Day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Site Preparation	0.53	2.06	21.48	0.04	7.93	4.06

Category	Maximum Daily Emissions (Pounds per Day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Grading	0.83	3.34	33.68	0.06	3.92	1.59
Building Construction	49.71	209.25	521.48	2.17	188.70	52.33
Paving	0.67	1.23	17.64	0.03	0.21	0.08
Architectural Coating	190.35	2.88	62.22	0.21	30.63	8.18
Worst-Case Day¹	242.09	218.75	656.51	2.52	231.38	66.23
SCAQMD Regional Thresholds	75	100	550	150	150	55
Significant?	Yes	Yes	Yes	No	Yes	Yes
Notes: CO = carbon monoxide NO _x = oxides of nitrogen PM ₁₀ = particulate matter with an aerodynamic resistance diameter of 10 micrometers or less. PM _{2.5} = particulate matter with an aerodynamic resistance diameter of 2.5 micrometers. SCAQMD = South Coast Air Quality Management District VOC = Volatile Organic Compounds ¹ Worst-Case Day accounts for possible overlap of building construction, paving, and architectural coating phases. The PM ₁₀ and PM _{2.5} emissions reflect the exhaust and “mitigated” fugitive dust emissions in accordance with SCAQMD Rule 403. In addition, MM AIR-1a through MM AIR-1d (mitigation measures identified to reduce impacts from emissions that would be generated by construction of development contemplated under the Specific Plan) were represented in this scenario. All emissions are drawn from the greatest amount between the summer and winter modeling output files. Source of emissions: Appendix C.						

MM AIR-1a through MM AIR-1d will reduce emissions of VOCs, NO_x, CO, PM₁₀, and PM_{2.5} to the extent feasible; however, due to the size of the proposed project and the potential for overlapping construction activities, future development could still potentially exceed the SCAQMD regional thresholds, even with the implementation of mitigation. Therefore, project-related construction activities would result in significant regional air quality impacts.

Operation

Buildout of the proposed project would result in direct and indirect criteria air pollutant emissions from transportation, energy (e.g., natural gas use), and area sources (e.g., aerosols and landscaping equipment). Mobile source criteria air pollutant emissions are based on the traffic analysis conducted by EPD Solutions (see Appendix J of this Draft EIR). General Plan policies that would help to reduce air quality impacts include Policies AQ 1.1, 1.2, and Program 1.1.1, which promote the City’s participation with agencies to protect air quality, including participating on regional committees and enforcing all regulations. Policies AQ 3.1 through 3.4 include emission reduction measures that promote the use of efficient building materials, prevention of pollution from stationary sources, and requires projects to mitigate emissions that exceed allowable levels to the greatest extent possible. General Plan Policy AQ 4.3 requires “the installation and use of electric service units at truck stops and distribution centers for heating and cooling truck cabs, and particularly for powering refrigeration trucks, in lieu of idling of engines for power,” which would help to reduce operational emissions associated with TRUs at potential future cold storage distribution operations.

The Specific Plan objectives emphasize development of mixed-use areas and improvements to active and public transit facilities that would contribute to reducing vehicle trips and VMT. As an example, the proposed project would create residential development areas with open spaces and integrate light-industrial campuses and business parks that would provide amenities and employment opportunities for the nearby residences and businesses. The Specific Plan would include an 8-foot-wide decomposed granite soft-surface trail and a 10-foot-wide Class I hard-surface bicycle trail along 20th Street forming a central spine of trails through the project site. Sidewalks would be constructed on all Local Collectors and Local Streets, in order to provide a pedestrian network that connects residential areas to the trails and amenities located throughout the project site. The City’s General Plan also includes Program AQ-4.1.4 that establish incentives for developers to plan for and install electric vehicle charging stations in new development, and research funding sources for installing electric vehicle charging stations in other strategic locations. To further reduce the operational impacts of future development projects envisioned under the proposed project, MM AIR-1e through MM AIR-1i are recommended, which would allow for project-specific analysis of potential further operational emissions mitigation measures, as well as reducing emissions from future buildings and mobile sources.

Overall, the proposed guiding principles and objectives for land use planning and the proposed land use changes and transportation improvements would contribute to efficient vehicle trips and VMT per service population to the extent feasible. Furthermore, existing General Plan policies and required mitigation measures would further reduce emissions from the operation of future projects in the planning area. However, when compared to the existing vacant land use, implementation of the proposed project would generate a net increase of approximately 39,775 Passenger Car Equivalent (PCE) daily trips.³⁶ As the proposed project would be expected to be fully operational in 2034, Table 3.3-11 shows the net daily operational emissions for full buildout of the proposed project.

Table 3.3-11: Specific Plan Buildout (Year 2034) Net Daily Operational Emissions

Category	Daily Operational Emissions (Pounds per Day)					
	ROG	NOx	CO	SO ₂	PM ₁₀	PM _{2.5}
Area	204.93	1.62	140.38	0.01	0.78	0.78
Energy	3.94	35.26	26.08	0.21	2.72	2.72
Transportation	83.33	221.11	1,020.05	3.50	416.34	113.34
Total	292.20	257.99	1,186.51	3.72	419.84	116.84
SCAQMD Thresholds	55	55	550	150	150	55
Exceeds Threshold?	Yes	Yes	Yes	No	Yes	Yes

³⁶ EPD Solutions. 2023. Rio Vista Specific Plan Traffic Impact Analysis. February.

Category	Daily Operational Emissions (Pounds per Day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Notes: CO = carbon monoxide NO _x = oxides of nitrogen PM ₁₀ = particulate matter, including dust, 10 micrometers or less in diameter PM _{2.5} = particulate matter, including dust, 2.5 micrometers or less in diameter ROG = reactive organic gases SO ₂ = sulfur dioxide SCAQMD = South Coast Air Quality Management District Source: CalEEMod Version 2020.4.0 (see Appendix C).						

As shown in this table, due to the magnitude of the proposed growth, operation of the land uses accommodated under the proposed project at buildout would generate air pollutant emissions that exceed SCAQMD's regional significance thresholds for VOC, NO_x, CO, PM₁₀, and PM_{2.5} at full buildout. Emissions of VOC and NO_x that exceed the SCAQMD regional threshold would cumulatively contribute to the O₃ nonattainment designation of the SoCAB. Emissions of NO_x that exceed SCAQMD's regional significance thresholds would cumulatively contribute to the O₃ and particulate matter (PM₁₀ and PM_{2.5}) nonattainment designations of the SoCAB. Emissions of CO, PM₁₀, and PM_{2.5} would contribute to the respective nonattainment designations. Therefore, the proposed project would result in a potentially significant impact because it would significantly contribute to the nonattainment designations of the SoCAB.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implementation of MM AIR-1a through MM AIR-1i.

Level of Significance After Mitigation

Buildout of the proposed project would occur over approximately 10 years. Construction activities associated with buildout of the proposed project could generate short-term emissions that exceed the SCAQMD'S significance thresholds during this time and cumulatively contribute to the nonattainment designations of the SoCAB. Combined with the City of Jurupa Valley General Plan policies, the implementation of MM AIR-1a through MM AIR-1d would reduce criteria air pollutant emissions from construction-related activities to the extent feasible. However, specific construction time frames and equipment for individual site-specific projects are not available and there is a potential for multiple developments to be constructed at any one time, resulting in potentially significant cumulative construction-related emissions.

Buildout in accordance with the proposed project would generate long-term emissions that would exceed SCAQMD's regional significance thresholds and cumulatively contribute to the nonattainment designations of the SoCAB. To reduce emissions from the operation of future projects envisioned in the proposed project, MM AIR-1e through MM AIR-1i are required to reduce emissions to the extent feasible, in combination with the existing General Plan policies and programs that also apply to the

project. However, due to the magnitude of emissions generated by residential, office, institutional, commercial, and industrial land uses proposed as part of the project, no mitigation measures are available that would reduce cumulative impacts below SCAQMD's thresholds. Therefore, despite adherence to the applicable mitigation measures, Impact AIR-2 would remain significant and unavoidable.

Sensitive Receptors Exposure to Pollutant Concentrations

Threshold AIR-3: Would the proposed project expose sensitive receptors to substantial pollutant concentrations?

Under the City's local significance threshold, the project would have significant effects if:

- The project would exceed the SCAQMD LSTs which were developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities.
- The project would create a Maximum Incremental Cancer Risk of 10 in 1 million at the nearest sensitive receptor or off-site worker; or a Hazard Index (project increment) 1.0 or greater at the nearest sensitive receptor or off-site worker.
- The project emissions would contribute traffic volumes to an intersection in the vicinity of the project site which exceeds 100,000 vehicles per hour.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs related to sensitive receptors' exposure to pollutant concentrations.

Project Design Features

The proposed project design includes buffers and setbacks between residential areas and other land uses, such as schools and parks where sensitive receptors may be located, and proposed commercial or industrial land uses in the planning area. High-density residential neighborhoods located near transit and the support of alternative modes of transportation, reduce VMT on a per capita basis, helping to reduce the exposure of sensitive receptors to emissions from mobile sources.

Impact Analysis

To result in a less than significant impact, the following criteria must be true:

- **Criterion 1:** Localized Significance Threshold assessment: emissions and air quality impacts during project construction must be below the local significance thresholds.
- **Criterion 2:** CO hot spot assessment must demonstrate that the project would not result in the development of a CO hot spot that would result in an exceedance of the CO Ambient Air Quality Standards.
- **Criterion 3:** TAC analysis must demonstrate that the project would not result in significant health risk impacts to sensitive receptors during construction.

- **Criterion 4:** TAC analysis must demonstrate that TAC emissions from sources external to the project would not result in significant health risk impacts to the new on-site sensitive receptors.

Criterion 1: Localized Significance Thresholds

Construction Phase Localized Significance Thresholds

LSTs are the amount of project-related emissions at which localized concentrations (ppm or $\mu\text{g}/\text{m}^3$) would exceed the AAQS for criteria air pollutants for which the SoCAB is designated a nonattainment area. Buildout of the proposed project would occur over approximately 10 years or longer and would consist of multiple smaller projects with their own construction time frames and equipment.

Per the LST methodology, information regarding specific development projects and the locations of receptors would be needed in order to quantify the levels of localized operation and construction-related impacts associated with future development projects. Because the proposed project is a broad-based policy plan, it is not possible to calculate individual, project-related, operation emissions at this time. The LST analysis can only be conducted at a project level; per SCAQMD methodology, quantification of LSTs is not applicable for this program-level environmental analysis. However, because potential development and redevelopment could occur close to existing sensitive receptors, the proposed project has the potential to expose sensitive receptors to substantial pollutant concentrations. Construction equipment exhaust combined with fugitive particulate matter emissions have the potential to expose sensitive receptors to substantial concentrations of criteria air pollutant emissions and result in a significant impact. An LST analysis of a conservative project-level development has been provided below for informational purposes.

Utilizing the construction equipment list and associated acreages per 8-hour day provided in the SCAQMD “Fact Sheet for Applying CalEEMod to Localized Significance Thresholds” the maximum number of acres disturbed in a day would be 4 acres during grading (as shown in Table 3.3-12 below). To ensure a conservative analysis, the project emissions have been compared to the 2-acre per day LST.

Table 3.3-12: Maximum Number of Acres Disturbed Per Day

Activity	Equipment	Number	Acres/8-hour day	Total Acres
Site Preparation	Rubber Tired Bulldozers	3	0.5	1.5
	Tractors/Loaders/Backhoes	4	0.5	2.0
Total Per Phase				3.5
Grading	Excavators	2	0.5	1.0
	Graders	1	0.5	0.5
	Rubber Tired Bulldozers	1	0.5	0.5
	Scrapers	2	0.5	1.0
	Tractors/Loaders/Backhoes	2	0.5	1.0
Total Per Phase				4.0

Activity	Equipment	Number	Acres/8-hour day	Total Acres
<p>Notes:</p> <p>CO = carbon monoxide</p> <p>NO_x = oxides of nitrogen</p> <p>PM₁₀ = particulate matter, including dust, 10 micrometers or less in diameter</p> <p>PM_{2.5} = particulate matter, including dust, 2.5 micrometers or less in diameter</p> <p>ROG = reactive organic gases</p> <p>SCAQMD = South Coast Air Quality Management District</p> <p>SO₂ = sulfur dioxide</p> <p>Source: CalEEMod output and South Coast AQMD, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2. Accessed June 2, 2022.</p>				

The data provided in Table 3.3-13 shows that PM₁₀ and PM_{2.5} emissions would potentially exceed the local emissions thresholds at the nearest sensitive receptors during site preparation. Therefore, a significant local air quality impact could occur from construction of the proposed project.

Table 3.3-13: Localized Significance—Construction Emissions (lbs/day)

Category	Localized Daily Emissions (Pounds per Day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Site Preparation	27.18	18.34	8.90	5.07
Grading	32.38	27.72	4.92	2.65
Building Construction	12.47	16.08	0.53	0.50
Paving	7.12	15.85	0.33	0.33
Architectural Coating	0.86	1.80	0.02	0.02
Potential Overlap ¹	20.45	33.73	0.88	0.85
Maximum Daily Localized Emissions	32.38	27.72	8.90	5.07
SCAQMD Threshold for 25 meters (82 feet) or less ²	170	883	7	4
Exceeds Threshold?	No	No	Yes	Yes
<p>Notes:</p> <p>CO = carbon monoxide</p> <p>NO_x = oxides of nitrogen</p> <p>PM₁₀ = particulate matter, including dust, 10 micrometers or less in diameter</p> <p>PM_{2.5} = particulate matter, including dust, 2.5 micrometers or less in diameter</p> <p>ROG = reactive organic gases</p> <p>SCAQMD = South Coast Air Quality Management District</p> <p>SO₂ = sulfur dioxide</p> <p>¹ Accounts for possible overlap of building construction, paving, and architectural coating phases.</p> <p>² The nearest sensitive receptors are located 24 meters east and west to the project site; therefore, the 25-meter threshold has been used.</p> <p>Source: Calculated from CalEEMod and SCAQMD's Mass Rate Lookup Tables for two acres in Metropolitan Riverside Source Receptor Area (SRA 23). Project will disturb a maximum of 4.0 acres per day (see Table 3.3-10).</p>				

Because of the long-term nature of the buildout of the proposed project, potential development and redevelopment could occur close to existing sensitive receptors located as close as 24 meters to the west near Loveland Drive and east near Andalusia Avenue or new sensitive receptors within the planning area, potentially exposing sensitive receptors to substantial pollutant concentrations (Exhibit 3.3-2). Construction equipment exhaust combined with fugitive particulate matter emissions have the potential to expose sensitive receptors to substantial concentrations of criteria air pollutant emissions and result in a significant impact. Furthermore, the proposed project would permit commercial and light industrial land uses, which could potentially generate substantial quantities of criteria air pollutants and TACs from land uses such as stationary sources and warehouses once the proposed project is operational. These emissions could potentially impact nearby sensitive receptors.

Criterion 2: Carbon Monoxide Hot Spot Analysis

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. In 2007, the SoCAB was designated in attainment for CO under both the California AAQS and National AAQS. The CO hotspot analysis conducted for the attainment by SCAQMD did not predict a violation of CO standards at the busiest intersections in Los Angeles during the peak morning and afternoon periods. As identified in SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide, peak carbon monoxide concentrations in the SoCAB in previous years, prior to redesignation, were a result of unusual meteorological and topographical conditions and not of congestion at a particular intersection.³⁷

Under existing and future vehicle emission rates, a 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. Full buildout of the proposed project would result in approximately 38,106 average daily trips. With the standard assumption that peak-hour trips represent 10 percent of the average daily trips, implementation of the proposed project would result in an increase of about 3,811 peak-hour vehicle trips. Furthermore, distributing the total daily vehicle trips in the proposed project area and region and by peak-hour would result in smaller traffic volumes at the various intersections. Thus, implementation of the proposed project would not produce the volume of traffic required (i.e., 24,000 to 44,000 peak-hour vehicle trips) to generate a CO hotspot. Therefore, implementation of the Specific Plan would not have the potential to substantially increase CO hotspots at intersections in the vicinity of the project area, and impacts would be less than significant.

Criterion 3: Construction Toxic Air Pollutants

SCAQMD currently does not require health risk assessments to be conducted for short-term emissions from construction equipment. Health risks associated with emissions from construction equipment primarily are due to DPM. OEHHA adopted updated guidance for the preparation of health risk assessments in March 2015.³⁸ OEHHA has developed a cancer risk factor and non-cancer

³⁷ South Coast Air Quality Management District (SCAQMD). Final 2003 Air Quality Management Plan. Website: <https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/2003-aqmp>. Accessed January 31, 2022.

³⁸ California Office of Environmental Health Hazard Assessment (OEHHA). 2015. Notice of Adoption of Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments. Website: <https://oehha.ca.gov/air/cnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>. Accessed January 27, 2022.

chronic reference exposure level for DPM, but these factors are based on continuous exposure over a 30-year time frame. No short-term acute exposure levels have been developed for DPM.

Known sensitive receptors located within 1 mile of the planning area include numerous residences, child care centers, parks, and public schools. Construction of the proposed project would be implemented over a period of 10 years. It is anticipated that construction of individual developments accommodated under the plans would likely be spread out incrementally over this period of time, which would limit the exposure of on- and off-site receptors to elevated concentrations of DPM. However, similar to the LST analysis, construction health risk can only be conducted at a project level; therefore, quantification of construction-related health risk is not applicable for this program-level environmental analysis.

General Plan policies would assist in reducing potential impacts of construction emissions to sensitive receptors. Even with these mitigation measures in place, potential development and redevelopment could occur close to existing sensitive receptors. Construction equipment exhaust has the potential to expose sensitive receptors to substantial concentrations of TACs and result in a significant impact. As the exact location, timing, and level of future development activities arising from the proposed project is unforeseeable, specific impacts to sensitive receptors cannot be quantified. Therefore, to accurately analyze the potential impacts of potential future development projects, MM AIR-1a is required. Compliance with this mitigation measure will ensure that specific project-level construction impacts are analyzed and further mitigation measures are considered, as appropriate. Even after complying with regulations, existing policies and mitigation measures, as well as new mitigation measures, the impacts cannot be guaranteed to be reduced to below applicable agency thresholds, resulting in a potentially significant impact from construction toxic air pollutants to sensitive receptors.

Criterion 4: Operation Toxic Air Pollutants

The proposed project would permit residential, office, commercial and industrial land uses. Development of the land uses that are allowed under the proposed project may result in stationary sources of TAC emissions, including light industrial facilities, warehouses, dry cleaners, restaurants with charbroilers, or buildings with emergency generators and boilers. These types of stationary sources are subject to SCAQMD's new source review through their permitting requirements and would be subject to further study and Health Risk Assessment (HRA) prior to the issuance of any necessary air quality permits under SCAQMD Rule 1401. The permitting process ensures that stationary source emissions would be below the SCAQMD significance thresholds of 10 in a million cancer risk and 1 for acute risk at the maximally exposed individual.

The General Plan Air Quality Element sets forth policies that will further assist in reducing the impact of operational project-related emissions to sensitive receptors, including Policies AQ 2.1 through AQ 2.4. As discussed in the General Plan, these policies require barriers and set-back distances to be implemented between sensitive receptors and emission sources where possible, as well as the use of pollution control measures such as landscaping and vegetation as buffers. Program AQ 2.1.1 established a program to monitor adherence to best practices in distance and setbacks as recommended by the ARB and SCAQMD as a part of City planning efforts. The General Plan also includes the following policies to reduce emissions from mobile sources and to promote trip reduction:

including Policies AQ 7.1 through 8.2, which implement transit incentives, trip reduction programs at workplaces, traffic-flow management efforts, and other measures designed to alleviate traffic congestion and associated air pollution.

These existing policies and programs, combined with existing regulations and proposed mitigation measures, would serve to reduce the potential air quality impacts from future project operations to sensitive receptors. In regard to the industrial land uses proposed to be included in the planning area, the California Department of Justice (DOJ) has provided a document entitled, “Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act,” that provides guidance on CEQA analysis for warehouse projects and feasible mitigation measures.³⁹ This guidance has been reviewed and incorporated into this analysis, as appropriate. However, the document also includes a recommendation to fully analyze the impacts from truck trips as a part of CEQA compliance, stating that, “CEQA requires full public disclosure of a project’s anticipated truck trips, which entails calculating truck trip length based on likely truck trip destinations . . .”. While CalEEMod default trip lengths have been utilized for this analysis for most land uses and land uses because the specific types of industrial projects that may be implemented in future buildout of the proposed project are unknown, there is the possibility that trip lengths for the industrial land uses may be longer than these default values, especially where trucks may be traveling to local ports or to destinations outside of the SoCAB. Therefore, to accurately analyze the potential impacts of potential future development projects that include trucking emissions, MM AIR-1e is recommended.

Furthermore, ARB recommends a minimum separation between new sensitive land receptors and facilities that may emit TACs, such as dry cleaners, gas stations, auto body shops, warehouses, research and development facilities, manufacturers, public facilities such as wastewater treatment plants, truck stops, and busy roadways. These types of facilities would potentially be developed as a part of the land uses envisioned as a part of the proposed project. The health effects of DPM are of particular concern, as well as benzene, as discussed in earlier sections. To analyze and potentially reduce the potential exposure of sensitive receptors to TACs that could be emitted from the operation of these types of facilities, MM AIR-3a is required.

Furthermore, benzene may be emitted from the operation of gasoline service stations or other land uses with gasoline fueling pumps. To ensure that sensitive receptors are not going to be adversely affected by the exposure to benzene, it is recommended that the lead agency evaluate, quantify, and perform an HRA for the proposed project in the CEQA document for future proposed projects that include the operation of gasoline fueling pumps. To address this recommendation, MM AIR-3c is included.

In addition to operational emissions from new stationary sources of emissions and vehicle trips to and within the planning area, the proposed project would locate new sensitive receptors (residents) that could be subject to existing sources of TACs within the project boundary. The California Supreme Court in *California Building Industry Association v. Bay Area Air Quality Management*

³⁹ California Department of Justice (DOJ). 2021. Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act. Website: <https://oag.ca.gov/system/files/media/warehouse-best-practices.pdf>. Accessed March 1, 2022.

District concluded that agencies generally subject to CEQA are not required to analyze the impact of existing environmental conditions on a project's future users or residents. However, various types of mitigation are potentially available to reduce potential impacts to new sensitive receptors in the planning area. These methods include enhanced air filtration systems, sound walls, and vegetation. General Plan Air Quality Element policies that promote these methods include AQ 2.1 through AQ 2.4. Policy AQ 2.2 encourages, "the use of pollution control measures such as landscaping, vegetation and other materials that trap particulate matter or control pollution." Both the SCAQMD⁴⁰ and the ARB⁴¹ have discussed the merits and effectiveness of these types of measures designed to reduce near-roadway pollutant levels. The use of landscaping and vegetative barriers, as described in General Plan Policy AQ 2.2, would assist in reducing potential air quality impacts to sensitive receptors.

Many heating, ventilation, and air conditioning (HVAC) filters available in the United States are rated for their particle removal efficiency using a laboratory test procedure described in the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) Standard 52.2-2012, Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size. The test procedure classifies the single-pass particle removal efficiency of HVAC filters based on their minimum particle removal efficiency in three particle size bins (0.3 µm to 1 µm, 1 µm to 3 µm, and 3 µm to 10 µm) under various loading conditions. Minimum removal efficiency values in these three size bins are used to assign HVAC filters a single efficiency metric called the Minimum Efficiency Reporting Value (MERV). In general, the higher the MERV for a filter, the greater the removal efficiency for one or more particle size bins. The particle removal efficiency of filters is strongly dependent on particle size. Both larger particles (i.e., greater than ~1 µm) and smaller particles (i.e., less than ~0.1 µm) are removed by typical fibrous media filters with greater efficiency than particle sizes in between ~0.1 µm and ~1 µm. ASHRAE Standard 52.2-2012 evaluates the removal efficiency of a filter on a particle number-basis, albeit only for particle sizes 0.3 µm to 10 µm.

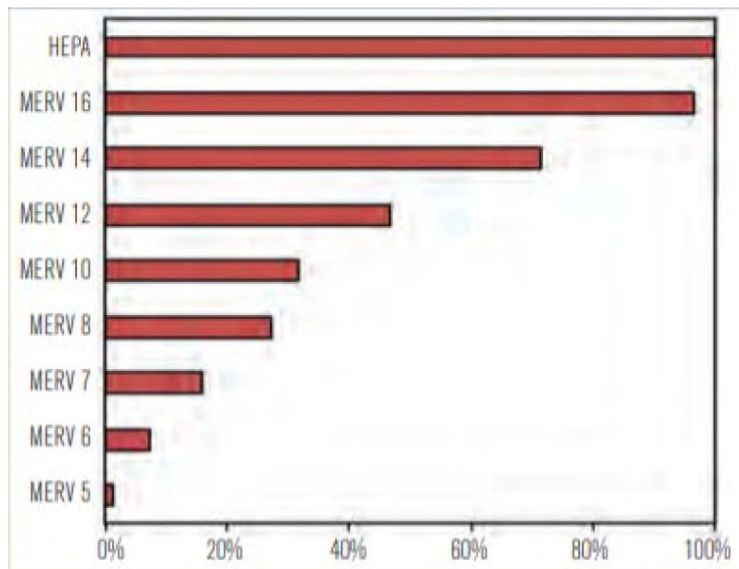
The majority of particles (by number) in most outdoor environments are smaller than 0.3 µm, and much of the PM_{2.5} mass is often in the 0.5 µm to 1 µm size range. Thus, the PM_{2.5} mass removal efficiency of a filter will vary depending on the filter's size-resolved removal efficiency for these particle sizes and the particle size distribution that passes through it. Average values for approximated outdoor origin PM_{2.5} removal efficiencies for several MERV-rated filters were derived from Stephens, Brennan, and Harriman.⁴² Single-pass outdoor origin PM_{2.5} removal efficiencies range from less than 10 percent for MERV 6 to over 95 percent for MERV 16 and high-efficiency particulate air (HEPA) filters as shown in Figure 3.3-7. In order to demonstrate a reduction in the risk of future residents, the use of air filters have been considered, as required under Title 24, Part 6, Subchapter 7, Section 150.0(m)12.C. Title 24 of the California Building Code requires that residential air filters meet a MERV of 13. MERV 13 filters would trap particles at an efficiency rate of 60 percent; however,

⁴⁰ South Coast Air Quality Measurement District (SCAQMD). 2009. Pilot Study of High Performance Air Filtration for Classrooms Applications. Website: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/aqmdpilotstudyfinalreport.pdf>. Accessed February 3, 2022.

⁴¹ California Air Resources Board (ARB). 2017. Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways. Website: https://ww2.arb.ca.gov/sites/default/files/2017-10/rd_technical_advisory_final.pdf. Accessed February 3, 2022.

⁴² Stephens, B., Brennan, T. and Harriman, L., 2016. Selecting ventilation air filters to reduce pm2. 5 of outdoor origin response. ASHRAE JOURNAL, 58(11), pp.10-10. Website: http://www.conforlab.com.br/wp-content/uploads/2016/10/2016Sep_012-021_HarrimanFiltersToReducePM2.5.pdf. Accessed February 3, 2022.

the use of air filters is only effective when residents keep windows closed and use air passed through the filtration system. The proposed project has no direct control over the resident's operation of windows. Therefore, MM AIR-3b has been included to relay this information to the residents in order for them to make their own informed decisions.



Source: Stephens, B., Brennan, T. and Harriman, L., 2016. Selecting ventilation air filters to reduce PM_{2.5} of outdoor origin response. ASHRAE JOURNAL, 58(11), pp.10-10. Website: http://www.conforlab.com.br/wp-content/uploads/2016/10/2016Sep_012-021_HarrimanFiltersToReducePM2.5.pdf. Accessed February 22, 2022.

Figure 3.3-7: Estimates of Particle Removal Efficiency for PM_{2.5} of Outdoor Origin for Filters Tested According to ASHRAE Standard 52.2-2012.2

Mobile Source Operational Health Risk Assessment

The ARB Air Quality and Land Use Handbook (ARB Handbook) provides an advisory recommendation to avoid the locating new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day. The closest any new residential use could be to potential roadway diesel particulate matter (DPM) sources would be approximately 2,500 feet from the nearest lanes of travel of U.S. 60. This freeway has an Average Daily Traffic (ADT) of 145,000, including approximately 11,800 truck trips per day. To determine the potential health risk from U.S. 60-related emissions sources as well as new on-site trips to be generated by the Specific Plan to the future residents of the project site, a health risk estimate was performed. Please refer to Appendix C for the full methodology and results of the assessment.

The DPM emission factors for the various vehicle types were derived from the ARB EMFAC2021 mobile source emission model. Full buildout year (2034) emissions factors were derived for Riverside County. The assessment requires that a network of receptors be specified where the impacts can be computed at the various locations surrounding the project. Discrete receptors were mainly located at planning areas that allowed residential uses within the proposed project as well as grid receptors to account for possible risk to existing sensitive receptors. Per SCAQMD AERMOD guidance, and to

ensure that impacts to children of all heights were assessed, the receptor height is 0 meters (per SCAQMD methodology).⁴³

The next step in the assessment process utilizes the emissions inventory along with a mathematical air dispersion model and representative meteorological data to calculate impacts at the various receptor locations. The assessment of air quality and health risk impacts from pollutant emissions from this project applied the EPA AERMOD Model, which is the air dispersion model accepted by the SCAQMD for performing air quality impact analyses. AERMOD predicts pollutant concentrations from point, area, volume, line, and flare sources with variable emissions in terrain from flat to complex with the inclusion of building downwash effects from buildings on pollutant dispersion (as applicable). It captures the essential atmospheric physical processes and provides reasonable estimates over a wide range of meteorological conditions and modeling scenarios. AERMAP, which assigns detailed terrain information, was run prior to running AERMOD. Meteorological data from the SCAQMD Riverside Airport station was selected for this modeling application. The meteorological input files were processed using AERMET program from Lakes Environmental. They are developed based on the 5 years data sets covering January 1, 2013, to December 31, 2016.

Health risks from DPM are twofold. First, DPM is a carcinogen according to the State of California. Second, long-term chronic exposure to DPM can cause health effects to the respiratory system. Each of these health risks is discussed below. SCAQMD formulas (based on the most recent OEHHA guidance) were used as detailed below.

Estimated Cancer Risks from Operation of the Proposed Project

According to the Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments, released by the California Office of Environmental Health Hazard Assessment (OEHHA) in February 2015 and formally adopted in March 2015, the residential inhalation dose for long-term cancer risk assessment should be calculated using the following formula:

$$[\text{Dose-air (mg)/(Kg-day)}] * \text{Cancer Potency} * [1 \times 10^{-6}] = \text{Potential Cancer Risk}$$

Where:

Cancer Potency Factor = 1.1

$\text{Dose-inh} = (\text{C-air} * \text{DBR} * \text{A} * \text{EF} * \text{ED} * \text{ASF} * \text{FAH} * 10^{-6}) / \text{AT}$

Where:

DBR [Daily breathing rate (L/kg body weight – day)] = 261 for adults, 572 for children, and 1,090 for infants, and 361 for third trimester per SCAQMD Permit Application Package “M” Table 9.1 guidance.

A [Inhalation absorption factor] = 1

EF [Exposure frequency (days/year)] = 350

⁴³ South Coast Air Quality Management District (SCAQMD). 2022. Modeling Guidance for AERMOD. Website: <http://www.aqmd.gov/home/air-quality/meteorological-data/modeling-guidance#AERMOD>. Accessed June 6, 2022

ED	[Exposure duration (years)] = 30 for adults (for an individual who is an adult at opening year), 14 for children (from 2-16 years), 14 for adults (from 16-30 years), 2 for infants, and 1 for third trimester
ASF	[Age sensitivity factor] = 10 for third trimester to 2 years of age, 3 for 2 to 16 years of age, and 1 for 16 to 30 years of age
FAH	[Fraction of time spent at home] = 1 for third trimester to 2 years of age, 1 for 2 to 16 years of age, and 0.73 for 16 to 30 years of age
106	[Micrograms to milligrams conversion]
AT	[Average time period over which exposure is averaged in days] = 25,550

The assessment of cancer-related health risk to sensitive receptors within the project vicinity is based on the following most-conservative scenario:

- An unborn child in its third trimester is potentially exposed to DPM emissions (via exposure of the mother) during the opening year.
- That child is born opening year and then remains at home for the entire first two years of life.
- From age 2 to 16, the child remains at home 100 percent of the time.
- From age 16 to 30, the child continues to live at home, growing into an adult that spends 73 percent of its time at home and lives there until age 30.

Table 3.3-14: Lifetime Cancer Risk at the Maximally Impacted On-site Receptor

Age	Cancer Risk (risk per million)
Third Trimester	0.28
Infant–2 years	6.73
2 to 16	7.74
16 to 30	0.82
Lifetime Risk	15.57
Notes: Source: Health Risk Assessment (HRA) Calculations; Please see Appendix C for full modeling results and calculation methodology.	

As shown in Table 3.3-14 above, because the lifetime cancer risk for the proposed project exceeds 10 in a million in the worst-case scenario analysis, it is concluded that the project site would be impacted by TAC emissions generated by mobile source emissions due to the operation of the proposed industrial uses and existing mobile source emissions in the area. The implementation of MM AIR-3a, MM AIR-3b, and MM AIR-3c will assist in reducing potential health risks to sensitive receptors.

Non-cancer Health Effects from Operation of the Proposed Project

The relationship for non-cancer health effects is given by the equation:

$$HI \text{ DPM} = CDPM / RELDPM$$

Where:

HI DPM = Hazard Index; an expression of the potential for non-cancer health effects.

C DPM = Annual average diesel particulate matter concentration in $\mu\text{g}/\text{m}^3$.

REL DPM = Reference Exposure Level (REL) for diesel particulate matter; the diesel particulate matter concentration at which no adverse health effects are anticipated.

The REL DPM is $5 \mu\text{g}/\text{m}^3$. The OEHHA as protective for the respiratory system has established this concentration. Using the maximum DPM concentration, the resulting Hazard Index is:

$$HI \text{ DPM} = 0.0039 / 5 = 0.0008$$

The criterion for significance is a Hazard Index increase of 1.0 or greater. Therefore, the proposed project would have a less than significant impact due to the non-cancer risk from diesel emissions from mobile sources during operation of the proposed project.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Compliance with MM AIR-1a through MM AIR-1i.

MM AIR-3a The City of Jurupa Valley shall require minimum distances between potentially incompatible land uses, as described below, unless a project-specific evaluation of human health risks defines, quantifies and reduces the potential incremental health risks through site design or the implementation of additional reduction measures to levels below applicable standards (e.g., standards recommended or required by the California Air Resources Board [ARB] or South Coast Air Quality Management District [SCAQMD]). The Health Risk Assessment (HRA) shall be prepared in accordance with policies and procedures of the most current California Office of Environmental Health Hazard Assessment (OEHHA) and the SCAQMD. At a minimum, the project-specific health risk analysis shall include emissions from sources including project trips, evaluated using appropriate emission factors and assumptions; stationary sources; area sources; on-site off-road equipment; Transport Refrigeration Units (TRUs); etc.

- a. Proposed dry cleaners and film processing services that use perchloroethylene shall be sited at least 500 feet from existing sensitive land uses including

residential, schools, day care facilities, congregate care facilities, hospitals, or other places of long-term residency for people.

- b. Proposed auto body repair services shall be sited at least 500 feet from existing sensitive land uses.
- c. Proposed gasoline dispensing stations with an annual throughput of less than 3.6 million gallons shall be sited at least 50 feet from existing sensitive land uses. Proposed gasoline dispensing stations with an annual throughput at or above 3.6 million gallons shall be sited at least 300 feet from existing sensitive land uses.
- d. Other proposed sources of toxic air contaminants (TACs) including furniture manufacturing and repair services that use methylene chloride or other solvents identified as a TAC shall be sited at least 300 feet from existing sensitive land uses.
- e. Avoid siting distribution centers or other industrial land uses that accommodate more than 100 truck trips per day (or more than 40 truck trips operating TRUs per day, or where TRUs operate more than 300 hours per week) within 1,000 feet of existing sensitive land uses.
- f. Proposed sensitive land uses shall be sited at least 500 feet from existing freeways, major urban roadways with 100,000 vehicles per day or more and major rural roadways with 50,000 vehicles per day or more.
- g. Proposed sensitive land uses shall be sited at least 500 feet from existing dry cleaners and film processing services that use perchloroethylene.
- h. Proposed sensitive land uses shall be sited at least 500 feet from existing auto body repair services.
- i. Proposed sensitive land uses shall be sited at least 50 feet from existing gasoline dispensing stations with an annual throughput of less than 3.6 million gallons and 300 feet from existing gasoline dispensing stations with an annual throughput at or above 3.6 million gallons.
- j. Proposed sensitive land uses shall be sited at least 300 feet from existing land uses that use methylene chloride or other solvents identified as a TAC.
- k. Proposed sensitive land uses shall be sited at least 1,000 feet from existing distribution centers that accommodate more than 100 trucks per day, accommodate more than 40 trucks per day with transportation refrigeration units, or where transportation refrigeration units operate more than 300 hours per week.

MM AIR-3b

All future residents of the planning area shall be provided with information that describes the potential health risks from localized and regional air pollution and that the incorporation of an advanced air filtration system has been provided in their housing unit to reduce that risk. The information shall also indicate that the residents have the option to open windows for circulation, however that by opening windows, they reduce or eliminate the effectiveness of the air filtration system within their unit for as long as the unit is open to unfiltered air.

MM AIR-3c Prior to future discretionary approval for projects that require environmental evaluation under CEQA, the City of Jurupa Valley shall evaluate new development proposals for new commercial land uses that include gasoline fueling pumps. Such projects shall submit a Health Risk Assessment (HRA) to the appropriate City department. The HRA shall be prepared in accordance with policies and procedures of the most current California Office of Environmental Health Hazard Assessment (OEHHA) and the South Coast Air Quality Management District (SCAQMD). If the HRA shows that the incremental health risks exceed their respective thresholds, as established by the SCAQMD at the time a project is considered, the applicant shall be required to identify and demonstrate that best available control technologies for toxics (T-BACTs), including appropriate enforcement mechanisms to reduce risks to an acceptable level.

Level of Significance After Mitigation

Compliance with existing regulatory programs, existing General Plan policies and mitigation measures, and MM AIR-1a through MM AIR-1i and MM AIR-3a through MM AIR-3c will serve to reduce the impacts of the proposed project to the extent feasible. However, the proposed project would result in the future development of numerous projects, each contributing incrementally to air emissions affecting sensitive receptors. Thus, it is possible that the project would result in cumulatively significant impacts to sensitive receptors, even if individual projects were each less than significant. This is particularly likely since none of the measures herein would prevent multiple development projects from being constructed concurrently within close proximity to sensitive receptors in such a manner as to cause substantial concentrations within the area. Further, neither the amount of construction occurring nor the exact location within the county is foreseeable and, as such, it cannot be determined whether the resultant construction emissions could be adequately controlled or reduced to below regulatory thresholds. Without such information, it is not possible to conclude that air pollutant emissions resulting from construction activities would be adequately reduced to the point that sensitive receptors are not exposed to substantial concentrations of air pollutants, and thus a significant and unavoidable impact may result.

Existing regulations and ordinances would reduce operation-related impacts by reducing air pollutant emissions from stationary and mobile sources. Even with the implementation of new project-specific mitigation measures, cumulative operational emissions resulting from future development would likely exceed SCAQMD thresholds. Therefore, the potential impacts from the proposed project to sensitive receptors would be significant and unavoidable.

Objectionable Odors

Threshold AIR-4: Would the proposed project create objectionable odors affecting a substantial number of people?

Screening Criteria: If the project is not any of the following, it may be presumed to have a less than significant impact absent substantial evidence to the contrary.

- Agricultural uses (livestock and farming)
- Wastewater treatment plants

- Food processing plants
- Chemical plants
- Composting operations
- Refineries
- Landfills
- Dairies
- Fiberglass molding facilities

Under the City's local significance threshold, the project would have significant effects if: The project 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 endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

The following PPP applies to the proposed project and would reduce impacts related to objectionable odors.

PPP 3.3-5 The project is required to comply with the provisions of South Coast Air Quality Management District Rule 402 "Nuisance." Adherence to Rule 402 reduces the release of odorous emissions into the atmosphere.

Project Design Features

The project design features include setbacks, buffers, and significant spacing between residential areas and other areas where sensitive receptors may be located, such as schools and parks, and commercial or industrial areas where potential odor-generating sources may be located.

Impact Analysis

Odors can cause a variety of responses. The impact of an odor is dependent on interacting factors such as frequency (how often), intensity (strength), duration (in time), offensiveness (unpleasantness), location, and sensory perception. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies.

The SCAQMD's role is to protect the public's health from air pollution by overseeing and enforcing regulations. The SCAQMD's resolution activity for odor compliance is mandated under California Health and Safety Code Section 41700 and falls under SCAQMD Rule 402. This rule on Public Nuisance Regulation states: "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 endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property."

The SCAQMD does not provide a suggested screening distance for a variety of odor-generating land uses and operations. However, the San Joaquin Valley Air Pollution Control District (Valley Air District) does have a screening distance for odor sources. Those distances are used as a guide to assess whether nearby facilities could be sources of significant odors. Projects that would site a new receptor farther than the applicable screening distances from an existing odor source would not likely to have a significant impact. These screening distances by type of odor generator are listed in Table 3.3-15.

Table 3.3-15: Screening Levels for Potential Odor Sources

Odor Generator	Screening Distance
Wastewater Treatment Facilities	2 miles
Sanitary Landfill	1 mile
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	1 mile
Chemical Manufacturing	1 mile
Fiberglass Manufacturing	1 mile
Painting/Coating Operations (e.g., auto body shop)	1 mile
Food Processing Facility	1 mile
Feed Lot/Dairy	1 mile
Rendering Plant	1 mile
Source: San Joaquin Valley Air Pollution Control District (Valley Air District) 2015.	

Construction-related Odors

Potential sources that may emit odors during construction activities include exhaust from diesel construction equipment. However, because of the temporary nature of these emissions, the intermittent nature of construction activities, and the highly diffusive properties of diesel exhaust, nearby receptors would not be affected by diesel exhaust odors associated with project construction. Odors from these sources would be localized and generally confined to the immediate area surrounding the proposed project site. The proposed project would utilize typical construction techniques, and the odors would be typical of most construction sites and temporary in nature. Impacts would be less than significant.

Operational-related Odors

Industrial land uses have the potential to generate objectionable odors. Examples of industrial projects are wastewater treatment plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch manufacturing plants, chemical manufacturing, and food

manufacturing facilities. The proposed project includes industrial land uses, and so there is the potential for land uses typically considered to be associated with odors to be developed in the planning area, which could result in a potentially significant impact.

Residential and other nonresidential (excluding industrial) land uses could result in generation of odors such as vehicle exhaust, landscaping equipment exhaust, laundry cleaning, cooking, and waste disposal. However, unlike industrial land uses, these are not considered potential generators of odor that could affect a substantial number of people. Additionally, for uses that could generate food odors such as restaurants, coffee roasters, and breweries, these types of uses would be subject to SCAQMD Rule 402 which would minimize and provide a control for odors.

MM AIR-4 requires an analysis of potential odor-emitting land uses through the environmental review process. Therefore, compliance with the applicable policies and programs in the General Plan as well as applicable SCAQMD rules and regulations would minimize odor emissions and prevent them from adversely affecting a substantial number of people within the City. Therefore, impacts from potential odors generated from residential and retail land uses associated with the proposed project are considered less than significant.

Level of Significance

Potentially significant impact.

Mitigation Measures

MM AIR-4 Prior to future discretionary approval for projects that require environmental evaluation under CEQA, the City of Jurupa Valley shall evaluate new development proposals for new industrial land uses that may generate significant operational odor impacts, as determined through a review of South Coast Air Quality Management District (SCAQMD) odor complaint history for similar facilities and consultation with the SCAQMD, to prepare an odor impact assessment and to implement odor control measures as recommended by the SCAQMD or the City as needed to reduce the impact to a less than significant threshold, as compared to the applicable significance criteria. Prior to issuance of the certificate of occupancy, the City shall require project applicants for projects that have the potential to emit nuisance operational odors to prepare an odor management plan that identifies project design features, measures, and control technologies to ensure compliance with South Coast Air Quality Management District (SCAQMD) Rule 402 “Nuisance,” which prohibits the discharge of air contaminants or other material (including odors) which may cause injury, detriment, nuisance, or annoyance to the public or to business or property. The City shall verify that all odor control measures have been incorporated into the project design specifications prior to issuing a permit to operate. During operation of the proposed facility, the City shall conduct periodic evaluation of on-site odors per the schedule and reporting requirements outlined in the odor management plan.

Level of Significance After Mitigation

Less than significant impact with mitigation incorporated.

3.3.8 - Cumulative Impacts

Criteria Pollutants

As indicated under the analysis of Threshold AIR-1 and Threshold AIR-2, the proposed project's construction and operational-related emissions would exceed the SCAQMD regional thresholds for criteria pollutants, including for NO_x, VOCs, CO, PM₁₀, and PM_{2.5}. As such, the proposed project would conflict with AQMP Consistency Criterion No. 1, and would, therefore, conflict with the SCAQMD 2016 AQMP. Other projects within the SoCAB also have the potential to conflict with the AQMP; therefore, the proposed project's impacts due to a conflict with the AQMP would be cumulatively considerable.

Sensitive Receptors

The proposed project could result in exposure of sensitive receptors in the vicinity of the proposed project (i.e., residences to the east and west of the proposed project) to potential TAC emissions from diesel trucks from future industrial land uses and existing local freeways, exceeding a cancer risk of 10 per million for long-term exposures. Additionally, emissions of DPM generated at the project site from construction and operation of the proposed project could expose sensitive receptors to TAC emissions at levels that would potentially exceed SCAQMD and OEHHA health-protective recommendations. However, as noted above, consistent with SCAQMD guidance an SLT should be applied at a project level, and identification of the applicable threshold is not applicable for this specific plan-level environmental analysis.

Mitigation measures, as further discussed under Threshold AIR-3, have been recommended to further analyze and potentially reduce the potential health risks from exposure to TACs generated by the construction and operation of future developments envisioned as a part of the proposed project. However, the potential cumulative impact to sensitive receptors from exposure to TACs remains potentially significant and should be further evaluated at a project level for future developments.

Odors

As discussed in Threshold AIR-4, potential odor sources associated with the proposed project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities; however, construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. Although it is possible other construction activities could occur in proximity concurrent with construction of the proposed project, due to the short duration and intermittent nature of construction-related odors, impacts would be less than cumulatively considerable.

For long-term operation, the proposed project and other cumulative developments would be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances, as well as MM AIR-4, which would require potential future odor-generating industrial projects to mitigate

potential impacts. Therefore, odors associated with the proposed project operations would be less than cumulatively considerable.

Level of Cumulative Significance Before Mitigation

Potentially significant cumulative impact.

Cumulative Mitigation Measures

Implementation of MM AIR-1a through AIR-1i, and MM AIR-3a, MM AIR-3b, MM AIR-3c, and MM AIR-4.

Level of Cumulative Significance After Mitigation

- Criteria Pollutant Emissions: Significant and unavoidable cumulative impact.
- Sensitive Receptors: Significant and unavoidable cumulative impact.
- Odors: Less than significant cumulative impact with the incorporation of mitigation.

Legend

CalEnviroScreen 4.0 Results



Census Tract:
6065040101
(Population: 4,542)

The results for each indicator range from 0-100 and represent the percentile ranking of census tract 6065040101 relative to other census tracts.

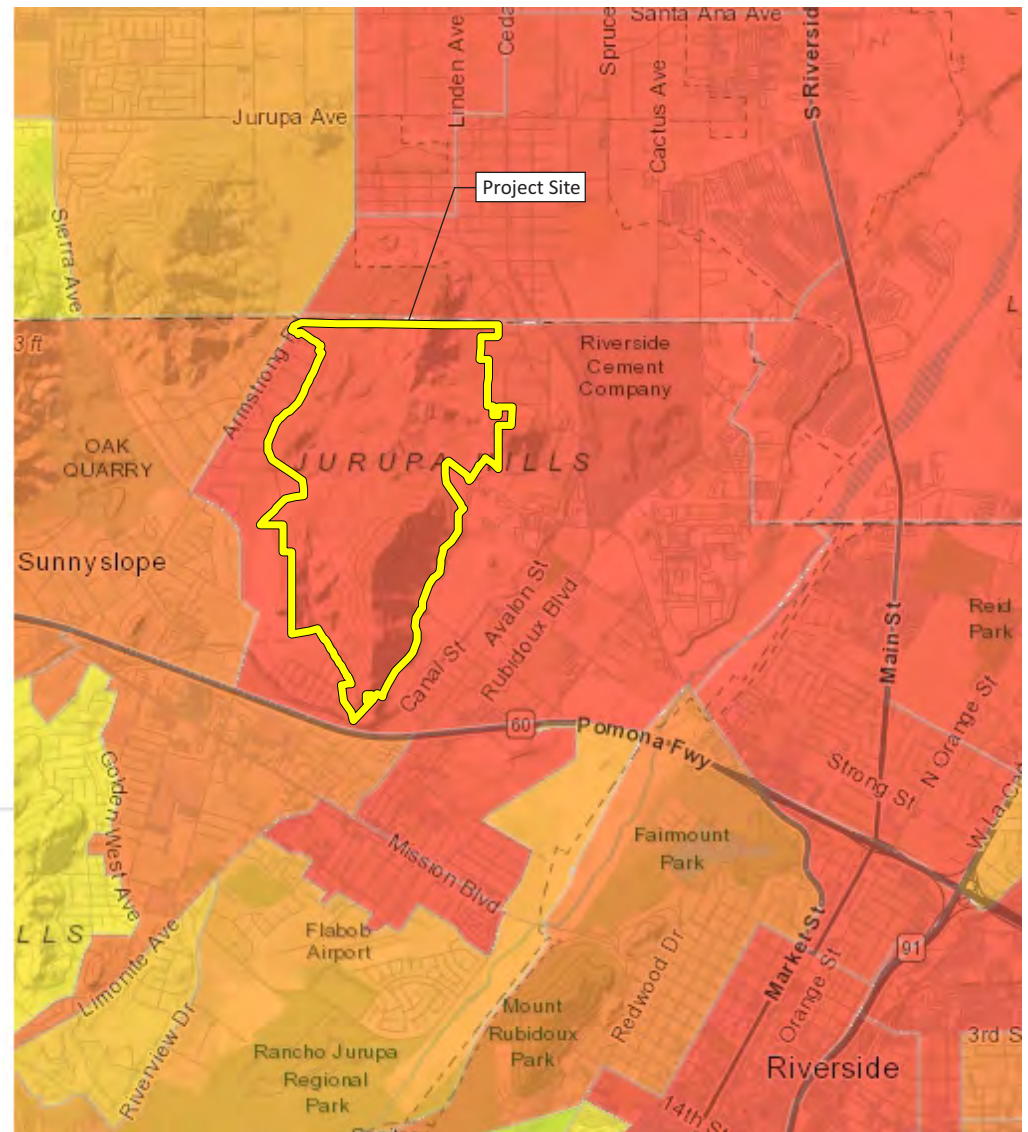
Overall Percentiles

CalEnviroScreen 4.0 Percentile	95
Pollution Burden Percentile	99
Population Characteristics Percentile	74

Exposures

Ozone	97
Particulate Matter 2.5	93
Diesel Particulate Matter	69

CalEnviroScreen 4.0 High Pollution, Low Population



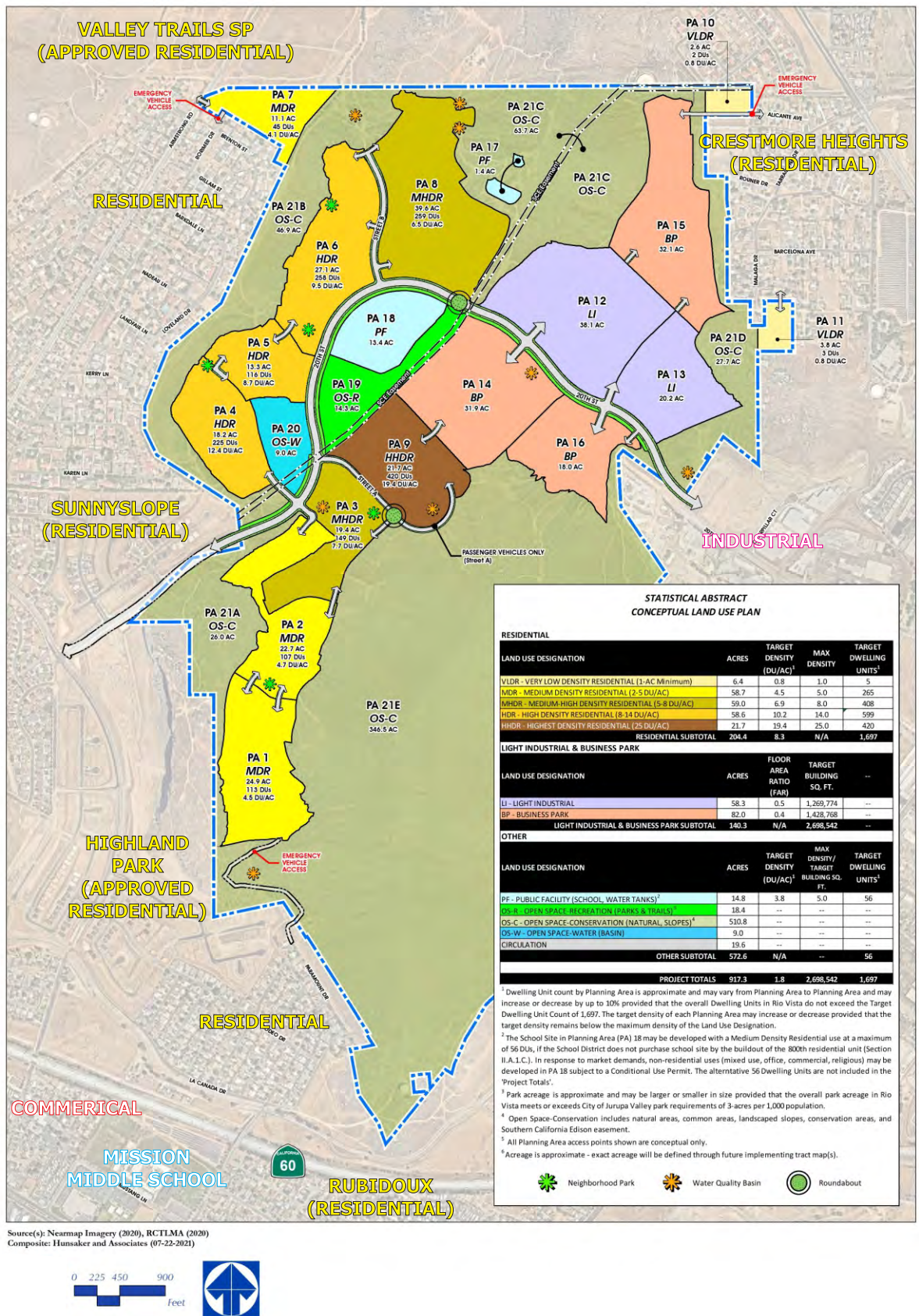
Source: California Office of Environmental Health Hazard Assessment (OEHHA).

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Exhibit 3.3-1 CalEnviroScreen Attributes for Project Site

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Source(s): Nearmap Imagery (2020), RCTLMA (2020)
Composite: Hunsaker and Associates (07-22-2021)



Source: t&b planning, August 5, 2021.

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3.4 - Biological Resources

3.4.1 - Introduction

This section describes the existing biological resources conditions on the project site and the relevant regulatory framework that considers and protects them. This section also evaluates the possible impacts related to biological resources that could result from implementation of the proposed project and includes appropriate mitigation measures to reduce potential impacts to a less than significant level. Information in this section is based on the *Updated Biological Assessment, Jurisdictional Delineation, Narrow Endemic Plant, Burrowing Owl, and DSF Focused Surveys Rio Vista, Specific Plan 16001, Jurupa Valley, California*, prepared by L&L Environmental, Inc. (L&L) in December 2016 and most recently updated in September 2023 (L&L Biological Resources Assessment [BRA]). L&L also prepared an Updated Jurisdictional Delineation for Rio Vista, Specific Plan, City of Jurupa Valley, Riverside County, California in October 2015 and most recently revised it in September 2023. These reports are included in Appendix D.

A Notice of Preparation (NOP) was released for public review on December 6, 2021, and an Environmental Impact Report (EIR) Scoping Meeting was held on December 14, 2021. No public comments were received during the EIR scoping period related to biological resources.

3.4.2 - Regulatory Framework

Federal

Endangered Species Act of 1973

The United States Congress passed the Endangered Species Act in 1973 to protect those species that are endangered or threatened with extinction. The Endangered Species Act is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

The Endangered Species Act prohibits the “take” of endangered or threatened wildlife species. “Take” is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (16 United States Code [USC] § 1531 *et seq.*). “Harm” is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 Code of Federal Regulations [CFR] § 17.3). “Harass” is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR § 17.3). Actions that result in take can result in civil or criminal penalties.

The Endangered Species Act and the Clean Water Act (CWA) Section 404 guidelines prohibit the issuance of wetland permits for projects that jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species. The United States Army Corps of Engineers (USACE) must consult with the United States Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NOAA Fisheries) when threatened or endangered species under their jurisdiction may be affected by a proposed project. In the context of the proposed project, Endangered Species Act consultation would be initiated if

development resulted in take of a threatened or endangered species or if issuance of a Section 404 permit or other federal agency action could result in take of an endangered species or adversely modify critical habitat of such a species.

Migratory Bird Treaty Act

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of State and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior.

Bald and Golden Eagle Protection Act

The golden eagle (*Aquila chrysaetos*) and bald eagle (*Haliaeetus leucocephalus*) are afforded additional protection under the Eagle Protection Act, amended in 1973 (16 USC § 669, *et seq.*) and the Bald and Golden Eagle Protection Act (16 USC §§ 668–668d).

Clean Water Act

The USACE administers Section 404 of the federal CWA, which regulates the discharge of dredge and fill material into waters of the United States.

The term “waters of the United States” was most recently defined in the Federal Register on September 8, 2023, in the USACE’s regulations at 33 Code of Federal Regulations Part 328.3(a).¹ There are no waters of the US on the project site as discussed in 3.4.3 Environmental Setting, below.

“Wetland” refers to areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and seasonal wetlands. Wetlands are considered jurisdictional if they fall under one of the categories of waters of the United States defined above. The USACE jurisdiction typically extends up to the ordinary high water mark (OHWM). There are no wetlands subject to federal jurisdiction on the project site as discussed in 3.4.3 Environmental Setting, below.

State

California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA pertains to State-listed endangered and threatened species. CESA requires State and local agencies to consult with the California Department of Fish and Wildlife (CDFW) when preparing California Environmental Quality Act (CEQA) documents. The purpose of CESA is to ensure that the State and local agencies actions do not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code [FGC] § 2080). CESA directs agencies to consult with CDFW on projects or actions that could affect listed species, directs CDFW to determine whether jeopardy would occur, and allows CDFW to identify “reasonable and prudent

¹ United States National Archives Office of the Federal Register. 2023. Federal Register, Volume 88, No. 173, Proposed Rules. September 8.

alternatives” to the proposed project consistent with conserving the species. CESA allows CDFW to authorize exceptions to the State’s prohibition against take of a listed species if the “take” of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (FGC § 2081).

California Fish and Game Code

Under CESA, CDFW has the responsibility for maintaining a list of endangered and threatened species (FGC § 2070). Fish and Game Code Sections 2050 through 2098 outline the protection provided to California’s rare, endangered, and threatened species. Fish and Game Code Section 2080 prohibits the taking of plants and animals listed under CESA. Fish and Game Code Section 2081 established an incidental take permit program for State-listed species. The CDFW maintains a list of “candidate species,” which it formally notices as being under review for addition to the list of endangered or threatened species.

Fish and Game Code Section 1602 requires any entity to notify the CDFW before beginning any activity that “may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake” or “deposit debris, waste, or other materials that could pass into any river, stream, or lake.” “River, stream, or lake” includes waters that are episodic and perennial and ephemeral streams, desert washes, and watercourses with a subsurface flow. A Lake or Streambed Alteration Agreement will be required if the CDFW determines that project activities may substantially adversely affect fish or wildlife resources through alterations to a covered body of water. CDFW jurisdiction typically extends to the edge or “drip line” of the riparian habitat or top of bank.

CDFW maintains a list of Natural Communities which are ranked S1 through S5. Natural Communities ranked S1 through S3 are considered Sensitive Natural Communities to be addressed in the environmental review processes of CEQA and its equivalents (Appendix D).

California Porter-Cologne Water Quality Control Act

The Regional Water Quality Control Board (RWQCB) regulates actions that would involve “discharging waste, or proposing to discharge waste, within any region that could affect the waters of the State” (Water Code § 13260(a)), pursuant to provisions of the Porter-Cologne Water Quality Act. “Waters of the State” are defined as “any surface water or groundwater, including saline waters, within the boundaries of the State” (Water Code § 13050(e)). In 2019, the California State Water Resources Control Board (State Water Board) published the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (Procedures) to guide wetland/waters of the State determinations and the permitting process.²

California Native Plant Society

The CNPS maintains a rank of plant species that are native to California and that have low population numbers, limited distribution, or are otherwise threatened with extinction. This information is

² California State Water Resources Control Board (State Water Board). 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State.

published in the Inventory of Rare and Endangered Vascular Plants of California. The following identifies the definitions of the CNPS ranks:

- **Rank 1A:** Plants presumed extirpated in California and either rare or extinct elsewhere
- **Rank 1B:** Plants rare, threatened, or endangered in California and elsewhere
- **Rank 2A:** Plants presumed extirpated in California but common elsewhere
- **Rank 2B:** Plants rare, threatened, or endangered in California but more numerous elsewhere
- **Rank 3:** Review List: Plants about which more information is needed
- **Rank 4:** Watch List: Plants of limited distribution

California Rare Plant Ranks at each level also include a threat rank (e.g., California Rare Plant Rank [CRPR] 4.3) and are assigned as follows:

- **Threat Rank 0.1:** Seriously threatened in California—Over 80 percent of occurrences threatened/high degree and immediacy of threat.
- **Threat Rank 0.2:** Moderately threatened in California—20–80 percent of occurrences threatened/moderate degree and immediacy of threat.
- **Threat Rank 0.3:** Not very threatened in California—Less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known.

All plants appearing on CNPS List 1 or 2 are considered to meet the CEQA Guidelines Section 15380 criteria. While only some of the plants ranked 3 and 4 meet the definitions of threatened or endangered species, the CNPS recommends that all Rank 3 and Rank 4 plants be evaluated for consideration under CEQA.

Potential impacts to populations of CNPS-ranked plants receive consideration under CEQA review. All plants appearing on the CNPS List ranked 1 or 2 are considered to meet the CEQA Guidelines Section 15380 criteria. Rank 3 and 4 plants do not automatically meet this definition. Rank 4 plants do not clearly meet the City's CEQA standards and thresholds for impact considerations. Nevertheless, some level of CEQA review is justified for CRPR 4 taxa, and under some circumstances, a full impact analysis is warranted. Taxa that can be shown to meet the criteria for endangered, rare, or threatened status under CEQA Section 15380(d) or that can be shown to be regionally rare or unique as defined in CEQA Section 15125(c) must be fully analyzed in a CEQA document. Some circumstances, such as local rarity, having occurrences peripheral to the taxon's distribution, or having occurrences on unusual substrates or rare and declining habitats, provide justification for treating some CRPR 4 taxa occurrences as regionally rare or unique. One limitation to fully analyzing impacts on CRPR 4 taxa is the difficulty in obtaining current data on the number and condition of the occurrences.³

³ California Native Plant Society (CNPS). 2020. Considerations for Including CRPR 4 Plant Taxa in CEQA Biological. Resource Impact Analysis. Sacramento, CA.

Local

Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) is a multi-jurisdictional Habitat Conservation Plan (HCP) focusing on conservation of species and their associated habitats in western Riverside County. The MSHCP covers 146 species and 14 natural communities within a Plan Area of approximately 1.26 million acres (1,966 square miles); it includes all unincorporated Riverside County land west of the crest of the San Jacinto Mountains to the Orange County line, as well as the jurisdictional areas of the cities of Temecula, Murrieta, Lake Elsinore, Canyon Lake, Norco, Corona, Riverside, Moreno Valley, Banning, Beaumont, Calimesa, Perris, Hemet, and San Jacinto. The MSHCP was implemented in 2003 and is administered by the Western Riverside County Regional Conservation Authority (RCA).

The MSHCP serves as an HCP pursuant to Section 10(a)(1)(B) of the Endangered Species Act, as well as a Natural Community Conservation Plan (NCCP) under the NCCP Act of 2001. The MSHCP allows the participating jurisdictions to authorize "take" of plant and wildlife species identified within the MSHCP area through an agreement with USFWS and CDFW and in exchange for the assembly and management of a coordinated MSHCP Conservation Area.

Jurupa Valley 2017 General Plan

The following General Plan Policies are directly related to the project in regard to biological resources. Please refer to Section 3-11, Land Use and Planning, for analysis of the proposed project's consistency with these policies.

- COS 1.2 Protection of Significant Trees.** Protect and preserve significant trees, as determined by the City Council upon the recommendation of the Planning Commission. Significant trees are those trees that make substantial contributions to natural habitat or to the urban landscape due to their species, size, or rarity. In particular, California native trees should be protected.
- COS 1.3 Other Significant Vegetation.** Maintain and conserve superior examples of vegetation, including agricultural wind screen plantings, street trees, stands of mature native and non-native trees, and other features of ecological, aesthetic, and conservation value.
- COS 2.2 Wildlife Corridors.** Identify and maintain a continuous wildlife corridor along the City's northern boundary through the Jurupa Mountains and along the Santa Ana River from the northern boundary to the City's western boundary. Condition development approvals to ensure that important corridors for wildlife movement and dispersal are protected and not interrupted by walls, fences, roadways or other obstructions. Features of particular importance to wildlife include riparian corridors, wetlands, streams, springs, and protected natural areas with cover and water. Linkages and corridors shall be provided to maintain connections between habitat areas.

- COS 2.3 Biological Reports.** Require the preparation of biological reports to assess the impacts of development and provide mitigation for impacts to biological resources when reviewing discretionary development projects with the potential to affect adversely wildlife habitat.
- COS 3.20 Riparian Area Preservation.** Require development projects to preserve and enhance native riparian habitat and prevent obstruction of natural watercourses. Zoning incentives, such as transfer of development credits, should be used to the maximum extent possible.
- COS 8.1 Environmental Resource Protection.** Preserve and maintain open space that protects environmental resources and protects public health and safety.
- COS 8.2 Extension of Public Facilities.** Avoid the extension of public streets, facilities, services, and utilities for urban uses into areas designated as Open Space in the General Plan.
- CSSF 1.13 Environmental Protection.** Ensure that any substantial modification to a watercourse is accomplished in the least environmentally damaging manner possible to maintain adequate wildlife corridors and linkages and maximize groundwater recharge.
- LU 5.47 Sensitive Habitat and Species.** Public and private development, operations, and maintenance shall avoid damaging sensitive habitat or species, including significant native trees, species of local significance, and threatened and endangered species.
- LU 8.37 Tree Preservation in Rights-of-Way.** Preserve mature trees with street or highway rights-of-way that are identified as superior examples of California native species or naturalized tree species.

3.4.3 - Environmental Setting

Literature Review

Western Riverside County Multiple Species Habitat Conservation Plan

The project site is within the area covered by the Western Riverside County MSHCP. The MSHCP requires an assessment of potential habitat for burrowing owl, riparian birds, and narrow endemic plants, as well as riparian/riverine habitat and species, vernal pools, and fairy shrimp. The project site lies within a survey area for narrow endemic plants⁴ (as defined in Section 6.1.3 of the MSHCP, Volume 1), including San Diego ambrosia (*Ambrosia pumila*), Brand's phacelia (*Phacelia stellaris*), and San Miguel savory (*Clinopodium chandleri*). Additionally, soil maps indicate the presence of Delhi soils in the project site, so identification of potential habitat and the presence/absence of Delhi Sands flower-loving fly (*Rhaphiomidas terminatus*) are also required by the MSHCP. The project site

⁴ Narrow endemic plants are plant species that are highly restricted by their habitat affinities, edaphic requirements, or other ecological factors, and for which specific conservation measures have been identified in Section 6.1.3 of the MSHCP, Volume I.

is not within any MSHCP Criteria Areas,⁵ depicted on Figure 3-1 of the MSHCP, Volume I. There are no MSHCP or Public/Quasi-public (PQP) conserved lands,⁶ as depicted on Figure 3-1 MSHCP, Volume I, adjacent to or within a 1-mile radius of the project site. The nearest MSHCP-conserved lands are located in the Jurupa Hills approximately 1.03 miles to the west of the project site, and the nearest PQP lands can be found along the Santa Ana River, located approximately 1.27 miles southeast of the project site.

Previous Studies

The L&L BRA includes data from reports documenting previous surveys of the project site including:

- Preliminary Determination of Jurisdictional Limits U. S. Army Corps of Engineers Section 404 Waters of the United States Including Wetlands and State Waters Subject to California Department of Fish and Game Section 1602 Streambed Alteration Agreement, Rio Vista Specific Plan. AMEC Earth & Environmental, Inc. 2005.
- Rio Vista Specific Plan, EA and Case #SP 00243A1 and CZ 07159, Habitat Assessment and Focused Survey for Delhi Sands Flower-loving Fly. AMEC Earth & Environmental, Inc. 2005.
- Rio Vista Specific Plan, EA and Case #SP 00243A1 & CZ 07159, Biological Resources Assessment, Habitat Assessment, and Focused Burrowing Owl Survey. AMEC Earth & Environmental, Inc. 2006.
- Determination of Biologically Equivalent or Superior Preservation, Rio Vista Specific Plan SP00243A1, Riverside County, California. AMEC Earth & Environmental, Inc. 2008.
- One Year Supplement Focused Study for Delhi Sands Flower-loving Fly, Rio Vista, Specific Plan 243A1, Jurupa Valley, Riverside County, California. L&L Environmental, Inc. 2015.
- Jurisdictional Delineation with Least Environmentally Damaging Practical Alternative for Rio Vista, Specific Plan 243A1, City of Jurupa Valley, Riverside County, California. L&L Environmental, Inc. 2023.

Previous Survey Results

Prior to the field surveys conducted by L&L starting in 2016, AMEC Earth & Environmental, Inc. (AMEC) conducted a focused survey for Delhi Sands flower-loving fly (a federal endangered species) in 2005 which found this species to be present within an area along the western side of the full survey area. AMEC also conducted a preliminary jurisdictional delineation in 2005 that identified 1.55 acres of State waters and 0.56 acre of “waters of the United States” in the project site. A total of 0.01 acre was classified as State and federal wetlands. Both AMEC reports are described in the L&L BRA (Appendix D). Subsequently, the USACE issued an Approved Jurisdictional Determination on February 11, 2021, stating that waters of the United States do not occur on the project site.

⁵ Criteria Areas are the area comprised of Cells depicted on Figure 3-1 of the MSHCP, Volume I.

⁶ Public/Quasi-public (PQP) conserved lands are a subset of MSHCP Conservation Area lands totaling approximately 347, 000 acres of lands known to be in public/private ownership and expected to be managed for open space value and/or in a manner that contributes to the Conservation of Covered Species (including lands contained in existing reserves), as generally depicted in Figure 3-1 of the MSHCP, Volume I.

Finally, AMEC conducted a general biological survey in 2006 that did not identify any special-status plant species in the project site. However, one special-status plant, Plummer's mariposa lily (*Calochortus plummerae*) was documented as "reported" in the project site by L&L Biologists via personal communication as discussed in the L&L BRA (Appendix D). Additionally, one well-known Palmer's oak (*Quercus palmeri*), recognized for its extreme age, was observed within the project site. In addition to the Delhi Sands flower-loving fly, several special-status bird, reptile, and mammal species were detected during surveys conducted in 2006 by AMEC. These include northern harrier (*Circus hudsonius*), Cooper's hawk (*Accipiter cooperii*), Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), coast horned lizard (*Phrynosoma coronatum*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), red-diamond rattlesnake (*Crotalus ruber*), and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*). The findings of the AMEC field surveys are described in the L&L BRA (Appendix D).

Soils and Topography

According to the L&L BRA, topographically the project site consists of a ridge of hills containing a mixture of steep and low relief rolling hills with associated drainages or canyons. Elevation in the project site ranges between 950 and 1,739 feet (290 to 530 meters) above mean sea level (AMSL) (Appendix D). The soils present within the project site are primarily rocky to sandy loams with a mixture of Cienega sandy loam and rocky sandy loam (15–50 percent slopes, eroded), Greenfield sandy loam (8–15 percent slopes, eroded), Hanford coarse sandy loam (8–15 percent slopes, eroded), Ramona sandy loam (0–5 percent or 8–15 percent slopes, eroded or severely eroded), and Vista coarse sandy loam (8–35 percent slopes, eroded). Delhi fine sand (2–15 percent slopes, wind eroded) is mapped along the northwestern project site boundary and was observed to be present on-site (see Exhibit 3.4-1). Delhi fine sands are typically wind-blown and can move through physical sand transport processes similar to sand dunes. Within the project site, Delhi fine sands have been constrained to their current location by topography including on-site hills to the east and by development to the west.

Physical Habitat/Vegetation

As detailed in the L&L BRA, the project site contains a mixture of steep hillsides, rolling hills, rocky outcrops, and low relief canyons combined with relatively flat areas. Several unpaved roads are present on the site and some areas have been adversely impacted by historic and ongoing off-road vehicle use. Large areas of the site are almost completely devoid of vegetation due to these activities. Surrounding land uses include residential and industrial uses, as well as undeveloped land. Eight distinct vegetation communities or land cover types were identified by the L&L BRA. They are depicted in Exhibit 3.4-2 and described below:

1. Brittle bush scrub
2. California buckwheat scrub
3. Bush penstemon scrub
4. Chamise chaparral
5. Willow scrub
6. Non-native grasslands
7. Ornamental vegetation
8. Developed land

The L&L BRA states that a previously graded area, located on the west side of the project site and covering approximately 1.35 acres, is mapped in Exhibit 3.4-2 as 0.92 acre of non-native grasslands and 0.42 acre of brittlebush scrub.

According to the L&L BRA, the drainages and canyons on the site are primarily vegetated with upland habitats, but also contain small areas of riparian plants, including willow (*Salix* sp.) and mulefat (*Baccharis salicifolia*). Areas of Delhi fine sands occur in the survey area almost exclusively within non-native grasslands, with a small portion occurring in brittle bush scrub. These vegetation communities and land cover types are depicted in Exhibit 3.4-2.

The vegetative community descriptions below are based on information presented in the L&L BRA.

Sage Scrub, including Brittle Bush Scrub and California Buckwheat Scrub (714.05 acres)

Sage scrub on the project site is a drought-tolerant community dominated by brittlebush (*Encelia farinosa*), a short-lived subshrub that commonly occurs on alluvial fans, rocky hillsides, and other well-drained slopes. This alliance is considered a form of sage scrub, which generally occurs on rolling hills at lower elevations. This habitat is often found in close association with chaparral. This species comprises an estimated 579.68 acres of the site.

Much of the survey area contains a mixture of disturbed and relatively undisturbed *Encelia farinosa* Shrubland Alliance dominated by brittle bush with scattered patches of California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), and deerweed (*Acemisson glaber*). A portion of the project site is mapped as *Encelia farinosa* – *Artemisia californica* alliance, which is a form of brittle bush scrub where California sagebrush is codominant. These vegetation communities both have a CDFW Natural Community Rank of S4 and are not considered sensitive by the CDFW⁷ (see California Fish and Game Code in Section 3.4.2 for Natural Community Rank definitions.) Brittlebush California Alliance comprises an estimated 95.74 acres of the site.

Other native plants observed within brittle bush scrub areas include, but are not necessarily limited to, wild cucumber (*Marah macrocarpa*), and wishbone bush (*Mirabilis californica*). Native annuals observed in these areas include forget-me-not (*Cryptantha* species), sapphire woollystar (*Eriastrum sapphirinum*), dove lupine (*Lupinus bicolor*), and wild hyacinth (*Dichelostemma capitatum*).

Delhi soils occur in patches and as a small percentage of the overall sandy soils in the project site. Where present within this vegetation community, Delhi soils are immediately adjacent to larger areas of Delhi soils in more sparsely vegetated and disturbed habitats, such as non-native grassland.

California buckwheat scrub on the site is dominated by California buckwheat and brittlebush. California buckwheat scrub commonly occurs on dry slopes, washes, and canyons that are scattered throughout foothills and mountains. This association is likely to be seral (an intermediate stage in ecological succession) to other plant communities. It is most often found on slopes that have been disturbed within the preceding 10 years. California buckwheat scrub forms an intermittent shrub canopy less than one meter (about 3 feet) tall over a variable or grassy ground layer. This vegetation

⁷ California Department of Fish and Wildlife (CDFW). 2020. California Natural Community List. Updated August 2021. Website: <http://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities>. Accessed January 17, 2022.

community is often found growing on shallow, rocky soils. It has a CDFW Natural Community Rank of S5 and is not considered sensitive by the CDFW.⁸

California buckwheat scrub occurs in two limited areas in the project site: the southern tip of the site near an off-site water tank and on a steep north and northeast facing slope in the northeastern portion of the project site (see Exhibit 3.4-2). This species comprises an estimated 38.63 acres of the site.

Some species associated with this plant community include deerweed and California sagebrush. Other native plants observed within California buckwheat scrub areas include, but are not necessarily limited to, California brickellbush (*Brickellia californica*) and cudweed aster (*Corethrogyne [Lessingia] filaginifolia*). Native annuals observed in these areas include slender pectocarya (*Pectocarya linearis*), fiddleneck (*Amsinckia intermedia*), filago (*Logfia* sp.), pygmy stonecrop (*Crassula connata*), dodder (*Cuscuta* sp.), dove lupine, and wild hyacinth.

Sage Scrub Chaparral, including Bush Penstemon Scrub

Bush penstemon scrub has bush penstemon (*Keckiella antirrhinoides*) as a dominant or codominant in the shrub canopy. This vegetation community occupies transitional sites between chaparral and coastal scrub habitats. It has a CDFW Natural Community Rank of S3 and is considered sensitive by the CDFW.⁹

One small area of bush penstemon scrub is located on a north-facing slope in the northwest corner of the project site. This species comprises an estimated 0.59 acres of the site. Associated plant species are skunk bush (*Rhus aromatica*), spiny redberry (*Rhamnus crocea*), branching phacelia (*Phacelia ramosissima*), and rope vine (*Clematis pauciflora*).

Chaparral (25.30 acres)

Small areas of the site, mostly in association with higher elevation rocky hilltops and shaded northern slopes and ravines, are vegetated with chamise chaparral. This community is dominated by chamise (*Adenostoma fasciculatum*), which forms an intermittent to continuous canopy less than 3 meters (about 10 feet) tall. The understory is generally a sparse herbaceous layer, especially in older stands. Chamise chaparral is commonly found on the drier south and west facing slopes and ridges, growing in shallow soils. This vegetation community has a CDFW Natural Community Rank of S5 and is not considered sensitive by the CDFW.¹⁰ This species comprises an estimated 25.30 acres of the site.

The most common species associated with this community in the project site include black sage (*Salvia mellifera*) and bush penstemon. Other plants observed in these areas include spiny redberry, hollyleaf cherry (*Prunus ilicifolia*), skunk bush, sticky monkeyflower (*Mimulus aurantiacus*), lanceleaf

⁸ California Department of Fish and Wildlife (CDFW). 2020. California Natural Community List. Updated August 2021. Website: <http://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities>. Accessed January 17, 2022.

⁹ Ibid.

¹⁰ California Department of Fish and Wildlife (CDFW). 2020. California Natural Community List. Updated August 2021. <http://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities>. Accessed January 17, 2021.

dudleya (*Dudleya lanceolata*), Bigelow spike-moss (*Selaginella bigelovii*), golden yarrow (*Eriophyllum confertiflorum*), and chia (*Salvia columbariae*).

Sage Scrub Chaparral (0.59 acre)

Sage scrub chaparral on the project site consists of bush penstemon scrub, which has bush penstemon (*Keckiella antirrhinoides*) as a dominant or codominant in the shrub canopy. This vegetation community occupies transitional sites between chaparral and coastal scrub habitats. It has a CDFW Natural Community Rank of S3 and is considered sensitive by the CDFW.¹¹

One small area of bush penstemon scrub is located on a north-facing slope in the northwest corner of the project site. This species comprises an estimated 0.59 acre of the site. Associated plant species are skunk bush (*Rhus aromatica*), spiny redberry (*Rhamnus crocea*), branching phacelia (*Phacelia ramosissima*), and rope vine (*Clematis pauciflora*).

Riparian (0.39 acre)

Riparian vegetation on the project site is composed of a mix of arroyo willow (*Salix lasiolepis*), mulefat, and black willow (*Salix gooddingii*). This vegetation community has a CDFW Natural Community Rank of S4 and is not considered sensitive by the CDFW.¹²

This community is limited within the project site, existing only in three very small areas comprising an estimated 0.39 acre of the site. In addition, these areas within the project site have been disturbed by human encroachment and trash dumping. The habitat supports few other riparian or wetland species and is not dense. What remains of this habitat in the project site is sparse and damaged and often laden with discarded household material. It is present as patches of one or two willows with a mixed invasive and native understory. In some cases, non-native tree tobacco (*Nicotiana glauca*) and Peruvian pepper tree (*Schinus* sp.) are within or adjacent to willow scrub. A single immature California sycamore (*Platanus racemosa*) was also observed.

Non-native Grasslands (160.72 acres)

Non-native grasslands consist of low herbaceous vegetation that is dominated by non-native annual grasses of various genera that are primarily of Mediterranean origin, including wild oats (*Avena* sp.), brome grasses (*Bromus* sp.), and Mediterranean grass (*Schismus* sp.). Small annual plants are also associated with this community and scattered throughout the habitat. Within this vegetation community are remnant plants associated with brittle bush scrub and California buckwheat scrub communities. This vegetation community is not considered sensitive by the CDFW.¹³

This habitat is located along the western margins, within the central portion of the site, and in the northeastern corner of the project site, just east of the Sunnyslope residential area (which is located to the west of the project site, see Exhibit 2-2). This vegetation community comprises an estimated

¹¹ California Department of Fish and Wildlife (CDFW). 2020. California Natural Community List. Updated August 2021. <http://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities>. Accessed January 17, 2021.

¹² Ibid.

¹³ California Department of Fish and Wildlife (CDFW). 2020. California Natural Community List. Updated August 2021. <http://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities>. Accessed January 17, 2021.

160.72 acres of the site. The majority of Delhi soils occur along the northern half of the westernmost edge of the survey area and almost all occur within this habitat type.

Ornamental Vegetation (1.00 acre)

Ornamental vegetation occurs within two drainages, as well as adjacent to the northeastern project site boundary, contiguous with off-site residential development. Within the drainage features, non-native ornamental vegetation consists of Peruvian pepper trees. Outside of the drainage features, non-native ornamental vegetation includes Peruvian pepper tree, olive, and other ornamental species. This vegetation community comprises an estimated 1.0 acre of the site.

Developed Land (0.07 acre)

Developed land is found in a small area near the southern tip of the project site where a water tank and adjacent mine are present. An estimated 0.07 acre of developed land are mapped on the site.

Sensitive Biological Communities

MSHCP Riparian/Riverine Habitat

Under MSHCP Volume 1 Section 6.1.2, areas associated with wetland and streambed systems must be evaluated for consideration as MSHCP Riparian/Riverine or vernal pool habitat. The project site contains four small areas of woody, water-dependent vegetation. Arroyo willow, black willow, and mulefat are present within small portions of Drainage Features 2, 4, 10, and 11 (Drainage Features are shown in Exhibit 3.4-3). In addition, Peruvian pepper tree, although ornamental and invasive, is classified as a facultative upland species. Peruvian pepper trees are therefore included in the riparian vegetation calculations where they occur in or adjacent to drainage features. MSHCP Riparian habitat corresponds to the area mapped as State wetland (see Exhibit 3.4-3).

A streambed channel, either unvegetated or vegetated with upland species, generally qualifies as MSHCP Riverine habitat. Therefore, Riverine habitat occurs in a narrow band along the drainage features where riparian habitats are absent. MSHCP Riverine habitat corresponds to the area mapped as State streambed.

Vernal pools are depressions where a relatively impermeable underground layer prevents rainwater from draining downward into the subsoils. During winter and spring rains, the water collects and remains in the depressions. The water gradually evaporates away until the pools become completely dry in the summer and fall. The soil texture (the amount of sand, silt, and clay particles) typically contains higher amounts of fine silts and clays with lower percolation rates. Pools that retain water for a sufficient length of time will develop hydric cells. Hydric cells form when the soil is saturated from flooding for extended periods and anaerobic conditions (lacking oxygen) develop.

Soil types are not consistent with an alkali playa or vernal pool complex and pools or depressions characteristic of vernal pool habitat were not found on the property. L&L found no features present on-site that would support fairy shrimp. No standing water or other sign of ponding water (e.g., mud cracks, tire ruts) were recorded.

Wetlands and Waters of the United States and the State

According to the L&L BRA, 12 non-relatively permanent water (non-RPW) features (i.e., ephemeral carriers of periodic rainfall) with tributaries were identified within the project site during the 2017 jurisdictional delineation by L&L Environmental, Inc. which includes 5.98 acres of State streambed and 0.88 acre of State wetlands [a total of 6.86 acres of CDFW jurisdiction] of which a total of 3.15 acres of RWQCB State jurisdiction is present. (Exhibit 3.4-3). As shown in Exhibit 3.4-3 (and Table 7 in the L&L BRA, [included in Appendix D]), no federal waters and wetlands are present within the project site.

The features on the property do not appear to be tributary to the Santa Ana River or any other relatively permanent water (RPW) or traditional navigable water (TNW). As stated in the L&L BRA, the USACE issued an Approved Jurisdictional Determination on February 11, 2021, stating that waters of the United States do not occur on the project site (Appendix D). It should also be noted that the drainages on-site would not be expected to be regulated by the USACE under the recent guidance issued pursuant to the U.S. Supreme Court case *Sackett v. U.S. Environmental Protection Agency*.

Common Wildlife

A list of both common and special-status wildlife species detected on the project site is included in Table 10 of the L&L BRA (see Appendix D). As shown in this table, a total of 291 wildlife species were observed on or adjacent to the project site during biological surveys conducted between 2006 and 2018. Of these, 115 species were only observed during the AMEC surveys conducted in 2005 and 2006. Most of the 115 species observed by AMEC were insects observed during the 2005 Delhi Sands flower-loving fly surveys.

Wildlife species observed or detected in the survey area are characteristic of those expected to occupy habitats in the region. Although the project site is isolated and surrounded by urban development, wildlife is generally diverse and abundant on-site due to the large area of natural open space. The project site is comprised largely of a single vegetative community (brittle bush scrub) that may limit the diversity of species occurring. The sage scrub and grassland habitats that cover much of the project site provide foraging and cover habitat for year-round residents, seasonal residents, and migrating songbirds.

Dogs, cats, horseback riders, off-road vehicle recreationists, mountain bikers, hikers, and unauthorized campers were all observed utilizing the project site.

Special-status Species

The L&L BRA discusses the following special-status plant species and special-status wildlife species.

Special-status Plants

Listed Plant Species

State- or federally listed and special-status plant species were evaluated as a part of the L&L BRA. Potential for occurrence of these species at the project site is listed in Table 12 of the L&L BRA (Appendix D). These species were either documented by the California Natural Diversity Database

(CNDDDB) as occurring within the vicinity of the project site or were addressed in previous reports. No State- or federally listed plant species were observed, and none were determined to have high or moderate potential to occur within the project site.

Thread-leaved Brodiaea

Thread-leaved brodiaea (*Brodiaea filifolia*) is federally listed threatened, State-listed endangered, and has a CRPR of 1B.1. It is typically found in herbaceous plant communities, including non-native grassland, alkali playa, and vernal pool communities, but also grows in open areas in shrub-dominated coastal sage scrub ecosystems. Within these communities, thread-leaved brodiaea occurs in open areas on clay soils, soils with clay subsurface, or clay lenses within loamy, silty loam, loamy sand, silty deposits with cobbles, or alkaline soils ranging in elevation from 100 feet to 2,500 feet.

Thread-leaved brodiaea is a covered species under the MSHCP and is considered Adequately Conserved. As shown in Figure 17 (Appendix F) of the L&L BRA (included in Appendix D), surveys are required in the Criteria Areas, but the project site is not within an MSHCP Criteria Area, nor is the project site within USFWS designated critical habitat for this species. The L&L BRA determined that thread-leaved brodiaea has a low potential for occurrence on the project site.

Non-Listed Plant Species

One special-status plant species, Plummer's mariposa lily, was observed in the project site during the 2017 surveys. It was not observed during previous surveys in 2014, 2015, or 2016, nor was it observed during the 2018 survey. Two other special-status species, Robinson's pepper grass (*Lepidium virginicum* var. *robinsonii*), and mesa horkelia (*Horkelia cuneata* ssp. *puberula*), have potentially suitable habitat in the survey area and moderate potential for occurrence, but have not been observed.

Plummer's Mariposa Lily

Plummer's mariposa lily has a CRPR of 4.2. Plummer's mariposa lily was observed in the project site but is considered a "Covered Species Adequately Conserved"¹⁴ under the MSHCP once conservation objectives have been met. The RCA conservation goals (as set forth in Section 9.2 of the MSHCP, Volume I and Table 9-3), for Plummer's mariposa lily have been met and it is now considered Adequately Conserved. Therefore, take authorization for this species could be available through the Section 10(a) Permit issued in conjunction with the MSHCP Implementing Agreement.

Mesa Horkelia

Mesa horkelia has a CRPR of 1B.1. This species inhabits chaparral, cismontane woodlands, and coastal scrub on sandy or gravelly soils. It is endemic to California and is found in the South Coast ranges, especially the foothill edge of the Los Angeles Basin. The L&L BRA determined there are four historic CNDDDB records of this species within 5 miles of the project site from 1885 to 1908. Mesa horkelia was not found during the surveys conducted between 2006 and 2018. Potentially suitable

¹⁴ Covered Species Adequately Conserved are the initial 118 Covered Species and any of the remaining 28 Covered Species where the species objectives, set forth in Section 9.2 of the MSHCP, Volume I and Table 9-3, are met and which are provided Take Authorization through the NCCP Permit and for animals through the Section 10(a) Permit issued in conjunction with the Implementing Agreement. These species are discussed in Section 2.1.4 of the MSHCP, Volume I, and listed in Exhibit "D" to the Implementing Agreement and Section 9.2 of the MSHCP, Volume I.

habitat for mesa horkelia occurs on-site on steep slopes and rocky hillsides, and the species has a moderate potential to occur. Mesa horkelia is not a covered species under the MSHCP.

Robinson's Pepper Grass

Robinson's pepper grass has a CRPR of 4.3 and is found in chaparral and coastal scrub. It is known to occur in San Diego, Riverside, San Bernardino, Los Angeles, Ventura and Santa Barbara counties, and some of the Channel Islands. There are four CNDDDB records within 5 miles of the project site. The CNDDDB identifies the closest occurrence as 1 mile southeast of the project site, near the Santa Ana River (record from 1952). Potentially suitable habitat for Robinson's pepper grass occurs on-site on steep slopes and rocky hillsides. The species was not observed on-site by L&L but has a moderate potential to occur. Robinson's pepper grass is not a covered species under the MSHCP.

Palmer's Oak

A single Palmer's oak is present within the eastern portion of the survey area. Although not a listed or special-status species, this individual is a unique botanical resource. Palmer's oak is present as a cluster called a "clone" at one (1) locality. Evidence indicates that this locality is a single cloned individual. The size of the clone and estimates of annual growth led researchers to conclude that the clone is more than 13,000 years old and may be as much as 18,000 years old. This would date the tree to the Late Pleistocene, possibly soon after the last glacial period.¹⁵ Southern California is known to have only remnants of this species that occur as small, isolated populations, likely due to the species' preference for cooler, wetter climates. This locality may be the oldest living Palmer's oak and potentially the oldest plant in California. Although Palmer's oak is not a listed or special-status species, this oak is a unique individual specimen and is very uncommon within cismontane western Riverside County. The specific location of the Palmer's oak is intentionally omitted from this Draft EIR in order to ensure that it remains protected.

Narrow Endemic Plant Species

The MSHCP requires a habitat assessment be conducted for the following Narrow Endemic plants: San Diego ambrosia, Brand's phacelia, and San Miguel savory. These species were not observed during focused botanical surveys conducted by L&L between April 2014 and September 2018 and suitable habitat is either lacking or of poor quality to support these plant species. Therefore, these species are considered absent from the project site.

San Diego Ambrosia

San Diego ambrosia is federally listed as endangered and has a CRPR of 1B.1. It is distributed within western Riverside County and western San Diego County and further south in widely scattered populations along the West Coast of Baja California. The L&L BRA identifies only one CNDDDB record of this species, located approximately 4.25 miles southwest of the project site (record from 1940); however, this species is believed to be locally extirpated due to existing development. All other records are at least 19 miles south of the project site. There is no USFWS designated critical habitat for this species on the project site.

¹⁵ May, M.R., M.C. Provance, A.C. Sanders, N.C. Ellstrand, and J. Ross-Ibera. 2009. A Pleistocene Clone of Palmer's Oak Persisting in Southern California. PlosOne 4(12):e8346.

According to the L&L BRA, “periodic flooding may be necessary at some stage of the plant population’s life history (such as seed germination, dispersal of seeds and rhizomes) or to maintain some essential aspect of its habitat, because native occurrences of the plant are always found on river terraces or within the watersheds of vernal pools.” Propagation is primarily through extensions of rhizomes (underground stems) indicating that each population could be a single plant and restricted to the immediate appropriate habitat. San Diego ambrosia is sensitive to seasonal conditions and variation causing the amount of above ground biomass to fluctuate from year to year. Flowers are generally present from April to October. Because a portion of San Diego ambrosia populations remain dormant in dry years and because of its vegetative similarity to other ambrosia species, it is difficult to inventory in terms of identification, number of individuals, and true spatial extent of populations.

No suitable habitat for this species was observed in the survey area and the site is likely on the margin of its geographic range. San Diego ambrosia was not observed during multiple years of surveys, including the focused botanical surveys conducted by L&L between April 2014 and September 2018. Therefore, this species is considered absent from the site.

Brand’s Phacelia

Brand’s phacelia, also known as Brand’s star phacelia, has a CRPR of 1B.1. The L&L BRA identified 15 historic records of this species within California. Observations range from Los Angeles County, inland to Riverside County, and south to Mexico, with most of the recent records located in San Diego County. According to the BRA, the CNDDDB documents an occurrence from 2000 in Rancho Jurupa Park within the Santa Ana River floodplain, approximately 1.75 miles south of the project site. Another occurrence from 2003 is documented near Rancho Cucamonga about 9.3 miles northwest of the project site but has likely been extirpated by previous development.

Brand’s phacelia occurs in open habitats on sandy soils, coastal dunes, and coastal scrub. Flowers are generally present from March through June. Potentially suitable habitat occurs in the project site, but it is regularly impacted and heavily disturbed by off-road vehicle use, although light to moderate disturbance may benefit this species, according to the L&L BRA. The species was not observed during multiple years of surveys, including focused botanical surveys conducted by L&L between April 2014 and September 2018. Brand’s phacelia is considered absent from the project site.

San Miguel Savory

San Miguel savory has a CRPR of 1B.2. It is distributed within western Riverside County, southeastern Orange County, and western San Diego County, California. The L&L BRA found that all CNDDDB records of this species within Riverside County are located within the Santa Ana Mountains, Elsinore Mountains, and Santa Rosa Plateau. There are no records north of Lake Elsinore, which is located about 24 miles south of the project site. This species is found on rocky, gabbroic, and metavolcanic soils in coastal sage scrub, chaparral, cismontane and riparian woodlands, and grasslands. Flowers are generally present from March through July. Potentially suitable habitat occurs in the survey area, but the survey area is to the north of the known range of the species. San Miguel savory was not observed during multiple years of surveys, including focused botanical surveys, and is considered absent from the site.

Special-status Wildlife

Listed Wildlife Species

Wildlife species listed as endangered, threatened, fully protected, or candidates for listing as endangered or threatened were evaluated as a part of this assessment. Potential for occurrence of these species is listed in Table 12 of the L&L BRA (included in Appendix D). These species were either documented by the CNDDDB to occur within the proposed project's topographic quadrangle or adjacent quadrangles, addressed in previous reports, or identified by the USFWS, MSHCP, or other source as potentially occurring in the area.

One listed wildlife species, coastal California gnatcatcher (*Poliioptila californica californica*), was observed on the project site during surveys from 2014 through 2018 by L&L, discussed below. Five other species: Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*), least Bell's vireo (*Vireo bellii pusillus*), Southwestern willow flycatcher (*Empidonax traillii extimus*), Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), and Crotch's bumble bee (*Bombus crotchii*), are also discussed below, although these species were not observed during protocol surveys conducted in 2015-2016 by L&L.

Coastal California Gnatcatcher

Coastal California gnatcatcher (CAGN) is federally listed as threatened and a CDFW Species of Special Concern. This small, insectivorous songbird occurs almost exclusively in several distinctive sub-associations of the coastal sage scrub plant community. The present project site is not located within the revised critical habitat for this species.

According to the L&L BRA, there are seven CNDDDB records for CAGN within 5 miles of the project site. Five of the occurrences are within the Jurupa Hills: one occurrence, recorded in 1999 is located approximately 1,000 feet north of the project site; one occurrence, recorded in 1995, is located approximately 0.7 mile northwest of the project site; three occurrences, two recorded in 1994 and one in 1998 are located approximately 3 miles west of the project site; one occurrence, recorded in 1997, is within the Pedley Hills, approximately 2.1 miles west-southwest of the project site; and one occurrence, recorded in 1924, is approximately 3.6 miles northeast of the project site, however this record of CAGN is believed to be locally extirpated.

The project site includes suitable habitat for CAGN and it has moderate potential for occurrence. Three CAGN were incidentally observed during botanical surveys in 2017 conducted by L&L.

CAGN is considered a "Covered Species Adequately Conserved" under the MSHCP. The Jurupa Mountains Subunit conservation efforts include conserving large intact habitat blocks consisting of coastal sage scrub, chaparral, and grasslands to support CAGN. Although the site is not within the Subunit, the Plan Area avoids approximately 363 acres of coastal sage scrub and 63 acres of chaparral and grasslands combined.

Delhi Sands Flower-loving Fly

Delhi Sands flower-loving fly (DSF) is federally listed as endangered. DSF is restricted in distribution to the Colton Dune system, which covers an area of approximately 40 square miles in the cities of Colton, Rialto, Fontana, and Ontario. It is estimated that as much as 97 percent of formerly known

DSF habitat has been converted for human uses or has been adversely impacted by various anthropogenic disturbances. No critical habitat has been designated for this species.

According to the L&L BRA, much of the life history of DSF (e.g., food source, lifespan of the immature stages, etc.) is poorly known. Most DSF are observed perching on the soil surface or on plants in sparsely vegetated areas (such as unpaved roads or trails) adjacent to or within occupied habitat. Male flies are most often observed, usually defending territories, or flying in search of females for mating. Adult flies are active during the late summer months of August and September, when temperatures in the region often rise above 100°F (degrees Fahrenheit). DSF larval development takes place underground within Delhi series sands for the remaining months of the year and adult flies emerge from pupal cases located just under the soil surface. Although few DSF feeding behaviors have been observed by researchers to date, indications are that the flowers of California buckwheat may be a potentially important nectar resource. Other indicator plant species are California croton (*Croton californicus*) and telegraph weed (*Heterotheca grandiflora*). Scattered patches of California buckwheat are present within the mapped California brittle bush scrub habitat on-site. California croton and telegraph weed are also present on-site.

According to the L&L BRA, DSF was observed on the western portion of the site by AMEC Biologists in August 2005. Adult flies were observed on four separate dates and carcasses of dead flies were located on two other dates. All DSF observations were made within an approximately 3.73-acre area on the western edge of the project site, where flat areas containing Delhi series (sandy) soils are present next to a residential area (see Figure 5 of the L&L BRA, included in Appendix D). Other sandy areas, totaling approximately 17.52 acres, along the western portion of the project site were surveyed by AMEC with negative results.

L&L conducted a 2-year focused survey in 2015 and 2016 to document the status of DSF in the survey area and to map any changes to the habitat. Focused surveys were conducted between July 1 and September 20, 2015, and between July 3 and September 14, 2016. Despite a thorough survey effort, no DSF were observed. During this 2015–2016 DSF survey, it was noted that insect diversity and overall numbers appeared to be lower than past years. Many insects commonly observed in 2015 on the site were absent or rarely observed in 2016. In addition, Hymenoptera (bees and wasps) and Lepidoptera (butterflies and moths) were conspicuously uncommon or even absent during some survey days.

In disturbed areas, such as the project site, Russian thistle (*Salsola tragus*) and annual sunflower (*Helianthus annuus*) may provide reliable nectar resources (and observation areas) for insects during the hot summer months. During the 2016 surveys by L&L, these plants were low in number and many were stunted. As a result, nectar resources were uncommon throughout the project site.

Off-road vehicle impacts are common on the project site. Many of the roads and trails in the survey area have been widened significantly over the years because of increased recreational traffic. Most notably, there is increased disturbance to the sandy area at the central portion of the project site where historic DSF observations have occurred. California croton was once common in this area and is almost extirpated. Because of ongoing disturbance over the last decade and a lack of DSF sightings during focused L&L studies in 2015 and 2016, it is likely that DSF has been extirpated from this area.

However, the L&L BRA does disclose that DSF has been recorded just north (off-site) of the project site in a small sandy area or “blowout.” This population has been referred to as the “Rattlesnake Mountain” colony, which is adjacent to an abandoned mine. This area lies just north of the Riverside-San Bernardino County line, approximately 300 feet north of the project site boundary, and is situated on a northwest-facing slope.

DSF is a covered species under the MSHCP and considered Adequately Conserved. Conservation efforts for this species under the MSHCP are focused on suitable habitat and linkages within Core Areas or adjacent to conserved habitats, including those that are not within MSHCP Criteria Areas. As shown in Figure 17 of the L&L BRA (included in Appendix D), the project site is not in or adjacent to a Core or a Criteria Area.

Riparian Birds

Least Bell’s vireo is State and federally listed as endangered. It is a covered species under the MSHCP and considered Adequately Conserved, but surveys are required in suitable habitat as described in MSHCP Section 6.1.2 and mitigation is required if the species is present. This species is migratory and breeds in California, arriving in March and departing by September or October. Males establish and defend territories in riparian woodlands and riparian scrub. Dense shrub cover is required for nesting.

Southwestern willow flycatcher is State and federally listed as endangered. It is a covered species under the MSHCP and considered Adequately Conserved, but surveys are required in suitable habitat as described in MSHCP Section 6.1.2 and mitigation is required if the species is present. This species inhabits dense riparian forests with ample numbers of willows and other associated trees and shrubs.

Western yellow-billed cuckoo is federally listed as threatened and State-listed as endangered. It is a covered species under the MSHCP and considered Adequately Conserved, but surveys are required in suitable habitat as described in MSHCP Section 6.1.2 and mitigation is required if the species is present. This species inhabits extensive riparian thickets or forests with dense, low-level or understory foliage and abutting on slow-moving watercourses, backwaters, or seeps.

According to the L&L BRA, the limited riparian vegetation in the project site does not provide suitable habitat for least Bell’s vireo, southwestern willow flycatcher, or western yellow-billed cuckoo. Although willow and cottonwood species are present in small areas, the diversity and density of the vegetation is not adequate to support these species. Therefore, there is no suitable habitat for these species on or adjacent to the site and they are considered absent.

Crotch’s Bumble Bee

Crotch’s bumble bee was originally advanced to candidacy for State listing in June 2019. This status was challenged in court, and a trial court decision temporarily removed its candidacy in February 2021. A state supreme court ruling reversed this judgment and reinstated its candidacy on September 30, 2022 (Supreme Court Case S275412). Information from CDFW (as of October 2022)

indicates that Crotch's bumble bee is a candidate for State listing as endangered.¹⁶ Candidates for State listing receive the same protections as State-listed species.

This species primarily nests underground, often using abandoned rodent burrows, but may also use rock piles, tree cavities, etc. This species was observed on the project site by AMEC in 2005. Crotch's bumble bee is not a covered species under the MSHCP.

A focused survey for this species is required to determine presence/absence. If the species is present on the project site and will be impacted, an Incidental Take Permit from the CDFW and associated mitigation may be required.

Other Special-status Species

Special-status wildlife species that are not listed but known to occur or are expected to occur within the vicinity of the project site were evaluated in the L&L BRA. Potential for occurrence of these species is listed in Table 12 of the L&L BRA (included in Appendix D). These species were either documented by the CNDDDB to occur within the project site United States Geological Survey (USGS) quadrangle or adjacent quadrangles, were addressed in previous reports covering the project site (referenced in Section 8 of the L&L BRA), or were identified by the USFWS, MSHCP, or other source as potentially occurring in the area.

According to the L&L BRA, nine special-status wildlife species were observed on-site during the 2014, 2015, 2016, 2017, and/or 2018 biological surveys conducted by L&L: Cooper's hawk, Southern California rufous-crowned sparrow, Lawrence's goldfinch (*Spinus lawrencei*), northern harrier, great egret (*Ardea alba*), Costa's hummingbird (*Calypte costae*), red-diamond rattlesnake, orange-throated whiptail (*Aspidoscelis hyperythra*), and San Diego black-tailed jackrabbit (see Figure 9 and Table 15 of the L&L BRA, included in Appendix D). Rosy boa (*Lichanura trivirgata*) was also observed but is no longer considered a special-status species by CDFW. Two other special-status wildlife species were observed during the 2005 biological surveys conducted by AMEC: coast horned lizard (*Phrynosoma blainvillii*) and coastal whiptail.

The L&L BRA determined that 18 other special-status wildlife species were to have high or moderate potential to occur in the project site, based on presence of suitable habitat, species range, and proximity to known occurrences. These species are: Southern California legless lizard (*Anniella stebbinsi*), California glossy snake (*Arizona elegans occidentalis*), San Diego banded gecko (*Coleonyx variegatus abbotti*), San Bernardino ringneck snake (*Diadophis punctatus ssp. modestus*), coast patch-nosed snake (*Salvadora hexalepis virgulata*), sharp-shinned hawk (*Accipiter striatus*), Bell's sage sparrow (*Artemisiospiza belli belli*), wrentit (*Chamaea fasciata*), California horned lark (*Eremophila alpestris actia*), peregrine falcon (*Falco peregrinus anatum*), loggerhead shrike (*Lanius ludovicianus*), Allen's hummingbird (*Selasphorus sasin*), Brewer's sparrow (*Spizella breweri*), black-chinned sparrow (*Spizella atrogularis*), northwestern San Diego pocket mouse (*Chaetodipus fallax*

¹⁶ California Natural Diversity Database (CNDDDB). 2022. State and Federally Listed Endangered and Threatened Animals of California. California Department of Fish and Wildlife. October. Website: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109405&inline>. Accessed November 3, 2022.

fallax), pallid bat (*Antrozous pallidus*), western mastiff bat (*Eumops perotis californicus*), and pocketed free-tailed bat (*Nyctinomops femorosaccus*).

Of the species observed or that the L&L BRA determined to have high or moderate potential to occur in the project site, the MSHCP considers the following species to be “Covered Species Adequately Conserved:” orange-throated whiptail, coastal whiptail, coast horned lizard, San Diego banded gecko, red-diamond rattlesnake, Cooper’s hawk, sharp-shinned hawk, Bell’s sage sparrow, Southern California rufous-crowned sparrow, California horned lark, peregrine falcon, loggerhead shrike, northern harrier, northwestern San Diego pocket mouse, and San Diego black-tailed jackrabbit.

Those species with suitable habitat and potential for impacts that are not covered by the MSHCP include great egret, Lawrence’s goldfinch, wrentit, Allen’s hummingbird, Brewer’s sparrow, black-chinned sparrow, Costa’s hummingbird, Southern California legless lizard, California glossy snake, San Bernardino ringneck snake, coast patch-nosed snake, pallid bat, western mastiff bat, and pocketed free-tailed bat.

Great Egret

The great egret is a CDFW Special Animal. It is found in marshlands, riparian forests, irrigated pastures, and wetlands. It nests in colonies in large trees. There is no suitable nesting habitat on the project site and no or marginal foraging habitat. The species was detected during surveys, but it is unknown if it was observed foraging on the project site or just flying over.

Lawrence’s Goldfinch

Lawrence’s goldfinch is a CDFW Special Animal and a USFWS Bird of Conservation Concern. This species typically nests in arid, open woodlands near chaparral, fields, and small bodies of water. The species feeds mostly on seeds of annual plants, with a preference for fiddlenecks (*Amsinckia* species) in its breeding range; in winter, its diet varies by region. These birds generally travel in pairs or flocks. Its breeding range is confined to the Central Valley and coastal foothills of California, as well as the northern portion of Baja California. The nearest CNDDDB record (nesting: EO #4) for the Lawrence’s goldfinch is 3.5 miles southwest of the survey area.

Although suitable woodland nesting habitat does not occur on the site, this species was observed foraging in the project site.

Wrentit

The wrentit is a USFWS Bird of Conservation Concern. It is found in chaparral, shrublands, and oak woodlands. It is a year-round resident in Southern California. It was not observed during surveys, but there are multiple eBird records of this species in the vicinity of the project site.

Allen’s Hummingbird

Allen’s hummingbird is a USFWS Bird of Conservation Concern. It is found in chaparral, scrub, and forest. It breeds in and migrates through Southern California. It was not observed during surveys, but there are many eBird records of this species in the vicinity of the project site.

Brewer's Sparrow

Brewer's sparrow is a CDFW Special Animal and a USFWS Bird of Conservation Concern. It is found in treeless shrub and desert scrub habitats. In California, it is a summer resident and breeder east of the Cascade-Sierra Nevada crest, in mountains and higher valleys of Mojave Desert, and in those bounding the southern end of the San Joaquin Valley. It is uncommon in Southern California at higher elevations of San Bernardino, Ventura, Kern, and San Luis Obispo Counties during the breeding season. There are no CNDDDB records (nesting) in Southern California. Its winter range includes southern Mojave and Colorado deserts. It was not observed during surveys but was identified on the adjacent Highland Park site. This may have been a migrating individual.

Black-chinned Sparrow

The black-chinned sparrow is a USFWS Bird of Conservation Concern. It is not tracked in the CNDDDB. It is migratory and breeds in Southern California in the Coast Ranges, Transverse Range, Peninsular Range, and mountains of southeastern California. It is found in chaparral, sagebrush, and arid scrublands on rugged slopes. It was not observed during surveys but was identified on the adjacent Highland Park site.

Costa's Hummingbird

Costa's hummingbird is a CDFW Special Animal and a USFWS Bird of Conservation Concern. It is a year-round resident in Southern California and found in chaparral, coastal scrub, desert scrub, open meadows, and gardens. The CNDDDB only tracks nesting for this species and there are no records in the CNDDDB database. There is suitable habitat on the site and the species was observed during surveys of the project site.

Southern California Legless Lizard

The southern California legless lizard is a CDFW Species of Special Concern. It is a snake-like, limbless, burrowing lizard that occurs from central California to northern Baja California, Mexico. Habitat for this lizard includes sparsely vegetated washes, beaches, chaparral, and certain woodlands. Legless lizards require loose soil (such as sand, loam, or leaf litter) for burrowing. There are 20 CNDDDB records of this species within five miles of the project site. The closest record is just south of the survey area. This species is secretive and difficult to detect. Suitable habitat for the species occurs in the survey area and it has a moderate potential to occur.

California Glossy Snake

The California glossy snake is a CDFW Species of Special Concern. This species inhabits arid scrub, rocky washes, grassland, and chaparral. It appears to prefer microhabitats of open areas and areas with soil loose enough for easy burrowing. The California glossy snake ranges from the San Francisco Bay Area south into Baja California, Mexico and is found from sea level to around 7,218 feet elevation. The CNDDDB documents six occurrences within five miles of the site. There is one historic record from 1935 (EO #101) near the southern end of the project site (but exact location unknown). The species was not observed during surveys, but suitable habitat for this species occurs in the project site. The species has a high potential to occur.

San Bernardino Ringneck Snake

San Bernardino ringneck snake is a CDFW Special Animal. It occurs in relatively rocky areas within woodland, chaparral, or grassland, usually in moist habitats. The species is endemic to California and ranges from Santa Barbara south along the coast to San Diego County and inland into the San Bernardino Mountains. There are no CNDDDB occurrences for this species within five miles of the survey area. This species was not observed during surveys, but suitable habitat is present in the project site. This species has a moderate potential to occur.

Coast Patch-nosed Snake

Coast patch-nosed snake is a CDFW Species of Special Concern. This snake is an active, diurnal resident of shrublands with open sandy areas. This species is found from San Luis Obispo County through coastal Southern California to northern Baja California. There are no CNDDDB records for this species within five miles of the project site. Suitable habitat is present on the project site in open areas of chaparral and sage scrub habitats with sandy and loose soils and this species has a high potential for occurrence.

Pallid Bat

Pallid bat is a CDFW Species of Special Concern. This species roosts in cliff faces and rock outcrops but can also be found in man-made structures or trees. Roosting and foraging locations are common in dry, open shrubland habitat, typically near water and below 6,000 feet in elevation. This species occurs in much of California except the high mountains. Pallid bats will hibernate in small groups in the winter. The CNDDDB has over 400 records of this species throughout California. The closest record of this species in the CNDDDB is in Redlands (EO #244), approximately 11 miles west-northwest of the project site. Suitable roosting habitat occurs in the rock outcrops on the site and suitable roosting and foraging habitat occurs on and adjacent to the project site. This project site does not have a consistent water source but is just over a mile from the Santa Ana River and Lake Evans and several quarry basins are less than a mile away. This species has a moderate potential for occurrence.

Western Mastiff Bat

Western mastiff bat is a CDFW Species of Special Concern. This species primarily roosts in cliff faces and rock outcrops, but may occasionally roost in high buildings, trees, and tunnels. It inhabits a variety of habitats, including dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, montane meadows, and agricultural areas. This species occurs from San Francisco south into much of Southern California. CNDDDB records identify this species throughout southern and central California, with the greatest concentration in the coastal areas of Southern California. There are two CNDDDB records within five miles of the project site. The closest is in the Pedley area (EO #172) from 1954, approximately 3.3 miles southwest of the project site (but exact location unknown). The other record (EO # 83) is from 1933 near Colton, about 3.7 miles northeast of the project site. Suitable roosting habitat on the site is limited to rock outcrops, although a steep cliff face is present just off-site to the west. Suitable foraging habitat occurs on and adjacent to the project site. This project site does not have a consistent water source, but it is just over 1 mile from the Santa Ana River and Lake Evans and several quarry basins are less than 1 mile from the project site. This species has a moderate potential for occurrence.

Pocketed Free-tailed Bat

Pocketed free-tailed bat is a CDFW Species of Special Concern. This species primarily roosts in crevices of high cliffs, but can also roost in caves, rock crevices, and man-made structures (bridges, mines, etc.). It inhabits arid lowland areas and is associated with creosote bush and chaparral habitats. It prefers prominent rock features or rocky canyons. This species occurs from southwestern Texas west through New Mexico and Arizona into Southern California and south to Mexico. CNDDDB records identify this species mainly in southwestern Southern California. There are two records of this species within five miles of the project site, EO #22 about 3 miles south of the survey area (from 1988, uncertainty in location of 2 miles) and EO #23 about 3.6 miles northeast (from 1985, uncertainty in location of nine miles). Suitable roosting habitat on-site includes rock outcroppings and crevices. Suitable roosting and foraging habitat occurs within and adjacent to the project site. This species has a moderate potential for occurrence.

*MSHCP Additional Survey Needs Species***Burrowing Owl**

The burrowing owl (*Athene cunicularia*) is a CDFW Species of Special Concern and a USFWS Bird of Conservation Concern. The MSHCP identified the burrowing owl as an “Additional Needs Species” for the project site, requiring a habitat assessment and (if warranted) focused surveys for the species. The burrowing owl historically occurred throughout much of California; however, many former populations have vanished. The burrowing owl occurs as a resident in open areas of the lowlands across much of the Southern California region. It requires open expanses of sparsely vegetated areas on gently rolling or level terrain with an abundance of small mammal burrows. It uses rodent or other burrows for roosting and nesting cover or may dig its own burrow in soft, friable soil. In Southern California, burrowing owl nesting areas are often found in association with California ground squirrel activity. Burrowing owl may also use pipes, culverts, and other man-made structures. One burrow is typically selected for use as the nest site and additional satellite burrows are usually found in the immediate vicinity of the nest burrow within the territory of the owl.

According to the L&L BRA, AMEC Biologists identified open habitats and small rodent burrows within the project site during their 2005 focused survey. However, no burrowing owl or burrowing owl sign was identified on-site or within the 150-meter buffer zone surrounding the project site. L&L conducted focused surveys in 2014, 2016, and 2018. Section 2.4 of the L&L BRA (included in Appendix D) provides survey details. California ground squirrels were observed in the project site, but not in high numbers. Most were observed in association with rocky outcrops within the southwestern portion of the site. All existing mammal burrows were thoroughly examined for evidence of burrowing owl, including molted feathers, prey remains, pellets, eggshell fragments, and whitewash. Approximately 75.2 acres of suitable burrowing owl habitat was identified within the project site of 150-meter buffer zone, but no burrowing owls or evidence of owl presence were observed.

Wildlife Movement Corridors

Wildlife corridors link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated “islands” of wildlife habitat. In the absence of habitat linkages that

allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas because movement barriers prohibit the infusion of new individuals and genetic information.

Corridors mitigate the effects of this fragmentation by:

- Allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange;
- Providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (fire, disease, etc.) will result in population or local species extirpation; and
- Serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other necessary resources.

Wildlife movement activities usually fall into one of three movement categories: dispersal (e.g., juvenile animals dispersing from natal areas or individuals extending their range), seasonal migration, and movements related to home range activities (e.g., foraging for food or water, defending territories, or searching for mates, breeding areas, or cover).

Connectivity

The land surrounding the project site consists of residential and industrial uses, as well as undeveloped land. Adjacent residential communities include the Crestmore Heights community, located northeast of the site, Sunnyslope to the west, the approved Highland Park residential community, approved Emerald Ridge North and South and additional residential use to the south, and the Rubidoux residential community to the south (south of State Route [SR] 60). Industrial uses are located to the east of the project site and commercial uses are to the southeast and southwest (beyond the residential uses). Stretches of developed land are located east, west, and north of the project site. See Exhibit 2-2.

According to Figure 17 of the L&L BRA (included in Appendix D), MSHCP Criteria Areas located in the vicinity of the project site include Core A (Santa Ana River) located north and west of the project site. The project site also lies between Noncontiguous Habitat Block 2 (Jurupa Mountains) and Block 3 (Delhi Soils).¹⁷ The project site can connect to the north and then northeast with the Jurupa Mountains and MSHCP-designated Noncontiguous Habitat Block 2, but the project site and this habitat block are otherwise remote and do not connect with Core habitat blocks.¹⁸ Core A is closest and lies approximately 1 mile southeast of the project site, but it is separated from the project site by roadways and a combination of commercial, industrial, and residential development. While large, the site does not offer connection between wildlife use areas. The project site is large enough to allow wildlife to move freely throughout the survey area and in some cases to surrounding areas via existing travel routes, such as drainages, ridgelines, and existing dirt roads and trails. Based on the

¹⁷ A Noncontiguous Habitat Block is a block of habitat not connected to other habitat areas via a Linkage or Constrained Linkage.

¹⁸ A Core Area is a block of Habitat of appropriate size, configuration, and vegetation characteristics to generally support the life history requirements of one or more Covered Species.

surrounding level of development, the project site mainly provides for movement on a smaller, localized scale for species that live within the survey area and immediately adjacent open lands and that are reasonably tolerant of human activity and proximity.

3.4.4 - Thresholds of Significance

Significance Criteria

In accordance with Section 15064.7 of the State CEQA Guidelines, the City of Jurupa Valley adopted local CEQA Guidelines. The City's local CEQA Guidelines are based, in part, on the CEQA checklist included in Appendix G of the State CEQA Guidelines. The City of Jurupa Valley Guidelines recognizes the following significance thresholds and Significance Criteria related to Biological Resources. Based on these significance thresholds, a project would have a significant impact on Biological Resources if it would:

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

Under the City's local significance threshold, the project would have significant effects if: The project results in a direct or indirect physical change in the environment which is caused by and immediately related to the project that has 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 United States Fish and Wildlife Service.

- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service.

Under the City's local significance threshold, the project would have significant effects if: The project results in a direct or an indirect physical change to 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 United States Fish and Wildlife Service.

- c) Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Under the City's local significance threshold, the project would have significant effects if: The project results in a direct or an indirect physical change to State or federally protected wetlands.

- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.

Under the City's local significance threshold, the project would have significant effects if: The project results in a direct or an indirect physical change to the movement of any native

resident or migratory fish or wildlife species or to established native resident or migratory wildlife corridors, or impedes the use of native wildlife nursery sites or conflicts with the MBTA.

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

Under the City's local significance threshold, the project would have significant effects if: The project is inconsistent with the following General Plan Policies:

- COS 1.2—Protection of Significant Trees.
- COS 1.3—Other Significant Vegetation.

- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan.

Under the City's local significance threshold, the project would have significant effects if: The project is in conflict with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP).

Approach to Analysis

Impacts on biological resources were evaluated based on the likelihood that special-status species, sensitive habitats, wildlife corridors, and protected trees are present on the project site, and the likely effects of project construction or operation on these resources. For the purposes of this Draft EIR, the word "substantial" as used in the significance thresholds above is defined by the following three principal components:

- Magnitude and duration of the impact (e.g., substantial/not substantial),
- Uniqueness of the affected resource (rarity), and
- Susceptibility of the affected resource to disturbance.

In this Biological Resources Analysis, the project site is defined as all areas directly affected by project development.

3.4.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Special-status Species

Threshold BIO-1:	Would the proposed project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service?
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Under the City's local significance threshold, the project would have significant effects if: The project results in a direct or indirect physical change in the environment which is caused by and immediately

related to the project that has 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 CDFW or USFWS.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

These include existing regulatory requirements such as plans, policies, or programs applied to the proposed project based on federal, State, or local law currently in place which effectively reduce impacts to biological resources.

There are no PPPs applicable to special-status species.

Project Design Features

The conceptual land use plan for the proposed project sets aside approximately 510.8 acres of open space that would not be developed, but would rather be placed under a deed with restrictions from future development.¹⁹ The dedicated open space would also serve as mitigation, providing areas of preservation for the species noted in this section.

In addition, the proposed project would design measures to meet MSHCP Urban/Wildlands Interface guidelines and requirements, as listed in Section 6.1.4 of the MSHCP.

Impact Analysis

Special-status Plant Species

Listed Plants

The L&L BRA determined all listed plant species shown in Table 12 of the BRA (see Appendix D) to have low or absent potential to occur in the project site. No State- or federally listed plant species were observed on the project during focused surveys. Additionally, there are no CNDDDB recorded occurrences of listed plant species within the project site. Therefore, implementation of the proposed project is not expected to result in any impact to listed plant species.

Non-listed Plants

One special-status plant species, Plummer's mariposa lily, was observed in the project site. This species is covered under the MSHCP and considered Adequately Conserved and no mitigation is proposed. The BRA determined two special-status plant species: Robinson's pepper grass and mesa horkelia, have moderate potential to occur due to the presence of suitable habitat. These species are not covered under the MSHCP.

Robinson's Pepper Grass

Robinson's pepper grass has a CRPR of 4.3. CNDDDB records of this species are present throughout the coastal and inland valleys and foothills of Southern California. Although some may have been lost due to development, numerous populations are located within MSHCP-conserved lands and more within Criteria Areas. With the number and frequency of records within Riverside, San Diego,

¹⁹ L&L Environmental, Inc. 2016. Updated Biological Assessment, Jurisdictional Delineation, Narrow Endemic Plant, Burrowing Owl, and DSF Focused Surveys Rio Vista, Specific Plan 16001, Jurupa Valley, California. December. Most recently updated: January 2022.

San Bernardino, and Los Angeles counties, the known locations of this species within MSHCP Conservation Areas, and implementation of mitigation measures, impacts to Robinson's pepper grass (if this species occurs) would be considered adverse, but less than significant.

Mesa Horkelia

Mesa horkelia has a CRPR of 1B.1. The CNDDDB identifies over 100 records of mesa horkelia within California including numerous records in the lowlands and foothills of southwestern San Bernardino County and Los Angeles County, as well as limited records of this species in Riverside, San Diego, and Orange counties. Based on the wide distribution and number of locations of this species, and implementation of project mitigation measures, impacts to mesa horkelia (if this species occurs) would be considered adverse, but not significant.

MSHCP Narrow Endemic Plants

No MSHCP Narrow Endemic plants were observed on the project site. Based on lack of habitat, poor habitat, geographic range, and/or results of multiple years of field surveys, these species were determined to be absent from the project site. No impacts are expected to MSHCP Narrow Endemic plant species as a result of the proposed project.

Direct Impacts to Special-status Plants

If Robinson's pepper grass, mesa horkelia, or other special-status plant species are present on the site, impacts would be avoided and minimized through implementation of Mitigation Measure (MM) BIO-1b (Conserve Open Space), MM BIO-1h (Biological Monitoring and Clearance Surveys), and MMBIO-1c (Special-status Plants), which require avoidance or salvage or collection of propagules for use in the project avoidance area or local restoration projects. With implementation of mitigation measures, impacts to special-status plants would be less than significant.

Indirect Impacts to Special-status Plants

No special-status plant species are known to occur within the avoided portions of the survey area or immediately adjacent to the survey area; however, if a previously unknown special-status botanical species were present, impacts could potentially occur as a result of chemical emissions, fugitive dust, human presence, and invasive species. Increases of chemical emissions and fugitive dust during clearing would be temporary. Release of chemical emissions from vehicles and machinery would increase during clearing; however, due to the size of the project site and open area, emissions would disperse. Impacts of chemical emissions after clearing are not expected to increase substantially over current levels.

Fugitive dust rates could increase during clearing as a result of vehicle and machinery use and exposure of soils. Implementation of MM BIO-1d, which limits vehicle speeds on unpaved roads within the project to 15 miles per hour (mph), would help reduce fugitive dust.

Propagules of invasive plant species could be spread or introduced into the area by vehicles or machinery. Implementation of MM BIO-1e reduces the potential for spread of non-native species by utilizing certified weed-free products on the project site, prohibiting the use of invasive plants in landscaping, washing heavy equipment prior to bringing it on-site, and limiting staging of equipment to the extent possible to areas not infested by invasive plants.

Human and pet encroachment would be reduced by implementation of MM BIO-1f, by requiring compliance with MSHCP Urban and Wildlands Interface guidelines. Measures detailed in MSHCP Section 6.1.4 (Urban Wildland Interface) include incorporation of rear yard fencing and/or steep inaccessible slopes between avoided areas and development in the project design, as well as signage and homeowner education. With incorporation of the mitigation measures outlined above, impacts on listed and special-status plants would be less than significant.

Special-status Wildlife Species

Listed Wildlife

Two listed species were observed on the project site: DSF and CAGN. Crotch's bumble bee was also observed on the project site. This species is a candidate for State listing (as of October 2023).

Delhi Sands Flower-loving Fly

DSF was recorded by AMEC in 2005 within an approximately 3.73-acre area on the western edge of the project site. A two-year focused survey for DSF was conducted between 2015 and 2016 by L&L and findings were negative both years. The site is not within an MSHCP Criteria Area or a Delhi Sands Conservation Area. DSF is a covered species under the MSHCP and is considered Adequately Conserved.

The project as designed would impact 4.87 acres (24.4 percent) of the total 19.97 acres of Delhi soils present within the project site (see L&L BRA Figure 12, included in Appendix D). However, of the 3.73 acres of occupied DSF habitat mapped in 2005, 0.84 acres (22.5 percent) will be impacted by the construction of the project. With implementation of MM BIO-1b, which would create a deed restriction of any avoided habitat to prevent future impacts, and species-specific conservation goals for DSF under the MSHCP, project impacts to DSF would be reduced to less than significant levels.

Coastal California Gnatcatcher

Three CAGN were incidentally observed on the project site in 2017. These observations were likely to have been dispersing juveniles. This species is considered a "Covered Species Adequately Conserved" in the MSHCP and the project site is not in an MSHCP Criteria Area. Impacts to CAGN, if any, would be covered under the MSHCP and associated incidental take permits.

Development projects within the Plan Area would further avoid and minimize impacts to CAGN through conservation of open space, as required by MM BIO-1b, implementation of nesting bird surveys and avoidance, as required by MM BIO-1g, and biological monitoring and clearance surveys, as required by MM BIO-1h. The implementation of these mitigation measures would reduce any potential impacts to CAGN to less than less than significant levels.

Riparian Birds

The limited riparian vegetation in the survey area does not provide suitable habitat for least Bell's vireo, southwestern willow flycatcher, or western yellow-billed cuckoo. Although willow and cottonwood species are present in small areas, the diversity and density of the vegetation is not adequate to support these species. Therefore, there is no suitable habitat for these species on or adjacent to the project site and they are considered absent. No impact would occur.

Crotch's Bumble Bee

This species occurs in open grassland and scrub habitats and is found across California, from the northern border south to Mexico. Large areas of potentially suitable habitat for this species are present in the project vicinity in and around the Jurupa Mountains and the Santa Ana River. With implementation of MM BIO-1b (Conserve Open Space), approximately 366 acres of sage scrub and approximately 38 acres of non-native grasslands that are potentially suitable habitat for this species would be avoided and conserved on the project site. As such, the proposed project has a potential to substantially reduce and adversely modify habitat for Crotch's bumble bee, reduce and potentially impair the viability of populations of Crotch's bumble bee, and reduce the number and range of the species while taking into account the likelihood that special-status species on adjacent and nearby natural lands rely upon the habitat that occurs on the proposed project site.

MM BIO-1k (Crotch's Bumble Bee) requires the project proponent to coordinate with CDFW to determine whether an Incidental Take Permit is required. If a permit is required, it would be obtained prior to the start of construction. With implementation of MM BIO-1k and MM BIO-1b (Conserve Open Space), and any additional mitigation required under the Incidental Take Permit (if any), impacts to Crotch's bumble bee would be less than significant.

Other Special-status Wildlife

Burrowing Owl

As stated in subsection 3.4.3, Environmental Setting, above, previous habitat assessments of the project site identified habitat suitable for burrowing owl, and determined that burrowing owl could occur in low-lying disturbed and undisturbed brittle bush scrub and non-native grasslands, as well as ground squirrel burrows within the project site. The findings of the focused burrowing owl survey conducted by L&L in May and June 2014, April through June 2016, and April through June 2018 were negative. No burrowing owl or burrowing owl sign were observed in the survey area or buffer zone.

Implementation of MM BIO-1i would reduce potential impacts to burrowing owl by requiring an updated breeding season protocol survey within one year prior to the start of construction. The RCA typically requires surveys for burrowing owl to be no more than a year old and the requirement for an updated protocol survey was included in MM BIO-1i to address this requirement. Additionally, and in compliance with the MSHCP, a pre-construction burrowing owl clearance survey shall be conducted no more than 30 days before ground or vegetation disturbance. If owls are present, MM BIO-1i includes mitigation as required by the MSHCP. Such measures include the establishment of buffer zones around active burrows (nests) and the installation of burrow exclusion doors during the nesting (February 1-August 31) and non-nesting seasons if occupied burrows are present. The implementation of MM BIO-1i would reduce any potential impacts to burrowing owl to less than significant levels.

Special-status and Nesting Birds

The L&L BRA determined the following special-status bird species, which are not covered by the MSHCP, to have potential to be impacted by the proposed project: great egret, Lawrence's goldfinch, wrentit, Allen's hummingbird, Brewer's sparrow, black-chinned sparrow, Costa's hummingbird, as well as any other nesting birds protected under the MBTA and California Fish and Game Code.

Development of the project site could result in the loss of potential foraging and/or nesting habitat for these species. The loss of habitat for special-status and nesting birds would have an adverse impact, but the implementation of MM BIO-1b would avoid and conserve 427 acres of habitat for nesting birds on the project site. Additionally, the implementation of MM BIO-1f would require the project to minimize edge effects that could impact the conserved habitat and reduce the value of edge habitats to special-status and nesting birds.

If active nests are present within the project site at the time of construction, there could be impacts to eggs, chicks, and/or dependent juveniles. Impacts to nesting birds, eggs, or dependent juveniles would be avoided and minimized through the implementation of MM BIO-1g, which requires nest surveys to be conducted prior to construction. In addition, the implementation of MM BIO-1h, which requires biological monitoring and pre-construction clearance surveys, would avoid and minimize impacts to nesting birds. With implementation of these measures, impacts to nesting birds would be reduced to less than significant levels.

Special-status Reptiles

The L&L BRA determined the following special-status reptile species to not be covered by the MSHCP and to have potential to be impacted by the proposed project: Southern California legless lizard, California glossy snake, San Bernardino ringneck snake, and coast patch-nosed snake.

Development of the project site could result in the loss of potential habitat for these species and potential mortality of individuals or populations. If present in the Plan Area, these species may be killed by the operation of heavy equipment or other disturbances during construction.

Direct and indirect impacts to these species and potential habitat would be avoided and minimized with implementation of MM BIO-1a Flag or Fence Impact Areas, MM BIO-1b (Conserve Open Space), MM BIO-2b (SWPPP), MM BIO-1h (Biological Monitoring and Clearance Surveys), MM BIO-1d (Wildlife Hazards), and MM BIO-1f (Urban/Wildlands Interface), and impacts would be considered adverse but reduced to a less than significant level.

Special-status Bats

The L&L BRA determined that the following special-status bat species are not covered by the MSHCP and have potential to be impacted by the proposed project: pallid bat, western mastiff bat, and pocketed free-tailed bat.

Development of the project site could result in the loss of potential foraging and roosting habitat for these species and potential mortality of individuals. If present in the Plan Area, roosting bats may be killed by heavy equipment or other disturbances during construction.

Direct and indirect impacts to special-status bats and their habitat would be avoided and minimized with implementation of MM BIO-1b (Conserve Open Space), MM BIO-2b (SWPPP), MM BIO-1h (Biological Monitoring and Clearance Surveys), MM BIO-1d (Wildlife Hazards), and MM BIO-1f (Urban/Wildlands Interface). MM BIO-1j (Bat Roosts) requires a qualified Biologist to inspect potential roosts and implement avoidance measures. With these mitigation measures, impacts would be considered adverse but would be reduced to a less than significant level.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-1a Flag or Fence Impact Areas

Prior to the issuance of a grading permit, or clearing and grubbing, all designated conservation areas within the project site boundary shall be clearly flagged or fenced prior to grading or vegetation clearing to prevent incursion into sensitive habitats. The approximately 510.8 acres of designated conservation areas are identified as “OS-C” on Exhibit 2-7 of the Draft EIR.

MM BIO-1b Conserve Open Space

Prior to recordation of the final map, those areas of the project site not impacted by the proposed project footprint, including Riparian/Riverine and Delhi sands, shall be designated as open space. The open space areas shall be deed restricted, and ownership shall be transferred to a City-approved local conservation entity prior to recordation of the final map.

MM BIO-1c Special-status Plants

A pre-construction survey of the proposed development area shall be conducted by a Multiple Species Habitat Conservation Plan (MSHCP)-qualified Biologist prior to the issuance of a grading permit. The purpose of the survey is to determine whether special-status plant species are present in the development area. If any of the species are observed, impacts shall be avoided and minimized to the extent feasible. If mesa horkelia or Robinson’s pepper grass plants are observed within the development footprint, they shall be salvaged or propagules shall be collected for use in the project conservation area or local restoration projects.

If either of these species are found within the development footprint, the applicant shall develop and implement a planting plan to address plant salvage, propagule collection, selection and preparation of a receiver site, propagation and planting methods, maintenance, monitoring, and reporting. At a minimum, the plan shall include the following information:

1. Plant numbers and location on the site.
2. Plant salvage, propagule collection, storage, and growing.
3. A description of the existing conditions of the receiver site(s) characterizing the suitability of the site(s) for the species, and documenting the acreage of the site.
4. A description of how the receiver site will be preserved in perpetuity, e.g., conservation easement, deed restriction, etc., and the name of the California Department of Fish and Wildlife (CDFW)-approved due diligence entity that shall hold the easement/deed restriction, etc.

5. Qualifications of the supervising Biologist. At a minimum the Biologist shall possess a minimum of 5-years' experience conducting habitat restoration projects in Southern California.
6. Receiver site preparation for planting/transplanting.
7. Transplant and propagule installation methods.
8. Schedule and monitoring period.
9. Performance criteria.
10. Maintenance, monitoring, and reporting procedures.

MM BIO-1d Wildlife Hazards

The Biological Monitor shall inspect all excavations for trapped wildlife daily. All potential wildlife pitfalls (trenches, bores, and other excavations) shall be backfilled or securely covered at the end of each workday. If backfilling or covering is not feasible, wildlife escape ramps shall be installed, in consultation with the Biological Monitor (as required under MM BIO-1h), sufficient to allow trapped wildlife to escape.

All debris piles, construction pipes, culverts, or other such materials shall be securely covered or capped while stored on the project site to prevent wildlife access. All such materials shall be inspected for wildlife before being moved, buried, or capped. If wildlife become trapped, the Biological Monitor shall remove the animal (if feasible and safe to do so) and place it in nearby suitable habitat outside of the impact area. If the Biological Monitor is unable to remove the animal, the California Department of Fish and Wildlife (CDFW) or other wildlife authority shall be immediately contacted for guidance and/or assistance. Any wildlife encountered on the project site shall be allowed to leave the area unharmed or moved or encouraged to move out of harm's way by the Biological Monitor, if safe, feasible, and permitted to do so. Vehicles traveling on unpaved roads within the project site shall be limited to 15 miles per hour (mph). Construction work shall be limited to daylight hours (and in accordance with the Municipal Code, only between 7:00 a.m. and 7:00 p.m., Monday through Saturday, excluding holidays). If water is applied to the site to control dust, ponding of this water shall be minimized to avoid creating predator subsidies.

MM BIO-1e Invasive Plants

Invasive plant species shall not be installed in landscaping. Design guidelines for the proposed project shall provide the homeowners with a list of native landscaping materials recommended for use within the project site, and the list shall be included in the project Covenants, Conditions, and Restrictions (CC&Rs) (to be confirmed prior to final map recordation). These materials shall be selected for their compatibility with the unique natural environment in the area. None of the plants listed in the California Invasive Plant Council Inventory (cal-ipc.org) or Section 6.1.4 of the Multiple Species Habitat Conservation Plan (MSHCP) shall be utilized in the

development design/landscape plans and their use by future homeowners will be discouraged to the extent possible. The MSHCP has identified invasive plants that should be eliminated from open space areas. This list is included in Table 6-2 of the MSHCP. To ensure that invasive plants are not used in landscaping within the project site, the project proponent shall include a list of plant species to avoid within the (CC&Rs) for the development.

To prevent the spread of invasive plants, all heavy equipment used on-site shall be washed, particularly the wheels, undercarriage, outriggers, and other parts that come in contact with soil and vegetation, prior to bringing it onto the project site from other construction sites. Care shall be taken to remove soil and debris that may contain seeds or propagules of invasive plants.

Any straw, mulch, or similar products used on the project site shall be certified weed-free. Any erosion control planting or seeding shall consist of native species, native seed mix, or other ecologically appropriate, non-invasive plants.

Insofar as possible, staging areas shall be placed in areas that have been previously disturbed or have degraded habitat within the project footprint, but that do not show an infestation of non-native species. Staging areas shall be maintained free of invasive species.

MM BIO-1f Urban/Wildlands Interface

As the approximately 510.8 acres of open space may be transferred to a City-approved local conservation entity, the project shall incorporate design measures to ensure compliance with Multiple Species Habitat Conservation Plan (MSHCP) Urban/Wildlands Interface guidelines and requirements. These measures, as listed in Section 6.1.4 of the MSHCP, shall address Drainage, Toxics, Lighting, Noise, Barriers, Access, Pets, and Grading/Land Development.

MM BIO-1g Nesting Birds

To prevent impacts to nesting birds (including raptors), clearing or other work in native habitats shall be avoided during the nesting season (January 1 through September 15). If work cannot be avoided during this timeframe, a nesting bird survey shall be conducted by a qualified Biologist within 3 days prior to issuance of a grading or building permit. If nesting birds are present, a Nesting Bird Plan shall be developed and implemented in accordance with the Migratory Bird Treaty Act (MBTA) regulations and the California Fish and Wildlife Code. The Nesting Bird Plan shall include appropriate measures such as establishment and maintenance of a buffer area while the nest is active. The size of the buffer area shall be defined by a qualified Biologist based on the specific nesting species, as defined below.

Active bird nests shall be mapped utilizing a handheld Global Positioning System (GPS), getting as close as possible without disturbing the nest, and a buffer shall be flagged around the nest (300 feet for non-raptors, 500 feet for raptor nests, or as determined by the Biologist). Construction shall not be permitted within buffer areas while the nest continues to be active. Once fledging has occurred or the nest otherwise becomes inactive, no further avoidance shall be required. An active nest is defined as a nest that is being built or in use as part of the reproductive process, including a nest with eggs, chicks, or dependent juveniles.

MM BIO-1h Biological Monitoring and Clearance Surveys

Prior to issuance of a grading permit, an engagement letter from a qualified Biologist shall be provided to the City by the applicant identifying one or more qualified Biological Monitors that will be assigned to the project to monitor construction activities. Monitors shall be responsible for ensuring that impacts to special-status species, native vegetation, wildlife habitat, jurisdictional waters, and sensitive or unique biological resources are avoided to the extent possible. Monitors shall also conduct Workers Environmental Awareness Program (WEAP) training to inform construction personnel of applicable mitigation measures and permit conditions, and any potential for infraction. The Biological Monitor shall submit a weekly report to the City inspector, and shall promptly identify any concerns or violations, as needed.

A Biological Monitor shall be present during initial site clearing activities (vegetation clearing, soil preparation, and ground disturbance), during work adjacent to avoided Delhi soils and jurisdictional waters and Multiple Species Habitat Conservation Plan (MSHCP) Riparian/Riverine habitat, and at appropriate intervals throughout construction to ensure compliance with mitigation measures and regulatory permit conditions.

In addition, a qualified Biologist shall conduct clearance surveys for special-status plant or wildlife resources within or adjacent to the project disturbance area within three calendar days prior to initial vegetation clearing and ground disturbance, including fence installation.

If any special-status plants or wildlife are found, the Biologist shall take appropriate action as defined in the MSHCP, mitigation measures, permit conditions, and regulations. Federal, State, and local agencies shall be consulted as needed and appropriate. If needed, an avoidance buffer shall be established to protect the resource until this action has been completed.

Monitoring and survey activities shall be documented, and, at the conclusion of project construction activities, all monitoring reports and communications shall be retained in project files to allow review by the lead agency and wildlife agencies, if requested.

MM BIO-1i Burrowing Owl

- a) Prior to the issuance of a grading permit, the Planning Department shall verify that the burrowing owl breeding season protocol survey is not more than one year old. If it is older than one year, an updated breeding season protocol survey for burrowing owl shall be conducted within all suitable burrowing owl habitat on the site and a 150-meter buffer. A copy of the report shall be provided to the Planning Department before grading occurs.
- b) Prior to the issuance of a grading permit, a pre-construction burrowing owl clearance survey shall be conducted no more than 30 days before ground or vegetation disturbance. The surveys shall be conducted as close to the actual construction initiation date as possible. If present, the Biologist shall notify the Planning Department and consult with local and State agencies, as appropriate, and develop a mitigation plan. A copy of the plan shall be provided to the Planning Department. The mitigation plan shall be implemented prior to any construction activities that may disturb burrowing owls. Mitigation shall be based on the following goals and requirements in the Multiple Species Habitat Conservation Plan (MSHCP):
 1. If the site contains or is part of an area supporting less than 35 acres of suitable habitat or the survey reveals that the site and the surrounding area supports fewer than three pairs of burrowing owls, on-site burrowing owls shall be passively or actively relocated following accepted protocols.
 2. Occupied nests shall be avoided during the nesting season (February 1-August 31) along with a buffer of 300–500 feet dependent upon the level of disturbance surrounding the burrow.
 3. Burrow exclusion shall be utilized outside of the nesting season by installing a one-way door in burrow openings. Burrows shall be closed following verification they are empty through site monitoring and scoping.
 4. If the project site (including adjacent areas) supports three-or more pairs of burrowing owls, supports greater than 35 acres of suitable habitat, and is noncontiguous with MSHCP Conservation Area lands, at least 90 percent of the area with long-term conservation value and burrowing owl pairs shall be conserved on-site.

MM BIO-1j Bat Roosts

Prior to the issuance of a grading permit, potential roosts for special-status bats (e.g., caves, crevices, mines, hollow trees, palm trees, rock outcrops, buildings, etc.) shall be inspected by a qualified Biologist within 7 days prior to initial ground or vegetation disturbance. If special-status bats are roosting or hibernating, an avoidance buffer shall be implemented where bats are present and a bat exclusion plan shall be prepared and submitted to the City of Jurupa Valley and CDFW for

review prior to impacts. If a maternity roost is discovered during the breeding season (March through October), the Biologist shall determine appropriate avoidance measures, including, but not limited to sound walls, buffers, and construction phasing/timing to avoid and minimize disturbance to the roost until all young are weaned and capable of foraging independently.

MM BIO-1k Crotch's Bumble Bee

Because of suitable habitat within the project site, within one year prior to vegetation removal and/or grading, a qualified entomologist familiar with Crotch's bumble bee behavior and life history conduct surveys to determine the presence/absence of Crotch's bumble bee. Surveys should be conducted during flying season when the species is most likely to be detected above ground, between March 1 to September 1. Surveys should be conducted within the project site and areas adjacent to the project site where suitable habitat exists. If a colony is present, a 100-foot avoidance buffer shall be established. Survey results, including negative findings, should be submitted to the California Department of Fish and Wildlife (CDFW) prior to project-related vegetation removal and/or ground-disturbing activities. If a survey finds that a Crotch's bumble bee colony is present on the project site, the project Biologist shall consult with CDFW. If the proposed project impacts Crotch's bumble bee, an Incidental Take Permit from the CDFW shall be obtained and/or other mitigation shall be implemented as required by the CDFW.

Level of Significance After Mitigation

Less than significant impact.

Sensitive Natural Communities or Riparian Habitat

Threshold BIO-2: Would the proposed project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service?

Under the City's local significance threshold, the project would have significant effects if: The project results in a direct or an indirect physical change to riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to sensitive natural communities or riparian habitat.

Project Design Features

The conceptual land use plan for the proposed project sets aside approximately 510.8 acres of open space that would not be developed, but would rather be transferred to a City-approved conservation

entity and be placed under a deed with restrictions from future development.²⁰ The dedicated open space would also serve as mitigation, providing areas of preservation for the species noted in this section.

In addition, the proposed project would design measures to meet MSHCP Urban/Wildlands Interface guidelines and requirements.

Impact Analysis

Riparian Habitat

As shown in Table 4 and Appendix Tables 14, 15 and 16 in the L&L BRA (included in Appendix D), the 2023 Updated jurisdictional delineation (included in Appendix D) determined that the development of the project site would impact 6.86 acres of MSHCP Riparian/Riverine areas, which includes 5.98 acres of CDFW streambed/MSHCP Riverine habitat and 0.88 acre of CDFW wetlands/MSHCP Riparian habitat.

Impacts from earthmoving or other construction activities in or adjacent to drainages or sheet-flow areas could result in discharge of toxic materials, silt, debris, or excessive erosion into Riparian/Riverine Habitat during construction. Impacts to habitat in the immediate project vicinity could potentially occur as a result of erosion and runoff, fugitive dust, and invasive species. Clearing the site of vegetation will reduce water absorption after rain events and increase runoff. Standard Best Management Practices (BMPs) require watering when necessary to reduce fugitive dust, subject to local water restrictions. MM BIO-2b requires preparation of a Storm Water Pollution Prevention Plan (SWPPP) which would be implemented to avoid and minimize impacts to drainage features. MM BIO-1d (Wildlife Hazards) restricts vehicles on unpaved roads to 15 mph. The implementation of these measures, as well as any additional measures required by regulatory permits, would reduce potential impacts to Riparian/Riverine habitat to less than significant levels.

Sensitive Natural Communities Implementation of the proposed project would result in the permanent loss of approximately 477 acres of habitat. The 477 acres of impacted habitat add to the reduction in availability of nest/den sites and foraging habitats for species that utilize shrublands, grasslands, and disturbed habitats. With implementation of MM BIO-1b (Conserve Open Space), approximately 510.5 acres of habitat would be preserved as open space, managed by a City-approved conservation entity, and deed restricted as open space and would be available to support plant and wildlife species that utilize the site. MM BIO-1a (Flag or Fence Impact Areas) and MM BIO-1h (Biological Monitoring and Clearance Surveys) would ensure that construction activities do not encroach on avoidance areas. With implementation of MM BIO-1a, MM BIO-1b, and MM BIO-1h, impacts to common vegetation communities on the project site would be adverse, but less than significant.

There is one sensitive vegetation community on the site, bush penstemon scrub, and approximately 0.10 acre of this vegetation (about 17 percent of the total on-site) will be permanently impacted by the proposed project. MM BIO-1b (Conserve Open Space) would conserve the remaining 0.49 acre

²⁰ L&L Environmental, Inc. 2016. Updated Biological Assessment, Jurisdictional Delineation, Narrow Endemic Plant, Burrowing Owl, and DSF Focused Surveys Rio Vista, Specific Plan 16001, Jurupa Valley, California. December. Most recently updated: January 2022.

(83 percent of the total on-site) within open space areas. Bush penstemon scrub is ranked as S3 (vulnerable to extirpation) and the loss of 0.10 acre of this vegetation community, coupled with the conservation of the remaining 0.49 acre, is not expected to significantly impact regional abundance. With implementation of MM BIO-1b, impacts to bush penstemon scrub would be less than significant.

A potential increase in non-native species, which may impact native plant species, may occur along project margins where newly exposed soils not developed or landscaped could provide fertile ground. Invasive species occur within the impact area and could disperse seed to newly turned soil. Invasive and noxious weed species seeds could be spread or introduced into the area by vehicles or machinery. MM BIO-1e (Invasive Plants) reduces the potential for spread of noxious and non-native species by utilizing certified weed-free products on the site, prohibiting the use of invasive plants in landscaping, washing heavy equipment prior to bringing it on-site, and limiting staging of equipment to areas not occupied by noxious weeds. Human and pet encroachment would be reduced by implementation of MM BIO-1f (Urban/Wildland Interface), which requires compliance with the Urban and Wildlands Interface guidelines. Measures detailed in Section 6.1.4 of the MSHCP include the incorporation of rear yard fencing and/or steep inaccessible slopes between the avoided areas and development in the project design, as well as signage and homeowner education.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-2a MSHCP Riparian/Riverine Habitat

Prior to issuance of a grading permit, the project applicant shall provide mitigation for the loss of Multiple Species Habitat Conservation Plan (MSHCP) Riparian/Riverine areas at no less than a 2:1 basis, or as determined through consultation with the City of Jurupa Valley and wildlife agencies based on a functions and values analysis. Equal or greater value mitigation shall be provided in the form of one or more of the following: off-site acquisition and preservation, participation in an approved mitigation bank, on-site creation, off-site creation and/or enhancement, or reestablishment. If off-site mitigation is incorporated, the preferred choice shall be to find mitigation within or adjacent to the Santa Ana Watershed and within Riverside County.

If on-site mitigation is proposed, a Habitat Mitigation and Monitoring Plan (MMRP) shall be developed and provided for review and approval by local and other regional regulatory agencies and shall include, but not be limited to, the following:

- Recommendations for soil preparation.
- A plant palette to include native species appropriate for the project site.
- Planting methods.
- Irrigation and maintenance requirements.
- Quantitative success criteria (vegetation cover and species richness).
- A long-term management plan.

MM BIO-2b Stormwater Pollution Prevention Plan

Prior to the issuance of a grading permit, , the project applicant shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP), employing standard Best Management Practices (BMPs), to prevent discharges from entering jurisdictional waters and/or wetlands during construction. BMPs shall include, but not be limited to:

- Use of erosion control or sedimentation prevention methods, such as fiber rolls, sand or gravel bags, rice mats, straw wattles, or similar measures, where appropriate.
- Proper use and disposal of oil, gasoline, diesel fuel, antifreeze, and other toxic substances.

Level of Significance After Mitigation

Less than significant impact.

Wetlands and Jurisdictional Features

Threshold BIO-3: Would the proposed project have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Under the City's local significance threshold, the project would have significant effects if: The project results in a direct or an indirect physical change to State or federally protected wetlands.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to wetlands and jurisdictional features.

Project Design Features

The conceptual land use plan for the proposed project sets aside approximately 510.8 acres of open space that would not be developed, but would rather be preserved as open space, managed by a City-approved conservation entity, and placed under a deed with restrictions from future development.²¹ The dedicated open space would also serve as mitigation, providing areas of preservation for the species noted in this section.

In addition, the proposed project would design measures to meet MSHCP Urban/Wildlands Interface guidelines and requirements.

Impact Analysis

As described in the L&L BRA (included in Appendix D), the 2018 L&L jurisdictional delineation determined that the proposed project would impact 5.98 acres of CDFW jurisdictional streambed and 0.88 acre of State wetland over 27,637 linear feet, for a total of 6.86 acres of State jurisdiction.

²¹ L&L Environmental, Inc. 2016. Updated Biological Assessment, Jurisdictional Delineation, Narrow Endemic Plant, Burrowing Owl, and DSF Focused Surveys Rio Vista, Specific Plan 16001, Jurupa Valley, California. December. Most recently updated: January 2022.

The USACE issued an Approved Jurisdictional Determination on February 11, 2021, stating that waters of the United States do not occur on the project site.

MM BIO-3a, which addresses potential impacts to RWQCB jurisdictional areas, and MM BIO-3b, which addresses impacts to CDFW jurisdictional areas, would require mitigation for impacts at no less than a 2:1 ratio. In addition, MM BIO-1a would also ensure jurisdictional resources within the project site are avoided. Impacts from earthmoving or other construction activities in or adjacent to drainages or sheet-flow areas could result in discharge of toxic materials, silt, debris, or excessive erosion into jurisdictional waters and wetlands during construction of the proposed project. Implementation of BMPs described in MM BIO-2b would increase avoidance and minimization of impacts to drainage features. The implementation of these mitigation measures as well as any additional measures required by regulatory permits would reduce potential impacts to protected State wetlands to less than significant levels.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-3a RWQCB Jurisdictional Areas

Prior to the issuance of a grading permit, the project applicant shall consult with the Regional Water Quality Control Board (RWQCB) to determine the need and if necessary, obtain a Waste Discharge Requirement (WDR) permit under the Porter-Cologne Water Quality Control Act.

MM BIO-3b CDFW Jurisdictional Areas

Prior to the issuance of a grading permit, the project applicant shall enter into an agreement with the California Department of Fish and Wildlife (CDFW) (via issuance and implementation of a Streambed Alteration Agreement, Section 1600) to replace State jurisdictional streambeds and wetlands impacted by the project at no less than a 2:1 ratio, or as specified by the CDFW, through a combination of off-site acquisition and preservation, participation in an approved mitigation bank, and/or on-site or off-site creation, enhancement, or reestablishment of streambed. The exact ratio shall be based on a functions and values assessment.

Level of Significance After Mitigation

Less than significant impact.

Fish and Wildlife Movement Corridors

Threshold BIO-4: Would the proposed project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?

Under the City's local significance threshold, the project would have significant effects if: The project results in a direct or an indirect physical change to the movement of any native resident or migratory fish or wildlife species or to established native resident or migratory wildlife corridors, or impedes the use of native wildlife nursery sites or conflicts with the MBTA.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to fish and wildlife movement corridors.

Project Design Features

The conceptual land use plan for the proposed project sets aside approximately 510.8 acres of open space that would not be developed, but would rather be preserved as open space, managed by a City-approved conservation entity, and placed under a deed with restrictions from future development.²² The dedicated open space would also serve as mitigation, providing areas that would serve as wildlife migratory corridors.

In addition, pursuant to MM BIO-1f, the proposed project would be required to implement design measures to meet MSHCP Urban/Wildlands Interface guidelines and requirements.

Impact Analysis

Construction

The project site is a large tract of land surrounded by developed lands, except for a small area of undeveloped land adjacent to the north and northwest which includes the Jurupa Hills. Currently, wildlife can move freely throughout the project site and surrounding undeveloped areas. However, the project site does not function as a wildlife corridor and there are no adjacent wildlife corridors. The project site is isolated from other similar habitats by surrounding and forms an "island" with no terrestrial linkages. Therefore, no impacts to wildlife corridors are expected to occur as a result of the construction of the proposed project.

Operation

Wildlife species are anticipated to continue to use habitat within the avoided and conserved portions of the project site along with the limited undeveloped areas adjacent to the project site to the north and northwest. The development of the proposed project would reduce the overall area of available habitat and may increase competition for resources and leave displaced individuals vulnerable to predation. Those species and individuals that may use the project site for foraging would have access to habitat in the avoided and conserved areas, and highly mobile species may also utilize adjacent undeveloped habitat and large expanses of relatively undisturbed habitat within the Jurupa Mountains and the Santa Ana River. Habitat in the conserved areas on-site will be further fragmented and isolated. The project site currently experiences disturbance as a result of human activities. The construction of the proposed project would likely result in increased disturbances such as noise, lighting, and predation from domestic pets may hinder localized wildlife movement and behaviors within open space and adjacent habitat. Species that remain would likely be those

²² L&L Environmental, Inc. 2016. Updated Biological Assessment, Jurisdictional Delineation, Narrow Endemic Plant, Burrowing Owl, and DSF Focused Surveys Rio Vista, Specific Plan 16001, Jurupa Valley, California. December. Most recently updated: January 2022.

that are more tolerant of human presence. Management of “edge effects” under the MSHCP Urban/Wildland Interface Guidelines would reduce and minimize indirect impacts to wildlife species to the extent possible as required under the MSHCP. Compliance with these guidelines would ensure that potential impacts to wildlife movement following construction would be less than significant and no additional mitigation would be required.

Level of Significance

Less than significant impact.

Local Policies or Ordinances

Threshold BIO-5: Would the proposed project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Under the City’s local significance threshold, the project would have significant effects if: The project is inconsistent with the following General Plan Policies:

- COS 1.2—Protection of Significant Trees;
- COS 1.3—Other Significant Vegetation.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to local policies or ordinances.

Project Design Features

Approximately 510.8 acres of the project site would not be developed, but would rather be preserved as open space, managed by a City-approved conservation entity, and placed under a deed with restrictions from future development.²³ This would ensure protection of the Palmer’s oak located on-site.

Impact Analysis

Protected Trees

The 2017 City of Jurupa Valley General Plan (General Plan) contains Policy COS 1.2, which encourages the protection of “significant” trees with an emphasis on “California native” trees, within the City. The General Plan also encourages the protection of other significant vegetation through Policy COS 1.3, which states “Maintain and conserve superior examples of vegetation, including: agricultural wind screen plantings, street trees, stands of mature native and non-native trees, and other features of ecological, aesthetic, and conservation value.”

Therefore, the ancient Palmer’s oak tree located in the northeast quarter of the project site, and discussed in subsection 3.4.3, Environmental Setting, above, would likely qualify for protection under Policy COS 1.2 and 1.3 due to its great age (estimated between 13,000 and 18,000 years old), being

²³ L&L Environmental, Inc. 2016. Updated Biological Assessment, Jurisdictional Delineation, Narrow Endemic Plant, Burrowing Owl, and DSF Focused Surveys Rio Vista, Specific Plan 16001, Jurupa Valley, California. December. Most recently updated: January 2022.

possibly the oldest living plant ever documented in California, as well the tree's unique status as being one of the last remnants of its species within all of Southern California.

A hydrogeologic investigation of the 1452 Hill, located in the project site, where the ancient tree is growing, aimed to identify the water source that allows the tree to grow at that location (see Appendix D).²⁴ According to the hydrogeologic investigation, groundwater level maps indicate that regional groundwater levels in the alluvium and surficial deposits are much lower than the elevation of the project site and the 1452 Hill and is not likely to support the ancient tree. A field investigation conducted as part of the hydrogeologic investigation concluded that vegetation in the tonalite is likely supported by annual rainfall and water stored in near-surface fractures since depth to groundwater in the fractured tonalite at this location is greater than 90 feet below ground surface.²⁵ This water is not likely to be sufficient to support the ancient oak tree.

FirstCarbon Solutions (FCS) prepared a Biological Review of Palmer's Oak memorandum²⁶ (Palmer's Oak memorandum, included in Appendix D). This review included a ground-penetrating radar (GPR) study which detected planar or basin-shaped depressions in subsurface bedrock to a depth of approximately 2 meters in several location in the study area. These features appear to confirm the hypothesis that the shape of subsurface bedrock collects and perches water in a manner that provides water to sustain the Jurupa Oak beyond periods of major rainfall.

The Palmer's oak would be avoided in accordance with MM BIO-5, Palmer's Oak. Based on the current design of the proposed project, the Palmer's oak is located in an area designated as an Open Space Conservation area, approximately 200 feet away from the area designated for development. In addition, based on a vibration prediction study prepared for the area of the Palmer's oak (Appendix D), and as required by MM BIO-5, heavy equipment would not be operating within 259 feet of the tree to prevent potential impact from equipment vibration to the subsurface bedrock that supports the ancient tree.²⁷

Detailed location information would be shared as needed with construction personnel; Biological Monitors; State, local, and federal agencies; and the future Homeowner's Association (HOA) to prevent any impacts during construction or operation. With the implementation of MM BIO-5, the proposed project would not conflict with General Plan Policy COS 1.2 or COS 1.3 and therefore the development of the Plan Area would have a less than significant impact.

Level of Significance Before Mitigation

Potentially significant impact.

²⁴ Stetson Engineers, Inc. 2022. Technical Memorandum 11192021, Hydrogeologic Investigation at Rio Vista Project Site, City of Jurupa Valley, California. January 18.

²⁵ Ibid.

²⁶ FirstCarbon Solutions (FCS). 2023. Biological Review of Palmer's Oak (Revision No. 2). July 25.

²⁷ Qtative Development Solutions. 2023. Rio Vista Grading and ESA Preservation. May 3.

Mitigation Measures**MM BIO-5 Palmer's Oak**

Prior to the recordation of the Final Map, a lettered open space lot shall be identified to avoid the Palmer's oak and a minimum of 200 feet beyond its mapped limits, as mapped in the *Revised Updated Biological Resources Assessment, Jurisdictional Delineation, Multiple Species Habitat Conservation Plan (MSHCP) Narrow Endemic Plant, Burrowing Owl Breeding Season, and Two-year Delhi Sands Flower-loving Fly Focused Surveys for Rio Vista, Specific Plan 16001, Jurupa Valley, Riverside County, California*, prepared by L&L Environmental, Inc. in December 2016 and most recently updated in September 2023. No project-related construction activities may occur within the tree's mapped limit and the 200-foot buffer. This includes, but is not limited to, staging of supplies and equipment, vegetation removal, grading, stockpiling, paving, and any other activity related to development of the proposed project. A City-approved local conservation entity shall be responsible for maintenance of the natural open space areas, which includes the area of the Palmer's oak, and it would monitor the health of this tree. The area surrounding the Palmer's oak would be designated as a preserve with limited public access. In addition, no heavy equipment may operate within 259 feet of the mapped limits of the tree.

Level of Significance After Mitigation

Less than significant impact.

Local, Regional, or State Habitat Conservation Plan

Threshold BIO-6: Would the proposed project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan?

Under the City's local significance threshold, the project would have significant effects if: The project is in conflict with the Western Riverside County MSHCP.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)*Plans, Policies, and Programs*

The following PPP applies to a Habitat Conservation Plan:

Plans, Policies, and Programs

PPP 3.4-6 The project is required to pay mitigation fees under the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) as required by Municipal Code Chapter 3.80.

Project Design Features

There are no PDFs applicable to local, regional, or State Habitat Conservation Plans.

Impact Analysis

Western Riverside County MSHCP

Conservation Areas/Reserve Assembly

The project site is not located within any MSHCP Criteria Areas and it is not located within an MSHCP-designated Core or Linkage and will not impact overall Reserve Assembly goals. The project site is in the Jurupa Area Plan and is located between but not within Noncontiguous Habitat Block 2 (Jurupa Mountains), a portion of Block 3 (Delhi Soils), and Core A (Santa Ana River). Thus, the proposed project would not affect either Habitat Block or the Core area. Therefore, the preservation of the affected acreage would not contribute to conservation, habitat, or species protection objectives of the MSHCP and development of the project site for other appropriate uses would not impact overall Reserve Assembly goals.

The project site contains Riparian/Riverine and Delhi sands habitat. Impacts to these habitats may require compensatory mitigation under MSHCP requirements. However, with the implementation of MM BIO-1b, which requires the project applicant to set aside portions of the project site as conservation land, the majority of the Riparian/Riverine and Delhi sands habitat present on-site shall be designated as open space, which would not be impacted by future development. These open space areas shall not be developed, but rather be preserved as open space, managed by a City-approved conservation entity, and placed under a deed with restrictions from future development.²⁸ The deed restriction would be established prior to issuance of a grading permit, and responsibility for managing this area would be entrusted to a City-approved local conservation entity which shall manage the open space areas and shall restrict future impact and uses of open space areas. With the implementation of these avoidance and preservation measures, the development of the project site would have a less than significant impact.

Impacts to Riparian/Riverine or Vernal Pools

Streambed/wetland delineation studies of the project site updated in 2023 identified 5.98 acres of MSHCP Riverine and 0.88 acre of MSHCP Riparian habitat on the project site. All features identified as MSHCP Riparian/Riverine were also considered a part of State jurisdictional area. No vernal pool habitat was identified in the survey area.

The L&L BRA (see Appendix D) concluded that the development of the project site would impact an estimated 5.98 acres of MSHCP Riverine area and 0.88 acre of MSHCP Riparian area. On-site and/or off-site mitigation would be provided for impacts to MSHCP Riparian/Riverine habitat as described in MM BIO-2a.

MSHCP Habitat Assessment Requirements

MSHCP Additional Needs Species and Narrow Endemic plant species that required habitat assessments include burrowing owl, San Diego ambrosia, Brand's phacelia, and San Miguel savory.

²⁸ L&L Environmental, Inc. 2016. Updated Biological Assessment, Jurisdictional Delineation, Narrow Endemic Plant, Burrowing Owl, and DSF Focused Surveys Rio Vista, Specific Plan 16001, Jurupa Valley, California. December. Most recently updated: January 2022.

Burrowing Owl

A habitat assessment for burrowing owl determined that the species could occur in low-lying disturbed and undisturbed brittle bush scrub and non-native grasslands on the project site. Focused burrowing owl surveys were conducted by L&L in May and June 2014, April through June 2016, and April through June 2018. No burrowing owl or burrowing owl sign were observed in the project site or buffer zone. However, due to the presence of suitable habitat the potential for burrowing owl to occur on-site cannot be ruled out entirely. As discussed in Impact BIO-1, the implementation of MM BIO-1i, which requires focused burrowing owl surveys to be conducted prior to construction, would reduce potential impacts to burrowing owl to less than significant levels.

Narrow Endemic Plants

A habitat assessment and focused surveys were conducted by L&L between April 2014 and September 2018 for San Diego ambrosia, Brand's phacelia, and San Miguel savory on the project site. No suitable habitat for San Diego ambrosia was observed in the survey area and the project site is likely on the margin of its geographic range. The species was not observed during multiple years of surveys. Potentially suitable habitat for Brand's phacelia occurs in the survey area, but it is regularly impacted and heavily disturbed by off-road recreational vehicle use. The habitat is considered poor and the species was not observed during multiple years of surveys.

Potentially suitable habitat for San Miguel savory occurs in the survey area, but the project site was located north of the known range of the species. The species was not observed during multiple years of surveys. Based on results of the habitat assessment and focused surveys, San Diego ambrosia, Brand's phacelia, and San Miguel savory are considered absent from the site. As discussed under Threshold BIO-1, the implementation of MM BIO-1c, which requires pre-construction surveys and avoidance of any special-status plants if they are present on-site, would reduce potential impacts to narrow endemic plants to less than significant levels.

Delhi Sands Flower-loving Fly

DSF were found on-site during the 2005 surveys by AMEC and the occupied habitat was mapped as 3.73 acres. A 2-year focused survey was conducted on the project site in 2015 and 2016 by L&L, but no DSF were observed in the project site. MSHCP Conservation Objective 1B limits impacts to 25 percent of the Delhi soils on-site if the site is determined to be occupied by DSF. The proposed project would impact a total of 4.87 acres of suitable DSF habitat, representing 24.4 percent of the suitable habitat on the site and 22.5 percent of the 2005 mapped occupied habitat. As discussed under Impact BIO-1, the implementation of MM BIO-1b, which would create a deed restriction of any avoided habitat to prevent future impacts, would reduce potential impacts to DSF to less than significant levels.

Urban/Wildlands Interface

Section 6.1.4 of the MSHCP presents guidelines to minimize "edge effects" or indirect effects of projects adjacent to MSHCP Conservation Areas that might adversely affect biological resources within the MSHCP Conservation Area. The project site lies between two Noncontiguous Habitat Blocks: Block 2 (Jurupa Mountains) and Block 3 (Delhi Soils). The project site does not adjoin any MSHCP Criteria Areas and is separated from any Conservation Areas by mostly residential and industrial development. Based on the distance and existing development between the project site

and Criteria Areas, indirect impacts to Criteria Areas would not occur. However, indirect impacts may occur to habitat within the project site that would be avoided by future development, including habitat for DSF. Indirect impacts that result from development, including lighting, urban runoff, toxics, and domestic predators, will be minimized in the project design in accordance with Urban/Wildlands Interface guidelines and requirements as described in Section 6.1.4 of the MSHCP. Additionally, the implementation of MM BIO-1a (Flag or Fence Impact Areas), MM BIO-1b (Conserve Open Space), MM BIO-1e (Invasive Plants), and MM BIO-1f (Urban/Wildland Interface) throughout the project site would further reduce any potential impacts to wildlife and their habitats (as described in Impact BIO-1) that may result from edge effects to less than significant levels.

Drainage

The proposed project would incorporate streets and natural drainage courses, as well as a comprehensive system of underground storm drains, to handle storm runoff from the project site. Stormwater from the project site would be directed to storm drains. The design and operation of the drainage channels would be adequate to preclude discharge of water into open space areas that are of lower quality or higher quantity than current conditions.

The proposed development would incorporate measures such as MM BIO-2b, which includes measures required through the National Pollutant Discharge Elimination System (NPDES) requirements, to ensure that the quantity and quality of runoff discharged to open space area is not altered in an adverse way when compared with existing conditions. These measures would ensure that the discharge of untreated surface runoff from developed and paved areas is prevented from entering into open space areas. Stormwater systems would be designed to prevent the release of toxins, chemicals, petroleum products, invasive plant materials, or other elements that might degrade or harm biological resources or ecosystem processes within open space areas. This would be accomplished using a variety of methods, including natural detention basins, grass swales, or mechanical trapping devices. Regular maintenance shall occur to ensure effective operations of runoff control systems. The implementation of these measures and PDFs would reduce potential impacts to less than significant levels.

Toxics

Future development within the project site would be designed to utilize natural drainage patterns for the flow of surface water. Water quality BMPs would include education, storm drain stenciling, and street sweeping in compliance with City of Jurupa Valley requirements. These BMPs would be implemented as part of the stormwater pollution prevention measures for the proposed project, in accordance with all appropriate NPDES requirements.

Development of the project site would result in additional use of hazardous materials in limited quantities associated with normal residential use, such as cleaning products, solvents, herbicides, and insecticides. However, the implementation of MM BIO-2b and PDFs, as discussed earlier, would reduce potential risk of hazardous material exposure to a level that is less than significant.

Lighting

The proposed project would comply with applicable requirements and policies of the City of Jurupa Valley. Outdoor lighting of residences within the project site would be designed so that all direct

beams would be confined to dwelling sites. Lighting would not intrude into avoided or adjacent open space areas. Street lighting, parking lot lighting, and other project-related illumination sources would be positioned, directed, and shielded to avoid “light spill” into conserved areas. Through the implementation of these PDFs, potential impacts would be less than significant.

Noise

The proposed project would incorporate landscape elements, including trees, shrubs, and groundcover, which would assist in noise reduction in native habitats adjacent to the project site. Noise levels within the project site following development are not expected to exceed residential noise standards. Therefore, the proposed project is in compliance with the MSHCP.

Barriers

In accordance with the Urban/Wildlands guidelines found in the MSHCP Section 6.1.4 the proposed project would include theme walls along perimeter streets adjacent to public streets and would include walls and fencing located where public view and/or important interfaces are of concern. Future development within the project site would also incorporate special edge treatments such as native landscaping and fencing to separate development areas from open space areas and minimize unauthorized public access, domestic animal predation, and illegal trespassing and dumping.

Fencing would adhere to MSHCP requirements, would be permanent, and would be maintained in perpetuity. Exclusion fencing would be 5 feet in height at minimum and would be installed and maintained for the purpose of controlling human and domestic animal access into open space areas. Approval of the fencing design will be required by the City of Jurupa Valley prior to initiation of the proposed project. Through the implementation of these PDFs, potential impacts would be less than significant.

Invasive Vegetation Control

As discussed in Impact BIO-1a, the implementation of MM BIO-1e, which would require invasive plant species control measures, would reduce the potential for spread of non-native species to less than significant levels. Additionally, project design guidelines would be provided to homeowners with a list of allowed native landscaping materials. These materials would be selected for their contribution to the proposed project theme, adaptability to local climatic and soil conditions, and for their compatibility with the unique natural environment in the project site vicinity. None of the plants listed in Table 6-2 in Section 6.1.4 of the MSHCP will be utilized on the project site adjacent to open space areas. Therefore, potential impacts would be less than significant.

Access

Access points between native habitats and the developed areas within the project site would be posted with signage asking residents to stay on trails and avoid disturbing habitat. The CC&Rs would include a requirement that yard fencing would not have back gates in order to reduce access to native habitats adjacent to any future development within the project site. Many of the existing informal trails in open space areas would remain for use by residents and the public, but no new trails into the open space would be created. Through the implementation of these PDFs, potential impacts would be less than significant.

Pets

Uncontrolled pets and feral dogs and cats can prey on native wildlife species. Appropriate signage would be posted requesting that residents leash their pets. Educational pamphlets would be provided to inform homeowners of the potential impacts of uncontrolled pets on native wildlife and request that residents prevent their pets from hunting in the avoidance area. Therefore, potential impacts would be less than significant.

Grading/Land Development

All manufactured slopes associated with site development would be located within the areas designated for development as shown in Exhibit 2-7. There would be no grading in the areas designated for conservation. All manufactured slopes that abut natural open space would be retained as open space buffer zones and all manufactured slopes and areas disturbed by construction would be revegetated with buffer species following implementation of the proposed project in accordance with the Urban/Wildlands guidelines found in Section 6.1.4 of the MSHCP. Therefore, potential impacts would be less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement MM BIO-1a, MM BIO-1b, MM BIO-1c, MM BIO-1e, MM BIO-1f, MM BIO-1i, MM BIO-2a, and MMBIO-2b throughout the project site.

Level of Significance After Mitigation

Less than significant impact.

3.4.6 - Cumulative Impacts

The geographical scope of the cumulative Biological Resources Analysis is the area covered by the Western Riverside County MSHCP. The direct and/or indirect impacts of the proposed project could result in significant cumulative impacts to biological resources within the region of the project site. While the proposed project could result in impacts to special-status plant and wildlife species, riparian/riverine habitat, and jurisdictional features, the MSHCP was developed to address the comprehensive regional planning effort and anticipated growth in the City. The proposed project has been designed and mitigated to remain in compliance with all MSHCP conservation goals and guidelines and therefore, with mitigation implemented, would not result in adverse cumulative impacts. Furthermore, while there are a limited number of isolated pockets of natural habitat in the surrounding areas that could support special-status wildlife and plant species, the built-up nature of the surrounding areas precludes the possible cumulative impacts to biological resources related to special-status wildlife and plant species.

Special-status Species

Listed Species

Listed Plant Species

There are no direct or indirect impacts to State- or federally listed botanical species or to designated or proposed critical habitat on the project site. No suitable habitat for these species occurs within the project site and none were identified during multiple years of focused surveys. Implementation of the proposed project would not add considerably to any cumulative effects to listed plants.

Listed Wildlife Species

The proposed project would impact 4.87 acres of the 19.97 acres of existing Delhi soils on-site, equivalent to 24.4 percent of Delhi soils suitable to support DSF. Of the 3.73 acres of occupied habitat mapped by AMEC in 2005, 0.84 acres (22.5 percent) would be impacted by the proposed project. The findings of the 2015 through 2016 2-year survey effort on the project site were negative. While impacts to 24.4 percent of all Delhi soils habitat and 22.5 percent of the occupied habitat mapped in 2005 could add to cumulative impacts to potentially suitable soils for this species, by meeting the MSHCP requirements for occupied sites, the proposed project contribution to regional impact would therefore not be cumulatively significant.

Other Special-Status Species

Cumulative habitat loss in the area will affect several special-status species, as loss and degradation of habitat would adversely affect the distribution and abundance of species and would indirectly affect survival of remaining populations through fragmentation and isolation. Impacts to special-status species are likely in the future. However, the implementation of the MSHCP, which focuses conservation in areas of sensitive communities or concentrations of special-status species in proximity to large expanses of open lands or wildlife corridors, will ensure that extensive natural open space is maintained for special-status species in western Riverside County. Upon compliance with MSHCP survey requirements and the implementation of recommended mitigation measures (MM BIO-1b, MM BIO-1c, MM BIO-1f, and MM BIO-1i), potential impacts to MSHCP covered species due to the proposed project are not expected to be cumulatively significant. Impacts to special-status species not covered under the MSHCP may occur, but the impacts would be reduced to less than significant levels by the implementation of MM BIO-1a, MM BIO-1d, MM BIO-1e, MM BIO-1h and MM BIO-1j. Therefore, the proposed project is not expected to substantially affect regional populations and would not be cumulatively significant.

Nesting Birds

The implementation of MM BIO-1g would ensure impacts to nesting birds would be avoided and potential nesting habitat would be conserved within open space areas on-site. Additionally, nesting habitat would be preserved within the project site vicinity as a part of the nearby MSHCP Conservation Areas including Noncontiguous Habitat Block 2 (Jurupa Mountains) and Core A (Santa Ana River). Therefore, the development of the proposed project would not have significant cumulative impacts to nesting birds.

Sensitive Natural Communities or Riparian Habitat

The development of the project site would impact 1.96 acres of MSHCP Riverine habitat and 0.78 acre of MSHCP Riparian habitat. These impacts would add to cumulative impacts to MSHCP Riparian/Riverine habitat in the region. However, with the implementation of MM BIO-1a, MM BIO-2a, and MM BIO-2b, the proposed project's contribution to regional impacts would not be cumulatively significant.

Wetlands and Jurisdictional Features

The proposed project would impact 27,637 linear feet (6.86 acres) of CDFW jurisdictional areas, composed of 5.98 acres of State streambed and 0.88 acre of State wetlands. These totals would be added to cumulative impacts to jurisdictional features in the region. However, with the implementation of MM BIO-1a, MM BIO-2b, MM BIO-3a, and MM BIO-3b, the proposed project's contribution to regional impacts would not be cumulatively significant.

Fish and Wildlife Movement Corridors

The project site does not function as a wildlife corridor. Therefore, the implementation of the proposed project would not cause or contribute to any cumulative impacts in this regard.

Local Policies or Ordinances

Protected Trees

The ancient Palmer's oak located within the project site would be avoided in accordance with MM BIO-5. Therefore, implementation of the proposed project would not conflict with General Plan Policies COS 1.2 and COS 1.3.

The development of the project site would not conflict with any other local policies or ordinances protecting biological resources. Therefore, the implementation of the proposed project would not cause or contribute to any cumulative impacts in this regard.

Habitat and Natural Community Conservation Plan Consistency

Western Riverside County MSHCP

During its initial development, the MSHCP considered projects that were already planned and other reasonably foreseeable projects to determine the minimization and mitigation levels required and additional survey needs. The MSHCP provides a process to mitigate for regional cumulative impacts to covered species and their habitats. The MSHCP's habitat-based approach to the protection of covered species focuses on conservation and management of lands essential for their long-term conservation, and therefore addresses potential impacts on environmental resources on a regional scale rather than individually.

Through the implementation of MM BIO-1a, MM BIO-1b, MM BIO-1c, MM BIO-1f, MM BIO-1h, and MM BIO-1i, as well as PDFs, the proposed project would be consistent with Section 7 of the MSHCP, which ensures cumulative impacts to covered species are mitigated. Therefore, implementation of the proposed project would not cause or contribute to significant cumulative impacts.

Level of Cumulative Significance Before Mitigation

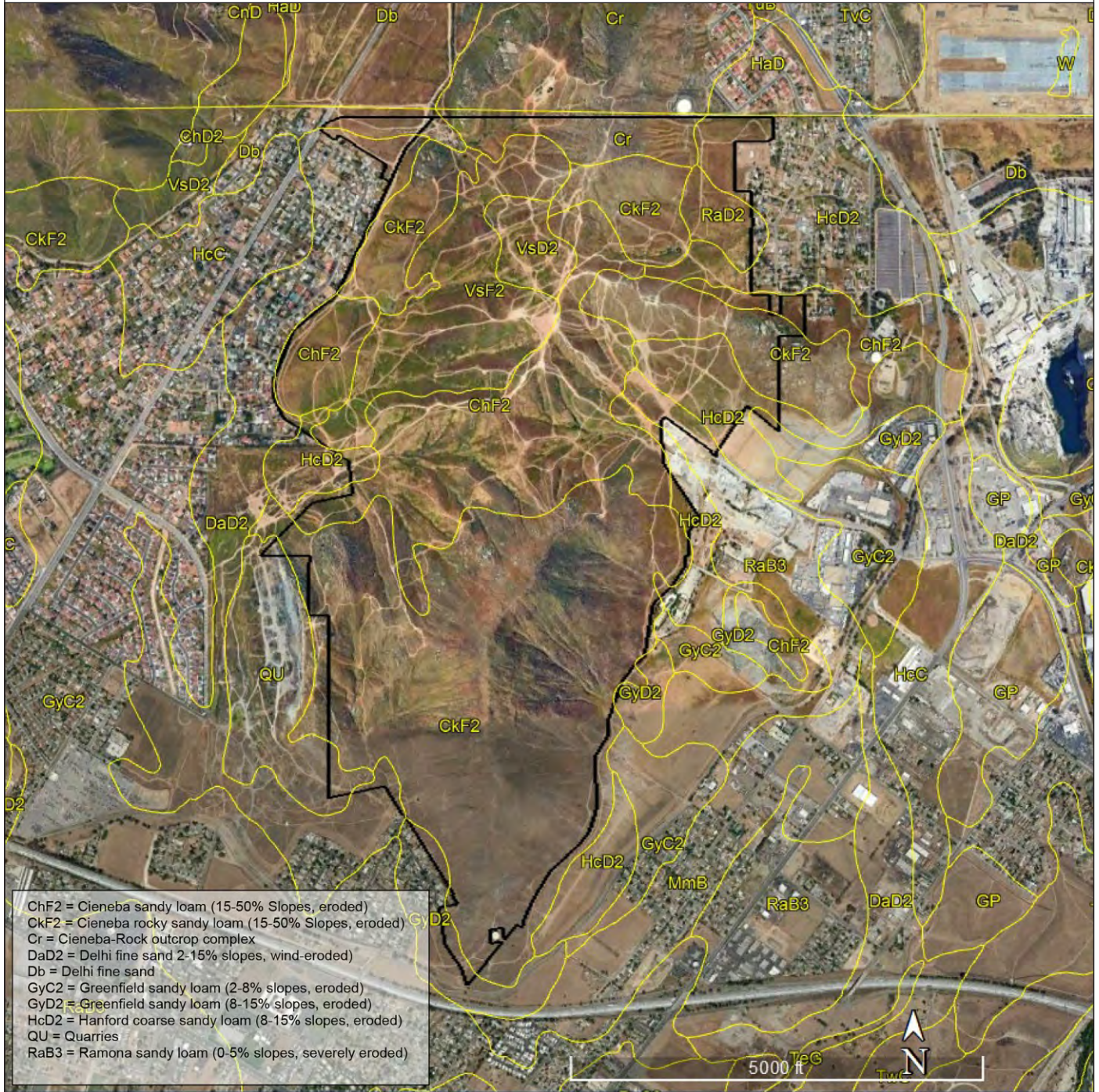
Potentially significant impact.

Mitigation Measures

MM BIO-1a, MM BIO-1b, MM BIO-1c, MM BIO-1f, MM BIO-1h, and MM BIO-1i.

Level of Cumulative Significance After Mitigation

Less than significant impact.



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3.5 - Cultural Resources

3.5.1 - Introduction

This section describes the existing cultural resources setting and potential effects from project implementation on the site and its surrounding area. Cultural resources refer broadly to prehistoric and historic buildings, structures, objects, sites, and districts exhibiting important historical, cultural, scientific, or technological associations and which exhibit historic integrity.¹ This definition extends to Tribal Cultural Resources (TCRs), which refer to sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe (see Section 3-18, Tribal Cultural Resources, for a separate discussion and analysis of potential impacts to TCRs). For the purposes of the California Environmental Quality Act (CEQA), the remaining three types of cultural resources are broadly divided into the following categories:

- **Historic Resources:** Historic resources are associated with the recent past. In California, historic resources are typically associated with the Spanish, Mexican, and American periods in the State's history and are generally less than 200 years old.
- **Archaeological Resources:** Archaeology is the study of artifacts and material culture with the aim of understanding human activities and cultures in the past. Archaeological resources may be associated with prehistoric indigenous cultures as well as historic periods.
- **Burial Sites and Cemeteries:** Burial sites and cemeteries are formal or informal locations where human remains have been interred.

More specifically, cultural resources may be understood as resources that have been formally recognized by a lead agency and/or are listed or determined eligible for listing on the California Register of Historical Resources (CRHR) (Public Resources Code [PRC] § 5024.1, Title 14 California Code of Regulations [CCR] § 4852). It is notable that the fact that a resource is not yet identified as a historical resource or found eligible for the CRHR does not preclude a lead agency from determining that said resource is a historical resource pursuant to Public Resources Code Sections 5020.1(j) or 5024.1. Under CEQA, a substantial adverse change in the significance of a historical resource would constitute a significant effect on the environment.

Unless otherwise stated, information in this section is based on a Cultural Resources Assessment (CRA) prepared by L&L Environmental, Inc. (L&L) on September 18, 2017, and last revised on December 21, 2021,² this report is included in Appendix E. Recommendations provided in the L&L CRA to address potential impacts on cultural resources during ground-disturbing activities are incorporated into this section where appropriate.

¹ Historic integrity refers to the authenticity of a property's historic identity, evidenced by survival of physical characteristics that existed during the property's prehistoric or historic period. Historic integrity is the composite of seven qualities: location, design, setting, materials, workmanship, feeling, and association.

² L&L Environmental, Inc. 2019. Cultural Resources Assessment, Rio Vista Specific Plan 16001, City of Jurupa Valley, Riverside County, California. June 12. Most recently updated: December 21, 2021.

A Notice of Preparation (NOP) was released for public review on December 6, 2021, and an Environmental Impact Report (EIR) Scoping Meeting was held on December 14, 2021. No public comments were received during the scoping period related to Cultural Resources.

3.5.2 - Environmental Setting

The following is a brief overview of the prehistory, ethnography, and historic background, providing a context in which to understand the background and relevance of sites found in the general project area. Unless otherwise stated, information in this section is taken from the L&L CRA. This section is not intended to be a comprehensive review of the current resources available; rather, it serves as a general overview. Further details can be found in ethnographic studies, mission records, and major published sources.

Prehistoric Setting

The following section provides a brief discussion of the prehistoric setting for the project site that borrows heavily from the general frameworks proffered by Goldberg et al. for Diamond Valley Reservoir; O'Connell et al. for Perris Valley Reservoir; Grenda for Lake Elsinore; and Warren for the greater Southern California desert region.

Paleoarchaic Period (12,000 to 9,500 Before Present [BP])

The earliest period of human occupation in Southern California dates to the late Pleistocene-Holocene transition in coastal and desert settings. This is often referred to as the Paleoindian Period and is commonly applied to the earliest cultures across North America. This period is also referred to as Period I: Hunting, Paleocoastal, San Dieguito, Lake Mojave, and the Western Pluvial Lakes Tradition.

Others argue the existence of a Paleoarchaic tradition accounts for the stemmed and nonfluted projectile point culture(s) of the Far West and distinguish it from the Paleoindian tradition, which they equate with fluted point cultures, most notably Clovis. Davis et al. identify significant differences in the organization of Paleoarchaic and Paleoindian lithic technologies that challenge the idea of a clear evolution from fluted to nonfluted lithic reduction technologies, as implied within the Clovis first model.

Paleoarchaic sites may be associated with the remains of extinct megafauna. The period is also distinguished by a distinct lithic tool assemblage composed of percussion-flaked scrapers and knives and large, well-made, fluted, leaf-shaped, or stemmed projectile points (e.g., Lake Mojave, Silver Lake) as well as crescentics, heavy core/cobble tools, hammerstones, bifacial cores, choppers, and scraper planes. Both Warren and Wallace suggest that the absence of milling tools commonly used to process seeds and other plant materials indicates big game subsistence focus. The early occupants of Southern California's deserts were most likely nomadic large game hunters, while those occupying the coastline and islands were entrenched within a maritime economy that included large mammal, fish, and shellfish.

Pleistocene megafauna perished abruptly between 13,000 and 10,000 BP as the climate warmed and became more arid. Human populations responded to the changing environmental conditions by diversifying their subsistence base to include a variety of faunal and floral resources.

Early Archaic Period (9,500 to 7,000 BP)

The Early Archaic Period represents the earliest accepted evidence of human occupation in the vicinity of the project site. Archaeological remains associated with this period are often associated with and characterized by an abundance of metates and manos and a paucity of projectile points and faunal remains, suggesting a transition in subsistence focus from large game hunting to plant resource procurement. Evidence of this transition, which Wallace subsumed under “Period II: Food Collecting,” was noted along Southern California’s coastline at approximately 8,500 BP and associated with the Encinitas Tradition, with a slightly earlier date of 9,000 BP proposed for Central and Northern California. In Southern California’s inland valleys, the appearance of metates and manos date to as early as 9,400 BP.

The Encinitas Tradition, which Sutton and Gardner divide into inland and coastal manifestations and four distinct cultural patterns (Topanga and La Jolla along the coast; Pauma and Greven Knoll for inland areas), is characterized by a rather generic and flexible subsistence strategy employed by small groups of highly mobile hunter-gatherers with a heavy reliance upon plant resources. Material culture attributes of the Encinitas Tradition, as originally defined by Warren, include abundant metates and manos, crude core and flake tools, shell ornaments, bone tools, and a paucity of projectile points.

Few archaeological sites date to the Early Archaic in Riverside County. The majority of these contain scant evidence of Early Archaic, mostly dated off obsidian hydration rind measurements, suggesting ephemeral site use by small, highly mobile groups. This seems to support the idea that ephemeral use of the inland valleys during the Paleoindian Period continued into the Early Archaic. However, at least two sites (CA-RIV-5786 and -6069) contain evidence of semisedentary residential occupations where site reuse was anticipated, suggesting a predictable availability of water and other critical resources. These sites are found invariably near large, drought-resistant, inland water sources and may have been destination points on a scheduled, seasonal round.

Middle Archaic Period (7,000 to 4,000 BP)

Settlement activities intensified in the inland areas of cismontane Southern California during the Middle Archaic Period as conditions in the interior deserts deteriorated. Paleoecological and paleohydrological evidence suggests maximum aridity in the desert regions between approximately 7,000 and 5,000 BP, with amelioration returning at approximately 5,500 BP and continuing through 4,000 BP. The Pinto Period (ca. 7,000 to 4,000 or 3500 BP), which succeeded the Lake Mojave Period in the Mojave Desert, represents an adaptive response to changing climatic conditions evident in prehistoric subsistence practices, placing higher emphasis on the exploitation of plants and small animals than the preceding period, although hunting of large game animals continued with similar intensity.

Sutton and Gardner’s Greven Knoll I complex for the San Bernardino Mountains and inland valleys, while problematic for its lack of consistency, does identify Pinto material traits among Greven Knoll

sites. These traits led Kowta and later Sutton and Gardner to suggest the San Bernardino Mountains and inland valleys were influenced by Pinto groups occupying the Mojave Desert to the north.

Archaeological investigations in Diamond Valley identified at least 19 archaeological components associated with the Middle Archaic Period. Several intensively used residential bases and/or temporary camps containing abundant cultural debris, including temporally diagnostic artifacts (Pinto and Silver Lake projectile points, crescents), at least nine complex lithic scatters likely representing resource extraction and processing sites, and one human burial covered with large rocks and ground stone artifacts, were recorded. In addition, evidence of ephemeral Middle Archaic use is present at several sites in the form of isolated radiocarbon dated features and/or sparse scatters of obsidian debitage dated by obsidian hydration methods. More intensively used residential components occur along alluvial fan margins, while less intensively used areas are situated on arroyo bottoms or upland benches.

CA-RIV-5045, also known as the Diamond Valley Pinto Site, evinces purely Pinto and Lake Mojave materials in well-stratified, radiometrically defined cultural deposits. In addition to the numerous Pinto-style projectile points recovered, deposits contained abundant and diverse faunal assemblages, an extensive array of flaked stone tools and ground stone implements, and intact cultural features assignable to specific periods of occupation. Radiometric data, feature types, and artifact/ecofact assemblage characteristics indicate that CA-RIV-5045 was occupied most intensively between 6,200 and 5,600 BP, when it is believed to have functioned as a wintertime residential base.

The density of Middle Archaic Period sites in Diamond Valley compared to the previous period suggests land use and settlement activities intensified. Similar evidence of intensification was observed by Grenda at the Lake Elsinore site (CA-RIV-2798/H) sometime after 4800 BP. The distribution and variety of sites (i.e., residential bases, temporary camps, and a variety of ephemeral resource extraction and processing sites) suggest that Middle Archaic inhabitants of the inland valleys likely conformed to a rest-rotation collecting strategy that included warm-season residential movements through a series of resource procurement camps (otherwise known as the seasonal round), followed by longer-term residential settlements during the midwinter ebb. A key feature of rest-rotation collecting is reliance on stored foods during the interval of winter sedentary occupation. Logistic mobility, or the collection and transport of critical resources to the home residential base, also played an important role in resource procurement, especially during the winter when stored foods were likely consumed.

Late Archaic Period (4,000 to 1,500 BP)

Analysis of Late Archaic sites in nearby Diamond Valley suggests groups shifted to a semisedentary land use and collection strategy. The profusion of features especially refuse deposits in Late Archaic components suggests that seasonal encampments saw longer use and more frequent reuse than during the latter part of the Middle Archaic Period, with increasing moisture improving the conditions of Southern California after ca. 3,100 BP. Drying and warming after ca. 2,100 BP likely exacted a toll on expanding populations, influencing changes in resource procurement strategies, promoting economic diversification and resource intensification, and perhaps resulting in a permanent shift toward greater sedentism.

The Late Archaic artifact assemblage shared many technological similarities with the assemblages of the preceding Middle Archaic. New tools were added either as innovations or as “borrowed” cultural items. Influence from the Colorado Desert was apparent in the appearance of Obsidian Butte obsidian at Late Archaic assemblages in Diamond Valley. The influence of desert culture that was apparent during the Middle and early part of the Late Archaic Period, as evinced by the presence of Pinto and Elko-style dart points, waned toward the end of the Late Archaic and Phase I of the Late Prehistoric Period. For instance, the Rose Spring projectile point style, prevalent in the Mojave Desert north and west of the Mojave River, was not found in association with Late Archaic or Phase I Late Prehistoric Period sites in Diamond Valley. In fact, Rose Spring-style points are rare throughout the inland valleys. Further, the Late Archaic/Late Prehistoric transition was also marked by a decrease in use of Coso obsidian, suggesting access to Mojave Desert resources was restricted, perhaps resulting from the growth of competing social networks (e.g., the stone bead interdependence network).

Late Archaic/Late Prehistoric Transition (1,500 to 1,200 BP)

Chronometric data from archaeological sites in Diamond Valley include a 450-year gap in the human occupation record. Similar gaps were noted at Perris Reservoir and Lake Elsinore, suggesting a potential occupational hiatus of the inland valleys between the end of the Late Archaic (1,500 BP) and advent of the Medieval Warm Interval (1,200 BP). A similar occupational hiatus between 1,350 and 1,150 BP is noted in chronometric data from residential sites in Coachella Valley. The evidence suggests the inland valleys and lower desert witnessed a period of sporadic non-intensive use as these once viable areas were abandoned for other locations with greater availability and predictability of natural resources and water.

Late Archaic populations occupying canyons and desert oases of the northwestern Colorado Desert, as well as the Diamond, San Jacinto, and Moreno valleys, could have migrated into the Peninsular Ranges (e.g., Santa Rosa and San Jacinto mountains) or north into the Transverse Ranges and Mojave Desert. Movement southeast into the lower Colorado River is not likely due to the absence of Patayan I ceramics, produced as early as 1,250 BP in the lower Colorado River area, from Coachella Valley deposits radiocarbon dated as early as 1,100 BP. Patayan ceramics (i.e., evidence of interaction with the lower Colorado River) did not arrive in the Coachella Valley or the Peninsular Ranges until 950 BP.

While inland valley and lower desert areas were apparently vacated, populations were aggregating near predictable and reliable sources of water in other areas of Southern California. In the Mojave Desert and southwestern Great Basin, population aggregation coincides with the early part of the Saratoga Springs Period associated with Rosegate-series and Eastgate-series projectile point styles, as well as morphologically distinct large triangular projectile points, later classified as Saratoga Springs points. These points may represent the advent of the bow and arrow weapons system, which was used alongside the former atlatl weapons system for some time. Others working in the Mojave Desert refer to this period as Rose Spring and place the start date as far back as 1,800 BP.

A shift toward sedentism during the Saratoga Springs/Rose Springs Period led to the development of extensive residential occupations established near springs, creeks, and lakeshores. In some instances, these occupations were equipped with permanent living structures. Between 1,500 and

1,100 BP, large village sites with well-developed midden deposits appeared in the Antelope Valley, at the Bickel Site north of Antelope Valley, Rustler Rockshelter in the Mojave national preserve, and possibly at the Saratoga Springs site in Death Valley. In the northwestern Colorado Desert, a Late Archaic Period occupation near Seven Palms (CA-RIV-2642) and another below the high shoreline of Lake Cahuilla (CA-RIV-6797) persisted until approximately 1,350 BP, when the area was apparently abandoned.

Adaptive responses to changing environmental conditions associated with the Medieval Warm Interval and the diversion of the Colorado River back into the Salton Trough led to repopulation and intensive occupation of the northwestern Colorado Desert. Coinciding with this settlement shift in the desert, populations reoccupied the inland valleys around 1,200 BP.

Late Prehistoric Period (1,200 to 410 BP)

The initial date of the Late Prehistoric Period in Southern California is a topic of some debate. It is commonly associated with the appearance of a unique suite of artifacts that include Cottonwood Triangular and Desert Side-notched (DSN) projectile points and ceramics dated to approximately 800 BP. Others push the advent of the Late Prehistoric Period as far back as 1,500 BP, coeval with the Saratoga Springs/Rose Springs Period in the Mojave Desert. We suggest a more satisfactory date of 1,200 BP, coinciding with the re-intensification of land use in inland valleys following a potential 300-year occupational hiatus.

The Late Prehistoric Period may be divided into three distinct phases spanning the time before and during the Medieval Warm Interval – Phase I: 1,200 to 750 BP, Phase II: 750 to 550 BP, and Phase III: 550 to 410 BP.

Phase I of the Late Prehistoric Period (1,200 BP to 1,050 BP) is associated with the reoccupation of the inland valleys and northwestern Colorado Desert prior to the onset of the Medieval Warm Interval and the aggregation of populations near reliable water sources during the climatic interval, a pattern that peaked during Phase II (750 and 550 BP). Phase III follows the end of the Medieval Warm Interval and is characterized by the transition toward fewer more permanent residential sites that continued into and after the arrival of Europeans, which marks the beginning of the Protohistoric Period (i.e., 410 BP).

Characteristic artifacts of the Late Prehistoric Period, in general, include large triangular projectile points, sometimes referred to as Saratoga Springs points or perhaps more appropriately ancestral Cottonwoods, that transition into standard Cottonwood points, higher frequencies of ground stone (e.g., unshaped handstones, mortars, and pestles), incised stones, and shell beads. Brownware ceramics, Lower Colorado Buffware ceramics, and DSN points do not typically occur until the Protohistoric. During this time, access to Coso obsidian was restricted to the northern Mojave Desert, possibly associated with the Numic Spread resulting in increased use of cryptocrystalline silicates to the south and east. In the inland valleys, locally available lithic materials (e.g., quartz, Bedford Canyon metavolcanics) were supplemented by obsidian obtained from the Obsidian Butte source in Imperial County near the southern end of Salton Sea.

Protohistoric Period (410 to 150 BP)

The Protohistoric Period marks the arrival of the Spanish in Alta California and the impact of European influence on native populations. Although the Spanish did not formally enter the project site until centuries later, Native Americans in the area were aware of Europeans and even acquired some European goods through trade networks well before European colonization began. Such influences may be found when European- and Mexican-made materials are encountered in Protohistoric archaeological deposits. Such discoveries may contribute to analyses of trade networks, political relationships between groups, and shifts in emphasis on subsistence resources.

The Protohistoric Period witnessed an increase in usage of obsidian from the Obsidian Butte source near the southern end of Salton Sea, which was exposed between high stand intervals of Lake Cahuilla sometime between 350 and 300 BP and again between 250 to 150 BP. Furthermore, DSN points spread further inland where they are often found in Protohistoric archaeological deposits along with the more common Cottonwood Triangular points. Late in the period, European trade goods (i.e., glass trade beads) were added to the cultural assemblages.

Climatic conditions of the Little Ice Age, beginning in Phase III of the Late Prehistoric Period, continued into the Protohistoric Period and supported development of various productive plant communities and ecotones to sustain local populations almost year-round. The use of plant food increased, as did the intensity of the processing effort. Faunal data from this period demonstrates a decrease in faunal diversity, signifying both a reduction in diet breadth and greater dependency on specific animals, namely lagomorphs.

Lower temperatures during the Little Ice Age, coupled with inadequate sources of fuel wood, suggest procurement of fuel may have become an increasingly important element of logistic provisioning. Toolstone distribution patterns indicate that local materials, such as Bedford Canyon metavolcanics and quartz vein deposits, were supplemented by desert materials (obsidian and chert), which gained prominence during this period while other relatively closer sources of exotic raw materials from the west (basalt, andesite, rhyolite, metavolcanic rock, and Piedra de Lumbre “chert”) were little used, suggesting that territorial boundaries, at least to the west, had become established.

Hunting efficiency increased through use of bow and arrow and widespread exploitation of hard nuts and berries, as well as the re-intensification of acorn use (indicated by the abundance of mortars and pestles in Diamond Valley assemblages), provided reliable and storable food resources. Village sites dating to the Protohistoric Period in Diamond Valley contained deeper refuse-laden midden deposits, suggesting permanent habitation. Settlement became almost completely sedentary, with many small residential sites within larger village territories that included resource gathering and processing areas. These would have been the villages and rancherias noted by early non-native explorers of the region.

Land use intensification strategies during the Protohistoric Period mirror changes at the end of the Late Archaic Period when climatic degradation inducing resource stress on local populations may have triggered a shift from rest-rotation collecting to a semisedentary settlement strategy. If the environment during the Protohistoric Period was just as productive as Phase III of the Late Prehistoric Period, what other factors would account for the development of more intensive land use

strategies during the Protohistoric? It has been suggested that the shift to a fully sedentary settlement strategy during the Protohistoric was not a response to environmental degradation but rather resource stress resulting from a population increase that started in Phase III of the Late Prehistoric Period.

Increased population in the inland valleys may have led to competition for food, water, and other natural resources (fuel). Resource stress could not be alleviated through territorial expansion and/or resource niche-width expansion as it was during the Late Archaic and Phase I and II of the Late Prehistoric. Increasing territorial circumscription would require longer occupation of residential bases, reducing logistic movements between seasonal bases. Rather, occupation of permanent villages and increasing population likely led to territoriality over critical resources, precluding opportunities for territorial expansion and/or leading to confrontations and all-out inter-village conflict. An increase in the frequency of projectile points and the strategic placement of residential sites on elevated bedrock surfaces overlooking the floor of Diamond Valley lends some support to this theory. Alternatively, trade and ceremonial gatherings with other groups may have helped maintain social relationships, ensured food resources during stressful times, and sustained populations.

The Hakataya influence in coastal and inland Southern California regions appears to have diminished during the late Protohistoric Period, when extensive trade networks along the Mojave River and in Antelope Valley apparently broke down and large village sites were abandoned. Warren suggests that disruption in trade networks may have resulted from the movement of the Colorado River basin Chemehuevi populations southward across the trade routes.

Ethnographic Setting

Cahuilla

The ethnohistory of the Cahuilla Indians is documented in academic studies, mission records, and major published sources. The San Geronimo Pass, Coachella Valley, and Santa Rosa and San Jacinto mountains were occupied by the Cahuilla people at the time of Spanish arrival in 1769. By the early 1800s, the Cahuilla had expanded into northern Riverside County. The Cahuilla were organized into at least 12 differed patrilineal clans, which owned large spans of territory that included multiple ecological zones at high and low elevations. This allowed the Cahuilla people to exploit a wide range of plant and animal resources in different seasons. Cahuilla groups are often distinguished by the topographic region (i.e., desert, mountain, and pass) in which they established permanent settlements.

Desert Cahuilla settlements congregated around the shoreline of ancient Lake Cahuilla as well as near the mouth of canyons and valleys in areas that could supply many of their food resources within a 5-mile area. As the lake receded, the Cahuilla moved their villages and adapted their subsistence practices. Pass Cahuilla also established settlements in or near the mouths of canyons and valleys. Mountain Cahuilla occupied settlements between 3,000 and 5,000 feet in the San Jacinto and Santa Rosa Mountains.

Cahuilla clans operated within a hierarchical politico-religious structure, each with one or more ceremonial units that served as a “symbolic representation of the sociopolitical reality of the group.” These groups were part of a ritual congregation connecting autonomous groups to the broader sociopolitical, religious, and economic networks.

The Cahuilla were hunter-gatherers for the most part and may have incorporated agriculture into their subsistence foci prior to European contact. Among the animals the Cahuilla hunted were Pronghorn sheep, mule deer, rabbits, squirrels, chipmunks, desert tortoise, rats, and mice. The Cahuilla often organized communal rabbit hunts prior to ceremonial gatherings to provide food for guests and participants. When available, the Cahuilla also hunted fish and birds along the shoreline of ancient Lake Cahuilla.

Cahuilla material culture included an array of utilitarian and ceremonial objects. Cahuilla were well known for their woven baskets. They were also expert potters and used ceramics to craft many different items for storage, cooking, and other uses. Stone and wood implements were integral to daily Cahuilla life. Wooden mortars and pestles were used to process mesquite beans and other seeds and plant materials as were stone manos and pestles used with stone mortars, metates, and bedrock slicks. Cryptocrystalline and microcrystalline silicates, metavolcanics, and obsidian, among other stone materials, were worked into knives, blades, scrapers, and projectile points to tip wood arrows. Wood was utilized for bow construction, pestles and mortars, arrow shafts, throwing sticks, digging sticks, and flutes. The Cahuilla also utilized various parts of animals (e.g., bone and tendons) and plants (e.g., mescal fiber sandals) in everyday life. Ceremonial objects included shell beads, feathers, gourd rattles, crystals, wands, and various items that made up the ceremonial bundle.

Gabrieleño

The arrival of Spanish explorers and the establishment of missions and outposts during the eighteenth century ended the prehistoric period in California. At this time, traditional Gabrieleño society fragmented in the face of foreign diseases and extrication of local Native American groups into the Spanish Missions at San Gabriel and San Juan Capistrano. Bean and Smith believe the Gabrieleño population is impossible to accurately estimate at the time of Spanish arrival but suggest there may have been more than 100 mainland villages, with an average population of 50-200 people per village (i.e., 5,000 to 20,000 people). By 1800, many Gabrieleño people had died or were subjugated under Spanish rule.

The Gabrieleño were one of the most influential and powerful Native American groups in Southern California. They were a chief-oriented society of semisedentary to sedentary hunter-gatherers. The society exhibited ranked individuals, possibly chiefs, who possessed a much higher level of economic power than unranked persons. Influenced by coastal and interior environmental settings, their material culture was quite elaborate and consisted of well-made wood, bone, stone, and shell items. The Inland Gabrieleño lived in primary villages occupied year-round, supplemented by seasonal gathering camps. Their living structures were large, domed, and circular thatched rooms that may have housed multiple families. Other structures included sweatshops and ceremonial structures. The subsistence economy included a variety of plants and animals, including deer, piñon nuts, and acorns. Acorns were used as trade items for marine resources acquired by coastal groups and other goods, such as obsidian, offered by desert groups.

Luiŕeño

The term Luiŕeño originated as a description of the native peoples associated with Mission San Luis Rey near Oceanside who shared a similar language, culture, and religious worldview. The Luiŕeño refer to themselves as Payómkawichum, meaning people of the west (R. Basquez, personal communication April 1, 2014) derived from the word Payómkawic (i.e., westerner [Harrington 1933]). They were distinguished by name from their neighbors west of the Santa Ana Mountains who were brought under the influence of Mission San Juan Capistrano (i.e., Juaneños or Acjachemen; 'Axátcmeyam) but shared closely related dialects, culture, and religious customs, leading others to argue that the Payómkawichum and 'Axátcmeyam represented one ethnic nationality. As succinctly stated in recent ethnographic work among the Luiŕeño, the “anthropological characterization of Luiŕeño history and geography . . . differs considerably from the Luiŕeño’s own understanding of their origins as explained by the Luiŕeño Origin Story, or story of creation.”

The Luiŕeño were a patrilineal society, meaning property, rights, and leadership positions were inherited through the father. The Luiŕeño also practiced a form of patrilocality, in which related males lived in clusters within a village, while females were either married in or married out of the family. The Luiŕeño did not maintain moieties, at least not the Coyote and Wildcat moieties common among neighboring groups like the Cahuilla and Serrano, although White suggested that a type of ceremonial moiety system was in place prior to Spanish arrival.

Luiŕeño territory was divided into a system of village complexes, village territories, and villages. The village complex, which was like a city, contained multiple villages or neighborhoods, each with their own village territory. The Pechanga Tribe has identified several large village complexes in neighboring areas, including *Sóovamay* centered in Diamond and Domenigoni valleys; *Qaxáalku*, southeast of Lake Matthews; *Paxávxá* in Temescal Canyon; *Páayaxchi* at Lake Elsinore; and *Téemeku* in Temecula.

Areas within a village territory were connected by trails and pathways, all of which communicated information, both public and private, to the Luiŕeño. A similar system of trails connected village territories and village complexes to one another and emphasized important concepts of community and commonwealth. Oxendine, White, and others recognized the existence of Luiŕeño settlement land use patterns within historic village territories; future archaeological research in the project site region may determine just how far back these patterns can be traced into prehistory.

The Luiŕeño were, for the most part, hunters, collectors, and harvesters who utilized available resources within their village territories while also maintaining usufruct rights to gather from other village territories. Most food resources were gathered within close proximity to the village, but during certain seasons the family group would move to the coast for marine resources or into the mountains for acorns and deer. This allowed the Luiŕeño to obtain resources from a variety of ecological zones, which supplied food in all seasons. Environmental niches of particular importance within the project site would have included Riversidian sage scrub and riparian plant communities.

The Luiŕeño hunted small and large game, including various hare and rabbit, woodrat, mice, ground squirrels, quail, doves, ducks, and other birds, and both antelope and deer. Tree squirrels, most

reptiles, and predators such as coyotes, mountain lions, and bobcats were avoided as food resources, except possibly during lean times. Insects were also available as food resources. Luiseño hunting technology employed for small and large game included throwing sticks; the bow and arrow, typically with a wood or bone point; snares; traps; slings; decoys; disguises; and hunting blinds. Fire also assisted in communal rabbit drives. Many villages also had access to creeks and rivers, and nets, traps, spears, hooks and lines, and poisons were used to catch fish.

As in most of California, acorns were a major staple, but the roots, leaves, seeds, and fruit of many other plants also were used. Roots and shoots of various types were gathered from marshes and wetlands. Seeds from various grasses and scrub plants such as buckwheat also played an important role in the aboriginal diet and were available for harvest from summer through fall. Certain mushrooms and tree fungi supplemented the diet and were considered delicacies. Teas were made from a variety of floral resources and were used for medicinal cures as well as for beverages. Tobacco and datura were sacred plants used for rituals and medicine.

Plant and animal processing activities required portable and/or stationary ground stone tools. Bedrock mortars (BRMs) were fixed locations on the landscape utilized in communal, family, and private resource processing settings. They were most populated with slicks, but also contained basin metates and mortars that were worked into the outcrop surface or placed within natural depressions. BRMs were used in tandem with manos and pestles. Portable ground stone tools are sometimes found in association with BRMs but are more commonly associated with village sites, other habitation sites, and resource processing locations that did not contain bedrock outcrops (i.e., complex lithic scatters).

Most Luiseño houses were conical and partially subterranean; however, during the nineteenth century some had rectangular houses. The dwellings were made of locally available material, such as reeds, brush, or bark. Occupants entered using a door at the side of the shelter, which was sometimes accessed through a short tunnel. Smoke from a central fireplace rose through a hole in the center of the roof. Domestic chores, such as cooking, eating, and social interaction, often occurred under a brush-covered ramada that stood near the house. Earth-covered sweat houses for purification and curing rituals, ceremonial houses with fenced areas, and granaries for food storage were found in most villages.

Serrano

The history of the Serrano Indians is retained in the oral history of their surviving members. It is also documented in ethnographic studies, historic diaries, mission records, and published sources. The following is a summary of Serrano ethnohistory.

The Serrano refer to themselves collectively as *Maringayam* in Morongo dialect, which included the *Tumukvayam* in Banning Water Canyon and *Tamianutcem* at Twentynine Palms, or *Maara'yam* in the dialect of the San Manuel Indian Reservation in Highland, California. Serrano Traditional Use Area encompasses the San Bernardino Mountains extending south into the Yucaipa Valley, west to the Antelope Valley, east to Twentynine Palms and north of Barstow. The Serrano argued the limits of their traditional territory in a Claims Case against the United States in the 1950s. While Bean and Vane note the territorial description was and remains controversial, they opted to use the

description in their study of ethnohistory in Joshua Tree National Park because it was agreed upon by the tribes themselves. The Serrano traditional territory identified in the Claims Case against the United States did not include the Jurupa area, though the Serrano may have occupied the area during the Mexican Period succeeding the Gabrieleño and/or Luiseño.

The Serrano were organized into two territorial exogamous totemic moieties known as *Tuktum* (Coyote) and *Wahilyam* (Wildcat) and were composed of more than a dozen autonomous clans divided into smaller patrilineal bands that occupied defined territories. The Serrano sociopolitical, religious, and ceremonial institutions, including exogamous marriage between clans/moieties and the periodic mourning ceremony, promoted reciprocity between clans. Trade and exchange were also important and allowed for resources available in one ecological zone to be distributed to another. The Serrano's practice of reciprocity and the distribution of resources from one ecological zone operated within a broader mutual interdependence network that promoted group unity and survivability.

The Serrano practiced a semisedentary lifestyle moving among occupation sites to take advantage of seasonally available resources. Principal villages where larger corporate groups gathered were occupied in the winter, and in some cases year-round, with seasonal camps occupied by smaller bands during the spring, summer, and fall. Many of the principal villages correspond to place names provided by Serrano Indians and recorded in the Franciscan mission sacramental registers.

Serrano dwellings were used primarily for sleeping and included a central hearth for heat. Most cooking and other residential chores occurred outside in the open or under a ramada-like structure. Serrano material culture included tools and implements for hunting, gathering, and processing food as well as food storage. Common tools included manos and metates, mortars and pestles, knives, scrapers, bows and arrows tipped with stone, bone, and wood tips, ceramic and stone bowls, baskets, and bone implements (e.g., spoons, awls, or stirrers). Other items of Serrano material culture included musical instruments such as rattles and flutes, pipes, strands of shell, stone, and bone beads, abalone shell compacts, and shell and stone pendants.

Flora utilized by the Serrano included acorns, seeds, piñon nuts, bulbs, tubers, shoots, roots, chia, berries, cacti fruit, and mesquite. Game animals primarily exploited by the Serrano included mountain sheep, antelope, deer, rabbits, small rodents, birds, among which quail were the most desired, and sometimes fish. Bow and arrow were the most common hunting implements but curved throwing sticks, traps, snares, and deadfalls were also used. Communal hunts for deer and rabbits were sometimes held, often in association with Serrano ceremonies. Meats were generally baked in earthen ovens or boiled in watertight baskets containing water, meat, and hot stones. Meat was sometimes parched by tossing it along with hot coals in shallow trays. Bones were often boiled to extract nutritious marrow and blood was consumed hot or cold. Surplus meats were dried for future use. Serrano men were primarily responsible for the hunting.

The Spanish incursion devastated indigenous populations in Southern California, but some Serrano survived for many years. This was due to a combination of the ruggedness of the terrain in the far eastern San Bernardino Mountains and Mojave Desert and their dispersed populations. During the

Mexican Period and into the American Period, Serrano Indians and their neighbors were often targeted and attacked in retribution for the attacks on livestock and ranches by bands of marauders.

In 1866, three cowboys were murdered at Las Flores Ranch by a group of Chemehuevi or Paiute Indians. In retaliation, a group of American settlers living in the San Bernardino Valley formed a militia and attacked the neighboring Serrano Indians. During a 32-day campaign, most of the Native Americans living in the valley, foothills and mountains were driven from their homes or killed. Some Serrano followed Chief Antonio Sever and worked for the local ranchers in the valley while most followed *Yuhaaviatam* clan leader Santos Manuel out of the mountains and into the foothills near Highland. This location became the San Manuel Band of Mission Indians Reservation, which was established by Presidential Order in 1891.

Historic Setting

Spanish Period (1769 to 1821)

The first Europeans to traverse the territory that comprises modern Riverside County were Spanish soldier Pedro Fages and Father Francisco Garcés. This expedition to locate deserting soldiers brought the group through the foothills of the San Jacinto Mountains and along Coyote Canyon on the southern edge of Riverside County. They then continued into the Anza Valley, the San Jacinto Valley, Riverside, and eventually into San Bernardino and the Cajon Pass. Later, in 1774, Captain Juan Bautista de Anza would also utilize Coyote Canyon and enter the confines of modern Riverside County as his expedition searched for an overland route from Sonora to coastal Southern California. These expeditions sparked an influx of non-natives to Southern California, and the first of these groups were the Spanish. Associated with the Spanish migration is the establishment of missions and military presidios along the coast of California. Between 1769 and 1823, Spanish explorers and missionaries established 21 missions, four presidios, and four pueblos between San Diego and Sonoma. Although neither the missions nor presidios were ever located within modern Riverside County, their influence was far-reaching. Lands within modern Riverside County were utilized for agriculture and pasturage under the supervision of the Mission San Gabriel and the Mission San Luis Rey.

Beginning in the late eighteenth century, the Missions began establishing ranchos for the purpose of expanding their agricultural holdings. The project site and vicinity was affiliated with the Mission San Gabriel and the Rancho Jurupa.

Mexican Period (1821 to 1848)

Mexico achieved independence from Spain in 1821, and California became a distant outpost of the Mexican Republic. Under a law adopted by the Mexican Congress in 1833, the former mission lands were secularized and subdivided into land grants. The project site and vicinity was included in the Rancho Jurupa land grant that was awarded to Juan Bandini in 1838. Bandini was prominent in the region and had served as the Mission San Gabriel administrator near the end of the Spanish Mission Period.

Subdivision of rancho lands was common during the Mexican Period and portions of the Rancho Jurupa were sold over time. Within a few years after receiving the grant, Bandini divided the rancho

into two separate partitions of land and sold them to his tenant, Benjamin D. "Benito" Wilson, and his son-in-law, Abel Stearns. Benito Wilson then sold a portion of his property to Louis Robidoux in 1847. Louis Robidoux's last name is commonly misspelled as Rubidoux and this more common spelling will be used hereafter in this report. Rubidoux successfully raised stock, and planted orchards, vineyards, and grains. In addition, he opened a winery and built the first gristmill in the area in 1846. The site of the Rubidoux gristmill has been recorded as 33-9699 and is a California Point of Historical Interest (CPHI).

During this period of rancho land grants, Mexico's hold on California was threatened by the steady overland migration of American settlers into the region. War between the U.S. and Mexico commenced in May 1846 and the Mexican Period ended in 1848, at the end of the Mexican American War.

American Period (1848 to Present)

The American Period began in 1848 when Mexico ceded California to the U.S. under the Treaty of Guadalupe Hidalgo. Mexican ranchos were subdivided or sold during this period, and much of the land that once constituted rancho holdings became available for settlement by immigrants to California. For the lands once comprising the Rancho Jurupa, two separate rancho entities were recognized when Alta California was annexed: Rancho Jurupa (Rubidoux) and Rancho Jurupa (Stearns). The Rancho Jurupa (Rubidoux) was owned by Louis Rubidoux and consisted of 6,750 acres while the Rancho Jurupa (Stearns) encompassed 25,519 acres and was owned by Abel Stearns. Based on Bureau of Land Management (BLM) General Land Office (GLO) information, the project site contains lands that were once associated with both ranchos. The northern portion of the project site is mapped within the Rancho Jurupa (Stearns), while the southern portion is mapped within the Rancho Jurupa (Rubidoux) on plat maps dating to 1878. This is included as Figure 5 in the L&L CRA (Appendix E).

By the 1850s, Rubidoux began subdividing his land and urging settlers to purchase and operate small farms. He remained active on his remaining rancho lands until his death at the age of 77 in 1868. In 1871, the town of Riverside was founded on the eastern edge of the former Rancho Jurupa. In 1873-1875, the Riverside area and adjacent environs experienced an increase in growth when the navel orange was introduced to Riverside by Eliza Tibbets. This seedless orange revolutionized the citrus industry and led to the rapid spread of citrus cultivation throughout Southern California. Over the next decades, Riverside became extremely prosperous due to agricultural pursuits associated with the citrus industry. In 1887, West Riverside was founded on the old Rancho Jurupa lands and around the site of Rubidoux's house. The site of the Rubidoux house has been recorded as 33-9698 and is a CPHI. West Riverside eventually became known as the Community of Rubidoux.

The Community of Rubidoux, along with the Communities of Jurupa Hills, Mira Loma, Glen Avon, Pedley, Indian Hills, Belltown, Sunnyslope, and Crestmore Heights comprise the modern City of Jurupa Valley. The City of Jurupa Valley was incorporated on July 1, 2011, as the 482nd city in California and the 28th city in Riverside County. It occupies approximately 44 square miles and is currently characterized by a mixture of residential, commercial retail, and industrial developments, as well as lands used for rural farming and other agricultural activities.

Records Searches and Pedestrian Survey to Identify Existing Cultural Resources

Eastern Information Center

The project site lies within Riverside and San Bernardino Counties, which required records review of records at two branches of the California Historical Resources Information System (CHRIS). The record searches included the project site and all land within a one-mile radius. An initial records search for Riverside County at the Eastern Information Center (EIC) was completed on May 5, 2014. The EIC search was updated on April 6, 2015, and on January 15 and 19, 2016. L&L subsequently requested additional information from the EIC, and all documents were received on January 21 and 25, 2016. The records search for San Bernardino County was completed on February 26, 2015 (Appendix E). The results of the records search indicate that 11 cultural resources are located within or partially within the project site: six prehistoric archaeological sites and five historic archaeological sites/resources. These resources are summarized below in Table 3.5-1.

Table 3.5-1: Previously Recorded Cultural Resources Located in the Project Site

Resource Number	Recorder Name and Date	Resource Description
33-3492/CA-RIV-3492	Originally recorded by R. Parr and R. Yohe of the Archaeological Research Unit (ARU), 1988	Prehistoric: A bedrock milling site originally recorded in 1988 as two (2) bedrock milling features (Loci A and B). These features were located approximately 40 meters apart and each exhibited grinding slicks. No associated artifacts were detected.
	Updated by D. Ballester and M. Wetherbee of CRM Tech, 2005	CRM Tech resurveyed this site in 2005 and no associated artifacts were encountered.
33-3494/CA-RIV-3494	Originally recorded by R. Parr of the ARU, 1988	Prehistoric: A bedrock milling site originally recorded in 1988 as six milling slicks on two bedrock milling features. No associated artifacts were detected.
	Updated by D. Ballester and M. Wetherbee of CRM Tech, 2005	CRM Tech resurveyed this site in 2005 and no new features or artifacts were detected. In 2005, the site was mapped further to the north than the 1988 site location and no explanation is provided to address the mapping anomaly.
33-3495/CA-RIV-3495H	Originally recorded by R. Parr of the ARU, 1988	Historic: A debris or refuse scatter originally recorded in 1988. At this time, several discreet mounds of refuse were noted, and the observed artifacts dated from the 1880s to the 1920s.
	Updated by M. Wetherbee of CRM Tech, 2005	This site was not found by CRM Tech in 2005 and was presumed destroyed or obscured by vegetation.
33-3496/CA-RIV-3496	Originally recorded by R. Parr of the ARU, 1988	Prehistoric: A bedrock milling site originally recorded in 1988 as three milling slicks on two bedrock milling features. No associated artifacts were detected.
	Updated by D. Ballester and M. Wetherbee of CRM Tech, 2005	CRM Tech resurveyed the site in 2005; no new features or artifacts were detected.

Resource Number	Recorder Name and Date	Resource Description
33-3497/CA-RIV-3497	Originally recorded by R. Parr of the ARU, 1988	Prehistoric: A bedrock milling site originally recorded in 1988 as three milling slicks on two bedrock milling features. No associated artifacts were detected.
	Updated by D. Ballester and M. Wetherbee of CRM Tech, 2005	This site was not found by CRM Tech in 2005 and was believed to have been destroyed by offroad vehicle activity.
33-3498/CA-RIV-3498	Originally recorded by R. Parr of the ARU, 1988	Prehistoric: A bedrock milling site originally recorded in 1988 as three milling slicks on three bedrock milling features. No associated artifacts were detected.
	Updated by D. Ballester and M. Wetherbee of CRM Tech, 2005	CRM Tech resurveyed this site in 2005 and one new bedrock milling feature was recorded with one slick. No artifacts were detected.
33-3499/CA-RIV-34	Originally recorded by R. Parr, K. Swope, and D. Everson of the ARU, 1988	Historic: A group of water control and conveyance features recorded in 1988 as a well, two cisterns, and an irrigation ditch measuring approximately 1476 feet in length. A corral and a structure were also identified that may be associated with this resource.
	Updated by D. Ballester and M. Wetherbee of CRM Tech, 2005	A small portion of this resource was resurveyed by CRM Tech in 2005. The only observable feature was the irrigation ditch.
33-13238	Originally recorded by R. Goodwin of LSA Associates (LSA), 2003	Historic: Ormand Quarry Complex. This resource consists of an expansive granodiorite quarry complex with several features, including structural remnants/landscaping of three historic buildings, rails/ties of an associated spur, a siding, and a railyard.
	Updated by G. Austerman and R. Goodwin of LSA, 2013	
33- 13239/CA-RIV-7324H	Originally recorded by R. Goodwin of LSA, 2003	Historic: This resource is a pre-World War II power transmission line. Known as the Bloomington Overhead, the line is carried by more recently installed steel towers and an occasional wooden pole associated with its original construction.
	Updated by D. Ballester of CRM Tech, 2005	
33- 14100/CA-RIV-7740	D. Ballester and J. Eddy of CRM Tech, 2005	Prehistoric: A bedrock milling site consisting of one slick on one bedrock milling feature. No associated artifacts were detected.
33-16681/36-013627/CA-SBR-12613H	Originally recorded by M. Dice of Michael Brandman Associates (MBA), 2007	Historic: An electric power line right-of-way and its associated towers known as the Southern Sierras Powerline. This transmission line extends through portions of Riverside, San Bernardino, and Orange Counties.
	Updated by R. Hoffman, of ICF International, 2011 and J. Sanka and W. Gillean of Atkins, 2012	Updates were completed in 2011 and 2012 for segments mapped within Corona (Riverside and San Bernardino Counties) and Colton (San Bernardino County). Neither of these updates addressed the portion of the resource located in the project site.

Resource Number	Recorder Name and Date	Resource Description
Source: L&L Environmental, Inc., December 21, 2021.		

Within a 1 mile radius of the project site, 77 additional cultural resources were previously recorded. The overwhelming majority of these cultural resources are historic and predominately buildings or the remains of buildings constructed between the late 1800s and the mid-1960s. These buildings include single-family residences built between the late 1800s and mid-1950s, commercial buildings built between the mid-1920s and the mid-1960s, and multi-family properties built between the 1940s and the 1960s. Other historic-era resources include the Jensen-Alvarado Historic Ranch and Museum, the Emerald Meadows Ranch, four water control and conveyance features including the West Riverside Jurupa Canal, a power transmission line, and a spur of the Union Pacific Railroad (UPRR). Four additional historic-era resources are CPHIs, including the Riverside Cement Company, the site of the Louis Rubidoux House, the site of the Rubidoux Gristmill, and Sonora Road.

The remaining seven cultural resources include four prehistoric sites and three prehistoric isolated finds. Prehistoric sites include three bedrock milling sites and a campsite or possible permanent habitation site. The prehistoric isolated finds include a single chert flake, an obsidian biface preform, and two sherds of Tizon brownware. More information about these resources can be found in Table 2 of the L&L CRA, included in Appendix E.

The EIC and Archaeological Information Center (AIC) records searches indicate that 57 area-specific cultural resource studies were completed within the one-mile radius. Five of these studies were completed within the project site and, when combined, indicate that the entire project site was previously surveyed for cultural resources. Including these five studies, approximately 40 percent of the surface area within the search radius was previously surveyed. The details of the studies completed within the project site are summarized in Table 3.5-2. Details of the studies located within a one-mile radius of the project site can be found in Table 3 of the L&L CRA, included in Appendix E.

Table 3.5-2: Previous Cultural Resources Studies Within the Project Site

Report #	Date	Report	Author
RI-2380	1988	A Cultural Resources Assessment of the Rio Vista Project Located in the Jurupa Area of Riverside County, California	ARU
RI-2930	1978	UltraSystems Project: Archaeological Report	AA
RI-6386	2005	Historical/Archaeological Resources Survey Report: Rio Vista, Specific Plan Amendment, Near the Community of Rubidoux, Riverside County, California	CRM Tech
RI-6726	2003	Cultural Resources Assessment: Rubidoux Residential Project, Riverside County, California	LSA

Report #	Date	Report	Author
RI-8381	2010	Archaeological Survey Report for Southern California Edison's Pole Replacement Project: Highgrove-Corona 115kV Circuit, San Bernardino and Riverside Counties, California	Chambers Group
Notes: AA = Archaeological Associates ARU = Archaeological Research Unit LSA = LSA Associates, Inc. Source: L&L Environmental, Inc., December 21, 2021.			

Native American Heritage Commission Record Search

L&L submitted a Sacred Lands File Search request to the Native American Heritage Commission (NAHC) on April 11, 2019. The NAHC responded on April 29, 2019, stating the results were positive for Sacred Sites and recommended the Gabrieleño Band of Mission Indians–Kizh Nation be contacted for more information. Furthermore, the NAHC recommended contacting additional local tribes who may have information on Native American cultural resources in the project site and provided a list of names. On March 5, 2015, six scoping letters were sent to the Tribes and individuals originally identified by the NAHC. On May 1, 2019, an additional 20 scoping letters were sent to Tribes and individuals. For additional information about tribal consultation, please refer to Section 3.18, Tribal Cultural Resources.

Cultural Resources Pedestrian Survey

L&L Senior Archaeologist Barbara Loren-Webb and L&L Field Technician Rachel Irish conducted the initial survey efforts on May 1 and 11, 2014. These efforts were focused on relocating previously recorded resources. The remainder of the survey was completed by L&L Archaeologists Thomas Baurley and Cynthia Morales on May 5, 20, 21, 26, 27, and 28, 2015, and June 11, 12, 15, and 16, 2015 and by L&L Archaeologist William R. Gillean on February 19, 2016, and March 27, 2019. Approximately 737 acres within and adjacent to the project site were surveyed. Approximately 170 acres were not surveyed due to access issues generally relating to the presence of steep and unsafe slopes (greater than 20 percent slope). Survey coverage within and near the project site is shown in Figure 8 of the L&L CRA and overview photographs are included in Appendix E.

Surface visibility varied greatly throughout the project site depending on the presence or absence of vegetation and it ranged from very poor or negligible (0 to 5 percent) to excellent (90 to 100 percent). Surface visibility was good to excellent in areas with low-lying grasses and sparse weeds or in areas exhibiting unpaved roads and two-track trails. It significantly decreased in other areas due to increased vegetative cover. During the pedestrian survey, 12 previously recorded resource locations were visited. Eleven of these resources are located within the project site and one resource is outside the project site boundary. In addition, 29 previously unrecorded resource sites and isolated finds were detected within the project site.

Architectural and Historic Resources Assessment

The results of the archival aerial photograph and map review indicate that the project site could contain structures and features of historic age (greater than 45 years in age) in addition to those already identified during the records search. These potential resources consist of one water tank, one water tank or basin feature, and one possible well. A water tank is situated in the southwestern portion of the project site by at least 1959 and it remains in this location to the present based on aerial photographs. This tank is also shown on topographic maps between 1969 and the present. A second water tank or rectangular basin feature is in the northeastern portion of the project site. This potential resource is observable as a rectangular clearing in the vegetation from at least 1938 to the present in aerial photographs. It is depicted on topographic maps between 1969 and the present and is labeled as a water tank. A possible well feature is located to the immediate northeast of the water tank or basin. This feature is observable from 1966 to the present in photographs and 1969 to the present in topographic maps.

CRHR Significance Evaluations and Summary of Resources Within the Project Site

Of the 26 cultural resources verified within the direct impact area, 13 are recommended not eligible for the CRHR. The 13 other cultural resources are recommended eligible for the CRHR individually and/or as contributors to the significance of a district and are considered historical resources for the purposes of CEQA. These include 10 prehistoric sites (33-003492 [MRN 1], 33-003496 [MRN 5], 33-003498 [MRN 7], 33-014100 [MRN 10], 33-024749 [MRN 11], 33-024757 [MRN 19], 33-024759 [MRN 20], 33-024761 [MRN 23], 33-024762 [MRN 24], and 33-024763 [MRN 25]) and one prehistoric component of a mixed component site (33-003495 [MRN 4]).

Additional historical resources recommended individually eligible for the CRHR include two historically significant areas (*Hurunga* Oak and Rattlesnake Mountain (*Junā'av*)), and a prehistoric rock shelter that is also contributes to the eligibility of Rattlesnake Mountain (*Junā'av*) Ethnographic Area. The *Hurunga* Oak Native American sacred area is recommended eligible for the CRHR under Criteria 1 and Criteria 4. The Rattlesnake Mountain Ethnographic Area is recommended eligible for the CRHR under Criteria 1 and 4. Nine additional prehistoric sites and the prehistoric component of a mixed component site also contributes to the eligibility of the Rattlesnake Mountain (*Junā'av*) Ethnographic Area.

These 13 cultural resources are considered “historical resources” under CEQA and potential impacts resulting from the proposed project must be assessed and reduced to the greatest extent feasible through avoidance, minimization, and mitigation measures. In addition, the four prehistoric isolated finds that do not qualify as historical resources under CEQA may be of cultural significance to consulting Native American tribes and efforts should be made to avoid direct impacts that may result in damage to, or destruction of, these isolated resources.

3.5.3 - Regulatory Framework

Federal

National Historic Preservation Act

The National Historic Preservation Act of 1966 (NHPA), as amended, established the National Register of Historic Places (NRHP), which contains an inventory of the nation's significant prehistoric and historic properties. Under Title 36 Code of Federal Regulations Part 60, a property is recommended for possible inclusion on the NRHP if it is at least 50 years old, has integrity, and meets one of the following criteria:

- It is associated with significant events in history, or broad patterns of events.
- It is associated with significant people in the past.
- It embodies the distinctive characteristics of an architectural type, period, or method of construction; or it is the work of a master or possesses high artistic value; or it represents a significant and distinguishable entity whose components may lack individual distinction.
- It has yielded, or may yield, information important in history or prehistory.

Certain types of properties are usually excluded from consideration for listing in the NRHP, but they can be considered if they meet special requirements in addition to meeting the criteria listed above. Such properties include religious sites, relocated properties, graves and cemeteries, reconstructed properties, commemorative properties, and properties that have achieved significance within the past 50 years.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act (ARPA) amended the Antiquities Act of 1906 (16 United States Code [USC] §§ 431–433) and set a broad policy that archaeological resources are important to the nation and should be protected and required special permits before the excavation or removal of archaeological resources from public or Indian lands. The purpose of the ARPA was to secure, for the present and future benefit of the American people, the protection of archaeological resources and sites that are on public lands and Indian lands and to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data that were obtained before October 31, 1979.

American Indian Religious Freedom Act

The American Indian Religious Freedom Act (AIRFA) established federal policy to protect and preserve the inherent rights of freedom for Native American groups to believe, express, and exercise their traditional religions. These rights include but are not limited to access to sites, use and possession of sacred objects, and freedom to worship through ceremonials and traditional rites.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 sets provisions for the intentional removal and inadvertent discovery of human remains and other cultural items from

federal and tribal lands. It clarifies the ownership of human remains and sets forth a process for repatriation of human remains and associated funerary objects and sacred religious objects to the Native American groups claiming to be lineal descendants or culturally affiliated with the remains or objects. It requires any federally funded institution housing Native American remains or artifacts to compile an inventory of all cultural items within the museum or with its agency and to provide a summary to any Native American tribe claiming affiliation.

State

CEQA Guidelines Section 15064.5(a)—CEQA Definition of Historical Resources

CEQA Guidelines Section 15064.5(a), in Title 14 of the California Code of Regulations, defines a “historical resource” as:

1. A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the California Register of Historical Resources.
2. A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code, or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing on the CRHR.
4. The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

Therefore, under the CEQA Guidelines, even if a resource is not included on any local, State, or federal register, or identified in a qualifying historical resources survey, a lead agency may still determine that any resource is a historical resource for the purposes of CEQA if there is substantial evidence supporting such a determination. A lead agency must consider a resource to be historically significant if it finds that the resource meets the criteria for listing in the CRHR. Archaeological and historical sites are protected pursuant to a wide variety of State policies and regulations, as enumerated in the Public Resources Code. Cultural resources are recognized as nonrenewable resources and receive additional protection under the Public Resources Code and CEQA.

Public Resources Code 5024.1(c)—Definition of a Historic Resource

CEQA Guidelines Section 15064.5(a), in Title 14 of the California Code of Regulations, defines a “historical resource” as a resource that:

1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
2. Is associated with the lives of persons important in our past.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history.

CEQA Guidelines Section 15064.5(a)(3)—California Register of Historical Resources Criteria

As defined by CEQA Guidelines, Section 15064.5(a)(3)(A-D), a resource shall be considered historically significant if the resource meets the criteria for listing on the CRHR. The CRHR and many local preservation ordinances have employed the criteria for eligibility to the NRHP as a model (see criteria described above under the description of the NHPA) since the NHPA provides the highest standard for evaluating the significance of historic resources. A resource that meets NRHP criteria is clearly significant. In addition, a resource that does not meet NRHP standards may still be considered historically significant at a local or State level.

CEQA Guidelines 15064.5(c)—Effects on Archaeological Resources

CEQA Guidelines state that a resource need not be listed on any register to be found historically significant. CEQA Guidelines direct lead agencies to evaluate archaeological sites to determine whether they meet the criteria for listing in the CRHR. If an archaeological site is a historical resource, in that it is listed or eligible for listing in the CRHR, potential adverse impacts to it must be considered. If an archaeological site is considered not to be a historical resource but meets the definition of a “unique archaeological resource” as defined in Public Resources Code Section 21083.2, then it would be treated in accordance with the provisions of that section.

CEQA Guidelines Section 15064.5(d)—Effects on Human Remains

Native American human remains and associated burial items may be significant to descendant communities and/or may be scientifically important for their informational value. They may be significant to descendant communities for patrimonial, cultural, lineage, and religious reasons. Human remains may also be important to the scientific community, such as prehistorians, epidemiologists, and physical anthropologists. The specific stake of some descendant groups in ancestral burials is a matter of law for some groups, such as Native Americans (CEQA Guidelines § 15064.5(d); PRC § 5097.98). CEQA and other State regulations regarding Native American human remains provide the following procedural requirements to assist in avoiding potential adverse effects on human remains within the contexts of their value to both descendant communities and the scientific community:

- When an initial study identifies the existence or probable likelihood that a project would affect Native American human remains, the lead agency is to contact and work with the appropriate Native American representatives identified through the NAHC to develop an agreement for the treatment and disposal of the human remains and any associated burial items (CEQA Guidelines § 15064.5(d); PRC § 5097.98).
- If human remains are accidentally discovered, the County Coroner must be contacted. If the County Coroner determines that the human remains are Native American, the Coroner must contact the NAHC within 24 hours. The NAHC must identify the Most Likely Descendant (MLD) to provide the opportunity to make recommendations for the treatment and disposal of human remains and associated burial items.
- If the MLD fails to make recommendations within 24 hours of notification or the project applicant rejects the recommendations of the MLD, the Native American human remains and associated burial items must be reburied in a location not subject to future disturbance within the project site (PRC § 5097.98).
- If potentially affected human remains or a burial site may have scientific significance, whether or not it has significance to Native Americans or other descendant communities, then under CEQA, the appropriate mitigation of effect may require the recovery of the scientific information of the remains/burial through identification, evaluation, data recovery, analysis, and interpretation (CEQA Guidelines § 15064.5(c)(2)).

Health and Safety Code Section 7050.5 (Treatment of Human Remains)

Section 7050.5 of the Health and Safety code sets forth provisions related to the treatment of human remains. As the code states, “every person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor”³ except under circumstances as provided in Section 5097.99 of the Public Resource Code. The regulations also provides guidelines for the treatment of human remains found in locations other than a dedicated cemetery including responsibilities of the Coroner.

Public Resources Code Section 5097.98 (Discovery of Human Remains)

Section 5097.98 provides protocol for the discovery of human remains. It states that “when the commission receives notification of a discovery of Native American human remains from a County Coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, it shall immediately notify persons believed to be most likely descended from the deceased Native American.”⁴ It also sets forth provisions for descendants’ preferences for treatment of the human remains and what should be done if the commission is unable to identify a descendant.

³ California Legislative Information. 2019. Health and Safety Code—HSC. Website: http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC§ionNum=7050.5. Accessed February 22, 2019.

⁴ Find Law. 2019. California Code, Public Resources Code—PRC § 5097.98. Website: <https://codes.findlaw.com/ca/public-resources-code/prc-sect-5097-98.html>. Accessed February 22, 2019.

Local***Jurupa Valley 2017 General Plan****Conservation and Open Space Element***Goal**

COS 7 Ensuring the preservation of cultural, historical, archaeological, and paleontological resources.

Policies

- COS 7.1** **Preservation of Significant Cultural Resources.** Identify, protect, and, where necessary, archive significant paleontological, archaeological, and historical resources.
- COS 7.3** **Development Review:** Evaluate project sites for archaeological sensitivity and for a project's potential to uncover or disturb cultural resources as part of development review.
- COS 7.4** **Site Confidentiality:** Protect the confidentiality and prevent inappropriate public exposure or release of information on locations or contents of paleontological and archaeological resource sites.
- COS 7.5** **Native American Consultation:** Refer development projects for Native American tribal review and consultation as part of the environmental review process, in compliance with State law.
- COS 7.7** **Qualified Archaeologist present:** Cease construction or grading activities in and around sites where substantial archaeological resources are discovered until a qualified Archaeologist knowledgeable in Native American cultures can determine the significance of the resource and recommend alternative mitigation measures.
- COS 7.8** **Native American Monitoring:** Include Native American participation in the City's guidelines for resource assessment and impact mitigation. Native American representatives should be present during archaeological excavation and during construction in an area likely to contain cultural resources. The Native American community shall be consulted as knowledge of cultural resources expands and as the City considers updates or significant changes to its General Plan.
- COS 7.9** **Archaeological Resources Mitigation:** Require a mitigation plan to protect resources when a preliminary site survey finds substantial archaeological resources before permitting construction. Possible mitigation measures include presence of a qualified professional during initial grading or trenching; project redesign; covering with a layer of fill; excavation, removal and curation in an appropriate facility under the direction of a qualified professional.

- COS 7.10** **Historically significant buildings:** Prohibit the demolition or substantial alteration in outward appearance of historically significant buildings and structures unless doing so is necessary to remove a threat to health and safety and other means to eliminate or reduce the threat to acceptable levels are infeasible.

3.5.4 - Thresholds of Significance

Significance Criteria

In accordance with Section 15064.7 of the State CEQA Guidelines, the City of Jurupa Valley adopted local CEQA Guidelines. The City's local CEQA Guidelines are based, in part, on the CEQA checklist included in Appendix G of the State CEQA Guidelines. The City of Jurupa Valley Guidelines recognizes the following significance thresholds and Significance Criteria related to Cultural Resources. Based on these significance thresholds, a project would have a significant impact on Agriculture and Forestry Resources if it would:

- a) Cause a substantial adverse change in the significance of a historical resource as pursuant to Section 15064.5.

Under the City's local significance threshold, the project would have significant effects if: The project causes a substantial adverse change or materially alters a resource as described in CEQA Guidelines Section 15064.5(b).

The project causes a substantial adverse change or materially alters a resource as identified in General Plan Table 4.1: Designated Historic Structures in Jurupa Valley as amended from time to time.

- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

Under the City's local significance threshold, the project would have significant effects if: The project causes a substantial adverse change or materially alters a "historic" or "unique" archaeological resource pursuant to CEQA Guidelines Section 15064.5(c).

- c) Disturb any human remains, including those interred outside of formal cemeteries.
Under the City's local significance threshold, the project would have significant effects if: The project disturbs any human remains, including those interred outside of formal cemeteries.

Approach to Analysis

This evaluation focuses on whether the proposed project would impact historic architectural or archaeological resources or human remains.

The project may have an impact on a historical resource if construction of the project would impair a resource's eligibility for inclusion in the CRHR. Analysis is based on information collected from record searches at the Northwest Information Center (NWIC), additional archival research, pedestrian surveys, and information from historic architectural assessment of existing properties more than 45 years in age located within the project boundaries as described in the L&L CRA (Appendix E). If an identified impact would leave a resource no longer able to convey its significance, meaning that the

resource would no longer be eligible for listing in the CRHR, then the project's impact would be considered a significant adverse change. According to Public Resources Code Section 15126.4(b)(1) (CEQA Guidelines), if a project adheres to the Sphere of Influence standards, the project's impact "shall generally be considered mitigated below a level of significance and thus is not significant."

The project may have an impact on an archaeological resource or human remains if construction of the project would physically damage or destroy archaeological data or human remains (including those interred outside of formal cemeteries). Analysis is based on the L&L CRA.

Both direct and indirect effects of project implementation were considered for this analysis. Direct impacts are typically associated with construction and/or ground-disturbing activities and have the potential to immediately alter, diminish, or destroy all or part of the character and quality of archaeological resources and/or historic architecture. Indirect impacts are typically associated with post-project implementation conditions that have the potential to alter or diminish the historical setting of a cultural resource (generally historic architecture) by introducing visual intrusions on existing historical structures that are considered undesirable.

3.5.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and identifies mitigation measures where appropriate. Mitigation measures are derived from guidance provided by L&L and information provided by the City resulting from consultation between the City and Native American tribes.

Historic Resources

Threshold CUL-1: Would the proposed project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

Under the City's local significance threshold, the project would have significant effects if: The project causes a substantial adverse change or materially alters a resource as described in CEQA Guidelines Section 15064.5(b).

The project causes a substantial adverse change or materially alters a resource as identified in General Plan Table 4.1: Designated Historic Structures in Jurupa Valley as amended from time to time.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

These include existing regulatory requirements such as plans, policies, or programs applied to the project based on federal, State, or local law currently in place which effectively reduce impacts to cultural resources.

There are no PPPs applicable to historic resources.

Project Design Features

There are no PDFs applicable to the project related to the topic of cultural resources.

Impact Analysis

A substantial adverse change in the significance of a historical resource is defined at Section 15064.5(b)(1) of the CEQA Guidelines as the “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.”

As discussed above, 13 cultural resources within the proposed project’s direct impact area are eligible for the CRHR individually and/or as contributors to the significance of a district and are considered historical resources for the purposes of CEQA. These include two historically significant areas, *Hurunga* Oak and Rattlesnake Mountain (*Junā’av*). Development under the proposed project would result in additional residential and industrial development throughout the project site that would likely result in the alteration of these resources, which would constitute a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5. It is likely that these impacts may not be mitigated or reduced to a level less than significant. In order to reduce these impacts to the greatest extent feasible, the proposed project shall implement Mitigation Measure (MM) MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-1d.

As the City receives development applications for subsequent development under the proposed project, those applications will be reviewed by the City for compliance with policies and programs in the General Plan and the Rio Vista Specific Plan related to the protection of historical resources. The City’s Municipal Code, which implements the City’s General Plan, would be reviewed when development applications are received, and projects would be planned to reduce impacts to the greatest extent feasible. However, even with implementation of the mitigation measures listed below, impacts would remain significant and unavoidable.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

- MM CUL-1a** The Hurunga Oak is both a historic resource and a historic tribal cultural resource. Direct or indirect impacts to the Hurunga Oak Native American sacred area (MRN 45) resulting from the proposed Project that may lead to its decay or death would constitute a significant impact on the environment that may not be mitigated or reduced to a level less than significant. To ensure the continued existence of the Hurunga Oak Native American sacred area, the following steps shall be taken in accordance with City of Jurupa Valley General Plan Policy COS 7.1:
- The project proponent shall design the project to avoid direct impacts to the Hurunga Oak Native American sacred area as delineated on the Sacred Lands File by the Gabrieleño Band of Mission Indians–Kizh Nation. If complete avoidance of the area delineated on the Sacred Lands file is not feasible, the project proponent shall minimize impacts within the boundary of the sacred area through project design (e.g., reducing or limiting the construction footprint) and prepare a Cultural Resources Impact Mitigation Plan (CRIMP) to include specific actions for

this Environmentally Sensitive Area (ESA) [See MM CUL-8]. The project design and CRIMP shall be developed in coordination with the City and Gabrieleño Band of Mission Indians–Kizh Nation.

- Prior to the issuance of a grading permit, the project proponent shall complete a scientific assessment of the Hurunga Oak Native American sacred area to determine, the project's potential to disturb or disrupt, though direct or indirect impacts, the unique conditions that have allowed the oak tree to survive in this location for more than 10,000 years. A scientific specialist with qualifications approved by the City, shall perform the assessment using noninvasive methods to avoid or minimize direct or indirect impacts to the Hurunga Oak during the assessment. The specialist shall delineate the area contributing to the support of the Hurunga Oak; including, as appropriate, hydrology, topography, root system, microhabitat, etc. The project proponent shall avoid impacts within the boundary of the delineated area through project design (e.g., reducing or limiting the construction footprint). A CRIMP will be developed by the project Archaeologist to include specific actions for avoidance of this Environmentally Sensitive Area (ESA) [See MM CUL-8]. The CRIMP shall be circulated to the City and Gabrieleño Band of Mission Indians–Kizh Nation for review and comment.

MM CUL-1b The following measures/conditions will be required to reduce the project's potential direct, indirect, and cumulative impact on Rattlesnake Mountain (*Junā'av*) Ethnographic Area in accordance with the City of Jurupa Valley General Plan Policies COS 7.1, COS 7.2, COS 7.5, COS 7.7, COS 7.8, COS 7.9, and Program COS 7.1.4

- The project proponent shall name one of its dedicated open space parks Junā'av Park and commission the production of an informational kiosk that will be installed in the park. Installation shall occur prior to the approval/sign off of the landscape and irrigation systems within the park. The kiosk shall include photos and/or illustrations and a narrative description of the Rattlesnake Mountain (*Junā'av*) Ethnographic Area and its contribution to the cultural heritage of the local indigenous population. The information presented on the kiosk shall be developed in coordination with the City and the consulting Native American tribe.

MM CUL-1c Prior to the issuance of a grading permit, the project proponent shall hire a qualified Archaeologist identified on the County of Riverside's Cultural Resource Consultant List which is used by the City of Jurupa Valley, to prepare a California Department of Parks and Recreation (DPR) 523D District Record Form for *Junā'av* Ethnographic Area that identifies contributing and noncontributing resources, describes its historic function or use, and includes a narrative description and narrative statement of significance in accordance with pertinent guidelines. This measure shall be done in conjunction with MM CUL-2b.

MM CUL-1d Prior to the issuance of a grading permit, the project proponent shall hire a qualified Archaeologist identified on the County of Riverside's Cultural Resource Consultant

List which is used by the City of Jurupa Valley, to conduct archival research and prepare an educational booklet for the public that describes Jurupa (*Hurúpa/ Hurú'ŋa/ Húutsuvaxpa'/Haránka*) and its various ethnographic areas (e.g., Rattlesnake Mountain [*Junā'av*], Jurupa Hills [*Sokáva*], etc.) that contribute to the cultural heritage of indigenous population(s) and Jurupa's local history. The proponent shall circulate the booklet to the Native American Tribe for review and comment prior to publication. The project proponent shall make the booklet available to the City of Jurupa Valley, and provide the local public libraries, government buildings, etc., with copies and potentially on the City's website.

Level of Significance After Mitigation

Significant and unavoidable impact.

Archaeological Resources

Threshold CUL-2: Would the proposed project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Under the City's local significance threshold, the proposed project would have significant effects if: The project causes a substantial adverse change or materially alters a "historic" or "unique" archaeological resource pursuant to CEQA Guidelines Section 15064.5(c).

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to archaeological resources.

Project Design Features

There are no PDFs applicable to the project related to the topic of cultural resources.

Impact Analysis

As discussed above, 13 cultural resources within the proposed project's direct impact area are eligible for the CRHR individually and/or as contributors to the significance of a district and are considered historical resources for the purposes of CEQA. These include 10 prehistoric archaeological sites, one prehistoric component of a mixed component site, and two historically significant areas, *Hurunga* Oak and Rattlesnake Mountain (*Junā'av*), of which archaeological resources are contributing elements. Development under the proposed project would result in additional residential and industrial development throughout the project site that would likely result in the demolition or alteration of these resources, which would constitute a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5. It is likely that these impacts may not be mitigated or reduced to a level less than significant. In order to reduce these impacts to the greatest extent feasible, the proposed project shall implement MM CUL-1a, MM CUL-1b, MM CUL-1c, MM CUL-1d, MM CUL-1e, MM CUL-2a, MM CUL-2b, MM CUL-2c, MM CUL-2d, MM CUL-2e, MM CUL-2f, MM CUL-2g, and MM CUL-2h.

As the City receives development applications for subsequent development under the Specific Plan, those applications will be reviewed by the City of Jurupa Valley for compliance with policies and programs in the Specific Plan and General Plan related to the protection of historical resources. The City's Municipal Code, which implements the City's General Plan, would be reviewed when development applications are received, and projects will be planned to reduce impacts to the greatest extent feasible. However, even with implementation of the mitigation measures listed below, impacts would remain significant and unavoidable.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement MM CUL-1a, MM CUL-1b, MM CUL-1c, MM CUL-1c, and MM CUL-1d.

MM CUL-2a Prior to the issuance of a grading permit, the project proponent shall hire a qualified Archaeologist identified on the County of Riverside's Cultural Resource Consultant List which is used by the City of Jurupa Valley, to provide close range photogrammetric documentation and viewshed analysis (i.e., direct line of sight and 180-degree viewsheds) of all prehistoric sites within the project's direct impact area through the completion of field work. The results of the analysis, including all photos and figures, shall be presented in a technical report attached to the data recovery report. Final reports must be submitted by the project Archaeologist to the City, project proponent, consulting Native American Tribe, the Eastern Information Center (EIC) located on the campus of the University of California, Riverside, and the South Central Coastal Information Center located on the campus of California State University, Fullerton prior to final building inspection and approval (See Below MM CUL-2f). The reports shall be transmitted by U.S. Mail, return receipt requested.

MM CUL-2b Prior to the issuance of a grading permit, the project proponent shall hire a qualified Archaeologist identified on the County of Riverside's Cultural Resource Consultant List which is used by the City of Jurupa Valley, to conduct Phase II testing and a data recovery program through the completion of field work to City of Jurupa Valley standards. Based on the current project design, the testing and data recovery (as needed) will apply to 13 impacted archaeological resources within the project's direct impact area, and any additional resources within 100 feet of the project impact limits. In addition, surface collection of the four prehistoric isolates that fall within the project's direct impact area (33-024196 [MRN 33], 33-024772 [MRN 36], 33-024774 [MRN 38], and 33-024775 [MRN 39]) shall be included in the data recovery plan. If the project design changes the sites that are impacted may correspondingly change (See MM CUL-2h).

The Phase II testing and data recovery program shall include preparation of a testing and data recovery plan, completion of testing and data recovery field work, archival research, lab analysis of artifacts recovered, preparation of a data recovery report, and curation of archaeological materials in a local museum or repository or an

agreement that artifacts/materials shall be buried within a designated conservation area within the project area limits. The data recovery plan must include an archaeological research design for prehistoric archaeological resources that presents specific research domains/themes of interest, offer questions that shall be investigated through archaeological research and analysis, and identify data requirements necessary to address those questions. The plan shall also include, at a minimum, the following: site descriptions, background contexts, field methods, lab methods, reporting requirements, and a curation agreement with a local repository or a repatriation agreement with consulting tribal groups. The plan shall be prepared by the project Archaeologist and circulated for review and comment to the consulting Native American tribe and the City prior to implementation.

MM CUL-2c If the proposed development is located within waters of the United States, the project Archaeologist acting on behalf of the proponent shall consult with the United States Army Corps of Engineers (USACE) and the State Historic Preservation Office (SHPO) under Section 106. The project Archaeologist shall provide the City with a letter report that includes documentation by the USACE that waters of the United States are not present within the project site or that known resources are not present within mapped waters of the United States.

MM CUL-2d Prior to the issuance of a grading permit, the project proponent shall hire a qualified Archaeologist identified on the County of Riverside's Cultural Resource Consultant List which is used by the City of Jurupa Valley, to prepare a Cultural Resources Impact Mitigation Plan (CRIMP), to include specific actions for Environmentally Sensitive Areas (ESAs), that applies to the entire project area. The CRIMP shall include a brief description of the cultural resources present, standards and specifications for ESA and the avoided archaeological sites (14 sites currently lie outside of the project design impact area), as well as any resources that fall within 100 feet of the project impact limits. The CRIMP shall reference the Project Specifications, maps and figures and depict the location of ESA and avoided site(s). The CRIMP shall detail the fencing to be required in relation to all avoided culturally sensitive areas, the project's direct impact area and installation location of the fencing. These along with specific treatment measures will ensure the project shall have no impact on the avoided resources.

Also included shall be a discussion of key personnel and their specific roles and responsibilities, archaeological monitoring requirements and methods, pre-construction field surveys to identify known and unknown cultural resources, a discussion of archaeological resource classes that may be encountered during construction, and protocols for identifying, evaluating, treating, and curating archaeological resources that may be encountered. The plan submitted to the City and consulting Native American tribe(s) via email or other electronic format for review and comment.

MM CUL-2e A qualified Archaeologist, identified on the County of Riverside’s Cultural Resource Consultant List which is used by the City of Jurupa Valley, will oversee implementation of the Cultural Resources Impact Mitigation Plan (CRIMP). This includes archaeological and Native American monitoring on a full-time basis for all grading and ground-disturbing activities until the project Archaeologist in coordination with the consulting Tribe(s) and the City determines that resources are not likely to be encountered. The Archaeologist shall also oversee the cultural resource sensitivity training for construction personnel (i.e., Worker Environmental Awareness Program [WEAP]). Should any cultural resources be discovered during implementation of the CRIMP, the Monitor(s) shall be authorized to temporarily halt all construction-related activities within a 100-foot radius of the discovery while the resource is recorded onto appropriate California Department of Parks and Recreation (DPR) 523 Forms and evaluated for significance in consultation with the qualified Archaeologist. If the resource is determined significant, the qualified Archaeologist shall identify measures that shall be implemented to treat cultural resources in accordance with the protocols developed in the CRIMP. No further grading shall occur in the discovery area until the City is notified by the qualified Archaeologist that treatment has been completed.

MM CUL-2f Prior to final building inspection and approval, the project proponent shall provide the City of Jurupa Valley with a draft Phase II testing and data recovery report, draft archaeological monitoring report, draft California Department of Parks and Recreation (DPR) 523D District Record Form for the *Junā’av* Ethnographic Area including the photogrammetric documentation and viewshed analysis, draft educational booklet for Jurupa (*Hurúpa/ Hurú’ña/ Húutsuvaxpa’/Haránka*), and one or more of the following, (1) a receipt of payment to a local museum or repository for the curation of archaeological materials generated during implementation of the data recovery program and/or monitoring program, (2) an agreement that artifacts/materials will be buried within a designated conservation area within the project area limits or (3) a tribal repatriation agreement. The Phase II testing, data recovery report and archaeological monitoring report should follow Archaeological Resource Management Report (ARMR) format and content guidelines developed by the California Office of Historic Preservation (OHP). They shall, at a minimum, present the results of field work, lab analysis, archival research, special studies, and identify the final disposition of artifacts. The project proponent shall provide a final testing, data recovery and monitoring reports. Reports shall address comments from the City, proponent, and/or consulting Native American tribe(s). Final reports will be submitted to the City, project proponent, consulting Native American tribe(s), the Eastern Information Center (EIC) located on the campus of the University of California, Riverside, and the South Central Coastal Information Center located on the campus of California State University, Fullerton. The reports shall be transmitted by the project proponent or their designee via U.S. Mail return receipt requested.

MM CUL-2g Prior to the issuance of a grading permit, the project proponent shall hire a qualified Archaeologist identified on the County of Riverside’s Cultural Resource Consultant List which is used by the City of Jurupa Valley, to resurvey the project site and sites 33-003494 (MRN 3) and 33-003497(MRN 6). These previously recorded archaeological resources were not found during the current study and may have been obscured. These resources fall within the current direct impact area. Should the previously recorded resources be found, they would be subject to the same treatment measures placed on other prehistoric archaeological sites to reduce potentially significant impacts resulting from the project. The results of this survey shall be reported by the project Archaeologist in a letter report and provided to the City by the project proponent at or before grading permit issuance.

MM CUL-2h The following steps shall be taken to reduce potential impacts to historic and archaeological resources resulting from project design modifications:

If at any time, the Rio Vista Specific Plan development footprint is modified, project impacts to cultural resources shall be reviewed by an Archaeologist identified on the County of Riverside’s Cultural Resource Consultant List which is used by the City of Jurupa Valley to determine whether additional studies may be required prior to issuance of the grading permit, or prior to any project related disturbances. The Archaeologist in coordination with the City of Jurupa Valley, shall determine whether an update of existing literature searches, consultation, or coordination with the NAHC and the Consulting Tribal entities, survey work, Phase II testing, data recovery and/or other work is necessary based upon the nature of the proposed project and resultant impacts to cultural resources or Tribal Cultural Resources (TCRs). If a new application is submitted to the City or new/revised Specific Plan is submitted to the City, the City shall follow the requirements of Assembly Bill (AB) 52 consultation and/or Senate Bill (SB) 18.

Project modifications may include, but are not limited to, an increase in development impact acreage beyond what is addressed in this report, newly identified impacts to any resources described in this report or within 100 feet of any resources, and/or the addition of recreational trails, trailheads utilizing existing dirt paths, or any other development that may increase public accessibility and the potential for vandalism or disturbance to cultural resources in areas proposed as open space.

Level of Significance After Mitigation

Significant and unavoidable.

Human Remains

Threshold CUL-3: Would the proposed project disturb human remains, including those interred outside of formal cemeteries?

Under the City's local significance threshold, the project would have significant effects if: The project disturbs any human remains, including those interred outside of formal cemeteries.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

The following PPP applies to the proposed project and would reduce impacts related to cultural resources:

Plans, Policies, and Programs

PPP 3.5-1 The proposed project is required to comply with the applicable provisions of California Health and Safety Code Section 7050.5 as well as Public Resources Code Section 5097 *et seq.*

Project Design Features

There are no PDFs applicable to the project related to the topic of cultural resources.

Impact Analysis

While no cemeteries, informal burial sites, or human remains have been recorded, the size of the project site and existence of several significant archaeological resources increases the probability that human remains may be located within the project site. As a result, subsurface construction activities associated with the project, such as trenching and grading, could potentially damage or destroy previously undiscovered human remains. This would constitute a potentially significant impact.

However, in the event of the inadvertent discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and Section 5097.98, must be followed. In the event that human remains are discovered, implementation of MM CUL-3a and MM CUL-3b would reduce impacts related to previously undiscovered human remains to a less than significant level.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM CUL-3a Inadvertent Discovery of Human Remains

There is always the possibility that ground-disturbing activities during construction may uncover previously unknown buried human remains. In the event that human or potential human remains are encountered, the following steps shall be taken to reduce potential impacts to inadvertent discoveries of human remains:

In the event of discovery of human bone, potential human bone, or a known or potential human burial or cremation, all ground-disturbing work within 100-feet of the discovery shall halt immediately and the County Coroner and the Lead Agency shall be immediately notified. California State Health and Safety Code 7050.5

dictates that no further disturbance shall occur until the County Coroner has made necessary findings as to origin and disposition pursuant to CEQA regulations and PRC Section 5097.98. If the County Coroner determines that the remains are Native American, the NAHC shall be notified within 24 hours and guidelines of the NAHC shall be adhered to in treatment and disposition of the remains. The Lead Agency shall also retain a professional Archaeologist with Native American burial experience to conduct a field investigation of the find and consult with the Most Likely Descendant (MLD), if any, identified by the NAHC. As necessary and appropriate, the Archaeologist may provide professional assistance to the MLD, including excavation and removal of the human remains. The Lead Agency shall be responsible for approval of recommended mitigation as it deems appropriate, taking account of the provisions of State law, as set forth in CEQA Guidelines Section 15064.5(e) and PRC Section 5097.98. The project contractor shall implement approved mitigation measure(s), to be verified by the Lead Agency, prior to resuming ground-disturbing activities within 100 feet of where the remains were discovered.

- MM CUL-3b** During the development of the CRIMP and Data Recovery Plan, the proponent or the Archaeologist hired to prepare the documents will coordinate with the Consulting Native American tribe. Consistent with MM CUL-6 and MM CUL-8, the project Archaeologist shall develop the draft plan and transmit the plans to the consulting Native American tribes. The Tribe(s) shall have 45 days to respond with any comments or information they wish to provide. The Tribal comments shall be addressed in the plan and copies of the transmittal letter and the Tribal responses shall be attached to the plan. Evidence of coordination with a tribe shall be included in the plan (e.g., certified letter or email).

Level of Significance After Mitigation

Less than significant with mitigation incorporated.

3.5.6 - Cumulative Impacts

This analysis evaluates whether the impacts of the proposed project, together with the impacts of cumulative development, could result in a cumulatively significant impact with respect to cultural resources. This analysis also considers whether incremental contribution of impacts associated with the implementation of the proposed project would be significant. Both conditions must apply for a project's cumulative effects to rise to the level of a significant impact.

The geographic context for this analysis includes the City of Jurupa Valley, The *Hurunga* Oak Native American sacred area, the Rattlesnake Mountain (*Junā'av*) Ethnographic Area, and other adjacent unincorporated areas.

Historic Resources

Of the 26 cultural resources verified within the direct impact area, 13 resources are recommended eligible for the CRHR individually and/or as contributors to the significance of a district and are considered historical resources for the purposes of CEQA. Two of these resources are historical

resources that are individually eligible for the CRHR: The *Hurunga* Oak Native American sacred area and Rattlesnake Mountain (*Junā'av*) Ethnographic Area. As project implementation has the potential to significantly alter these resources, this could also constitute a significant cumulative impact to historic resources in the surrounding area.

Archaeological Resources

Of the 26 cultural resources verified within the direct impact area, 13 resources are recommended eligible for the CRHR individually and/or as contributors to the significance of a district and are considered historical resources for the purposes of CEQA. These include 10 prehistoric archaeological sites, one prehistoric component of a mixed component site, and two historically significant areas, *Hurunga* Oak and Rattlesnake Mountain (*Junā'av*), of which archaeological resources are contributing elements. As project implementation has the potential to destroy or significantly alter these resources, this could also constitute a significant cumulative impact to archaeological resources in the surrounding area.

Human Remains

Potential impacts associated with the disturbance of human remains are highly localized and unlikely to result in cumulative impacts. In the event that human remains are discovered, implementation of MM CUL-3 would reduce impacts to previously undiscovered human remains to a less than significant level.

Overall

As project implementation has the potential to significantly alter or destroy historic and archaeological resources, this could also constitute a significant cumulative impact to historic and archaeological resources within the City of Jurupa and surrounding areas. Mitigation may not reduce impacts to a less than significant level but will be required to reduce impacts to the greatest extent feasible.

Level of Cumulative Significance Before Mitigation

Potentially significant impact.

Cumulative Mitigation Measures

Implement MM CUL-1a, MM CUL-1b, MM CUL-1c, MM CUL-1d, MM CUL-2a, MM CUL-2b, MM CUL-2c, MM CUL-2d, MM CUL-2e, MM CUL-2f, MM CUL-2g, MM CUL-2h, MM CUL-3a, and MM CUL-3b.

Level of Cumulative Significance After Mitigation

Significant and unavoidable.

3.6 - Energy

3.6.1 - Introduction

This section describes the existing energy setting in the project area as well as the relevant regulatory framework. This section also evaluates the energy impacts that could result from implementation of the proposed project. Information in this section is based on project-specific energy calculation outputs included in Appendix C.

A Notice of Preparation (NOP) was released for public review on December 6, 2021, and an Environmental Impact Report (EIR) Scoping Meeting was held on December 14, 2021. No public comments were received during the scoping period related to energy.

3.6.2 - Environmental Setting

Energy Basics

Energy is generally transmitted either in the form of electricity, measured in kilowatts (kW)¹ or megawatts (MW),² or natural gas, measured in British Thermal Units (BTU) or cubic feet.³ Fuel, such as gasoline or diesel, is measured in gallons or liters. Electricity is used primarily for lighting and appliances. Natural gas is used primarily for heating, water heating, and cooking purposes and is typically associated with commercial and residential uses. Fuel is used primarily for powering off-road equipment, trucks, and passenger vehicles. The typical fuel types used are diesel and gasoline.

Electricity Generation, Distribution, and Use

State of California

According to the California Energy Commission, in 2020, the State of California generated approximately 190,913 gigawatt-hours (GWh) of electricity.⁴ Approximately 48.4 percent of this energy generation was sourced from natural gas, 33.4 percent from renewable sources (i.e., solar, wind, and geothermal), 9.4 percent from large hydroelectric sources, and the remaining 8.8 percent was sourced from coal, nuclear, oil, and other nonrenewable sources. Additionally, California imported 81,663 GWh of electricity from other states in 2020.

In 2019, according to the United States Energy Information Administration,⁵ California ranked second in the nation in conventional hydroelectric generation, fourth in electricity production, and first as a producer of electricity from solar, geothermal, and biomass resources. California leads the nation in solar thermal electricity capacity and generation.

¹ 1 kW = 1,000 watts; A watt is a derived unit of power that measure rate of energy conversion. 1 watt is equivalent to work being done at a rate of 1 joule of energy per second. In electrical terms, 1 watt is the power dissipated by a current of 1 ampere flowing across a resistance of 1 volt.

² 1 MW = 1 million watts

³ A cubic foot is a unit for quantity of heat that equals 100,000 British Thermal Units (BTU). A BTU is the quantity of heat required to raise the temperature of 1 pound of liquid water 1 degree Fahrenheit at a constant pressure of 1 atmosphere.

⁴ California Energy Commission (CEC). 2020 Total System Electric Generation. Website: <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2020-total-system-electric-generation>. Accessed February 3, 2022.

⁵ U.S. Energy Information Administration. California State Profile and Energy Estimates. Website: <https://www.eia.gov/state/?sid=CA>. Accessed February 3, 2022.

Electricity and natural gas are distributed through the various electric load-serving entities (LSEs) in California. These entities include investor-owned utilities (IOUs), publicly owned LSEs, rural electric cooperatives, community choice aggregators, and electric service providers.

City of Jurupa Valley

Southern California Edison (SCE) provides electricity to the City of Jurupa Valley (City).

Project Site

As noted in the Project Description, the project site is currently vacant. As such, the project site does not currently consume electricity.

Natural Gas Generation, Distribution, and Use

State of California

Natural gas is used extensively, from generating electricity to cooking and space heating to an alternative transportation fuel. Natural gas-fired generation has become the dominant source of electricity in California; it fuels about 43 percent of electricity consumption, followed by hydroelectric power.

According to the United States Energy Information Administration, in 2015, total natural gas consumption in California for residential, commercial, industrial, vehicle fuel, and electric power generation was 2,301 billion cubic feet per year (BCF/year). In 2020, the total natural gas consumption was 2,074 BCF/year.⁶ The overall demand remained relatively flat for the last decade, largely due to energy efficiency measures.

City of Jurupa Valley

Southern California Gas Company (SoCalGas) provides natural gas service to the City of Jurupa Valley and to the Riverside County area. SoCalGas is a subsidiary of Sempra Energy. SoCalGas is the nation's largest natural gas distribution utility and provides energy to 20.9 million consumers through 5.8 million meters in more than 500 communities. The company's service territory encompasses approximately 20,000 square miles throughout Central and Southern California.

Project Site

As noted in the Project Description, the project site is currently vacant. As such, the project site does not currently consume natural gas.

Fuel Use

State of California

The main category of fuel use in California is transportation fuel, specifically gasoline and diesel. Gasoline is the most used transportation fuel in California, with 97 percent of all gasoline sold in California being consumed by light-duty cars, pickup trucks, and sport utility vehicles. Diesel is the second largest transportation fuel used in California. Nearly all heavy-duty trucks, delivery vehicles,

⁶ United States Energy Information Administration (EIA). Natural Gas Consumption by End Use. Website: https://www.eia.gov/dnav/ng/ng_cons_sum_dcu_SCA_a.htm. Accessed January 26, 2022.

buses, trains, ships, boats and barges, and farm, construction, and heavy-duty military vehicles and equipment have diesel engines. In 2020, it was estimated that 12.57 billion gallons of gasoline and 2.98 billion gallons of diesel were sold in California.⁷

Project Site

The project site is currently vacant and would not be considered a trip generator that would result in consumption of any vehicle fuel.

3.6.3 - Regulatory Framework

Federal

In the United States, there is a focus on increasing energy efficiency, developing renewable fuel production, and improving vehicle fuel economy at a federal level. Relevant regulations that are continuing to reduce energy usage in the country, including in the planning area, include the Energy Independence and Security Act (EISA) of 2007, which the United States Environmental Protection Agency (EPA) implements through Increased Corporate Average Fuel Economy Standards, Renewable Fuel Standards, Biofuels Infrastructure, and Carbon Capture and Sequestration. EPA and National Highway Traffic Safety Administration (NHTSA) regulations have established national standards for passenger vehicles, as well as for heavy-duty trucks and buses, which support ongoing reductions in fuel usage through increased fuel economy and associated reductions in energy usage.

The State of California has received a waiver from the EPA to have separate, stricter Corporate Average Fuel Economy Standards. Although global climate change did not become an international concern until the 1980s, efforts to reduce energy consumption began in California in response to the oil crisis in the 1970s, resulting in the incidental reduction of greenhouse gas (GHG) emissions. In order to manage the State's energy needs and promote energy efficiency, Assembly Bill (AB) 1575 created the California Energy Commission (CEC) in 1975. These standards and rules ensure the vehicles sold in California continue to be more fuel-efficient and emit less pollutants, therefore reducing overall energy consumption per vehicle mile traveled.

State

California AB 1493: Pavley Regulations and Fuel Efficiency Standards

California AB 1493, enacted on July 22, 2002, required the California Air Resources Board (ARB) to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light-duty trucks. The most recent phase of the implementation for the Pavley Bill was incorporated into amendments to the Low-Emission Vehicle (LEV) 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 reduce pollutants from gasoline- and diesel-powered cars and deliver

⁷ California Energy Commission (CEC). 2020. A15 Report Responses vs. California Department of Tax and Fee Administration. Website: <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting#notes>. Accessed January 27, 2022.

increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid electric vehicles, and hydrogen fuel cell cars.⁸

California Code of Regulations Title 13: Motor Vehicles

California Code of Regulations, Title 13: Division 3, Chapter 10, Article 1, Section 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling⁹ seeks to reduce public exposure to diesel particulate matter and other air contaminants by establishing idling restrictions, emission standards, and other requirements for heavy-duty diesel engines and alternative idle-reduction technologies to limit the idling of diesel-fueled commercial motor vehicles. Any person who owns, operates, or causes to operate any diesel-fueled commercial motor vehicle must not allow a vehicle to idle for more than 5 consecutive minutes at any location or operate a diesel-fueled auxiliary power system for greater than 5 minutes at any location when within 100 feet of a restricted area.

California Code of Regulations, Title 13: Division 3, Chapter 9, Article 4.8, Section 2449: General Requirements for In-Use Off-Road Diesel-Fueled Fleets regulates nitrogen oxides (NO_x), diesel particulate matter (DPM), and other criteria pollutant emissions from in-use off-road diesel-fueled vehicles. This measure also requires each fleet to meet fleet average requirements or to demonstrate that it has met “best available control technology” requirements. Additionally, this measure requires medium and large fleets to have a written idling policy that is made available to operators of the vehicles informing them that idling is limited to 5 consecutive minutes or less.

California Senate Bill 1078: Renewable Electricity Standards

On September 12, 2002, Governor Gray Davis signed Senate Bill (SB) 1078, requiring California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 changed the due date to 2010 instead of 2017. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, which established a Renewable Portfolio Standard (RPS) target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Governor Schwarzenegger also directed the ARB (Executive Order S-21-09) to adopt a regulation by July 31, 2010, requiring the State’s LSEs to meet a 33 percent renewable energy target by 2020. The ARB approved the Renewable Electricity Standard on September 23, 2010, by Resolution 10-23. The utility provider for the proposed project would be required to comply with these standards and provide energy generated from more renewable sources.

California SB 350: Clean Energy and Pollution Reduction Act

In 2015, the State legislature approved and the Governor signed SB 350, which reaffirms California’s commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the RPS, higher energy efficiency requirements for buildings, initial strategies toward a

⁸ California Air Resources Board (ARB). 2013. Final 2017 Scoping Plan and Appendices. Website: <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2017-scoping-plan-documents>. Accessed February 3, 2022.

⁹ Thomas Reuters Westlaw. 2019. California Code of Regulations, Title 13. Motor Vehicles. Website: [https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=I143B9530D46811DE8879F88E8B0DAAAE&originationContext=documenttoc&transitionType=Default&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=I143B9530D46811DE8879F88E8B0DAAAE&originationContext=documenttoc&transitionType=Default&contextData=(sc.Default)). Accessed January 27, 2022.

regional electricity grid, and improved infrastructure for electric vehicle (EV) charging stations. Specifically, SB 350 requires the following to reduce statewide GHG emissions:¹⁰

- Increase the amount of electricity procured from renewable energy sources from 33 percent to 50 percent by 2030, with interim targets of 40 percent by 2024 and 25 percent by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission, the CEC, and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) 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 Code of Regulations Title 24

Part 6 (Energy Efficiency Standards for Residential and Nonresidential Buildings)

California Code of Regulations 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 2019 Building Energy Efficiency Standards became effective on January 1, 2020.¹¹

Part 11 (California Green Building Standards Code)

California Code of Regulations Title 24, Part 11, is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect January 1, 2011. The Code is updated on a regular basis, with the most recent update of the 2019 California Green Building Code Standards that became effective January 1, 2020.¹² 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 meet a minimum 50 percent diversion requirement. The Code also provides exemptions for areas not served by construction and demolition recycling infrastructure. The California Building Standards Code (CBC) provides the minimum standard that buildings need to meet in order to be certified for occupancy, which is generally enforced by the local building official.

California Public Utilities Code

The California Public Utilities Commission (CPUC) regulates privately owned telecommunication, electric, natural gas, water, railroad, rail transit, and passenger transportation companies. It is the responsibility of the CPUC to (1) assure California utility customers safe, reliable utility service at

¹⁰ California Legislative Information. 2015. Senate Bill 350 Clean Energy and Pollution Reduction Act of 2015. Website: https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350. Accessed February 3, 2022.

¹¹ California Energy Commission (CEC). 2019. Building Energy Efficiency Standards. <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency>. Accessed February 3, 2022.

¹² California Building Standards Commission (CBSC). 2019. California Green Building Standards. Website: <https://codes.iccsafe.org/content/CAGBSC2019/cover>. Accessed January 27, 2022.

reasonable rates; (2) protect utility customers from fraud; and (3) promote a healthy California economy. The Public Utilities Code, adopted by the legislature, defines the jurisdiction of the CPUC.

Local Regulations

City of Jurupa Valley General Plan

The following General Plan policies are directly related to the proposed project in regard to energy:

Air Quality Policies

- AQ 5.1 Reduce Solid Waste.** Utilize source reduction, recycling, and other appropriate measures to reduce the amount of solid waste disposed of in landfills.
- AQ 5.2 Energy Conservation.** Encourage advanced energy conservation techniques and the incorporation of energy efficient design elements for private and public developments, including appropriate site orientation and the use of shade and windbreak trees to reduce fuel consumption for heating and cooling, and offer incentives, as appropriate.

Housing Element Policies

- HE 5.1 New Construction.** Encourage the development of dwellings with energy efficient designs, utilizing passive and active solar features and energy-saving features that exceed minimum requirements in State law.
- HE 5.2 Sustainable Design.** Residential developments should promote sustainability in their design, placement, and use. Sustainability can be promoted through a variety of housing strategies, including recycling, renewable energy features, planting shade trees,
- HE 5.3 Site and Neighborhood Design.** Residential site, subdivision, and neighborhood designs should consider sustainability, including solar design, outdoor spaces, cluster developments.

Land Use Element

- LUE 11.6 Energy Efficiency.** Require development projects to use energy efficient design features in their site planning, building design and orientation, and landscape design that meet or exceed State energy standards.

Conservation and Open Space

- COS 5.1 Best Available Practices.** The City will employ the best available practices in energy conservation, procurement, use, and production, and encourage individuals, organizations, and other agencies to do likewise. “Best available practices” means behavior and technologies that reflect recommendations of specialists and that use the least energy for a desired outcome, considering available equipment, lifecycle costs, social and environmental side effects, and the regulations of other agencies. Best available practices include use of sustainable energy sources. Sustainable energy sources are naturally renewed in a relatively short time and avoid substantial

undesirable side effects, and include: Space heating and cooling using earth, plantings, and/or building thermal mass to moderate temperature changes; space cooling through natural ventilation; space cooling through reflectivity and shading; indoor illumination by natural light; solar space and water heating; and wind electricity generation.

COS 5.5 Energy Efficiency and Green Building. Encourage energy-efficient “green buildings” as addressed by the U.S. Green Building Council’s LEED® (Leadership in Energy and Environmental Design) Program or through other similar programs.

COS 5.8 Reduce “Heat Island” Effect. Encourage the conversion of asphalt and concrete paving to porous surfaces that help reduce surface runoff and the “heat island” effect.

City of Jurupa Valley Municipal Code

The Municipal Code includes regulatory requirements that effectively reduce environmental impacts related to energy.

Chapter 8.05, Adoption of Construction Codes

Chapter 8.05, Adoption of Construction Codes, outlines the construction codes of the City, whereby the City has adopted the CBC 2019 Edition; the California Electrical Code, 2019 Edition; the California Energy Code, 2019 Edition; and the California Green Building Standards Code, 2019 Edition (as included in Title 24 of the California Code of Regulations [CCR]).¹³ The City routinely adopts CBC updates as they become available.¹⁴

3.6.4 - Thresholds of Significance

Significance Criteria

In accordance with Section 15064.7 of the State California Environmental Quality Act (CEQA) Guidelines, the City of Jurupa Valley adopted local CEQA Guidelines. The City’s local CEQA Guidelines are based, in part, on the CEQA checklist included in Appendix G of the State CEQA Guidelines. The City of Jurupa Valley Guidelines recognizes the following significance criteria related to energy. Based on the applicable significance criteria, a project would have a significant impact on energy if it would:

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

Under the City’s local significance threshold, the project may have a significant impact if it:

- Does not meet State or federal energy standards.
- Causes wasteful, inefficient, or unnecessary consumption of energy during construction or operation.

¹³ City of Jurupa Valley. Municipal Code, Title 8, Section 8.05.010 Adoption of Construction Codes. Website: https://library.municode.com/ca/jurupa_valley/codes/municipal_code?nodeId=TIT8BUCO_CH8.05ADCOCO_S8.05.010ADCOCO. Accessed January 24, 2022.

¹⁴ City of Jurupa Valley. 2017. Jurupa Valley General Plan. September.

- Results in an increase in demand for electricity or natural gas that exceeds available supply or distribution infrastructure capabilities that could result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
 - Does not utilize source reduction, recycling, and other appropriate measures to reduce the amount of solid waste disposed of in landfills.
 - Does not include features that encourage advanced energy conservation techniques and the incorporation of energy-efficient design elements for private and public developments, including appropriate site orientation and the use of shade and windbreak trees to reduce fuel consumption for heating and cooling, and offer incentives, as appropriate.
- b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Under the City's local significance threshold, the project may have a significant impact if it:

- Does not meet the requirements of Title 24, Building Standards Code and California Green Building Standards (CALGreen) Code.
- Does not meet the following General Plan Policies (if applicable):
 - COS 5.1–Best Available Practices
 - COS 5.5–Energy Efficiency and Green Building
 - COS 5.8–Reduce "Heat Island" Effect

Approach to Analysis

For the purposes of this EIR, the approach to analysis for energy use is based on the 2019 CEQA Guidelines Appendix F (Energy Conservation). CEQA Guidelines Appendix F is focused on energy conservation through the efficient use of energy resources. Estimates of energy consumption associated with the proposed project are based, in part, on information provided by the California Emissions Estimator Model (CalEEMod) output included in this Draft EIR as Appendix C. CalEEMod contains energy intensity rates for the various land uses selected. (See Section 3.7, Greenhouse Gas Emissions, for detailed information on how energy estimates are determined.)

Furthermore, the proposed project is assessed for whether it would conflict with or obstruct a State or local plan for renewable energy or energy efficiency. To achieve this, the proposed project is assessed for its consistency with State goals and plans related to energy efficiency and renewable energy.

3.6.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the implementation of the proposed project and provides mitigation measures where appropriate. This analysis is based on operational energy demand that would result from projected future growth at buildout of the proposed project. The CalEEMod Version 2020.4.0 was used to compute energy demand (see Appendix C).

Energy Use

Threshold ENER-1: Would the proposed project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Under the City's local significance threshold, the project may have a significant impact if it:

- Does not meet State or federal energy standards.
- Causes wasteful, inefficient, or unnecessary consumption of energy during construction or operation.
- Results in an increase in demand for electricity or natural gas that exceeds available supply or distribution infrastructure capabilities that could result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Does not utilize source reduction, recycling, and other appropriate measures to reduce the amount of solid waste disposed of in landfills.
- Does not include features that encourage advanced energy conservation techniques and the incorporation of energy-efficient design elements for private and public developments, including appropriate site orientation and the use of shade and windbreak trees to reduce fuel consumption for heating and cooling, and offer incentives, as appropriate.

Plans, Policies, Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

PPPs include existing regulatory requirements such as plans, policies, or programs applied to the proposed project based on federal, State, or local law currently in place which effectively reduce impacts to energy.

The following PPP applies to the proposed project and would reduce impacts related to energy use:

PPP 3.6-1 Construction vehicle operators must comply with CCR Title 13, Motor Vehicles, section 2449(d)(3) Idling, which limits the idling times of construction vehicles to no more than five minutes. Before issuance of a grading permit, the City shall verify that grading plans contain the following note: *"A sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling."*

Project Design Features

The proposed project design includes high-density development and alternative transportation infrastructure, such as bicycle and pedestrian paths, which would reduce Vehicle Miles Traveled (VMT) and the need for fossil fuel burning vehicles. Furthermore, adherence to the City of Jurupa Valley lighting standards and green building standards will help to ensure that future developments accommodated as a part of the proposed project implement energy efficiency measures.

Impact Analysis

Implementation of the proposed project would utilize energy resources during construction and operational activities. Energy resources that would be potentially impacted include electricity, natural gas, and petroleum-based fuel supplies and distribution systems. A significant impact would occur if the proposed project would result in the inefficient, wasteful, or unnecessary use of energy according to the significance criteria adopted by the City as described above.

Construction Energy Usage

During construction, the proposed project would result in energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment and the use of electricity for temporary buildings, lighting, and other sources. It is not anticipated that natural gas would be consumed as part of project construction. Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during site clearing, grading, paving, and building construction. The types of equipment could include gasoline- and diesel-powered construction and transportation equipment, including trucks, bulldozers, frontend loaders, forklifts, and cranes.

Based on CalEEMod estimations within the modeling output files used to estimate GHG emissions associated with future development projects, under the proposed project, construction-related vehicle trips would result in approximately 488.7 million VMT and consume an estimated 19,427,357 gallons of gasoline and diesel combined during future development projects' construction phases (Appendix C).¹⁵ Additionally, on-site construction equipment would consume an estimated 325,408 gallons of diesel fuel (Appendix C).¹⁶ Limitations on idling of vehicles and equipment and requirements that equipment be properly maintained would result in fuel savings. California Code of Regulations, Title 13, Sections 2449 and 2485, limit idling from both on-road and off-road diesel-powered equipment and are enforced by the ARB. Additionally, given the cost of fuel, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction.

Other equipment could include construction lighting, field services (office trailers), and electrically driven equipment such as pumps and other tools. Single-wide mobile office trailers, which are commonly used in construction staging areas, generally range in size from 160 square feet to 720 square feet. A typical 720-square-foot office trailer would consume approximately 66,188 kWh during the approximately 10-year construction period (Appendix C).¹⁷ Because of the temporary nature of construction and the financial incentives for developers and contractors to use energy-consuming

¹⁵ Construction-related vehicle fuel was calculated by dividing the Vehicle Miles traveled (VMT) for each phase of construction by the corresponding fuel efficiencies. The EMFAC2017 web database was used to calculate fuel efficiencies based on worker, vendor, and hauling fleet mixes, and VMT was calculated by multiplying trip length by number of trips for each phase of construction. These calculations and assumptions can be found in Appendix C.

¹⁶ On-site construction fuel consumption is the sum of diesel fuel usage of each type of equipment during each phase of construction. Diesel fuel usage was calculated for each type of construction equipment by multiplying the number of pieces of equipment by usage hours by horsepower by load factor by number of days and by an estimated fuel usage value of 0.05 gallons of diesel fuel per horsepower-hour. These calculations and assumptions can be found in Appendix C.

¹⁷ Electricity use for field services was calculated by multiplying the estimated annual electricity use for a single-wide mobile office trailer by the number of years of construction for the proposed project. These calculations and assumptions can be found in Appendix C.

resources in an efficient manner, the construction phase of the proposed project would not result in wasteful, inefficient, and unnecessary consumption of energy.

Furthermore, new development would be subject to energy conservation requirements in the California Energy Code (CCR Title 24, Part 6—California’s Energy Efficiency Standards for Residential and Nonresidential Buildings) and California Green Building Standards Code (CALGreen) (CCR Title 24, Part 11). Project features that reduce the amount of solid waste associated with the project are discussed in Section 3-19, Utilities. Energy efficient project design features, including the proposed project’s high-density development and alternative transportation infrastructure, such as bicycle and pedestrian paths, would further reduce impacts related to energy. Based on standards for new construction established by the State and the South Coast Air Quality Management District (SCAQMD) and adherence to the development standards in the City’s Municipal Code, activities associated with implementation of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy. Therefore, implementation of the proposed project will have a less than significant impact under this criterion.

Operation Energy Usage

Implementation of the proposed project may result in development of up to 1,697 new residential units; 1,269,774 new square feet of light industrial uses; and 1,428,768 new square feet of business park uses within the planning area. Operation of future developments envisioned as a part of the proposed project would consume natural gas and electricity for building heating and power, lighting, and water conveyance, among other operational requirements. The electrical consumption and natural gas usage associated with the potential development have been calculated in the CalEEMod model, which estimates that the potential development would consume 73,808,873 kWh of electricity per year and 133,305,155 kilo-British Thermal Units (kBtUs) of natural gas per year. Operational vehicle fuel use from future residents and employees would consume an estimated 5,142,954 gallons of fuel per year.

Future development projects would be designed and constructed in accordance with the City’s latest adopted energy efficiency standards, which are based on the California Title 24 energy efficiency standards. Title 24 standards include a broad set of energy conservation requirements that apply to the structural, mechanical, electrical, and plumbing systems in a building. For example, the Title 24 Lighting Power Density requirements define the maximum wattage of lighting that can be used in a building based on its square footage. Title 24 additionally requires new low-rise residential developments to include rooftop solar systems meeting a minimum system capacity consistent with calculations contained in Title 24, Part 6, Subchapter 8. Title 24 standards, widely regarded as the most advanced energy efficiency standards, would help to reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation.

The emission reduction measures included in the City of Jurupa Valley General Plan, as well as the Western Regional Council of Governments (WRCOG) Subregional Climate Action Plan (CAP) reinforce these State standards. The City’s General Plan includes energy conservation policies designed to reduce energy demand through improving energy efficiency of homes and businesses, facilitating residential and commercial renewable energy, and promoting recycling and waste management

efforts, including Air Quality Element Policies AQ 5.1 and 5.2 and Program AQ 5.1.1. Air Quality policies included in the General Plan also promote increased densities, mixed use, electric vehicles, and improved circulation to reduce VMT and energy consumption. City General Plan Land Use policies encourage the development of renewable energy resources and related infrastructure. Additionally, the City participates in the WRCOG Subregional CAP in support of State GHG-reduction goals, which have corresponding energy conservation benefits. Future development projects envisioned under the proposed project would be required to comply with stipulations originating from General Plan policies. Compliance with the applicable General Plan policies would help to avoid building energy consumption that would be considered wasteful, inefficient, or unnecessary.

Additionally, plans submitted for building permits of development projects in the project area would be required to include verification demonstrating compliance with the Building and Energy Efficiency Standards in effect at the time building permits are issued. The proposed project would also be required to adhere to the provisions of CALGreen, which established planning and design standards for sustainable site development, energy efficiency (beyond the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. Furthermore, compliance with recommended mitigation for potential Air Quality and GHG impacts included as part of this EIR would reduce energy usage from the proposed project by requiring energy efficiency measures that go beyond the Title 24 and CalGreen standards, including the use of energy efficient building design and materials and EV infrastructure. Even though the proposed project would increase the consumption of electricity and natural gas resources, the proposed project would not increase demand such that SCE or SoCalGas would need to plan for new regional electricity or natural gas facilities, the construction of which could cause significant environmental effects.

Based on the above analysis, the proposed project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. As discussed above, the proposed project would meet or exceed federal energy standards and would not result in an increase in demand for electricity or natural gas that exceeds available supply or distribution infrastructure capabilities. Consistent with the City's General Plan policies, the proposed project would utilize source reduction and recycling to reduce the amount of solid waste distributed in landfills. Finally, developments consistent with the proposed project would incorporate energy efficient design elements, consistent with the City's General Plan requirements and as outlined in PPP 4.6-1. Therefore, the potential energy impacts of the proposed project would be less than significant.

Level of Significance

Less than significant impact.

Energy Efficiency and Renewable Energy Standards Consistency

Threshold ENER-2: Would the proposed project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Under the City's local significance threshold, the project may have a significant impact if it:

- Does not meet the requirements of Title 24, Building Standards Code and California Green Building Standards (CALGreen) Code.
- Does not meet the following General Plan Policies (if applicable):
 - COS 5.1—Best Available Practices
 - COS 5.5—Energy Efficiency and Green Building
 - COS 5.8—Reduce "Heat Island" Effect

Plans, Policies, Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

The following PPP applies to the proposed project and would reduce impacts related to energy efficiency:

PPP 3.6-2 Before issuing a building permit, the Building and Safety Department will ensure that the Project is designed, constructed, and operated to meet or exceed incumbent CCR Title 24 Energy Efficiency Standards and CCR Title 24 CALGreen Standards.

Project Design Features

The proposed project design includes high-density development and alternative transportation infrastructure, such as bicycle and pedestrian paths, which would reduce VMT and the need for fossil fuel burning vehicles. As discussed in Threshold ENER-1, the proposed project would also be consistent with the General Plan lighting standards and green building standards, ensuring that future developments accommodated as a part of the proposed project implement energy efficiency measures in support of local and State goals to conserve energy.

Impact Analysis

A significant impact would occur if the proposed project would conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Potential new development that may occur from implementation of the proposed project would be required to comply with the General Plan policies and programs and adherence to the development standards within Chapter 8 of the Municipal Code. The City of Jurupa Valley has not yet adopted a CAP, but the City participates as a member of the WRCOG Subregional CAP. The City's General Plan sets forth a section of Energy Efficiency and Conservation within the Air Quality Element chapter. The Housing Element chapter also provides various ways to reduce residential energy and water use. Therefore, the General Plan and the Municipal Code will be referenced herein.

Construction

As discussed under Impact ENER-1, the proposed project would result in energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment and the use of electricity for temporary buildings, lighting, and other sources. California Code of Regulations Title 13, Sections 2449 and 2485, limit idling from both on-road and off-road diesel-powered equipment and are enforced by the ARB. The proposed project would comply with these regulations. There are no policies at the local level applicable to energy conservation specific to the construction phase. Thus, it is anticipated that construction of the

proposed project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. Therefore, construction-related energy efficiency and renewable energy standards consistency impacts would be less than significant.

Operation

California's RPS required that 33 percent of electricity retail sales be served by renewable energy sources by 2020. The proposed project would be served with electricity provided by SCE. In 2020, SCE obtained 30.9 percent of its electricity from renewable energy sources, while the remaining electricity was sourced from nuclear (8.4 percent), natural gas (15.2 percent), and large hydroelectric (3.3 percent). While SCE's 2020 RPS reporting showed that only 30.9 percent of electricity sales sourced from eligible renewable sources, the RPS requirements apply to a 3-year average of utility provider electricity sourcing to allow for fluctuations in market demand and supply availability. Nonetheless, the proposed project's electricity provider is required to meet the State's 2020 objective of 33 percent and is making progress toward the State's 2024 RPS target of 44 percent. The proposed project's electricity demands would also be required to meet the State's future objective of 60 percent electricity from renewable energy sources by 2030.¹⁸

The State's Title 24 energy efficiency standards establish mandatory measures for residential buildings, including material conservation and resource efficiency. The proposed project would be required to comply with these mandatory measures. The proposed project would also comply with the CBC requirement that proposed low-rise residential buildings include rooftop solar systems. In addition, per the CBC, the proposed building would be required to provide wiring that would allow installation of EV charging equipment in any private garages or carports. Mandatory compliance with the applicable provisions of CALGreen would ensure that the proposed project uses energy efficiently.

All future development envisioned as a part of the proposed project would also be required to adhere to the Municipal Code, which contains rules and regulations regarding energy efficiency. Chapter 8.05 adopts the 2019 California Energy Code, Title 24, Part 6, and incorporates the code into the City's Municipal Code. Chapter 6.76 promotes the redirection of recyclable materials generated during construction away from landfills. Chapter 6.05 contains regulations to support water conservation. Energy conservation measures promoted through the City's General Plan policies and programs include the installation of EV infrastructure, site orientation, shading, windbreak trees, and the establishment of energy incentives. The City's participation in the WRCOG Subregional CAP, which includes local reduction measures such as the establishment of energy action plans, the use of shade trees, the inclusion of bicycle parking, and recommendations for site plan designs, further supports State and local energy conservation goals and plans. These measures represent the best available practices in energy conservation and use, as outlined in General Plan Policy COS-5.1. These energy conservation measures serve to reduce the occurrence of urban heat island effects, as encouraged through General Plan Policy COS-5.8. Future development projects would be required to comply with City-mandated policies through the development permitting process and, therefore,

¹⁸ Southern California Edison (SCE). 2020 Power Content Label. Website: <https://www.energy.ca.gov/filebrowser/download/3902>. Accessed February 3, 2022.

would implement energy efficiency measures and green building design, as encouraged under General Plan Policy COS-5.5. Other policies that promote energy conservation at the local level are voluntary.

Compliance with the above measures would ensure that future development projects would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. Furthermore, and as discussed above, the proposed project would meet the requirements of Title 24 and would meet the requirements of the City's General Plan Policies COS 5.1, 5.5, and 5.8. Therefore, operational energy efficiency and renewable energy standards consistency impacts would be less than significant.

Level of Significance

Less than significant impact.

3.6.6 - Cumulative Impacts

The geographic context for this analysis includes the project site and the City generally. This analysis considers whether implementation of the proposed project together with the impacts of cumulative development could result in cumulatively significant impacts with respect to wasteful, inefficient, or unnecessary consumption of energy resources. This analysis then considers whether the incremental contribution of the impacts associated with the proposed project would be significant. Both conditions must apply for a project's cumulative effects to rise to the level of a significant impact.

Construction Energy Demand

Past, present, and future development projects could contribute to energy impacts. All projects in the City would be required to comply with City policies that address energy conservation and energy efficiency, such as COS 5.1, Best Available Practices; COS 5.5, Energy Efficiency and Green Building and COS 5.8, Reduce "Heat Island" Effect. Additionally, all projects would be required to comply with the latest California Energy Code as well as other applicable county, State and federal regulations. Accordingly, cumulative impacts would be less than significant.

Moreover, the proposed project's incremental contribution to less than significant cumulative impacts would not be considerable. Based on the preceding analysis, the proposed project's construction activities would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources. Construction activities associated with the proposed project would not be more energy intensive than other similar construction operations throughout the region, and the proposed project would be subject to applicable regulations designed to reduce energy consumption. Accordingly, the proposed project's impacts due to construction-related energy consumption would not result in a cumulatively considerable contribution to a cumulative impact.

Operational Energy Demand

Throughout the life of a project, all projects in the City would be required to comply with City policies that address energy conservation and energy efficiency as well as other applicable county,

State and federal regulations, including CALGreen. Accordingly, cumulative operational impacts related to energy would be less than significant.

Moreover, the proposed project's incremental contribution to less than significant cumulative impacts would not be considerable. Mandatory compliance with the applicable provisions of CALGreen would ensure that the proposed project uses energy efficiently. Furthermore, Air Quality mitigation measures included in this document require that the proposed project go beyond the requirements of CALGreen, as outlined in MM AIR-1h, AIR-1i, and AIR-1j. GHG mitigation measures require the installation of Energy Star rated appliances and also require that buildings developed as a part of the proposed project implement CALGreen Standards with Leadership in Energy and Environmental Design (LEED™) features for potential certification and employ energy and water conservation measures in accordance with such standards. This includes design considerations related to the building envelope, heating, ventilation, and air conditioning (HVAC), lighting, and power systems. Additionally, architectural expression such as roofs and windows in the buildings will relate to conserving energy. Because of these PDFs and mitigation measures, energy consumed by the proposed project is calculated to be comparable to, or less than, energy consumed by other individual residential or commercial uses of similar scale and intensity currently constructed and operating in California. On this basis, the proposed project could not result in the inefficient, wasteful, or unnecessary consumption of energy. The proposed project would not cause or result in the need for additional energy facilities or energy delivery systems outside of connection to the existing utilities located in the adjacent roadways. As indicated under the analysis for Threshold ENER-2, the proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. As such, the proposed project has no potential to result in cumulatively considerable impacts due to a conflict with or obstruction of such plans.

Level of Cumulative Significance

Less than significant impact.

3.7 - Geology and Soils

3.7.1 - Introduction

This section describes existing conditions related to geology and soils in the region and project area as well as the relevant regulatory framework. This section also evaluates the possible impacts related to geology and soils that could result from implementation of the Rio Vista Specific Plan (proposed project). Information included in this section is based on the City of Jurupa Valley 2017 General Plan (General Plan) and the United States Geological Survey (USGS). Additional resources include the Geotechnical Grading Plan Review (Geotechnical Review) prepared by Leighton and Associates, Inc., on December 7, 2021, included in Appendix E; the revised Phase I Paleontological Resources Inventory prepared by L&L Environmental, Inc., on March 20, 2015, and most recently updated on December 21, 2021, included in Appendix E; the Paleontological Resource Impact Mitigation Plan (PRIMP) for Rio Vista, Specific Plan 16001, Jurupa Valley, Riverside County, California prepared by L&L Environmental, Inc., on March 20, 2015, and most recently updated on December 21, 2021, included in Appendix E; and the Preliminary Hydrology Study prepared by Hunsaker & Associates in January 2022, included in Appendix G.

A Notice of Preparation (NOP) was released for public review on December 6, 2021, and an Environmental Impact Report (EIR) Scoping Meeting was held on December 14, 2021. No public comments were received during the scoping period related to geology, soils, and seismicity.

3.7.2 - Environmental Setting

The project site is located within a developed area characterized by residential development, undeveloped land, industrial areas, and freeways. The majority of the project site is currently vacant with no existing buildings. The project site generally consists of a north- and northwest-trending ridge line with associated drainages. Topography across the site is moderate to steep, and elevations vary from a high of about 1,720 feet in the hills on the south side of the property to a low of about 972 feet on the west, north of an existing quarry. Natural hillsides above the development typically slope at inclinations in the range of 2:1 to 3:1 (horizontal to vertical) but locally up to roughly 1.4:1 and steeper. The western portion of the property generally drains to the west, and the eastern portion generally drains to the east. Vegetation on-site consists of an assortment of native grasses and brush, with very heavy vegetation in some areas, as well as a few mature trees occurring in some of the stream valley bottoms of the site.¹

Geologic Setting

Regional Geological Conditions

The site is located in the northern Peninsular Ranges Geomorphic Province of Southern California along the western margin of the San Bernardino Valley. This is a geologically complex area where the relatively northwest-moving Peninsular Range Province meets the relatively southeast-moving Transverse Ranges Province. Strike-slip faults, such as the San Jacinto Fault Zone, dominate the

¹ Leighton and Associates, Inc. 2021. Geotechnical Grading Plan Review, Proposed Rio Vista Development, West of 20th Street, South of County Line, City of Jurupa Valley, California. December 7.

structure of the Peninsular Ranges. The active San Andreas Fault Zone, located approximately 13.67 miles (22 kilometers) northeast of the site, separates the valley from the rugged San Bernardino Mountains. The active San Jacinto Fault Zone is present about 6.21 miles (10 kilometers) to the northeast, and the active Cucamonga fault is located about 11.18 (18 kilometers) to the northwest. The San Andreas, San Jacinto, and Cucamonga faults have experienced significant activity in the recent geologic past.

Based on available regional geologic maps, the site and surroundings are underlain by granitic bedrock of the Upper Cretaceous age and locally by metamorphic schist of Paleozoic age. The bedrock units are mantled by older and younger alluvium.²

Project Site

Existing Soils

Subsurface Soil Conditions

Based on the Geotechnical Review, the project site is underlain by surficial units and bedrock. Mapped surficial units include artificial fill, young alluvium, and older alluvium. Artificial fill was encountered in test pits excavated in the northwestern and northeastern valley portions of the project site. Uncontrolled artificial fill consisting of silty sand was encountered to depths ranging from 1 to 4 feet in several test pits. The fill was generally dry and loose and contained plastic bags, metal scraps, cloth, and other debris. Uncontrolled fill and debris were also reported in two test pit logs, with 10 feet of fill/trash in one of the test pits. Uncontrolled fill may be present in other areas of the site, particularly where dirt roads cross drainage areas.³

Young or recent alluvium generally consisting of silty sand and sand that was dry and loose is present in active stream channels in several areas of the site. Young alluvium was usually less than about 4 feet thick; however, 12 feet of loose alluvial soil was encountered in one test pit. Older Alluvium mantles much of the lower elevations of the site and was generally observed as light brown to reddish brown silt and sandy silt. The older alluvium encountered was dry to slightly moist and dense to very dense. The older alluvium varied from a few feet to more than 50 feet thick.

The Peninsular Ranges Batholith Tonalite underlies the ridges and elevated knolls of the site and is present at relatively shallow depth below the alluvial soil across much of the project site. This granitic bedrock consists of tonalite and heterogeneous tonalite, typically light brown to gray and medium- to very coarse-grained. Evaluation of the test pits determined that the bedrock was weathered at the surface becoming very hard at shallow depths.

Exposures of metamorphic schist mixed with tonalite were observed locally on the surface and in some of the excavator test pits. The bedrock units have numerous fractures and joints that are typically moderately angled. Regional mapping suggests a moderately steep, east-dipping joint pattern is present. Outcrops of granitic bedrock are present across the elevated portions of the site. In some areas, the rock has weathered to create spheroidal boulders resting on steep slopes.

² Leighton and Associates, Inc. 2021. Geotechnical Grading Plan Review, Proposed Rio Vista Development, West of 20th Street, South of County Line, City of Jurupa Valley, California. December 7.

³ Ibid.

Evidence of rockfall is present at the base of some slopes and buried boulders and cobbles may be present within the alluvial soil near the foot of slopes.⁴

Seismicity

The term seismicity describes the effects of seismic waves that are radiated from an earthquake fault in motion. While most of the energy released during an earthquake results in the permanent displacement of the ground, as much as 10 percent of the energy may dissipate immediately in the form of seismic waves. Seismicity can result in seismic-related hazards such as fault rupture, ground shaking, and liquefaction. Faults form in rocks when stresses overcome the internal strength of the rock, and fault rupture occurs when movement on a fault breaks through to the surface and can result in damage to infrastructure and persons. Ground movement during an earthquake can vary depending on the overall magnitude, distance to the fault, focus of earthquake energy, and type of geologic material. The composition of underlying soils, even those relatively distant from faults, can intensify ground shaking. Strong ground shaking from an earthquake can result in damage, with buildings shifted off their foundations and underground pipes broken. Liquefaction occurs when an earthquake causes ground shaking that results in saturated soil losing shear strength, making it deform and act like a liquid. When liquefaction occurs, it can result in ground failure that can result in damage to roads, pipelines, and buildings.

Slope Disturbance

Slope disturbance from long-term geologic cycle of uplift, mass wasting, intense precipitation or wind, and gravity can result in slope failure in the form of mudslides and rock fall. The project area is seismically active with known faults; however, the project area does not contain active faults that would cause geologic uplifting. Mass wasting refers to a variety of erosional processes from gradual downhill soil creep to mudslides, debris flows, landslides, and rock fall—processes that are commonly triggered by intense precipitation or wind, which varies according to climactic shifts. Often, various forms of mass wasting are grouped together as landslides, which are generally used to describe the downhill movement of rock and soil. Soil creep is a long-term, gradual downhill migration of soil under the influence of gravity and is generally on the order of a fraction of an inch per year. These soils can creep away downslope sides of foundations and reduce lateral support.

3.7.3 - Regulatory Framework

Federal

National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program, authorized by Section 402(p) of the federal Clean Water Act, controls water pollution by regulating point sources, such as construction sites and industrial operations that discharge pollutants into waters of the United States. A Storm Water Pollution Prevention Plan (SWPPP) is required to control discharges from a project site, including soil erosion, to protect waterways. A SWPPP describes the measures or practices to control discharges during both the construction and operational phases of the project. A

⁴ Leighton and Associates, Inc. 2021. Geotechnical Grading Plan Review, Proposed Rio Vista Development, West of 20th Street, South of County Line, City of Jurupa Valley, California. December 7.

SWPPP identifies project design features and structural and nonstructural Best Management Practices (BMPs) that will be used to control, prevent, remove, or reduce stormwater pollution from the site, including sediment from erosion.

Society of Vertebrate Paleontology Guidelines

The Society of Vertebrate Paleontology (SVP), a national scientific organization of professional Vertebrate Paleontologists, has established standard guidelines that outline acceptable professional practices in the conduct of paleontological resource assessments and surveys, monitoring and mitigation, data and fossil recovery, sampling procedures, specimen preparation, analysis, and curation. Most practicing professional Paleontologists in the nation adhere to the SVP's assessment, mitigation, and monitoring requirements, as specifically spelled out in its standard guidelines.⁵

State Regulations

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code [PRC] §§ 2621 to 2630) was passed in 1972 to provide a statewide mechanism for reducing the hazard of surface fault rupture to structures used for human occupancy. The main purpose of the Act is to prevent the siting of buildings used for human occupancy across the traces of active faults. It should be noted that the Act addresses the potential hazard of surface fault rupture and is not directed toward other earthquake hazards, such as seismically-induced ground shaking or landslides.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (PRC §§ 2690–2699.6), which was passed in 1990, addresses earthquake hazards other than surface fault rupture. These hazards include strong ground shaking, earthquake-induced landslides, liquefaction, or other ground failures. Much like the Alquist-Priolo Earthquake Fault Zoning Act discussed above, these seismic hazard zones are mapped by the State Geologist to assist local government in the land use planning process.

California Building Code

The State of California provides minimum standards for building design through the California Building Standards Code (California Code of Regulations [CCR], Title 24). Where no other building codes apply, Chapter 29 regulates excavation, foundations, and retaining walls. The California Building Standards Code (CBC) applies to building design and construction in the State and is based on the federal Uniform Building Code (UBC) used widely throughout the country (generally adopted on a state-by-state or district-by-district basis). The CBC has been modified for California conditions with more detailed and/or more stringent regulations.

The CBC is updated every 3 years, and the current 2019 CBC took effect on January 1, 2020.

⁵ The Society of Vertebrate Paleontology. 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Website: https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines-1.pdf. Accessed January 6, 2022.

Local Regulations

City of Jurupa Valley General Plan

The following General Plan policies are directly related to the proposed project in regard to geology and soils. Please refer to Section 3-11, Land Use and Planning, for analysis of the proposed project's consistency with these policies.

- CSSF 1.1 Fault Rupture Hazards.** When reviewing new development, minimize fault rupture hazards through the enforcement of Alquist-Priolo Earthquake Fault Zoning Act provisions and the following requirements:
- Require geologic studies or analyses for new, critical structures, such as schools, medical facilities, senior or disabled housing, or other high risk occupancies located within 0.5 mile of all active or potentially active faults.
 - Require geologic trenching studies for new developments within all designated Earthquake Fault Studies Zones, unless adequate evidence is presented and accepted by the City Engineer or a Building Official. The City may also require geologic trenching for new development located outside designated fault zones for especially critical or vulnerable structures or lifelines.
 - Require that critical infrastructure, including roads, bridges, and utilities be designated to resist, without failure, their crossing of a fault, if fault rupture occurs.
 - Encourage and support efforts by the geologic research community to better define the locations and risks of County faults. Such efforts could include data sharing and database development within regional entities, State and local governments, private organizations, utility agencies, or universities.
- CSSF 1.2 Geologic Investigations.** Require geological and geotechnical investigations as part of the environmental development and review process. This requirement shall apply to the development of any structure proposed for human occupancy or to unoccupied structures whose damage could cause secondary hazards in areas with potential for earthquake-induced liquefaction, landslides, or settlement.
- CSSF 1.3 Structural/Nonstructural Assessment.** Require structural and nonstructural assessment and, when necessary, mitigation for other types of potentially hazardous buildings that are undergoing substantial repair or improvements costing more than half of the assessed property value. Potential implementation measures could include:
- Use of variances, tax rebates, fee waivers, credits, or public recognition as incentives.
 - Inventory and structural assessment of potentially hazardous buildings based on screening methods developed by the Federal Emergency Management Agency.
 - Development of a mandatory retrofit program for hazardous, high occupancy, essential, dependent, or high risk facilities.

- Development of a mandatory program requiring public posting of seismically vulnerable buildings.

CSSF 1.4 Structural Damage. Utilize the latest approaches to minimize damage to structures located in areas determined to have high liquefaction potential during seismic events.

CSSF 1.5 Hillside Development. Encourage and, where possible, require mitigation of potential erosion, landslide, and settlement hazards for existing public and private development located on unstable hillside areas, especially slopes with recurring failures where City property or public right-of-way is threatened from slope instability or where considered appropriate and urgent by the City Engineer, CAL FIRE, or County Sheriff's Department.

City of Jurupa Valley Municipal Code

The specific policies and programs outlined in the City's Municipal Code that are related to geology and soils and that apply to the proposed project are listed below:

Health and Sanitation

Chapter 6.05 of the City Municipal Code, Storm Water/Urban Runoff Management and Discharge Controls, provides regulations for the reduction of pollutants in stormwater discharges to the maximum extent practicable, regulates illicit connections and discharges to the storm drain system, and regulates non-stormwater discharges to the storm drain system. These regulations are intended to protect and enhance the water quality of the City watercourses, water bodies, ground water, and wetlands in a manner consistent with applicable California Regional Water Quality Control Board requirements and any other applicable State or federal regulations.⁶

Building and Construction

The City has adopted the California Building Standards Code 2019 Edition (CBC) pursuant to Section 8.05.010.—Adoption of construction codes.⁷ The City routinely adopts CBC updates as they become available.⁸

Grading, Soils, and Erosion Control Codes

Chapter 8.70 of the City's Municipal Code, Grading Regulations, establishes standards regulating the design and construction of building sites and the development of property by grading, while protecting and preserving the public health, safety and general welfare and minimizing damage to adjacent properties and the environment. Specifically, Sections 8.70.030, Grading Permits, and Section 8.70.040, Grading Permit Application, outline the requirements for obtaining grading permits; Section 8.70.060, Erosion Control Plan, states the requirement of having an Erosion Control Plan when a grading permit is required and lists the contents of such plans; Section 8.70.070,

⁶ City of Jurupa Valley. Municipal Code, Title 6, Section 6.05 Storm Water/Urban Runoff Management and Discharge Controls. Website: https://library.municode.com/ca/jurupa_valley/codes/municipal_code?nodeId=TIT6HESA_CH6.05STWAURRUMADICO. Accessed September 19, 2022.

⁷ City of Jurupa Valley. Municipal Code, Title 8, Section 8.05.010 Adoption of Construction Codes. Website: https://library.municode.com/ca/jurupa_valley/codes/municipal_code?nodeId=TIT8BUCO_CH8.05ADCOCO_S8.05.010ADCOCO. Accessed January 24, 2022.

⁸ City of Jurupa Valley. 2017. Jurupa Valley General Plan. September.

Geotechnical Reports, lists the types of reports (Soil Engineering Report, Engineering Geology Report, and Seismicity Report) and their contents.⁹

The City's Municipal Code states that each geotechnical report shall be prepared in accordance with Section 8.70.070 and the current County of Riverside's Technical Guidelines for Review of Geotechnical and Geologic Reports, as may be revised by the City Council. Each geotechnical report shall be approved by the Public Works Director. The Building Official may also require a soil engineering report or additional information related to the building structure in accordance with the UBC. Recommendations contained in the approved reports shall be incorporated into the grading plans and shall become conditions of the grading permit.

3.7.4 - Thresholds of Significance

Significance Criteria

In accordance with Section 15064.7 of the State California Environmental Quality Act (CEQA) Guidelines, the City of Jurupa Valley adopted local CEQA Guidelines. The City's local CEQA Guidelines are based, in part, on the CEQA checklist included in Appendix G of the State CEQA Guidelines. The City of Jurupa Valley Guidelines recognizes the following significance thresholds and Significance Criteria related to geology and soils. Based on these significance thresholds, a project would have a significant impact on geology and soils if it would:

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

- i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Under the City's local significance threshold, the project would have significant effects if: The project is located within an Alquist-Priolo Earthquake Fault Zone as shown on General Plan Figure 8-4 -Mapped Fault Zones.

- ii. Strong seismic ground shaking.

Under the City's local significance threshold, the project would have significant effects if: The project site is located within a seismic hazard area as identified by the State of California, Department of Conservation, Earthquake Zones and Required Investigations Map.

- iii. Seismic-related ground failure, including liquefaction.

Under the City's local significance threshold, the project would have significant effects if: The project is located within an area susceptible to liquefaction as shown on General Plan Figure 8-5- Liquefaction Susceptibility in Jurupa Valley or identified as

⁹ City of Jurupa Valley. Municipal Code, Chapter 8.70 Grading Regulations. Website: https://library.municode.com/ca/jurupa_valley/codes/municipal_code?nodeId=TIT8BUCO_CH8.70GRRE. Accessed February 8, 2022.

being susceptible to liquefaction or based on a project specific geotechnical report.

iv. Landslides.

Under the City's local significance threshold, the project would have significant effects if: The project is located within the High or Very High zone per General Plan Figure 8-6: Landslide Susceptibility in Jurupa Valley.

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

Under the City's local significance threshold, the project would have significant effects if: The project is inconsistent with Municipal Code Chapter 6.05—Storm Water/Urban Runoff Management and Discharge Controls.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

Under the City's local significance threshold, the project would have significant effects if: The project is located with the following areas:

- General Plan Figure 8-6: Landslide Susceptibility in Jurupa Valley.
- General Plan Figure 8-5- Liquefaction Susceptibility in Jurupa Valley.
- An area susceptible to subsidence as identified in the Parcel Report available on the Riverside County Map My County website.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.

Under the City's local significance threshold, the project would have significant effects if: The project site is located on soil that has an EI Expansion Potential >91 according to the results of the laboratory testing performed in accordance with ASTM D 4829.

e) 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.

Under the City's local significance threshold, the project would have significant effects if: The project's proposed septic tanks or alternative wastewater disposal system do not meet the regulatory requirement of the Local Agency Management Program (LAMP) applicable to Jurupa Valley.

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

Under the City's local significance threshold, the project would have significant effects if: The project is identified as "HIGH SENSITIVITY (HIGH A) for paleontological resources in the Parcel Report available on the Riverside County Map My County website.

NOTE: Unique geologic features in this document are those that are unique to the field of geology. There are no unique geologic features identified in the General Plan.

Approach to Analysis

Impacts related to geology and soils were determined by reviewing information contained in the Geotechnical Review prepared for the project site by Leighton and Associates, Inc., on December 7, 2021. Impacts related to paleontological resources were determined through an Updated Phase I Paleontological Resources Inventory prepared for the project site by L&L Environmental, Inc., on September 5, 2017, most recently updated on December 21, 2021. Both documents are provided in Appendix E.

3.7.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

Earthquakes

Threshold GEO-1: Would the proposed project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:

i) Ground Rupture

Under the City's local significance threshold, the project would have significant effects if: The project is located within an Alquist-Priolo Earthquake Fault Zone as shown on General Plan Figure 8-4 - Mapped Fault Zones.

ii) Strong Seismic Ground Shaking

Under the City's local significance threshold, the project would have significant effects if: The project site is located within a seismic hazard area as identified by the State of California, Department of Conservation, Earthquake Zones and Required Investigations Map.

iii) Seismic-related Ground Failure, including Liquefaction

Under the City's local significance threshold, the project would have significant effects if: The project is located within an area susceptible to liquefaction as shown on General Plan Figure 8-5- Liquefaction Susceptibility in Jurupa Valley or identified as being susceptible to liquefaction or based on a project specific geotechnical report.

iv) Landslides

Under the City's local significance threshold, the project would have significant effects if: The project is located within the High or Very High zone per General Plan Figure 8-6: Landslide Susceptibility in Jurupa Valley.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

These include existing regulatory requirements such as plans, policies, or programs applied to the project based on federal, State, or local law currently in place which effectively reduce impacts to recreational opportunities.

The following PPP applies to the proposed project and would reduce impacts related to geology and soils:

PPP 3.7-1 As required by Municipal Code Section 8.05.010, the Project shall comply with the most recent edition of the California Building Code, which requires the Project to comply with the approved recommended seismic design requirements contained in the Geotechnical Evaluation, EEI Engineering Solutions, and be incorporated in the construction of each structure, to preclude significant adverse effects associated with seismic hazards.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of geology and soil.

Impact Analysis

A Geotechnical Review was prepared by Leighton and Associates, Inc. (Leighton) in December of 2021. Prior to this review, the project site was included in previous studies, including a geotechnical feasibility report prepared by Gary S. Rasmussen and Associates (Rasmussen) and a geotechnical investigation report prepared by John R. Byerly, Inc. (Byerly) in 2006. Further, the project site was also previously evaluated in a preliminary investigation report prepared by Leighton in 2015 for a mixed-use development proposed at that time.

The Geotechnical Review prepared for the proposed project concluded that the proposed development is feasible from a geotechnical standpoint. No severe geologic or soils-related concerns were identified that would preclude development of the project site for the proposed improvements. The most substantial geotechnical concerns at the project site are those related to the potential for strong seismic shaking, hard bedrock, potentially compressible soils, potential for rock fall hazards, and infeasible infiltration characteristics of planned basin locations where bedrock is either present at the surface or is relatively shallow. Appropriate planning and design of the project, as detailed below, can limit the impact of these constraints.

i) Ground Rupture

Southern California is a seismically active region that has been subject to major earthquakes in the past. According to the Geotechnical Review, there are no known active faults traversing the project site.¹⁰ Additionally, the project site does not lie within any Alquist-Priolo Earthquake Fault Zones.¹¹ The known regional active and potentially active faults include the San Jacinto-San Bernardino, San Jacinto-San Jacinto Valley, Cucamonga, San Andreas-San Bernardino, San Andreas-Southern, Chino-Central Avenue, San José, Cleghorn, Elsinore-Glen Ivy, and Whittier faults. The nearest known active fault is the San Jacinto Fault located approximately 6 miles northeast of the project site¹² (see Exhibit 3.7-1). As such, it is unlikely for ground rupture to occur at the project site. Thus, the proposed

¹⁰ Leighton and Associates, Inc. 2017. Geotechnical Grading Plan Review, Proposed Rio Vista Development, West of 20th Street, South of County Line, City of Jurupa Valley, California. December 7.

¹¹ California Department of Conservation. 2021. California Earthquake Hazards Zone Application. September 23. Website: <https://www.conservation.ca.gov/cgs/geohazards/eq-zapp>. Accessed January 24, 2022.

¹² Leighton and Associates, Inc. 2017. Geotechnical Grading Plan Review, Proposed Rio Vista Development, West of 20th Street, South of County Line, City of Jurupa Valley, California. Grading Plan Review, Proposed Rio Vista Development, West of 20th Street, South of County Line, City of Jurupa Valley, California. December 7.

project would not expose people or structures to substantial adverse effects associated with fault rupture. Therefore, impacts related to fault rupture would be less than significant.

ii) Strong Seismic Ground Shaking

According to the Geotechnical Review, the principal seismic hazard that could affect the project site is ground shaking resulting from an earthquake occurring along several major active or potentially active faults in Southern California. As discussed above, the closest known active or potentially active fault is the San Jacinto Fault, located approximately 6 miles northeast of the site.¹³ Accordingly, the project site is not located within an Alquist-Priolo Earthquake Fault Zone as shown on General Plan Figure 8-4, Mapped Fault Zones, and therefore impacts are less than significant.

The buildings and supporting infrastructure improvements proposed within the project site would be subject to ground shaking during seismic events along local and regional faults that would occur during the lifetime operation of the proposed project. Therefore, the project has the potential to expose people or structures to adverse effects associated with seismic events. Based on the location of the project site in relation to regional faults, it is anticipated that moderate to large seismic events along regional faults would result in strong seismic ground shaking at the project site.

However, the Geotechnical Review states that with proper planning and design, these impacts could be limited. For example, the report provides general earthwork and grading specifications, includes recommendations for concrete slabs-on-grade, lists seismic design parameters, and includes numerous other recommendations to reduce the impact of seismic ground shaking.

The design and construction of the improvements at the project site would be subject to the mandatory requirements and standards of the CBC Title 24 (California Green Building Standards Code [CALGreen]) and Title 8 (Buildings and Construction) of the City of Jurupa Valley Municipal Code, which are designed to attenuate the effects of strong ground shaking. Adherence to the California Building Code requirements (as stated in PPP 3.7-1), would further ensure impacts would remain less than significant.

iii) Seismic-related Ground Failure, including Liquefaction

The Geotechnical Review states that secondary seismic hazards for sites in the region of the proposed project could include soil liquefaction. Liquefaction is the loss of soil strength or stiffness due to a buildup of pore-water pressure during severe ground shaking. Liquefaction is associated primarily with loose (low density), saturated, fine-to-medium grained, cohesionless soils. As the shaking action of an earthquake progresses, the soil grains are rearranged and the soil densifies within a short period of time. Rapid densification of the soil results in a buildup of pore-water pressure. When the pore-water pressure approaches the total overburden pressure, the soil reduces greatly in strength and temporarily behaves similarly to a fluid. Effects of liquefaction can include sand boils, settlement, and bearing capacity failures below structural foundations. The State of California has not prepared liquefaction hazard maps for this area. The County of Riverside has mapped a portion of the site in an area with a moderate liquefaction potential. The Geotechnical

¹³ Leighton and Associates, Inc. 2017. Geotechnical Grading Plan Review, Proposed Rio Vista Development, West of 20th Street, South of County Line, City of Jurupa Valley, California. December 7.

Review determined that the potential for liquefaction across the majority of the site is very low due to the presence of dense soil and bedrock and the absence of shallow groundwater.¹⁴ Furthermore, the project site is not located within an area susceptible to liquefaction as shown on General Plan Figure 8-5, Liquefaction Susceptibility in Jurupa Valley, and therefore impacts are less than significant.

During a strong seismic event, seismically-induced settlement can occur within loose to moderately dense, dry, or saturated granular soil. Settlement caused by ground shaking is often nonuniformly distributed, which can result in differential settlement. The majority of the project site is underlain by granitic bedrock or firm older alluvial soil, and liquefaction and seismically-induced settlement are expected to be minor.¹⁵ Therefore impacts related to liquefaction and seismically-induced settlement would be less than significant

iv) Landslides

The topography of the project site is covered with hills and mountains. According to the Conservation and Open Space Element of the General Plan, landslides, rock falls, and debris flows are associated with mountainous and hilly areas, and although natural processes, their risks are increased near housing and human activities. Based on the General Plan Figure 8-6, Landslide Susceptibility in Jurupa Valley, the project site is located within a “Moderate” to “Very High” susceptibility to landslides, in addition to being susceptible to “Soil Block Slides” and “Soil Slumps.”¹⁶ However, the Geotechnical Review found that geologic maps previously prepared by Rasmussen and Byerly for the project site in 2005 and 2006, respectively, show that numerous large landslides have occurred at the project site based on topographic expression and aerial photograph review, not subsurface data or evidence of displaced units. The Geotechnical Review stated that a 2015 review of the project site, also conducted by Leighton and Associates, found no evidence of deep-seated landslides in the project site and has concluded that landslides previously mapped did not occur in the proposed project. Further, large, deep-seated landslides would be very unusual in the project site’s geologic terrain and setting.

According to the Geotechnical Review, the bedrock on the project site is very hard and capable of supporting tall, steep slopes. A near vertical cut of nearly 300 feet in height is exposed in the quarry off-site to the southwest. This suggests the bedrock on-site is capable of supporting the existing and manufactured slopes in the development. Cut slopes excavated at 2:1 and up to 120 feet in height are planned for the development. When underlain by granitic bedrock, these slopes are expected to be grossly stable. Natural slopes surrounding the development are also expected to be grossly stable. Further, design slopes cut into the older alluvial soils are also expected to be grossly stable when constructed at a 2:1 grade. However, portions of the natural hillsides adjacent to the proposed project are covered with exposed bedrock outcrops and subrounded to rounded boulders. There is a potential for surficial instability and rockfall in these areas. Rockfall can present a hazard to

¹⁴ Leighton and Associates, Inc. 2017. Geotechnical Grading Plan Review, Proposed Rio Vista Development, West of 20th Street, South of County Line, City of Jurupa Valley, California. December 7.

¹⁵ Leighton and Associates, Inc. 2017. Geotechnical Grading Plan Review, Proposed Rio Vista Development, West of 20th Street, South of County Line, City of Jurupa Valley, California. December 7.

¹⁶ City of Jurupa Valley. 2017. Jurupa Valley General Plan. Available: <https://www.jurupavalley.org/DocumentCenter/View/217/2017-Master-General-Plan-PDF>. Accessed January 24, 2022.

improvements at the base of slopes if not mitigated or considered in the project design. Many of the natural slopes above the development are covered with loose colluvial soils and topsoils that may be prone to soil slumps and debris flow during or immediately following heavy rainfall, resulting in potential adverse effects.

In areas with isolated rock outcrops or loose rocks, it may be possible to remove or break individual rocks and remove the hazard. However, in areas with numerous rocks on steep slopes, removal may not be possible. Accordingly, the Geotechnical Review determined that the recommendations provided in the report would limit impacts. For example, Municipal Code requirements identified in the Geotechnical Review include provision of debris catchment basins where canyons and reentrants descend to the area of the development, as well as construction of debris deflection/impact walls or earthen berms at the base of natural slopes adjacent to the development. The design and construction

of the improvements at the project site would also be subject to the mandatory requirements and standards of the City of Jurupa Valley's building code, which establishes specific site investigation requirements for hillside development to reduce risks from landslides, rock falls, and debris flows. The City also requires a geological and geotechnical investigations as part of the environmental and development review process, which applies to any structures whose damage could cause secondary hazards in areas with potential for earthquake-induced liquefaction, landslides, or settlement. Therefore, with adherence to the California Building Code (as stated in PPP 3.7-1 and as required by Municipal Code Section 8.70.070), impacts would be less than significant.

Level of Significance

Less than significant impact.

Soil Erosion

Threshold GEO-2: Would the proposed project result in substantial soil erosion or the loss of topsoil?

Under the City's local significance threshold, the project would have significant effects if: The project is inconsistent with Municipal Code Chapter 6.05—Storm Water/Urban Runoff Management and Discharge Controls.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to the proposed project related to substantial soil erosion.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of geology and soil.

Impact Analysis

The proposed grading activities associated with the project would temporarily expose underlying soils to water and air, which would increase erosion susceptibility while the soils are exposed. The project site would require extensive grading due to the relatively mountainous and hilly topography, which has a high potential for erosion. Accordingly, exposed soils would be subject to erosion during

rainfall events or high winds due to the temporary exposure of these erodible materials to wind and water. Erosion by water would be greatest during the first rainy season after grading and before the proposed project's structure foundations are established and paving and landscaping occur. Erosion by wind would be highest during periods of high wind speeds when soils are exposed.

Consistent with Municipal Code Chapter 6.05—Storm Water/Urban Runoff Management and Discharge Controls, the proposed project would follow all applicable regulations to reduce pollutants in stormwater discharges to the maximum extent practicable. In addition, prior to any development, a Conceptual Grading Plan would be prepared and submitted for the City's Planning Department for review and approval. The Conceptual Grading Plan would provide grading instructions for each individual stage of development, including techniques to prevent erosion and sedimentation as well as eliminate source pollutants during and after the grading process, approximate time frames for grading, identification of areas which may be graded during high probability rain months (January through March), and preliminary pad and roadway elevations.

Additionally, as previously discussed, the proposed project would be required to obtain an NPDES permit for construction activities. As part of the NPDES requirements, preparation of a SWPPP that would address construction fencing, sand bags, and other erosion control features (including wind erosion) that would be implemented during the construction phase to reduce the site's potential for soil erosion or the loss of topsoil would be required. In addition, construction activities associated with the proposed project would be required to comply with South Coast Air Quality Management District (SCAQMD) Rule 403, Fugitive Dust, which would preclude wind-related erosion hazards during construction activities. Mandatory compliance with the proposed project's NPDES permit and these regulatory requirements of SCAQMD Rule 403 would ensure that water and wind erosion during the proposed project's construction activities would be minimized. Accordingly, construction-related impacts associated with soil erosion and loss of topsoil would be less than significant.

Following construction, wind and water erosion on the project site would be minimized as the areas disturbed during construction would be landscaped or covered with impervious surfaces such as building foundations and paved parking areas. Only nominal areas of exposed soil, if any, would occur in the project site's landscaped and/or constructed open space areas. The vast areas set aside for conservation would not be developed and would be protected against erosion by existing vegetation. The potential for erosion effects to occur during the proposed project's operation would be indirect effects from stormwater discharged from the project site or open space areas.

According to the Preliminary Hydrology Study prepared for the proposed project, stormwater management on the project site would be accomplished via five points of connections (POCs) to existing downstream storm drains or water courses with 4 POCs conveying stormwater flows to the westerly drainage area described above and 1 POC conveying flows to the easterly drainage area. The proposed storm drain infrastructure would also include 12 drainage basins, including a combination of detention basins, debris basins, and water quality basins designed to catch stormwater runoff.

According to the Preliminary Hydrology Report, the proposed storm drain facilities would mitigate post-development flows to meet the as-built capacities of the existing downstream storm drain

facilities. The proposed basins would also mitigate water quality impact, and meet County of Riverside’s hydromodification criteria by limiting post-project discharge from the proposed site to no more than 110 percent of the pre-project flows for 2-year, 24-hours storm events.

In addition, preparation of a project-specific SWPPP and Water Quality Management Plan (WQMP) would be required. These would be submitted to the City for review and approval. The SWPPP and WQMP would be required to identify and implement an effective combination of erosion control and sediment control measures (i.e., Best Management Practices [BMPs]) to reduce or eliminate discharge to surface water from stormwater and non-stormwater discharges. Adherence to the requirements noted in the proposed project’s required WQMP and site-specific SWPPP (both included in Appendix G) would ensure that the proposed project is consistent with Municipal Code Chapter 6.05, Storm Water/Urban Runoff Management and Discharge Controls, and potential erosion impacts would be less than significant.

Level of Significance

Less than significant impact.

Unstable Geologic Location

Threshold GEO-3: Would the proposed project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Under the City’s local significance threshold, the project would have significant effects if: The project is located with the following areas:

- General Plan Figure 8-6: Landslide Susceptibility in Jurupa Valley.
- General Plan Figure 8-5: Liquefaction Susceptibility in Jurupa Valley.
- An area susceptible to subsidence as identified in the Parcel Report available on the Riverside County Map My County website.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to the proposed project related to unstable geologic location.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of geology and soil.

Impact Analysis

The project site is located within a “Moderate” to “Very High” susceptibility to landslides on the General Plan Figure 8-6, Landslide Susceptibility in Jurupa Valley. The project site is not located within a liquefaction susceptibility area on General Plan Figure 8-5, Liquefaction Susceptibility in Jurupa Valley.

Several of the project site parcels are located in areas susceptible to subsidence as identified in the Parcel Report retrieved from the Riverside County Map My County website.¹⁷ According to the Geotechnical Review, the site is underlain by surficial units and bedrock. Mapped surficial units include artificial fill, young alluvium, and older alluvium.

Soil compressibility refers to a soil's potential for settlement when subjected to increased loads as from a fill surcharge. According to the Geotechnical Review, the older alluvial soil on-site is generally considered slightly compressible. The bedrock on-site is not considered compressible. Undocumented artificial fill and young alluvial soil is expected to be moderately compressible. The Geotechnical Review includes a recommendation for complete removal of undocumented fill and partial removal of alluvial soil in order to reduce the potential for adverse total and differential settlement of the proposed improvements. With adherence to the California Building Code (as stated in PPP 3.7-1 and as required by Municipal Code Section 8.70.070,)), which would require compliance with the Geotechnical Review recommendations, impact regarding soil compressibility would be less than significant.

The hard granitic bedrock present in elevated portions of the site is not prone to deep-seated slope failures. As discussed in the Geotechnical Review, geologic maps show numerous large landslides on the property. These were based primarily on topographic expression and aerial photograph review, not subsurface data or evidence of displaced units. The Geotechnical Review stated that a 2015 review of the project site, also conducted by Leighton and Associates, determined that there was no evidence of deep-seated landslides on the project site and that large, deep-seated landslides would be very unusual in this geologic terrain and setting. The Geotechnical Review determined that the landslides that were previously mapped are not present on the project site. Subsurface evidence for their presence is very limited and contradictory, and strong evidence of continuous bedrock extending across the mapped trace of many of the mapped landslides is readily observed in aerial photographs.¹⁸

The on-site bedrock is very hard and capable of supporting tall, steep slopes. A near vertical cut of nearly 300 feet in height is exposed in the quarry off-site to the southwest. This suggests the bedrock on-site is capable of supporting existing and manufactured slopes in the proposed project. Natural slopes surrounding the project site are expected to be stable. Design slopes cut into the older alluvial soils are also expected to be stable when constructed at a 2:1 grade.

Liquefaction is the loss of soil strength or stiffness due to a buildup of pore-water pressure during severe ground shaking. Liquefaction is associated primarily with loose (low density), saturated, fine-to-medium grained, cohesionless soils. As the shaking action of an earthquake progresses, the soil grains are rearranged and the soil densifies within a short period of time. Rapid densification of the soil results in a buildup of pore-water pressure. When the pore-water pressure approaches the total overburden pressure, the soil reduces greatly in strength and temporarily behaves similarly to a fluid. Effects of liquefaction can include sand boils, settlement, and bearing capacity failures below

¹⁷ Riverside County. Map My County. Website: https://gis1.countyofriverside.us/Html5Viewer/?viewer=MMC_Public. Accessed September 20, 2022.

¹⁸ Leighton and Associates, Inc. 2017. Geotechnical Grading Plan Review, Proposed Rio Vista Development, West of 20th Street, South of County Line, City of Jurupa Valley, California.

structural foundations. The State of California has not prepared liquefaction hazard maps for this area. The County of Riverside has mapped a portion of the site in an area with a moderate liquefaction potential. According to the Geotechnical Review, the potential for liquefaction across the majority of the site is very low due to the presence of dense soil and bedrock and the absence of shallow groundwater.¹⁹ Impacts would be less than significant.

Portions of the natural hillsides adjacent to the development are covered with exposed bedrock outcrops and subrounded to rounded boulders. There is a potential for surficial instability. With adherence to the California Building Code (as stated in PPP 3.7-1 and as required by Municipal Code Section 8.70.070), impacts would be less than significant.

Level of Significance

Less than significant impact.

Expansive Soil

Threshold GEO-4: Would the proposed project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating?

Under the City's local significance threshold, the project would have significant effects if: The project site is located on soil that has an EI Expansion Potential >91 according to the results of the laboratory testing performed in accordance with ASTM D 4829.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to the proposed project related to expansive soil.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of geology and soil.

Impact Analysis

Expansive soils contain significant amounts of clay particles that swell considerably when wetted and shrink when dried. Foundations constructed on these soils can be subjected to large uplifting forces caused by the swelling. Without proper measures taken, heaving and cracking of both building foundations and slabs on-grade could result.

The near-surface soils on the project site consist primarily of sandy silts and silty sands. As reported in the Geotechnical Review, testing conducted by Byerly in 2006 yielded expansion index of zero. Based on this result and the nature of the soils observed, the Geotechnical Review determined that the near-surface soil is expected to have a low to very low expansion potential.²⁰ Therefore, impacts associated with expansive soil would be less than significant.

¹⁹ Leighton and Associates, Inc. 2017. Geotechnical Grading Plan Review, Proposed Rio Vista Development, West of 20th Street, South of County Line, City of Jurupa Valley, California.

²⁰ Leighton and Associates, Inc. 2017. Geotechnical Grading Plan Review, Proposed Rio Vista Development, West of 20th Street, South of County Line, City of Jurupa Valley, California.

Level of Significance

Less than significant impact.

Alternate Wastewater Disposal Systems

Threshold GEO-5: Would the proposed project 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?

Under the City's local significance threshold, the project would have significant effects if: The project's proposed septic tanks or alternative wastewater disposal system do not meet the regulatory requirement of the Local Agency Management Program (LAMP) applicable to Jurupa Valley.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)*Plans, Policies, and Programs*

The following PPP applies to the proposed project and would reduce impacts related to alternate wastewater disposal system:

PPP 3.7-2 Prior to the issuance of a grading or building permit for any lot in PA 11, the City's Building Department standards require submittal of successful results of a Soil Percolation Test for any proposed septic system to ensure soil suitability.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of geology and soil.

Impact Analysis

The project site is within the future boundary area of the Rubidoux Community Services District (RCSD) and the Jurupa Community Services District (JCSD), which would provide sewer service for the project site. Wastewater treatment for the RCSD community area occurs at the Riverside Regional Water Quality Treatment Plant located within the City of Riverside to the southwest of the project site. Wastewater from the proposed project would be transported eastward through the on-site system to the point of connection with existing sewer main in 20th Street at the eastern project site boundary. The on-site sewer system for the proposed project would install a 12-inch gravity main and 8-inch gravity sewer lines within local roads to collect wastewater from individual Planning Areas (PAs) and transport the wastewater to the proposed off-site 15-inch gravity sewer main located southeast of the project site. Because of its location adjacent to Armstrong Road and existing neighborhoods, PA 7 would connect to the adjacent existing sewer facilities. However, septic systems would be provided to serve PAs 10 and 11. An alternate gravity design that would eliminate the need for lift stations may be needed if a future RCSD Community Facilities District (CFD) project is built in Pacific Avenue. The project would construct a 15-inch sewer line to the west, in 20th Street, then south in Sierra Avenue, across the railroad tracks, turning into Pacific Avenue. The line would connect to a future CFD line terminating at Rustic Lane and Pacific Avenue. An 8-inch lateral line would also be constructed through a future local street to the southerly end of the project site. Impacts would be less than significant.

As stated above, residences in PAs 10 and 11 would be served by private septic systems. According to the Geotechnical Review, two permeameter tests, LB-3 and LB-4 (see Geotechnical Review, Plate 1, Geotechnical Map), were conducted in 2015 in PA 10. Well permeameter tests are useful for field measurements of soil infiltration rates and are suited for testing when the design depth of a basin or chamber is deeper than current existing grades. Bedrock was encountered in this area at a depth of 45 feet below ground surface (BGS). Measured infiltration rates of the small-scale test at LB-3 at depths of 6.2 to 12 feet BGS were on the order of 1.1 inches per hour. Measured infiltration rates of the small-scale test at LB-4 at depths of 20.8 to 30 feet BGS were on the order of 2.4 inches per hour.²¹ In addition, alluvium was encountered throughout boring LB-3 to its total depth of 21.5 feet BGS and at a depth of 40 feet below the surface at LB-4. Based on the thickness of alluvium encountered and the infiltration rate, septic systems are anticipated to be feasible in PA 10.²² Impacts would be less than significant.

No boring or testing was conducted at PA 11. This area is either in bedrock or is presumed to be underlain by relatively thin soils and most of that area is not feasible for septic systems, and impacts could be potentially significant. However, prior to the issuance of a grading or building permit for any lot in PA 11, the City's Building Department standards require submittal of successful results of a Soil Percolation Test for any proposed septic system²³ to ensure soil suitability. With adherence to City permitting requirements, impacts would be less than significant as the results would either ensure the ability of each individual lot to support a septic system or a grading and building permit would not be issued. Furthermore, according to the Riverside County Local Management Program for On-site Wastewater Treatment Systems (LAMP),²⁴ an On-site Wastewater Treatment System (OWTS) Report for Land Divisions is required for all proposed Tract and Parcel Maps (all Planning schedules) that will utilize an OWTS, which include septic tanks, for sewage disposal. The OWTS Reports for Land Divisions would be prepared by approved professionals (Professional Engineer, Professional Geologist, or Registered Environmental Health Specialist). The Report for Land Divisions shall include recommendations related to the installation of the septic tank, including the design rate, location, depth, and any additional special designs as needed. The proposed project would comply with all requirements in the LAMP. Compliance with all City and Riverside County requirements would ensure impacts would be less than significant.

Level of Significance

Less than significant impact.

²¹ Leighton and Associates, Inc. 2017. Geotechnical Grading Plan Review, Proposed Rio Vista Development, West of 20th Street, South of County Line, City of Jurupa Valley, California. December 7.

²² Aguilar, Catherine. EPD Solutions, Inc. Personal communication: email. March 3, 2022.

²³ City of Jurupa Valley Building Department. Submittal Requirements for Tract Development and Single Family Dwellings. Website: <https://www.jurupavalley.org/DocumentCenter/View/1361/Tract-and-Single-Family-Dwelling-Checklist-PDF>. Accessed March 4, 2022.

²⁴ County of Riverside Department of Environmental Health, Environmental Protection and Oversight Division, Land Use and Water Resources Program. 2016. Local Management Program for On-site Wastewater Treatment Systems. October 5. Website: <https://www.rivcoeh.org/Portals/0/PDF/Land-Use/LAMP.pdf?ver=2018-12-05-133532-290>. Accessed September 26, 2022.

Destruction of Paleontological Resource or Unique Geologic Feature

Threshold GEO-6: Would the proposed project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Under the City's local significance threshold, the project would have significant effects if: The project is identified as "HIGH SENSITIVITY (HIGH A) for paleontological resources in the Parcel Report available on the Riverside County Map My County website.

NOTE: Unique geologic features in this document are those that are unique to the field of geology. There are no unique geologic features identified in the General Plan.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)*Plans, Policies, and Programs*

There are no PPPs applicable to the proposed project related to paleontological resources.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of geology and soil.

Impact Analysis

A Phase I Paleontological Resources Inventory was prepared for the proposed project by L&L Environmental, Inc. (L&L) on March 20, 2015, and most recently revised on December 21, 2021 (Revised Paleontological Resources Inventory). It concluded that sedimentary rocks present in the northeast corner of the project site have the most potential to yield significant paleontological resources. While no fossils were observed in surficial outcrops of this rock unit, paleontological resource monitoring during future grading activities may yield fossil resources.

According to the Revised Paleontological Resources Inventory, the paleontological resources record searches did not identify any previously recorded paleontological localities on or near the project area. The project site was surveyed via a meandering pedestrian survey for paleontological resources and no fossil materials were identified. However, the potential for destruction of paleontological resources during surficial earthmoving during construction is high in Quaternary older alluvial fan deposits. Therefore, the Revised Paleontological Resources Inventory determined that there is high potential for locating significant paleontological resources during excavations within the Quaternary older alluvial fan deposits present in several areas around the outer edges of the project site, resulting in potentially significant impacts related to the destruction of a unique paleontological resource. In addition, the majority of the project site parcels are located in areas with high paleontological sensitivity as identified in the Parcel Report retrieved from the Riverside County Map My County website.²⁵ Therefore, impacts to paleontological resources would be potentially significant.

To reduce the potential of destroying paleontological resources, L&L has prepared a PRIMP on March 20, 2015, and revised it most recently on December 21, 2021. The PRIMP states that identifiable fossil remains (particularly of vertebrates), if any, recovered at the project site would be of high

²⁵ Riverside County. Map My County. Website: https://gis1.countyofriverside.us/Html5Viewer/?viewer=MMC_Public. Accessed September 20, 2022.

scientific importance if they represent new or rare species, geologic (temporal) and/or geographic range extensions, age-diagnostic taxa, and/or more complete specimens than are now available for their respective taxa. Furthermore, such remains would contribute to a more comprehensive documentation of the diversity of extinct animal life that existed in the Jurupa Valley area during the Quaternary Epoch and to a more accurate reconstruction of the geologic history of the area.²⁶

MM GEO-6a would require adherence with the PRIMP, and MM GEO-6b provides further details of the monitoring requirements during ground disturbance activities. With implementation of MM GEO-6a and MM GEO-6b, impacts would be reduced to a less than significant level.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM GEO-6a Implement Paleontological Resources Impact Mitigation Plan

Prior to ground-disturbing activities, the applicant shall implement the Paleontological Resource Impact Mitigation Plan (PRIMP) prepared by L&L Environmental, Inc. on March 20, 2015, and most recently revised on December 21, 2021, and included in Appendix E of the Draft EIR. The measures identified in the PRIMP are listed below, and detailed requirements for each is provided in the PRIMP.

- Review Geotechnical Report data
- Museum storage agreement
- Discovery clause/treatment plan
- Preconstruction Meeting
- Monitoring of ground-disturbing activities
- Large-specimen evaluation and recovery option
- Small-specimen sample evaluation, recovery, and processing
- Fossil treatment
- Final report

MM GEO-6b Paleontological monitoring during ground-disturbing activities

Ground-disturbing activities shall be monitored by a Paleontological Monitor supervised by a qualified paleontologist, as defined by the Society of Vertebrate Paleontology (SVP) 2010 guidelines (Supervising Paleontologist). Monitoring shall be conducted in areas within the project site determined by the Supervising Paleontologist to have high potential to yield fossils, specifically within the Quaternary older alluvial fan deposits present in several areas around the outer edges of the project site. Monitoring shall consist of visually inspecting freshly

²⁶ L&L Environmental, Inc. 2021. Paleontological Resource Impact Mitigation Plan (PRIMP) for Rio Vista Specific Plan 16001, Jurupa Valley, Riverside County, California. March 20, 2015. Revised December 21, 2021.

exposed rock and debris for larger fossil remains and periodically screening a small (25 pound) sample with a 20-mesh box screen for micro vertebrate fossil remains.

Monitors shall be equipped with water, screens, and a 10x magnifying lens so that any sediments encountered that are not clean sands or gravels can be periodically checked for microvertebrate fossils. Monitoring shall be conducted on a full-time basis until the Supervising Paleontologist has determined that additional fossil remains are not likely to be uncovered by earth moving or ground disturbance in specific area(s) underlain by a specific rock unit.

Where warranted, the Supervising Paleontologist may reduce monitoring to half- to quarter-time based on monitoring results. The Supervising Paleontologist may terminate monitoring of rock unit(s) which do not yield fossil resources after 50 percent of the earth has been moved in that rock unit. Alternatively, if sufficient fossil remains are uncovered by earth moving or ground disturbance, and with consultation with the City of Jurupa Valley Community Development Department, monitoring may be increased in areas underlain by the fossil-bearing rock unit, at least in the immediate vicinity of the fossil site.

Level of Significance After Mitigation

Less than significant impact.

3.7.6 - Cumulative Impacts

Adverse effects associated with geology and soils tend to be localized; therefore, an area generally within a 0.25-mile (1320 feet) radius would be the area most affected by activities associated with the proposed project. The analysis considers the foreseeable development projects listed in Table 3-1 within Chapter 3, Environmental Impact Analysis, in addition to the proposed project.

Seismic-related Hazards

There are four projects listed in Table 3-1 that are located within 0.25 mile of the project site. Cumulative projects, including the proposed project, have the potential to experience moderate to strong ground shaking from earthquakes. The projects within 0.25 mile of the project site, listed in Table 3-1, would be exposed to the same ground shaking hazards and would be subject to the same requirements as the proposed project. These cumulative projects would adhere to the provisions of the CBC, policies of the General Plan, and the Municipal Code to reduce potential hazards associated with seismic ground shaking and ground failure. As such, the proposed project, in conjunction with other projects, would not have a cumulatively significant impact associated with seismic-related hazards.

Soil-related Hazards

Soil conditions associated with the project site, such as expansive soils and soil settlement, are specific to the project site and generally do not contribute to a cumulative effect. Some or all other cumulative projects may have similar conditions, but they would not contribute to cumulative soil-related hazards. Accordingly, cumulative impacts are less than significant. Moreover, the proposed

project's contribution to less than significant cumulative impacts would not be cumulatively considerable. The proposed project would be subject to the California Building Code (as stated in PPP 3.7-1), General Plan policies, and the Municipal Code to reduce soil-related hazards. Other current and future development/redevelopment projects in the region would similarly be required to adhere to standards and practices that include stringent geologic and soil-related hazard mitigations. As such, the proposed project, in conjunction with other projects, would not have a cumulatively significant impact associated with soil-related hazards.

Paleontological Resources and Unique Geologic Feature

There are four projects listed in Table 3-1 that are located within 0.25 mile of the project site. Construction activities associated with development of cumulative projects in the project vicinity may have the potential to encounter undiscovered geologic resources or paleontological resources. Because the project site was determined to have potential to yield significant paleontological resources, the possibility of other projects within the 0.25-mile radius would have similar potential and could result in significant cumulative impacts. These cumulative projects would be required to mitigate for impacts through compliance with applicable federal and State laws governing geologic resources and paleontological resources. Therefore, cumulative impacts are less than significant. Additionally, the proposed project's contribution to the less than significant cumulative impacts would not be cumulatively considerable. As discussed in Thresholds GEO-1 through GEO-6, development associated with the proposed project would be consistent with the Municipal Code and the revised PRIMP. Implementation of standard construction practices and MM GEO-6a and MM GEO-6b would ensure that undiscovered geologic resources and paleontological resources are not adversely affected by cumulative project-related construction activities, and potential cumulative impacts would be reduced to a less than significant level.

Level of Cumulative Significance Before Mitigation

Potentially significant cumulative impact.

Mitigation Measures

Implement MM GEO-6a and MM GEO-6b.

Level of Cumulative Significance After Mitigation

Less than significant cumulative impacts.

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3.8 - Greenhouse Gas Emissions

3.8.1 - Introduction

This section describes the existing greenhouse gas (GHG) emissions setting and potential effects from project implementation on the project site and its surrounding area. The Greenhouse Gas Analysis is included in this Draft Environmental Impact Report (Draft EIR) as Appendix C.

A Notice of Preparation (NOP) was released for public review on December 6, 2021, and an EIR Scoping Meeting was held on December 14, 2021. No public comments were received during the scoping period related to GHG emissions.

3.8.2 - Environmental Setting

Climate Change

Climate change is a change in the average weather of Earth that is measured by alterations in wind patterns, storms, precipitation, and temperature. These changes are assessed using historical records of temperature changes occurring in the past, such as during previous ice ages. Many of the concerns regarding climate change use this data to extrapolate a level of statistical significance specifically focusing on temperature records from the last 150 years (the Industrial Age) that differ from previous climate changes in rate and magnitude.

An individual project cannot generate enough GHG emissions to effect a discernible change in global climate. However, the proposed project participates in the potential for global climate change by its incremental contribution of GHGs combined with the cumulative increase of all other sources of GHGs, which when taken together constitute potential influences on global climate change.

Greenhouse Gases

Gases that trap heat in the atmosphere are referred to as GHGs. The effect is analogous to the way a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, ozone, and aerosols. Natural processes and human activities emit GHGs. The presence of GHGs in the atmosphere affects Earth's temperature.

As shown on Table 3.8-1, individual GHG compounds have varying global warming potentials and atmospheric lifetimes. Global warming potential is the potential of a gas or aerosol to trap heat in the atmosphere.

Table 3.8-1: Global Warming Potentials and Atmospheric Lifetime of Select GHGs

Category	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)
Carbon Dioxide (CO ₂)	50 to 200	1
Methane (CH ₄)	12 ± 3	25

Category	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)
Nitrous Oxide	120	298
HFC-23	264	11,700
HFC-134a	14.6	1,300
HFC-152a	1.5	140
PFC: Tetrafluoromethane	50,000	6,500
PFC: Hexafluoroethane (C ₂ F ₆)	10,000	9,200
Sulfur Hexafluoride (SF ₆)	3,200	23,900
<p>Notes: HFC = hydrofluorocarbon PFC = perfluorocarbon Sources: Intergovernmental Panel on Climate Change (IPCC). Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller [eds.]). Website: https://www.ipcc.ch/report/ar4/wg1/. Accessed January 27, 2022.</p> <p>Intergovernmental Panel on Climate Change (IPCC). 2014. Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (Core Writing Team, Pachauri, R.K. and Reisinger, A. [eds.]). Website: https://www.ipcc.ch/report/ar4/syr/. Accessed January 27, 2022.</p>		

For the purposes of this analysis, emissions of CO₂, CH₄, and nitrous oxide (N₂O) were evaluated because these gases are the primary contributors to global climate change from development projects.

Emissions Inventories

An emissions inventory is a database that lists, by source, the amount of air pollutants discharged into the atmosphere of a geographic area during a given time period.

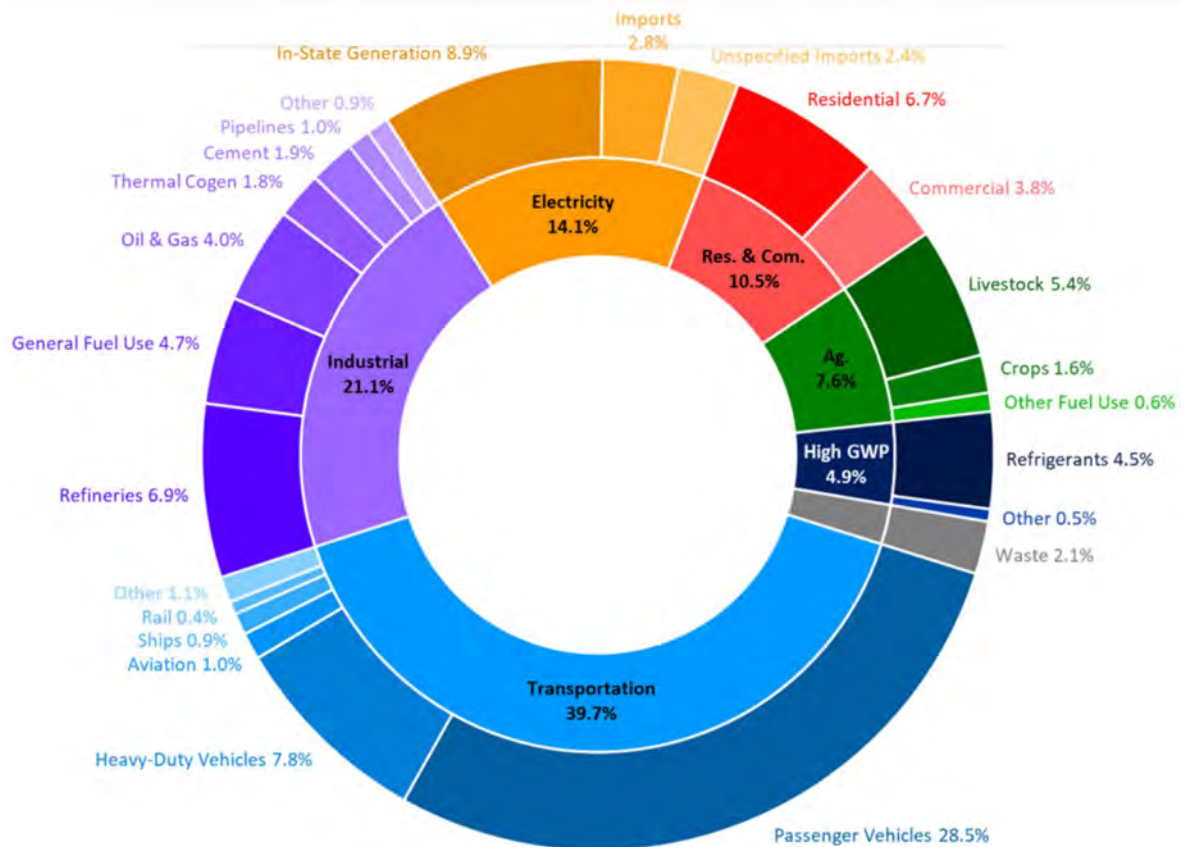
United States GHG Inventory

Since 1990, U.S. emissions have increased at an average annual rate of 0.3 percent. Transportation emissions also increased because of an increase in Vehicle Miles Traveled (VMT). Within the United States, fossil fuel combustion accounted for 92.4 percent of CO₂ emissions in 2019. Transportation was the largest emitter of CO₂ in 2019, accounting for 28.6 percent of emissions, followed by electric power generation, accounting for 25.1 percent.¹

¹ United States Environmental Protection Agency (EPA). 2021. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019. Website: https://www.epa.gov/sites/default/files/2021-04/documents/us-ghg-inventory-2021-main-text.pdf?VersionId=wEy8wQuGrWS8Ef_hSLXH1kYwKs4.ZaU. Accessed February 3, 2022.

California GHG Inventory

As the second largest emitter of GHG emissions in the United States, California contributes a large quantity (418.2 MMT CO₂e in 2019) of GHG emissions to the atmosphere.² Anthropogenic CO₂ are largely byproducts of fossil fuel combustion and are attributable to transportation, industry/manufacturing, electricity generation, natural gas consumption, and agriculture processes. As shown in Figure 3.8-1, in California, the transportation sector is the largest emitter at approximately 40 percent of GHG emissions, followed by the industrial sector at approximately 21 percent of GHG emissions.³



Source: California Air Resources Board (ARB). 2021. California GHG Inventory. Website: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf. Accessed February 3, 2022.

Figure 3.8-1: California Greenhouse Gas Emissions by Sector in 2019

Environmental Effects of Climate Change in California

The California Environmental Protection Agency (Cal/EPA) published a report titled “Scenarios of Climate Change in California: An Overview” (Climate Scenarios report) in February 2006 that, while

² California Air Resources Board (ARB). 2021. Current California GHG Emission Inventory Data, 2000-2019 Trends Figure Data. Website: <https://ww2.arb.ca.gov/ghg-inventory-data>. Accessed February 3, 2022.

³ California Air Resources Board (ARB). 2021. California Greenhouse Inventory—Graphs. Website: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf. Accessed February 3, 2022.

not adequate for a California Environmental Quality Act (CEQA) project-specific or cumulative analysis, is generally instructive about the Statewide impacts of global warming.⁴

The Climate Scenarios report uses a range of emissions scenarios developed by the IPCC to project a series of potential warming ranges (i.e., temperature increases) that may occur in California during the twenty-first century: lower warming range (3.0–5.5°F [degrees Fahrenheit]); medium warming range (5.5–8.0°F); and higher warming range (8.0–10.5°F). The Climate Scenarios report then presents an analysis of future climate in California under each warming range that, while uncertain, reflects a picture of the impacts of global climate change trends in California. Per the report, climate change may result in a reduction in the quality and supply of water from the Sierra snowpack, increased risk of large wildfires, reductions in the quality and quantity of certain agricultural products, sea level rise and associated displacement of residents and businesses along the coastline, exacerbation of air quality problems, an increase in temperature and extreme weather events, and a decrease in the health and productivity of California's forests:⁵

GHG emissions from development projects would not result in concentrations that would directly impact public health. However, the cumulative effects of GHG emissions on climate change have the potential to cause adverse effects to human health.

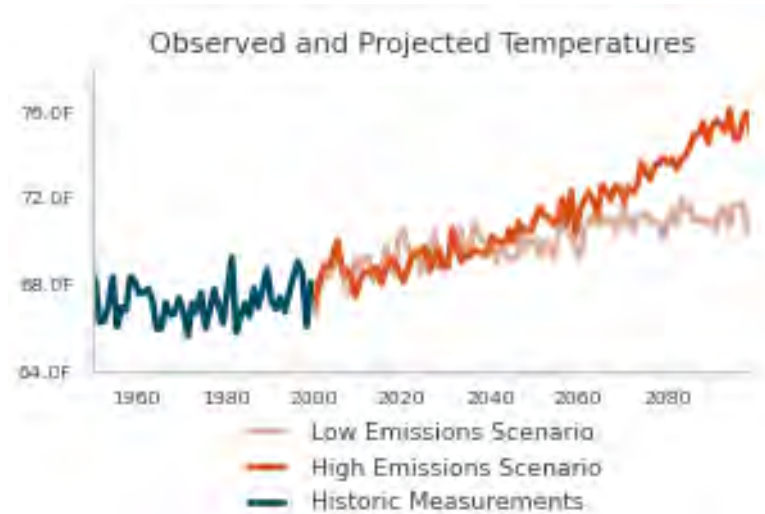
Consequences of Climate Change in Project Area

Figure 3.8-2 displays a chart of measured historical and projected annual average temperatures in the County of Riverside. As shown in the figure, temperatures are expected to rise in the low and high GHG emissions scenarios. The results indicate that temperatures are predicted to increase by 4.1°F under the low emission scenario and 7.2°F under the high emissions scenario in the project area.⁶

⁴ California Climate Change Center. 2006. Scenarios of Climate Change in California: An Overview. Website: https://www.sustainable-design.ie/arch/California2006_Climate-Change-Scenarios.pdf. Accessed January 27, 2022.

⁵ Moser, Susie, Guido Franco, Sarah Pittiglio, Wendy Chou, Dan Cayan. 2009. The Future Is Now: An Update on Climate Change Science Impacts and Response Options for California. California Energy Commission, PIER Energy-Related Environmental Research Program. CEC-500-2008-071.

⁶ Cal-adapt. Climate Tools. Website: <https://cal-adapt.org/tools/>. Accessed February 3, 2022.



Source: Cal-adapt. Climate Tools. Website: <https://cal-adapt.org/tools/>. Accessed February 3, 2022. (Average of all the hottest daily temperatures in a year)

Figure 3.8-2: Annual Average Maximum Temperatures in County of Riverside

3.8.3 - Regulatory Framework

International

International organizations such as the United Nations have made substantial efforts to reduce GHGs. Relevant agreements, including the Kyoto Protocol and the Paris Climate Change Agreement, serve to support the reduction of GHG emissions internationally and throughout California.

Federal Regulations

Prior to the last decade, there were no concrete federal regulations of GHGs or major planning for climate change adaptation. Since then, federal activity has increased. Relevant regulations that are continuing to reduce emissions in the country, including in the planning area, include the United States Consolidated Appropriations Act, which requires mandatory GHG reporting; the U.S. Clean Air Act permitting programs, which establishes new GHG source review requirements; and the Energy Independence and Security Act (EISA), which EPA implements through increased Corporate Average Fuel Economy Standards, Renewable Fuel Standards, Biofuels Infrastructure, and Carbon Capture and Sequestration.⁷ EPA and the National Highway Traffic Safety Administration (NHTSA) regulations have established national standards for passenger vehicles, as well as for heavy-duty trucks and buses, which support ongoing reductions in fuel usage through increased fuel economy, and associated reductions in greenhouse gas (GHG) emissions.⁸

⁷ United States Environment Protection Agency (EPA). Summary of the Energy Independence and Security Act. Website: <https://www.epa.gov/laws-regulations/summary-energy-independence-and-security-act>. Accessed February 3, 2022.

⁸ United States Environmental Protection Agency (EPA). 2012. EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks. Website: <http://www.epa.gov/otaq/climate/documents/420f12051.pdf>. Accessed February 3, 2022.

State

At the State level, legislation and executive orders have established policies and programs with the goal of reducing GHG emissions throughout California. ARB is the main agency responsible for implementing climate change reduction programs at the State level. Key legislation, policies and programs are further discussed in the following sections.

California Assembly Bill 32: Global Warming Solutions Act and Scoping Plan

The California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 required that GHGs emitted in California be reduced to 1990 levels by the year 2020. The ARB is the State agency charged with monitoring and regulating sources of GHGs. The State has made steady progress in implementing AB 32. The ARB's initial Climate Change Scoping Plan (Scoping Plan) contained measures designed to reduce the State's emissions to 1990 levels by the year 2020 to comply with AB 32.⁹

In addition, the Scoping Plan differentiates between "capped" and "uncapped" strategies. Capped strategies are subject to the ARB's Cap-and-Trade Program. The Cap-and-Trade Program remains a key element of the Scoping Plan. It sets a Statewide limit on sources responsible for 85 percent of California's GHG emissions and establishes a price signal needed to drive long-term investment in cleaner fuels and more efficient use of energy.¹⁰

California Senate Bill 32

Former Governor Jerry Brown signed SB 32 in September of 2016, giving the ARB the statutory responsibility to include the 2030 target previously contained in Executive Order B-30-15 in the 2017 Scoping Plan Update. As such, SB 32 establishes a Statewide goal of reducing GHG emissions to at least 40 percent below the Statewide GHG emissions limit no later than December 31, 2030.

2017 Scoping Plan

The most recent version of the ARB's Scoping Plan, the 2017 Climate Change Scoping Plan Update, addresses the SB 32 targets and was adopted on December 14, 2017. The major elements of the framework proposed to achieve the 2030 target are as follows:

1. SB 350
 - Achieve 50 percent Renewables Portfolio Standard by 2030.
 - Doubling of energy efficiency savings by 2030.
2. Low Carbon Fuel Standard
 - Increased stringency (reducing carbon intensity 18 percent by 2030, up from 10 percent in 2020).
3. Mobile Source Strategy (Cleaner Technology and Fuels Scenario)
 - Maintaining existing GHG standards for light- and heavy-duty vehicles.
 - Put 4.2 million Zero-Emission Vehicles (ZEVs) on the roads.

⁹ California Air Resources Board (ARB). 2008. Climate Change Scoping Plan, a framework for change. Website: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed February 19, 2022.

¹⁰ California Air Resources Board (ARB). 2015. ARB Emissions Trading Program. Website: https://ww2.arb.ca.gov/sites/default/files/classic/cc/capandtrade/guidance/cap_trade_overview.pdf. Accessed February 19, 2022.

- Increase ZEV buses and delivery and other trucks.
4. Sustainable Freight Action Plan
 - Improve freight system efficiency.
 - Maximize use of near-ZEVs and equipment powered by renewable energy.
 - Deploy over 100,000 zero-emission trucks and equipment by 2030.
 5. Short-Lived Climate Pollutant Reduction Strategy
 - Reduce emissions of methane and hydrofluorocarbons 40 percent below 2013 levels by 2030.
 - Reduce emissions of black carbon 50 percent below 2013 levels by 2030.
 6. SB 375 Sustainable Communities Strategies
 - Increased stringency of 2035 targets.
 7. Post-2020 Cap-and-Trade Program
 - Declining caps, continued linkage with Québec, and linkage to Ontario, Canada.
 - The ARB will look for opportunities to strengthen the program to support more air quality co-benefits, including specific program design elements. In Fall 2016, the ARB staff described potential future amendments including reducing the offset usage limit, redesigning the allocation strategy to reduce free allocation to support increased technology and energy investment at covered entities and reducing allocation if the covered entity increases criteria or toxics emissions over some baseline.
 8. 20 percent reduction in GHG emissions from the refinery sector.
 9. By 2018, develop Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

2022 Scoping Plan

On November 16, 2022, the ARB adopted the 2022 Scoping Plan for Achieving Carbon Neutrality.¹¹ The 2022 Scoping Plan establishes a scenario by which the State may achieve carbon neutrality by 2045 or earlier, and it outlines a technologically feasible, cost-effective, and equity-focused path for achieving this climate target. The 2022 Scoping Plan addresses the latest climate-related legislation and direction from current Governor Gavin Newsom, who, by his signing of AB 1279, required the State to reduce Statewide anthropogenic GHG emissions to at least 85 percent below 1990 levels by 2045 and to maintain net negative GHG emissions thereafter. The 2022 Scoping Plan relies on the aggressive reduction of fossil fuels in all Statewide sectors and accelerating existing carbon reduction programs. Aspects of the 2022 Scoping Plan's scenario include:

- Rapidly moving to zero-emission transportation by electrifying cars, buses, trains, and trucks.
- Phasing out the use of fossil gas used for heating homes and buildings.
- Clamping down on chemicals, refrigerants, and other high global warming potential gases.

¹¹ California Air Resources Board (ARB). 2022 Scoping Plan Documents. Website: <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents>. Accessed March 23, 2023.

- Providing communities with sustainable options for walking, biking, and public transit to reduce reliance on cars.
- Continuing to develop solar arrays, wind turbine capacity, and other resources that provide clean, renewable energy.
- Scale up options such as renewable hydrogen and biomethane for end uses that are hard to electrify.

The ARB estimates that successfully achieving the outcomes called for by the 2022 Scoping Plan will reduce demand for liquid petroleum by 94 percent and total fossil fuel by 86 percent in 2045, relative to 2022. The 2022 Scoping Plan also emphasizes the role of natural and working lands and carbon capturing technologies to address residual emissions and achieve net negative emissions.

California Assembly Bill 1493: Pavley Regulations and Fuel Efficiency Standards

California AB 1493, enacted on July 22, 2002, required the ARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light-duty trucks. The most recent phase of the implementation for the Pavley Bill was incorporated into Amendments to the Low Emission Vehicle (LEV) 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 passenger vehicle model years 2017 through 2025. The regulation is estimated to reduce GHGs from new cars by 34 percent from 2016 levels by 2025.¹²

California Senate Bill 375: Sustainable Communities and Climate Protection Act

SB 375 was signed into law on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40 percent of the total GHG emissions in California. The statute directed ARB to develop GHG reduction targets for Metropolitan Planning Organizations (MPOs) across the State. The Southern California Association of Governments (SCAG) is the MPO for the Southern California region, which includes the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. Per SB 375 requirements, Connect SoCal is the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) adopted by SCAG on September 3, 2020, as an update to the 2016 RTP/SCS. In general, the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce VMT from automobiles and light-duty trucks and thereby meeting the GHG reduction targets established by ARB for the SCAG region.¹³

California Air Resources Board's Truck and Bus Regulation

The latest amendments to the Truck and Bus regulation became effective on December 31, 2014. The amended regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses were mandated to meet particulate matter filter requirements beginning January 1, 2012. Lighter and older heavier trucks were to be replaced

¹² California Air Resources Board (ARB). 2011. Status of Scoping Plan Recommended Measures.

¹³ Southern California Association of Governments (SCAG). 2021. Connect SoCal: The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments. Website: <https://scag.ca.gov/read-plan-adopted-final-plan>. Accessed February 17, 2022.

starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent.

California Code of Regulations Title 24: Energy Efficiency Standards

Part 6 (Energy Efficiency Standards for Residential and Nonresidential Buildings)

California Code of Regulations 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 2019 Building Energy Efficiency Standards went into effect on January 1, 2020.

California Code of Regulations Title 24: California Green Building Standards Code

California Code of Regulations Title 24, Part 11, is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went into effect on January 1, 2011. The Code is updated on a regular basis, with the most recent update consisting of the 2019 California Green Building Standards Code (CALGreen) that became effective January 1, 2020. The State Building Code provides the minimum standard that buildings need to meet in order to be certified for occupancy, which is generally enforced by the local building official.

CALGreen (California Code of Regulations [CCR] Title 24, Part 11) 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 (§ 5.106.4.1.1).
- **Long-term bicycle parking.** For buildings with over 10 tenant-occupants, provide secure bicycle parking for 5 percent of tenant-occupied motorized vehicle parking capacity, with a minimum of one space (§ 5.106.4.1.2).
- **Designated parking.** Provide designated parking in commercial projects for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2 (§ 5.106.5.2).
- **Recycling by Occupants.** Provide readily accessible areas that serve the entire building and are identified for the deposit, storage, and collection of nonhazardous materials for recycling (§ 5.410.1).
- **Construction waste.** A minimum 65 percent diversion of construction and demolition waste from landfills. (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 (§ 5.408.3).
- **Wastewater reduction.** Each building shall reduce the generation of wastewater by one of the following methods:

10. The installation of water-conserving fixtures or
 11. Using nonpotable water systems (§ 5.303.4).
- **Water use savings.** 20 percent mandatory reduction in indoor water use with voluntary goal standards for 30, 35, and 40 percent reductions (§ 5.303.2, A5303.2.3 [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 (§ 5.303.1).
 - **Irrigation efficiency.** Moisture-sensing irrigation systems for larger landscaped areas (§ 5.304.3).
 - **Materials pollution control.** Low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particleboard (§ 5.404).
 - **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 (§ 5.410.2).

California Senate Bill 97 and the California Environmental Quality Act Guidelines Update

Passed in August 2007, SB 97 requires that the Office of Planning and Research develop guidelines for the mitigation of GHG emissions, including, but not limited to, effects associated with transportation or energy consumption. This bill resulted in updates to the CEQA Guidelines to require the analysis of GHG emissions impacts. Under CEQA Guidelines Section 15064.4(b), a lead agency should consider the following factors, among others, when determining the significance of impacts from GHG emissions on the environment:

- (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
- (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- (3) The extent to which the project complies with regulations or requirements adopted to implement a Statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.

CEQA Guidelines Section 15183.5 continues to permit programmatic GHG analysis and later project-specific tiering, as well as the preparation of Greenhouse Gas Reduction Plans. Compliance with such plans can support a determination that a project's cumulative effect is not cumulatively considerable, according to Section 15183.5(b).

Regional

The proposed project is within the South Coast Air Basin (SoCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

SCAQMD Regulation XXVII, Climate Change, Currently Includes Three Rules:

- **Rule 2700:** The purpose of Rule 2700 is to define terms and post global warming potentials.

- **Rule 2701:** The purpose of Rule 2701, Southern California Climate Solutions Exchange, is to establish a voluntary program to encourage, quantify, and certify voluntary, high quality certified GHG emission reductions in the SCAQMD.
- **Rule 2702:** The Greenhouse Gas Reduction Program was adopted on February 6, 2009. The purpose of this rule is to create a GHG Reduction Program for GHG emission reductions within the SCAQMD. The SCAQMD will fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

Western Riverside Council of Governments Subregional Climate Action Plan

In 2014, the City of Jurupa Valley was one of 12 cities that collaborated with the Western Riverside Council of Governments (WRCOG) on a Subregional Climate Action Plan (Subregional CAP) that includes 36 measures to guide GHG reduction efforts through 2020.¹⁴ However, the City of Jurupa Valley has not adopted the Subregional CAP because it did not go through formal CEQA review by WRCOG, which intended it to be a framework for cities to implement AB 52 and for cities to develop their own CAPs.

The WRCOG Subregional CAP establishes policies and priorities to enable member jurisdictions, including Jurupa Valley, to implement strategies that successfully address State legislation AB 32 and SB 375. The CAP addresses the overall GHG emissions in Western Riverside County by preparing GHG inventories, identifying emissions reduction targets, and developing and evaluating GHG emissions to 80 percent below 1990 levels by 2050 in accordance with Executive Order S-3-05, AB 52, and SB 375.

Until the City formally adopts a CAP, local development is not required to be consistent on a project-by-project evaluation of GHG emissions identified in the WRCOG Subregional CAP, so the project will be evaluated relative to the goals of AB 32, SB 32, the City's adopted General Plan policies that pertain to GHG emissions, and SCAG's 2020-2045 RTP/SCS.

Local

City of Jurupa Valley General Plan

The following General Plan policies are directly related to the proposed project in regard to GHG emissions.

AQ 4.3 **Electric Service Units.** Require the installation and use of electric service units at truck stops and distribution centers for heating and cooling truck cabs, and particularly for powering refrigeration trucks, in lieu of idling of engines for power.

AQ 9.5 **GHG Thresholds.** Utilize the SCAQMD Draft GHG thresholds to evaluate development proposals until the City adopts a Climate Action Plan (CAP).

¹⁴ Western Riverside Council of Governments (WRCOG). Subregional Climate Action Plan. Website: <https://wrcog.us/172/Planning>. Accessed January 27, 2022.

- LUE 2.2 Higher Density Residential.** Accommodate higher density residential development in walkable, pedestrian-oriented areas near major transportation corridors, concentrated employment areas, and community and town centers, and promote the development of high quality apartments and condominiums that will encourage local investment and pride of ownership.
- LUE 2.5 Connectivity.** Integrate residential development with a continuous network of parks, open space, public areas, bicycle trails, equestrian trails, public transit routes, and pedestrian paths to connect neighborhoods and communities with key nodes. Key nodes include parks and recreation facilities, schools, town and neighborhood centers, and other in-city communities and surrounding cities and points of interest.
- LUE 3.4 Transit and Housing.** Locate commercial uses near transit facilities and residential areas, and require the incorporation of facilities such as bus turnout lanes and bus shelters to promote use of public transit.
- LUE 3.10 Pedestrian, Bicycle, and Transit Access.** Require commercial projects to be designed to promote convenient access to and from nearby neighborhoods, transit facilities, bikeways, and other amenities.
- LUE 3.11 Environmental Compatibility and Quality.** Require commercial districts and uses to be compatible with their environmental setting, promote City environmental goals, and be designed and operated to avoid or mitigate environmental impacts.
- LUE 3.15 Locations.** Concentrate industrial and business park uses near major transportation facilities and utilities and along public transit corridors. Avoid siting such uses close to residentially zoned neighborhoods or where truck traffic will be routed through residential neighborhoods.
- LUE 7.4 Multimodal Orientation.** Provide for a broad range of land uses, intensities, and densities, including a range of residential, commercial, business, industry, open space, recreation, and public facilities uses and locate them to capitalize on multimodal transportation opportunities and to promote compatible land use patterns that reduce reliance on the automobile.

City of Jurupa Valley Municipal Code

The specific policies and programs outlined in the City of Jurupa Valley's Municipal Code that are related to GHG reduction that apply to the proposed project are listed below:

- Chapter 8.05** Adoption of construction codes, outlines the construction codes of the City, whereby the City has adopted the California Building Standards Code (CBC) 2019 Edition (CBC), the California Electrical Code, 2019 Edition, the California Energy Code, 2019 Edition, and the California Green Building Standards Code, 2019 Edition (as included

in Title 24 of the California Code of Regulations).¹⁵ The City routinely adopts CBC updates as they become available.¹⁶

Section 9.283 Water efficient landscape design requirements, outlines the water conservation efforts that projects must comply with as part of landscaping design, including the installation of drought-tolerant landscaping.

3.8.4 - Methodology

Model Selection and Guidance

The emission estimates were developed using consistent assumptions (e.g., proposed land uses, construction schedule, trip generation) and models as those discussed in Section 3.3, Air Quality, for a detailed description of modeling assumptions and methods.

Construction

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. Construction-related GHG emissions result from on-site and off-site activities. On-site GHG emissions principally consist of exhaust emissions from heavy-duty construction equipment. Off-site GHG emissions would occur from motor vehicle exhaust from material delivery vehicles and construction worker traffic. The construction parameters used to estimate the proposed project's construction-related GHG emissions were based on applicant-provided data and California Emissions Estimator Model (CalEEMod), Version 2020.4.0, default-provided assumptions. Full assumptions are detailed in the CalEEMod modeling output contained in Appendix C.

Operation

Operational sources for land use development projects are typically distinguished as mobile, area, and energy emissions. The major sources and operational parameters used to estimate the proposed project's operation-related GHG emissions are summarized below. Full assumptions are detailed in the CalEEMod modeling output contained in Appendix C. The analysis considers emissions from the proposed project in the year 2025 and 2035 (cumulative buildout of the proposed project).

Motor Vehicles

Motor vehicle emissions refer to exhaust and road dust emissions from the automobiles that would travel to and from the planning area. The emissions were estimated using CalEEMod. The average trip generation rates for project operations were obtained from the project-specific traffic study.

Pass-by trips are made as intermediate stops on the way from an origin to a primary trip destination without a route diversion. Pass-by trips are attracted from traffic passing the plan area on an

¹⁵ City of Jurupa Valley. Municipal Code, Title 8, Section 8.05.010 Adoption of Construction Codes. Website: https://library.municode.com/ca/jurupa_valley/codes/municipal_code?nodeId=TIT8BUCO_CH8.05ADCOCO_S8.05.010ADCOCO. Accessed January 24, 2022.

¹⁶ City of Jurupa Valley. 2017. Jurupa Valley General Plan. September.

adjacent street or roadway that offers direct access to the generator. Pass-by trips are not diverted from another roadway. The CalEEMod defaults pass-by trips were used for this analysis.

Landscape Equipment

The use of landscaping equipment (leaf blowers, chain saws, mowers) would generate GHG emissions as a result of fuel combustion based on assumptions in the CalEEMod model.

Electricity

The City is served by the Southern California Edison (SCE). For the purpose of estimating GHG emissions for this analysis, emission factors from SCE were used. SCE provides estimates of its emission factor per MWh of electricity delivered to its customers. SCE emissions factors for 2034 for CO₂ are provided below. The rates for methane and nitrous oxide are based on compliance with the Renewable Portfolio Standard.

Year 2034

- **carbon dioxide:** 390.98 lb/MWh
- **methane:** 0.033 lb/MWh
- **nitrous oxide:** 0.004 lb/MWh

CalEEMod has three categories for electricity consumption: Title 24-electricity; non-Title 24-electricity; and lighting. CalEEMod default assumptions for the split of electricity use between these three categories were used based on the land use type.

Water and Wastewater

There would be emissions from the combustion of natural gas used for the proposed project (water heaters, heat, etc.). CalEEMod has two categories for natural gas consumption: Title 24 and non-Title 24. CalEEMod defaults were used.

Solid Waste

GHG emissions would be generated from the decomposition of solid waste generated by the proposed project. CalEEMod was used to estimate the GHG emissions from this source. The CalEEMod default for the mix of landfill types is as follows:

- Landfill no gas capture—6 percent;
- Landfill capture gas flare—94 percent; and
- Landfill capture gas energy recovery—0 percent.

3.8.5 - Thresholds of Significance

Significance Criteria

In accordance with Section 15064.7 of the State CEQA Guidelines, the City of Jurupa Valley adopted local CEQA Guidelines. The City's local CEQA Guidelines are based on the CEQA checklist included in Appendix G of the State CEQA Guidelines. The City of Jurupa Valley Guidelines recognizes the following significance thresholds and Significance Criteria related to GHG emissions. Based on these significance thresholds, a project would have a significant impact on GHG emissions if it would:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

Under the City's local significance threshold, the project would have significant effects if: The project exceeds the thresholds per the General Plan Policy below:

AQ 9.5 GHG Thresholds. Utilize the SCAQMD Draft GHG thresholds to evaluate development proposals until the City adopts a Climate Action Plan (CAP).

- b) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

Under the City's local significance threshold, the project would have significant effects if:

- The project is inconsistent with the following: The Climate Change Scoping Plan first approved by the California Air Resources Board (ARB) in 2008 and updated every 5 years.
- Western Riverside County Council of Governments Subregional Action Plan (WRCOG Subregional CAP).

Significance Criteria for the Proposed Project

Consistent with General Plan Policy AQ 9.5 GHG Thresholds, this analysis utilizes the SCAQMD Draft GHG thresholds to evaluate whether the proposed project would generate significant amounts of GHG emissions. As described previously, the WRCOG Subregional CAP is not a qualified CAP for use within the City of Jurupa Valley because the City has not adopted the CAP.

The SCAQMD developed interim recommended significance thresholds for GHGs for local lead agency consideration (SCAQMD draft local agency threshold) in 2008; however, the SCAQMD Board has not approved the thresholds as of the date of this analysis. 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 GHG reduction plan. If a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions.
- Tier 3 consists of screening values, which the lead agency can choose but which must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to a project's operational emissions. If a project's emissions are under one of the following screening thresholds, then the project is less than significant:
 - All land use types: 3,000 MT CO₂e per year
 - Based on land use type: residential, 3,500 MT CO₂e per year; commercial, 1,400 MT CO₂e per year; industrial, 10,000 MT CO₂e; or mixed use, 3,000 MT CO₂e per year
- Tier 4 has the following options:

- Option 1: Reduce emissions from business-as-usual 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 MT CO₂e/SP/year for projects and 6.6 MT CO₂e/SP/year for plans.
 - Option 4, 2035 target: 3.0 MT CO₂e/SP/year for projects and 4.1 MT CO₂e/SP/year for plans.
- Tier 5 involves mitigation offsets to achieve target significance threshold.

The SCAQMD provided substantial evidence in support of its threshold approach. The SCAQMD discusses the draft thresholds in the following excerpt:¹⁷

The overarching policy objective with regard to establishing a GHG significance threshold for the purposes of analyzing GHG impacts pursuant to CEQA is to establish a performance standard or target GHG reduction objective that will ultimately contribute to reducing GHG emissions to stabilize climate change. Full implementation of the Governor's Executive Order S-3-05 would reduce GHG emissions 80 percent below 1990 levels or 90 percent below current levels by 2050. It is anticipated that achieving the Executive Order's objective would contribute to worldwide efforts to cap GHG concentrations at 450 ppm, thus, stabilizing global climate.

As described below, the staff's recommended interim GHG significance threshold proposal uses a tiered approach to determining significance. Tier 3, which is expected to be the primary tier by which the AQMD will determine significance for projects where it is the lead agency, uses the Executive Order S-3-05 goal as the basis for deriving the screening level. Specifically, the Tier 3 screening level for stationary sources is based on an emission capture rate of 90 percent for all new or modified projects. A 90 percent emission capture rate means that 90 percent of total emissions from all new or modified stationary source projects would be subject to some type of CEQA analysis, including a negative declaration, a mitigated negative declaration, or an environmental impact.

Therefore, the policy objective of staff's recommended interim GHG significance threshold proposal for project's where the SCAQMD is the lead agency is to achieve an emission capture rate of 90 percent of all new or modified stationary source projects. A GHG significance threshold based on a 90 percent emission capture rate may be more appropriate to address the long-term adverse impacts associated with global climate change. Further, a 90 percent emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future Statewide population and

¹⁷ South Coast Air Quality Management District (SCAQMD). 2008. Draft Guidance Document—Interim CEQA Greenhouse (GHG) Significance Threshold Document. Website: <http://www.aqmd.gov/hb/attachments/2008/December/081231a.htm>. Accessed January 24, 2022.

economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative Statewide GHG emissions. This assertion is based on the fact that staff estimates that these GHG emissions would account for less than 1 percent of future 2050 Statewide GHG emissions target (85 MMT CO₂e/year). In addition, these small projects would be subject to future applicable GHG control regulations that would further reduce their overall future contribution to the Statewide GHG inventory.

In summary, the SCAQMD's draft threshold uses the Executive Order S-3-05 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap CO₂ concentrations at 450 ppm, thus stabilizing global climate.

The SCAQMD Tier 3 threshold was expanded to include non-industrial projects, as explained in the minutes from the most recent working group meeting:¹⁸

Similarly, with regard to numerical residential/commercial GHG significance thresholds, at the 11/19/2009 stakeholder working group meeting staff presented two options that lead agencies could choose: option #1—separate numerical thresholds for residential projects (3,500 MT CO₂e/year), commercial projects (1,400 MT CO₂e/year), and mixed use projects (3,000 MT CO₂e/year) and; option #2—a single numerical threshold for all non-industrial projects of 3,000 metric tons (MT CO₂e/year). If a lead agency chooses one option, it must consistently use that same option for all projects where it is lead agency. The current staff proposal is to recommend the use of option #2, but allow lead agencies to choose option #1 if they prefer that approach.

To determine whether the proposed project would have a significant impact with respect to the generation of GHG emissions, this analysis utilizes the SCAQMD's draft local agency Tier 3 threshold of 3,000 MT CO₂e per year.

Section 15064.4(b) of the CEQA Guideline amendments for GHG emissions state that a lead agency may take into account the following three considerations in assessing the significance of impacts from GHG emissions.

- **Consideration No. 1:** The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting.
- **Consideration No. 2:** Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- **Consideration No. 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 include specific

¹⁸ South Coast Air Quality Management District (SCAQMD). 2010. Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15. September.

requirements that 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.

3.8.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

Greenhouse Gas Emissions

Threshold GHG-1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Under the City's local significance threshold, the project would have significant effects if: The project exceeds the thresholds per the General Plan Policy below:

AQ 9.5 **GHG Thresholds.** Utilize the SCAQMD Draft GHG thresholds to evaluate development proposals until the City adopts a CAP.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

These include existing regulatory requirements such as plans, policies, or programs applied to the proposed project based on federal, State, or local law currently in place which effectively reduce impacts to GHG emissions.

Plans, Policies, and Programs

The following PPPs apply to the proposed project and would reduce impacts related to GHG emissions:

PPP 3.8-1 Before issuing a building permit, the Building and Safety Department will ensure that the Project is designed, constructed, and operated to meet or exceed applicable CCR Title 24 Energy Efficiency Standards and CCR Title 24 CALGreen Standards.

PPP 3.8-2 As required by Municipal Code Section 9.283.010, *Water Efficient Landscape Design Requirements*, before the approval of landscaping plans, the Project Proponent shall prepare and submit landscape plans that demonstrate compliance with this section.

Project Design Features

The proposed project design includes high density development and alternative transportation infrastructure, such as bicycle and pedestrian paths, that would reduce VMT and reliance on fossil fuel burning vehicles. Energy efficiency measures included in PDFs and PPPs, and utilization of renewable energy sources such as solar on residential buildings, will serve to reduce GHG emissions from the proposed project. Specifically, PPP 3.8-1 requires that the City's Building and Safety Department ensure that the proposed project is designed, constructed and operated to meet or exceed the incumbent CCR Title 24 Energy Efficiency Standards and Title 24 CalGreen Standards, which will serve to reduce GHG emissions from the proposed project. Furthermore, PPP 3.8-2

requires that the proposed project comply with the water efficient landscaping requirements included in the City's Municipal Code, which reduces GHGs associated with watering landscaping.

Impact Analysis

Global climate change is not confined to a particular project area and is generally accepted as the consequence of global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough greenhouse gas emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact. Implementation of the Rio Vista Specific Plan, i.e., the proposed project, would contribute to global climate change through direct emissions of GHG from on-site area sources and vehicle trips generated by the proposed project and indirectly through off-site energy production required for on-site activities, water use, and waste disposal.

The total and net annual GHG emissions associated with full buildout of the proposed project are shown in Table 3.8-2. Annual GHG emissions were calculated for construction and operation of the proposed project. The emissions associated with the proposed project includes emissions associated with the new facilities, with the overall growth in the service population (e.g., mobile source emissions), and with the existing facilities. Total construction emissions were amortized over 30 years and included in the emissions inventory to account for the short-term, one-time GHG emissions from the construction phase of the proposed project.

Existing Condition

The project area consists of vacant land with relatively low existing GHG emissions due to active maintenance of the site and off-roading vehicles used for recreation. This analysis assumes no existing GHG emissions occur on-site to present a conservative analysis.

Construction

Construction activities associated with future development under the proposed project would generate temporary short-term GHG emissions from heavy-duty construction equipment, worker trips, and material delivery and hauling. On-site activities would consist of the operation of off-road construction equipment as well as on-site truck travel (e.g., haul trucks, dump trucks, and concrete trucks). Off-site sources would include emissions from construction vehicles used for hauling materials and worker vehicle trips. The SCAQMD has not established thresholds of significance for GHG emissions resulting from construction activities at the plan level. Rather, the SCAQMD Rule 403 encourages the incorporation of Best Management Practices (BMPs) to reduce GHG emissions during construction. As discussed in Section 3.3, Air Quality, new development facilitated by the General Plan would include the SCAQMD BMPs for reducing construction emissions of PM₁₀ and PM_{2.5}. The provisions that limit idling set forth in the SCAQMD BMPs would also reduce GHG emissions during construction.

Table 3.8-2 presents the proposed project's construction-related GHG emissions by construction year and total amortized construction emissions.

Table 3.8-2 Proposed Project Construction Greenhouse Gas Emissions

Construction Year	Emissions (MT CO ₂ e)
Construction 2024	656
Construction 2025	23,815
Construction 2026	25,391
Construction 2027	24,773
Construction 2028	24,117
Construction 2029	23,699
Construction 2030	23,276
Construction 2031	22,876
Construction 2032	20,049
Construction 2033	1,461
Total¹	190,114
<i>Amortized over 30 years²</i>	<i>6,337</i>
Notes: MT CO ₂ e = metric tons of carbon dioxide equivalent ¹ Figures may not appear to add exactly due to rounding. ² Construction greenhouse gas emissions are amortized over the 30-year life of the project. Source: CalEEMod Output (see Appendix C)	

Future development under the proposed project would comply with the requirements of the City's General Plan policies and programs related to GHG emissions as well as applicable SCAQMD regulations. Therefore, future development under the proposed project at construction would not result in significant adverse effects related to GHG emissions. As such, the construction of the proposed project would result in a less than significant impact relative to this topic.

Operation

As shown in Table 3.8-3, operation of the proposed project would result in a net increase of GHG emissions by 90,620.26 MT CO₂e per year compared to the existing conditions in the project area. This net increase would exceed SCAQMD's bright-line threshold of 3,000 MT CO₂e per year; therefore, emissions are compared to the efficiency metric, which is based on achieving a trajectory toward the State's long-term climate stabilizations goals under Executive Order S-03-05. As identified in this table, the proposed project would generate 10.74 MT CO₂e/SP and would exceed the 2035 efficiency target of 4.1 MT CO₂e/SP.

Table 3.8-3 Total and Net Annual Operational Phase GHG Emissions at Buildout

Source Category	Emissions with Proposed Project Buildout (MT CO ₂ e)
Area Sources	29.46
Energy Usage	20,313.14
Mobile	53,570.46
Solid Waste	4,310.25
Water and Wastewater	6,059.95
Amortized Construction ¹	6,337
Annual Total²	90,620.26
Service Population (Residents + Employees)	8,436
Emissions Per Service Population	10.74
Threshold	4.1
Threshold Exceeded?	Yes
Notes: MT CO ₂ e = metric tons of carbon dioxide equivalent ¹ Construction greenhouse gas emissions are amortized over the 30-year life of the project. ² Figures may not appear to add exactly due to rounding. Source: CalEEMod Output (see Appendix C)	

While implementation of the proposed project would generate a substantial increase in GHG emissions and would result in per service population emissions that exceed the efficiency target, its guiding principles, design guidelines, and proposed land use designations for the plan area would contribute to minimizing emissions to the extent feasible. Guiding principles and objectives of the proposed project include providing for a balanced mix of uses, boosting the economy, and promoting sustainable development. Additionally, objectives of the proposed project include removing barriers to infill development, reusing underutilized properties, encouraging a balanced mix of uses, and promoting development that reduces VMT and encourages active transit.

General Plan Policy AQ 4.3 requires, “the installation and use of electric service units at truck stops and distribution centers for heating and cooling truck cabs, and particularly for powering refrigeration trucks, in lieu of idling of engines for power.” Other General Plan policies support the installation of electric infrastructure to support electric vehicles at residential, commercial, and industrial land uses. Future developments envisioned as a part of the proposed project would be subject to State regulations that will reduce emissions from project construction and operation, including Title 24 and CALGreen standards and the California Code of Regulations. Furthermore, the City of Jurupa Valley Municipal Code adopts these standards.

Under full buildout conditions, the forecast year 2035 threshold of 4.1 MT CO₂e per service population per year would be exceeded in the project site. The increases in overall emissions would be attributable to the additional nonresidential and residential land uses proposed. In addition, an

increase in service population would contribute to an increase in wastewater generation, water demand, and vehicle trips. New buildings would be more energy-efficient, but there would be an overall increase in energy usage due to the magnitude of new building space that would be constructed. Overall, the proposed project's cumulative contribution to the long-term GHG emissions in the State would be considered potentially significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Compliance with Mitigation Measure (MM) AIR-1a and MM AIR-1d to reduce emissions from construction equipment and with MM AIR-1e through MM AIR-1i to reduce GHG impacts from future project operations.

MM GHG-1a To identify potential implementing development project impacts, project applicants for proposed development projects that are subject to CEQA shall analyze, or shall have analyzed by a qualified air quality consultant, the construction and operational-related greenhouse gas (GHG) emission impacts of the proposed development project using the latest available CalEEMod model or other analytical method determined by the City of Jurupa Valley as lead agency in conjunction with the South Coast Air Quality Management District (SCAQMD). The results of this GHG impact analysis shall be included in the development project's CEQA documentation. If such analysis identifies that emissions would exceed the latest recommended SCAQMD significance thresholds for GHG emissions, the City shall require the incorporation of appropriate mitigation. Mitigation should reduce identified impacts to the maximum extent feasible using, among others, measures identified in the Air Quality Element Policies of the General Plan and the most recent Air Quality Management Plan, as well as mitigation from the most recent CEQA Air Quality Handbook available at the SCAQMD, and the latest version of the California Air Pollution Control Officers Association (CAPCOA) *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*. Example topics include, but are not limited to, energy conservation and efficiency measures, use of renewable energy, reduction of Vehicle Miles Traveled (VMT), use of zero and near-Zero-Emission Vehicles (ZEVs), waste reduction measures, and water conservation. For new nonresidential land uses, the following mitigation shall be considered, where feasible:

- The project shall install solar photovoltaic (PV) panels or other source of renewable energy generation on-site, or otherwise acquire energy from the local utility that has been generated by renewable sources, which would provide 100 percent of the expected building load. The buildings shall include an electrical system and other infrastructure sufficiently sized to accommodate the PV arrays. The electrical system and infrastructure must be clearly labeled with noticeable and permanent signage.

- Only electric-powered off-road equipment (e.g., yard trucks/hostlers, forklifts, indoor material handling equipment, etc.) shall be utilized on-site for daily warehouse and business operations. The project developer/facility owner shall disclose this requirement to all tenants/business entities prior to the signing of any lease agreement. In addition, the limitation to use only electric-powered off-road equipment shall be included in all leasing agreements.

MM GHG-1b Buildings in the project area will be designed to provide CALGreen Standards with Leadership in Energy and Environmental Design (LEED®) features for potential certification and will employ energy and water conservation measures in accordance with such standards. This includes design considerations related to the building envelope, and heating, ventilation, and air conditioning (HVAC), lighting, and power systems. Additionally, the architectural expression such as roofs and windows in the buildings will relate to conserving energy. Compliance with this mitigation measure shall be verified by the City of Jurupa Valley prior to the issuance of a building permit.

MM GHG-1c Prior to the issuance of building permits for new development projects in the project area, the project applicant shall show on the building plans that all major appliances (dishwashers, refrigerators, clothes washers, and dryers) to be provided/installed are Energy Star-certified appliances or appliances of equivalent energy efficiency. Installation of Energy Star or equivalent appliances shall be verified by the City of Jurupa Valley prior to the issuance of a Certificate of Occupancy.

Level of Significance After Mitigation

Even with the implementation of MM GHG-1 through MM GHG-3, due to the size of the proposed development and potential emissions of GHGs from project construction and operation, the impacts of the proposed project are significant and unavoidable.

Conflict with Plan, Policy, or Regulation that Reduces Emissions

Threshold GHG-2: Would the project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

Under the City's local significance threshold, the project would have significant effects if:

- The project is inconsistent with the following: The Climate Change Scoping Plan first approved by the California Air Resources Board (ARB) in 2008 and updated every 5 years.
- Western Riverside County Council of Governments Subregional Action Plan (WRCOG Subregional CAP).

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

The following PPPs apply to the proposed project and would reduce impacts related to GHG plans, policies, and regulations:

- PPP 3.8-1** Before issuing a building permit, the Building and Safety Department will ensure that the Project is designed, constructed, and operated to meet or exceed applicable CCR Title 24 Energy Efficiency Standards and CCR Title 24 CALGreen Standards.
- PPP 3.8-2** As required by Municipal Code Section 9.283.010, *Water Efficient Landscape Design Requirements*, before the approval of landscaping plans, the Project Proponent shall prepare and submit landscape plans that demonstrate compliance with this section.

Project Design Features

The proposed project design includes high density development and alternative transportation infrastructure, such as bicycle and pedestrian paths, that would reduce VMT and reliance on fossil fuel burning vehicles. As discussed under Threshold GHG-1, the energy efficiency measures included in PDFs and PPPs, and utilization of renewable energy sources such as solar on residential buildings, will serve to reduce GHG emissions from the proposed project.

Impact Analysis

Applicable plans adopted for the purpose of reducing GHG emissions include the City's General Plan, ARB's Scoping Plan, and SCAG's 2020-2045 RTP/SCS. A consistency analysis with these plans is presented below.

City of Jurupa Valley General Plan and Municipal Code

As described previously, the City of Jurupa Valley General Plan and Municipal Code include policies that aim to reduce GHG emissions or would indirectly reduce GHG emissions. The analysis under Impact GHG-1 demonstrates consistency with AQ 9.5 GHG Thresholds because it utilizes the SCAQMD GHG Thresholds in the absence of a qualified CAP. The proposed project would be consistent with policies LUE 2.2 and 2.5 because it would provide residential, recreational, and school land uses connected by a network of multiuse trails designed for pedestrian, bicycles, and equestrian use. Additionally, the proposed project would be consistent with policies LUE 3.4, 3.10 and 3.11, because the proposed project would integrate commercial and residential land uses near transit facilities and planned multiuse paths. Moreover, the proposed project would not conflict with policies LUE 3.15 and 7.4 because industrial and business park land uses would be sited near the southern and eastern boundaries near a major transportation corridor, State Route 60, existing light industrial uses, and would be served by existing transit. Also, PPP 3.8-1 and 3.8-2 would ensure proposed development would be consistent with Municipal Code Chapter 8.05 and 9.283 as well as any new updates associated with the California Building Standards Code (CBC), CALGreen, and water efficient landscape requirements as they are released. Therefore, the proposed project would not conflict with the City of Jurupa Valley General Plan or Municipal Code policies and programs aimed at reducing GHG emissions.

ARB Scoping Plan

The ARB Scoping Plan is applicable to State agencies but is not directly applicable to cities/counties and individual projects (i.e., the Scoping Plan does not require the City to adopt policies, programs, or regulations to reduce GHG emissions). However, new regulations adopted by the State agencies outlined in the Scoping Plan result in GHG emissions reductions at the local level. As a result, local jurisdictions benefit from reductions in transportation emissions rates, increases in water efficiency

in the building and landscape codes, and other Statewide actions that affect a local jurisdiction's emissions inventory from the top down. Statewide strategies to reduce GHG emissions include the Low Carbon Fuel Standard (LCFS) and changes in the Corporate Average Fuel Economy Standards (e.g., Pavley I and Pavley California Advanced Clean Cars program).

Development projects accommodated under the proposed project are required to adhere to the programs and regulations identified by the Scoping Plan and implemented by State, regional, and local agencies to achieve the Statewide GHG reduction goals of AB 32. These future individual development projects would comply with these Statewide GHG emissions reduction measures. For example, new buildings under the proposed project would meet the current CALGreen and Building Energy Efficiency standards. The California Energy Commission (CEC) anticipates that new residential buildings will be required to achieve zero net energy (ZNE) by 2020 and that new nonresidential buildings will be required to achieve ZNE by 2030. Estimated project GHG emissions include reductions associated with Statewide strategies that have been adopted since AB 32. However, because the project exceeds the applicable numeric screening threshold identified by the SCAQMD under GHG Impact-1, the proposed project has the potential to impede the State's ability to achieve GHG reduction targets.

2022 Scoping Plan Update

As explained earlier, the 2022 Scoping Plan addresses the recent signing of AB 1279, which codified Executive Order B-55-18's target for California to achieve and maintain carbon net neutrality by 2045 (equivalent to a reduction in Statewide anthropogenic GHG emissions of 85 percent below 1990 levels). The 2022 Scoping Plan establishes a scenario by which the State may achieve this goal by 2045 or earlier.

The 2022 Scoping Plan reaffirms and clarifies the role of local governments in achieving the State's climate goals, particularly as it concerns the approval of new land use development projects and their environmental review under CEQA. It outlines three distinct approaches that lead agencies may consider for evaluating the consistency of proposed plans and residential and mixed-use development projects with the State's climate goals. In other words, the 2022 Scoping Plan considers these approaches to evaluate whether a project may have a less than significant impact on GHG emissions. However, it notes that these approaches are recommendations only and that they do not supplant lead agencies' discretion to develop their own evidence-based approaches for determining whether a project would result in a potentially significant impact on GHG emissions.

The first approach involves consistency with a GHG reduction plan, such as a CEQA-qualified CAP. However, the City of Jurupa Valley has not developed such a CAP. Therefore, this approach is not applicable to the proposed project.

The second approach involves determining whether a project would result in net-zero GHG emissions. However, the 2022 Scoping Plan acknowledges that this approach may not be appropriate or even feasible for every project.

The third approach involves assessing a project's consistency with key project attributes that have been demonstrated to reduce operational GHG emissions while advancing fair housing. Table 3.8-4

presents these attributes and a discussion of the proposed project's consistency with them. According to the 2022 Scoping Plan, the project attributes are intended as a guide to help local jurisdictions, such as the City of Jurupa Valley, qualitatively identify residential and mixed-use projects that are clearly consistent with the State's climate goals. The 2022 Scoping Plan considers residential and mixed-use development projects incorporating the following key project attributes to be aligned with the State's priority GHG reduction strategies for local climate action and therefore consistent with the 2022 Scoping Plan and other plans, policies, or regulations adopted for the purposes of reducing GHGs. The 2022 Scoping Plan acknowledges that projects incorporating some, but not all, of the key project attributes may also be consistent with the State's climate goals, at the discretion of the lead agency.

Table 3.8-4: 2022 Scoping Plan Consistency

Scoping Plan Measure	Project Consistency
<p>Deploy ZEVs and reduce driving demand. Passenger Vehicles. This scoping measure calls for a reduction in VMT per capita reduction of 12 percent below 2019 levels by 2030 and 22 percent below 2019 levels by 2045.</p> <p>It is further achieved via benefits from Light-Duty Vehicle (LDV) Fuel Economy Standards: Advanced Clean Cars I GHG standards for 2017–2025 model years, 2 percent annual fuel economy improvement for 2026–2035.</p> <p>Executive Order N79-20: 100 percent of LDV sales are ZEV by 2035 will contribute to an increase in ZEVs for employees of the projects.</p>	<p>Inconsistent. The proposed project would not obstruct the implementation of the LDV fuel economy standards because residents or businesses could operate ZEVs on-site during operation. However, the proposed project would conflict with this Scoping Plan Measure due to VMT impacts, a potentially significant impact. As discussed in the VMT analysis prepared for the proposed project, project-generated Production Attraction (PA) Home-Based (HB) VMT per capita exceeds the City's VMT per capita impact threshold by 22.4 percent in the baseline condition and 26.2 percent in the cumulative condition and is considered potentially significant. Despite the implementation of project design features, such as providing pedestrian and bicycle network improvements, MM TRANS-2a which requires a transportation demand management program to reduce VMT, MM TRANS-2b, which would require a school car pool program, and MM TRANS-2c and -2d, which would require street and transit access improvements, the proposed project VMT impacts would remain significant and unavoidable because these design features and MMs would not result in a VMT per capita reduction of 12 percent below 2019 levels by 2030 and 22 percent below 2019 levels by 2045. Therefore, impacts would remain significant and unavoidable.</p>
<p>Deploy ZEVs. Medium-Heavy and Heavy-Heavy Duty Trucks. This measure is supported by Executive Order N79-20 and plans in the AB 74 ITS Report: 100 percent of MD/HDV sales are ZEV by 2040.</p> <p>It does not depend on VMT reductions from the freight and truck transportation sector.</p>	<p>Consistent. Any trucks purchased by future development would be required to be compliant with truck Fuel Economy Standards: California Phase II GHG Standards.</p>

Scoping Plan Measure	Project Consistency
Coordinate supply of liquid fossil fuels with declining CA fuel demand. This measure involves the phase out oil and gas extraction operations by 2045 as well as Carbon Capture and Sequestration (CCS) on majority of petroleum refining operations by 2030. Interim goals are to reduce petroleum production reduced in line with its demand.	Not Applicable. The proposed project would include residential and industrial land uses and is not related to the petroleum industry.
Generate clean electricity. Electric sector GHG target of 38 MMTCO ₂ e in 2030 and 31 MMTCO ₂ e in 2045. This GHG target is determined to meet the loads associated with the scenario and corresponds to meeting the 2021 SB 100 Joint Agency Report's 100 percent of retail sales with eligible renewable and zero-carbon resources definition.	Not Applicable. The proposed project will benefit indirectly from these goals, however, there are no actions related to the project itself, because this measure would apply to passenger vehicle producers.
Decarbonize industrial energy supply. Phase out oil and gas extraction operations by 2045. Carbon Capture and Sequestration (CCS) on majority of petroleum refining operations by 2030. Production reduced in line with petroleum demand.	Not Applicable. This requirement is applicable to oil and gas production facilities.
Decarbonize buildings. The proposed scenario AB197 modeling is based on all electric appliances beginning 2026 (residential) and 2029 (commercial). This measure aligns with 2019 Integrated Energy Policy Report : Mid-High (electric) / Mid-Mid (gas) scenario.	Consistent. The proposed project is consistent with the AB197 commercial timeline. In addition, the proposed project would be required to comply with CALGreen measures for 2022 require rooftop P/V with battery storage for warehouses and heat pumps (in all climate zones) for office space in warehouses consistent with decarbonization strategies.
Reduce non-combustion emissions. This strategy involves a number of sectors and measures: <ul style="list-style-type: none"> • increase landfill and dairy digester methane capture. • capture of fugitive methane emissions from the oil and gas infrastructure components. • the introduction of Low global warming potential (GWP) refrigerants introduced as building electrification increases mitigating HFC emissions. 	Consistent. The proposed project would use low GWP refrigerants consistent with current California Significant New Alternatives Policy (SNAP) regulations.
Compensate for remaining emissions. This measure encompasses using Carbon Dioxide Removal (CDR) to compensate for remaining emissions. Targets are demonstration projects by 2030 and CDR scaled to compensate for remaining GHG emissions in 2045.	Not applicable. This measure would not be applicable for residential and mixed-use development, such as the proposed project.
Source: California Air Resources Board (ARB).2022. Scoping Plan for Achieving Carbon Neutrality. November.	

As described in Table 3.8-4, the proposed project would be consistent with some measures while other measures contained in the 2022 Scoping Plan would not directly apply to the proposed project. However, due to the proposed project's VMT impacts, the proposed project would result in

a significant impact related to consistency with the Measure Deploy ZEVs and reduce driving demand. Despite implementation of PDFs and MM TRANS-2a, MM TRANS-2c, and MM TRANS-2d, the proposed project would still exceed the respective reduction in VMT required to meet this measure and contribute toward meeting the State's goal of achieving carbon neutrality by 2045. Therefore, impacts would be significant and unavoidable.

Scoping Plan Appendix D, Local Actions

Included in the 2022 Scoping Plan is a set of Local Actions (2022 Scoping Plan Appendix D) aimed at providing local jurisdictions with tools to reduce GHGs and assist the State in meeting the ambitious targets set forth in the 2022 Scoping Plan. Appendix D of the 2022 Scoping Plan includes a section on evaluating plan-level and project-level alignment with the State's Climate Goals in CEQA GHG analyses and identifies several recommendations and strategies that should be considered for new development in order to determine consistency with the 2022 Scoping Plan. Notably, Appendix D is focused on residential and mixed-use projects and does not address other land uses (e.g., industrial).

1. Transportation electrification
2. VMT reduction
3. Building decarbonization

Appendix D notes that projects that have all of the key project attributes should accommodate growth in a manner consistent with State GHG reduction goals. While the proposed project does not include all-electric design that is a key component to demonstrating clear consistency with the 2022 Scoping Plan, the following comparison to the three aforementioned key project attributes is provided for information purposes.

Transportation electrification. MM AIR-1h would require electric vehicle charging to be provided as specified in Section A4.106.8.2 (Residential Voluntary Measures) of the CALGreen Code. MM AIR-1f would require the construction of all buildings to facilitate sufficient electric charging for trucks to plug in, in anticipation of future technology that allows trucks to operate partially or completely on electricity.

VMT reduction. As stated previously, the proposed project would include multiple PDFs that include: high density development and alternative transportation infrastructure, such as bicycle and pedestrian paths, that would reduce VMT. Further, MM TRANS-2a which would require a transportation demand management program to reduce VMT, MM TRANS-2b, which would require a school car pool program, and MM TRANS-2c and MM TRANS-2d, which would require street and transit access improvements.

Building decarbonization. As described above, the General Plan and Municipal Code include policies and regulations that aim to reduce GHG emissions or would indirectly reduce GHG emissions. PPP 3.8-1 requires that the City's Building and Safety Department ensure that the proposed project is designed, constructed, and operated to meet or exceed the incumbent CCR Title 24 Energy Efficiency Standards and Title 24 CalGreen Standards, which will serve to reduce GHG emissions from the proposed project. Further, MM GHG-1 requires future residential development to shall install solar PV panels or other source of renewable energy generation on-site, or otherwise acquire energy from

the local utility that has been generated by renewable sources, that would provide 100 percent of the expected building load.

SCAG's Regional Transportation Plan/Sustainable Communities Strategy

The SCAG 2020-2045 RTP/SCS, Connect SoCal, was adopted September 3, 2020. The RTP/SCS identifies multimodal transportation investments, including bus rapid transit, light rail transit, heavy rail transit, commuter rail, high-speed rail, active transportation strategies (such as bike paths and pedestrian connections), transportation demand management strategies, transportation systems management, highway improvements (interchange improvements, high-occupancy vehicle lanes, high-occupancy toll lanes), arterial improvements, goods movement strategies, aviation and airport ground access improvements, and operations and maintenance to the existing multimodal transportation system.

Connect SoCal identifies that land use strategies that focus on new housing and job growth in areas served by high quality transit and other opportunity areas would be consistent with a land use development pattern that supports and complements the proposed transportation network. The overall GHG emission reduction strategy included in the 2020-2045 RTP/SCS is to allow the region to grow in more compact communities in existing urban areas; provide neighborhoods with efficient and plentiful public transit and abundant and safe opportunities to walk, bike, and pursue other forms of active transportation; and preserve more of the region's remaining natural lands. The projected regional development pattern in Connect SoCal would reduce per capita GHG emissions originating from VMTs and support the achievement the GHG emission reduction targets for the SCAG region, as established by the ARB.

The 2020-2045 RTP/SCS contains transportation projects to help more efficiently distribute population, housing, and employment growth as well as a forecast development that is generally consistent with regional-level general plan data. The projected regional development pattern—when integrated with the proposed regional transportation network identified in the RTP/SCS—would reduce per capita vehicular-travel-related GHG emissions and achieve the GHG reduction per capita targets for the SCAG region. The RTP/SCS does not require that local general plans, specific plans, or zoning be consistent with the RTP/SCS but provides incentives for consistency for governments and developers.

As discussed in the VMT analysis prepared for the proposed project, project-generated Production Attraction (PA) Home-Based (HB) VMT per capita exceeds the City's VMT per capita impact threshold by 22.4 percent in the baseline condition and 26.2 percent in the cumulative condition and is considered potentially significant. Despite the implementation of PDFs, such as providing pedestrian and bicycle network improvements, MM TRANS-2a which would require a transportation demand management program to reduce VMT, MM TRANS-2b, which would require a school car pool program, and MM TRANS-2c and MM TRANS-2d, which would require street and transit access improvements, the proposed project VMT impacts would remain significant and unavoidable. Therefore, the proposed project would conflict with the 2020-2045 RTP/SCS.

Table 3.8-5 provides an evaluation of the proposed project in comparison to the three primary transportation-land-use strategies in the 2020-2045 RTP/SCS. As shown in the table, the proposed project would be consistent with the applicable 2020-2045 RTP/SCS land use strategies.

Table 3.8-5 Proposed Project Consistency with SCAG's 2020-2045 RTP/SCS

SCAG Transportation-Land Use Strategies	Implementing Policies/Strategies	Consistency
Focus new growth around high quality transit areas (HQTAs). The RTP/SCS overall land use pattern reinforces the trend of focusing new housing and employment in the region's HQTAs.	Additional local policies that ensure that development in HQTAs achieve the intended reductions in VMT and GHG emissions include: <ul style="list-style-type: none"> • Affordable housing requirements. • Reduced parking requirements. • Adaptive reuse of existing structures. • Density bonuses tied to family housing units such as three- and four-bedroom units. • Mixed-use development standards that include local serving retail. • Increased Complete Streets investments around HQTAs. 	Consistent: Guiding principles of the proposed project include providing for a balanced mix of uses, boosting the economy, and promoting sustainable development.
Plan for growth around livable corridors. SCAG's livable corridors strategy seeks to revitalize commercial strips through integrated transportation and land use planning that results in increased economic activity and improved mobility options.	Additional livable corridors strategies include: <ul style="list-style-type: none"> • Transit improvements, including dedicated lane bus rapid transit (BRT) or semi-dedicated BRT-light. The remaining corridors have the potential to support other features that improve bus performance (enhanced bus shelters, real-time travel information, off-bus ticketing, all-door boarding, and longer distances between stops to improve speed and reliability). • Active transportation improvements: Livable corridors include increased investments in complete streets to make these corridors and the intersecting arterials safe for biking and walking. • Land use policies: Livable corridor strategies include the development of mixed-use retail centers at key nodes along the corridors, increasing 	Consistent: The proposed project includes Mixed-Use land use designations, with residential areas located near existing transit, service amenities, areas of employment, and recreational areas. The Rio Vista Specific Plan also envisions new bicycle facilities throughout the project area, including a bicycle network with Class I trails, and enhancements to neighborhood and corridor mobility through a network of pedestrian walkways and connected sidewalks throughout the planning area.

SCAG Transportation-Land Use Strategies	Implementing Policies/Strategies	Consistency
	neighborhood-oriented retail at more intersections, and zoning that allows for the replacement of underperforming auto-oriented strip retail between nodes with higher density residential and employment.	
Provide more options for short trips in neighborhood mobility areas and complete communities. Neighborhood mobility areas have a high intersection density, low to moderate traffic speeds, and robust residential retail connections. These areas are suburban in nature, but can support slightly higher density in targeted locations. The land use strategies include shifting retail growth from large, centralized retail strip malls to smaller distributed centers throughout a neighborhood mobility area.	<ul style="list-style-type: none"> • Neighborhood mobility area land use strategies include pursuing local policies that encourage replacing motor vehicle use with neighborhood electric vehicle (NEV) use. NEVs are a federally designated class of passenger vehicle rated for use on roads with posted speed limits of 35 miles per hour or less. Steps needed to support NEV use include providing State and regional incentives for purchases, local planning for charging stations, designating a local network of low speed roadways, and adopting local regulations that allow smaller NEV parking stalls. • Complete communities strategies include creation of mixed-use districts through a concentration of activities with housing, employment, and a mix of retail and services in close proximity to each other. Focusing a mix of land uses in strategic growth areas creates complete communities wherein most daily needs can be met within a short distance of home, providing residents with the opportunity to patronize their local area and run daily errands by walking or cycling rather than traveling by automobile. 	Consistent: Guiding principles for the proposed project would support developing a mix of land uses, attracting local service businesses, increasing nonmotorized transportation, and creating public spaces that would encourage social interaction. The proposed project would focus on Mixed-Use Medium, Mixed-Use High, Mixed-Use Urban Core, and Mixed-Use Industrial that would provide daily services and amenities for the nearby residences and businesses. In addition, compliance with the City's General Plan policies would promote the installation of more electric vehicle (EV) charging stations, which would contribute to increasing the use of EVs in general.

Implementation of MM TRANS-2a, MM TRANS-2c, and MM TRANS2d would reduce project VMT, however, project VMT impacts would still exceed the City of Jurupa Valley baseline VMT threshold and impacts would remain significant and unavoidable.

WRCOG Subregional CAP Consistency

In 2014, the City of Jurupa Valley was one of 12 cities that collaborated with the WRCOG on a Subregional CAP that includes 36 measures to guide GHG reduction efforts through 2020. However, the City of Jurupa Valley has not adopted the Subregional CAP because it did not go through formal CEQA review by WRCOG, which intended it to be a framework for cities to implement AB 32 and for cities to develop their own CAPs. Therefore, since the City has not adopted a CAP no impact determination can be made.

Summary

The proposed project is consistent with many applicable Scoping Plan goals and policies as evaluated herein, but would be inconsistent with the 2022 Scoping Plan measure to reduce VMT. Additionally, the project incorporates a number of PDFs 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. 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. However, the project does conflict with the 2022 Scoping Plan and SCAG 2020/2045 RTP/SCS due to the VMT impacts. Although MM GHG-1a, GHG-1b, GHG-1c, and TRANS-2a, MM TRANS-2c, and MM TRANS-2d would reduce GHG emissions and VMT, the reduction in emissions and VMT from these mitigation measures would not reduce impacts below the applicable thresholds. Therefore, because the project exceeds the SCAQMD GHG 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.

Level of Significance Before Mitigation

Significant and unavoidable impact.

Mitigation Measures

Implement MM GHG-1a, MM GHG-1b, MM GHG-1c, MM TRANS-2a, MM TRANS-2c, and MM TRANS-2d.

Level of Significance After Mitigation

Significant and unavoidable impact.

3.8.7 - Cumulative Impacts

No single land use project could generate enough GHG emissions to noticeably change the global average temperature. Cumulative GHG emissions, however, contribute to global climate change and its significant adverse environmental impacts. The proposed project would generate a net increase in GHG emissions and would exceed the SCAQMD Working Group's bright-line threshold of 3,000 MT CO₂e for all land use types.

Level of Cumulative Significance Before Mitigation

Potentially significant.

Mitigation Measures

Compliance with MM AIR-1a and MM AIR-1d would assist in reducing emissions from construction equipment associated with the buildout of the proposed project. Implementation of MM AIR-1e through MM AIR-1i, as well as MM GHG-1a, MM GHG-1b, and MM GHG-1c, will help to reduce cumulative GHG impacts from future project operations to the extent feasible.

Level of Cumulative Significance After Mitigation

Even with the implementation of applicable mitigation measures, the proposed project impacts are cumulatively considerable.

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3.9 - Hazards and Hazardous Materials

3.9.1 - Introduction

This section describes the existing hazards and hazardous materials setting and potential effects from project implementation on the site and its surrounding area. This section considers the nature and range of foreseeable hazardous materials and physical hazards/impacts that would result from implementation of the proposed project. It identifies the ways that hazardous materials and other types of hazards could expose people and the environment to various health and safety risks during construction activities and operation of the proposed project.

This section also describes routine hazardous materials that are likely to be used, handled, or processed within the project site, and the potential for upset and accident conditions in which hazardous materials could be released. The impact analysis identifies ways in which hazardous materials might be routinely used, stored, handled, processed, or transported, and evaluates the extent to which existing and future populations could be exposed to hazardous materials.

Descriptions and analysis in this section are based on the Jurupa Valley General Plan (General Plan), the Jurupa Valley Municipal Code (Municipal Code), and the Phase I Environmental Site Assessment (Phase I ESA) prepared by Hillman Consulting in 2017,¹ included in this Draft Environmental Impact Report (Draft EIR) as Appendix G.

A Notice of Preparation (NOP) was released for public review on December 6, 2021, and an Environmental Impact Report (EIR) Scoping Meeting was held on December 14, 2021. No public comments were received during the scoping period related to hazards and hazardous materials.

3.9.2 - Environmental Setting

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

For purposes of this EIR, the term “hazardous material” is defined as a substance which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may: (1) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, disposed of, or otherwise mismanaged; or (2) cause or contribute to an increase in mortality or an increase in irreversible or incapacitating illness. Hazardous waste is defined in the California Code of Regulations, Title 22, Section 66261.3. The defining characteristics of hazardous waste are ignitability (oxidizers, compressed gases, and extremely flammable liquids and solids), corrosivity (strong acids and bases), reactivity (explodes or generates toxic fumes when exposed to air or water), and toxicity (materials listed by the United States Environmental Protection Agency [EPA] as capable of inducing systemic damage to humans or animals). Certain wastes are called “Listed Wastes” and are found in the California Code of Regulations, Title 22, Sections 66261.30 –

¹ Hillmann Consulting. 2017. Phase I Environmental Site Assessment Rio Vista Rubidoux, California 92509. March 27.

66261.35. Wastes appear on the lists because of their known hazardous nature or because the processes that generate them are known to produce hazardous wastes (which are often complex mixtures).

Hazards Materials and Wastes

Hazardous materials include but are not limited to hazardous materials, hazardous substances, and hazardous wastes, as defined in Section 25501 and Section 25117, respectively, of the California Health and Safety Code. A hazardous material is any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released; and any material that a handler or an administering regulatory agency under Section 25501 has a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment. Various properties may cause a substance to be considered hazardous, including:

Hazardous Substances

A hazardous substance can be any biological, natural, or chemical substance, whether solid, liquid, or gas that may cause harm to human health. Hazardous substances are classified on the basis of their potential health effects, whether acute (immediate) or chronic (long-term). Dangerous goods are classified on the basis of immediate physical or chemical effects, such as fire, explosion, corrosion, and poisoning. An accident involving dangerous goods could seriously harm human health or damage property or the environment. Harm to human health may happen suddenly (acute), such as dizziness, nausea, and itchy eyes or skin; or it may happen gradually over years (chronic), such as dermatitis or cancer. Some people can be more susceptible than others. Hazardous substances and dangerous goods can include antiseptic used for a cut, paint for walls, a cleaning product for the bathroom, chlorine in a pool, carbon monoxide from a motor vehicle, fumes from welding, vapors from adhesives, or dust from cement, stone, or rubber operations. Such hazardous substances can make humans very sick if they are not used properly.

Hazardous Wastes

Hazardous waste is any hazardous material that is to be discarded, abandoned, or recycled. The criteria that define a material as hazardous also define a waste as hazardous. Specifically, materials and waste may be considered hazardous if they are poisonous (toxic); can be ignited by open flame (ignitable); corrode other materials (corrosive); or react violently, explode, or generate vapors when mixed with water (reactive). Soil or groundwater contaminated with hazardous materials above specified regulatory State or federal thresholds is considered hazardous waste if it is removed from a site for disposal. If handled, disposed, or otherwise handled improperly, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The California Code of Regulations, Title 22, Sections 66261.20–66261.24 contains technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

Hazardous Materials Listing

The Cortese List is a list of known hazardous materials or hazardous waste facilities that meet one or more of the provisions of Government Code Section 65962.5, including:

- The list of hazardous waste and substances sites from the California Department of Toxic Substances Control (DTSC) EnviroStor database.² There are no listings for the project site found on the EnviroStor database.
- The list of Leaking Underground Storage Tank (LUST) sites by county and fiscal year from the California State Water Resources Control Board (State Water Board) GeoTracker database.³ No LUST sites are listed in GeoTracker database for the project site.
- The list of solid waste disposal sites identified by the State Water Board with waste constituents exceeding hazardous waste levels outside the waste management unit.⁴ There are no known disposal sites listed at the project site or in its vicinity.
- The list of active cease-and-desist orders and cleanup and abatement orders from the State Water Board.⁵ There are no known cases that exist for the project site.
- The list of hazardous waste facilities subject to Corrective Action pursuant to Section 25187.5 of the Health and Safety Code, as identified by the DTSC.⁶

Existing Fire Related Conditions and Presence of Hazardous Materials

The hazards in the City and the project area discussed in this section are related primarily to fire hazards and hazardous materials. Fire hazards and hazards from hazardous materials are typically site-specific, so existing conditions related to fire hazards and the transport, use, and disposal of hazardous materials are discussed below under “project site.”

Fire hazards present a considerable problem to vegetation and wildlife habitats throughout the County. Grassland fires are easily ignited, particularly in dry seasons. These fires are relatively easily controlled if they can be reached by fire equipment; the burned slopes, however, are highly subject to erosion and gullyng. While brushlands are naturally adapted to frequent light fires, fire protection in recent decades has resulted in heavy fuel accumulation on the ground. Wildfire is a serious hazard in undeveloped areas and on large lot home sites with extensive areas of unirrigated vegetation, particularly near areas of natural vegetation and steep slopes, since fires tend to burn more rapidly

² California Department of Toxic Substances Control (DTSC). “Cortese” list of DTSC’s EnviroStor database list of Hazardous Waste and Substances sites. DTSC’s Hazardous Waste and Substances Site List—Site Cleanup (Cortese List). Website: https://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=CORTESE&site_type=CSITES,FUDS&status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST+%28CORTESE%29. Accessed November 24, 2021.

³ California State Water Resources Control Board (State Water Board). “Cortese” List of Leaking Underground Storage Tank Sites by County (San Francisco County). Website: https://geotracker.waterboards.ca.gov/sites_by_county. Accessed November 24, 2021.

⁴ California Environmental Protection Agency (Cal/EPA). “Cortese” list of solid waste disposal sites identified with waste constituents above hazardous waste levels outside the waste management unit. Website: <https://calepa.ca.gov/wp-content/uploads/sites/6/2016/10/SiteCleanup-CorteseList-CurrentList.pdf>. Accessed November 24, 2021.

⁵ California Environmental Protection Agency (Cal/EPA). “Cortese” list of State Water Board sites with active Cease and Desist Orders or Cleanup Abatement Orders. Website: <https://calepa.ca.gov/wp-content/uploads/sites/6/2016/10/SiteCleanup-CorteseList-CDOCAOList.xlsx>. Accessed November 24, 2021.

⁶ California Environmental Protection Agency (Cal/EPA). “Cortese” list of sites subject to Corrective Action pursuant to Health and Safety Code 25187.5. Website: <https://calepa.ca.gov/site-cleanup/cortese-list-data-resources/section-65962-5a/>. Accessed November 24, 2021.

on steeper terrain. Wildfire is also a serious hazard in areas of high wind, given that fires will travel faster and farther geographically when winds are higher.

City of Jurupa Valley

The foothill areas and mountainsides of the City are subject to risk of fire hazards. Lush riparian vegetation, including giant cane, along the Santa Ana River also poses conditions conducive to wildfires. The highest danger of wildfires can be found in the most rugged terrain where, fortunately, development intensity is relatively low.⁷

In addition, disaster preparedness is important to the City in order to establish the most effective and efficient ways to address hazards and minimize effects of hazards on life and property, reduce potential for disasters, and recover from effects of disasters as quickly as possible. Therefore, the City has adopted a Local Hazard Mitigation Plan (LHMP) and participates in the County of Riverside Multi-Jurisdictional Local Hazard Mitigation Plan. The City also has an Emergency Operations Plan (EOP) that addresses how the City will respond to emergency situations ranging from minor incidents to large-scale disasters. The City also participates in the County of Riverside's Hazards – United States program (HAZUS), which is a standardized methodology for earthquake loss estimation based on Geographic Information Systems (GIS). HAZUS is designed for use by State, regional, and local governments in planning for earthquake loss mitigation, emergency preparedness, response, and recovery.⁸

Project Site

The project site consists of 17 irregularly shaped parcels to the north of State Route (SR) 60, between Rubidoux Boulevard and Armstrong Road. The site is currently vacant with no existing buildings and is approximately 917.3 acres. The site is located in a suburban developed area characterized by a mix of single- and multi-family homes, a quarry, manufacturing suppliers, and undeveloped land. The site has been undeveloped since 1896, with no indication of building development. Additionally, there are a number of informal, unpaved trails and dirt roads located throughout the site. The elevation of the project site ranges from approximately 900 feet at the southern corner to approximately 1,739 feet in the central area. The topography is a mixture of steep hillsides, rolling hills, rocky outcrops, and low-relief canyons combined with relatively flat areas. The project site is located outside the 100- and 500-year flood zones.^{9,10}

According to the Phase I ESA, there are four 15-gallon containers containing vinyl product that were dumped in the ravine at the project site. There are also two 5-gallon gasoline containers identified and were noted as empty. De minimis soil staining was identified in the northeastern portion of the project site from vinyl product that leaked out of containers. Additional de minimis staining was also found to the west of the vinyl product staining where a fire had likely occurred.

⁷ City of Jurupa Valley 2017. 2017 General Plan. September.

⁸ Ibid.

⁹ Hillman Consulting, 2017. Phase I Environmental Site Assessment Rio Vista Rubidoux, California. March 27.

¹⁰ L&L Environmental, Inc. 2021. Revised Updated Biological Resources Assessment, Jurisdictional Delineation, MSHCP Narrow Endemic Plant, Burrowing Owl Breeding Season, and Two-Year Delhi Sands Flower-Loving Fly Focused Surveys, Rio Vista, Specific Plan 16001, Jurupa Valley, Riverside County, California. August.

The Phase I ESA revealed the following Recognized Environmental Condition (REC):

- Double Barrel Environmental Services removed 6,000 pounds of oil debris and soil from the central portion of the site. Soil remaining in the vicinity of the removed soil may likely contain elevated contaminants, which constitutes an REC in connection with the project site.

The Phase I ESA recommends a limited subsurface investigation in the area where the waste and stained soil was removed from the project site. In addition, and while not a REC, the Phase I ESA also recommends proper disposal of the dumped items observed throughout the project site.

No Controlled Recognized Environmental Conditions (CRECs) and no Historical Recognized Environmental Conditions (HRECs) were identified at the project site. The Phase I ESA did not identify any notable concerns related to asbestos-containing material (ACM), lead-based paint (LBP), radon, or mold. No underground storage tanks (USTs) or aboveground storage tanks (ASTs) were found on the project site.

According to the Phase I ESA records review, one listing was identified in the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS). This listing is located within a 0.5-mile radius of the project site. The listing is described as Riverside Cement Company, Crestmore Plant, located at 1500 Rubidoux Boulevard. It is located approximately 2,130 feet east of the project site and at a lower elevation relative to the project site. The listing's status is "Other Cleanup Activity: State-Lead Cleanup" and in 1995 DTSC issued a No Further Action letter. Because of the status and the No Further Action letter, this site is not considered to be a REC in connection with the project site.

Five listings were identified on the EnviroStor database as State/Tribal Hazardous Waste Sites (SHWS) within 1 mile of the project site. The closest listing to the project site is Certainteed Corporation, located at 2100 Avalon Street, approximately 2,188 feet east of the project site and at lower elevation relative to the project site. As of January 2008, this listing is indicated as "Inactive" and the site type is noted as Corrective Action. Because of the distance and topographic relation, the Phase I ESA does not consider it to be an REC in connection with the project site. The other four listings are also not considered to be REC according to the Phase I ESA.

Additionally, the Phase I ESA identified 27 State/Tribal LUSTs within a 0.5-mile radius of the project site. The closest listing is the Certainteed Corporation site described above. Soil was potentially affected from diesel at this address and a leak was first discovered during a tank closure procedure in July 1991. However, as of October 1992, this listing status is "Case Closed." Considering the status, distance, and the fact that only soil media was impacted, this Phase I ESA determines that this listing is not considered to be a REC in connection with the project site. None of the other 26 listed facilities are considered to be a REC for the project site according to the Phase I ESA.

Four Spills, Leaks, Investigations, and Cleanups (SLIC) listings were also identified in the Phase I ESA within a 0.5-mile radius of the project site. The closest listing is Ryder Truck Rental located at 5880 20th Street, approximately 3,370 feet east of the project site and at a lower elevation than the project site. As of November 1995, this listing status is "Completed – Case Closed," when a No

Further Action letter was issued. Because of the status and distance, the Phase I ESA does not consider it to be an REC in connection with the project site. None of the other 3 listings are considered to be a REC for the project site according to the Phase I ESA.

3.9.3 - Regulatory Framework

Federal

Resource Conservation and Recovery Act and Comprehensive Environmental Response, Compensation, and Liability Act

The EPA is responsible for implementing and enforcing federal laws and regulations pertaining to hazardous materials. The primary legislation includes the Resource Conservation and Recovery Act of 1976 (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA or Superfund), as amended by the Superfund Amendments and Reauthorization Act (SARA) and the Emergency Planning and Community Right-to-Know Act (known as SARA Title III). RCRA and the 1984 RCRA Amendments regulate the treatment, storage, and disposal of hazardous and nonhazardous wastes and mandate that hazardous wastes be tracked from the point of generation to their ultimate fate in the environment, including detailed tracking of hazardous materials during transport and permitting of hazardous material handling facilities. As permitted by RCRA, in 1992, the EPA approved California's program called the Hazardous Waste Control Law (HWCL), administered by DTSC, to regulate hazardous wastes in California, as discussed further below. The purpose of CERCLA is to identify and clean up chemically contaminated sites that pose a significant environmental health threat, and the Hazard Ranking System is used to determine whether a site should be placed on the National Priorities List for cleanup activities. SARA relates primarily to emergency management of accidental releases and requires annual reporting of continuous emissions and accidental releases of specified compounds that are compiled into a nationwide Toxics Release Inventory. Finally, SARA Title III requires formation of state and local emergency planning committees that are responsible for collecting material handling and transportation data for use as a basis for planning and provision of chemical inventory data to the community at large under the "right-to-know" provision of the law.

Hazardous Materials Transportation Act

Under the Hazardous Materials Transportation Act of 1975, the United States Department of Transportation (USDOT), Office of Hazardous Materials Safety regulates the transportation of hazardous materials on water, rail, and highways, through air, or in pipelines and enforces guidelines created to protect human health and the environment and reduce potential impacts by creating hazardous material packaging and transportation requirements. It also includes provisions for material classification, packaging, marking, labeling, placarding, and shipping documentation. The USDOT provides hazardous materials safety training programs and supervises activities involving hazardous materials. In addition, the USDOT develops and recommends regulations governing the multimodal transportation of hazardous materials.

State

California Hazardous Waste Control Law

The HWCL is the primary hazardous waste statute in the State of California, and implements RCRA as a “cradle-to-grave” waste management system for handling hazardous wastes in a manner that protects human health and the environment and would reduce potential resulting impacts. The law specifies that generators have the primary duty to determine whether their waste is hazardous and to ensure proper management. The HWCL also establishes criteria for the reuse and recycling of hazardous waste used or reused as raw materials. The law exceeds federal requirements by mandating source reduction planning and a much broader requirement for permitting facilities that treat hazardous waste. It also regulates a number of types of waste and waste management activities that are not covered by federal law.

California Health and Safety Code

The California Health and Safety Code (HSC § 25141) defines hazardous waste as a waste or combination of waste that may:

. . . because of its quantity, concentration, or physical, chemical, or infection characteristics:

- (1) Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitation-reversible illness.
- (2) Pose a substantial present or potential hazard to human health or the environment, due to factors including, but not limited to, carcinogenicity, acute toxicity, chronic toxicity, bio accumulative properties, or persistence in the environment, when improperly treated, stored, transported, or disposed of or otherwise managed.

These regulations establish criteria for identifying, packaging, and labeling hazardous wastes; prescribe management practices for hazardous wastes; establish permit requirements for hazardous waste treatment, storage, disposal, and transportation; and identify hazardous waste that commonly would be disposed of in landfills.

Under both the RCRA and the HWCL, hazardous waste manifests must be retained by the generator for a minimum of 3 years. The generator must match copies of the manifests with copies of manifest receipts from the treatment, disposal, or recycling facility.

The California Environmental Protection Agency (Cal/EPA) designated the Riverside County Department of Environmental Health Hazardous Materials Branch (DEH) as the Certified Unified Program Agency (CUPA). As the CUPA, they enforce State statutes and regulations through the Hazardous Materials Unified Program Agency, which oversees aboveground petroleum tanks; generation of hazardous materials; storage and treatment; USTs; generation of medical waste; the accidental release prevention program; and Local Oversight Program. The CUPA has responsibility for overseeing the primary hazardous materials programs applicable to the proposed project:

Business Plan Program: In order to protect public health and safety, as well as the environment, the Business Plan Program regulates the storage and handling of hazardous materials through education, facility inspections and enforcement of State law.

Underground Storage Tank Program: DEH oversees the inspections of construction, repairs, upgrades, system operation and removal of UST systems.

California Emergency Response Plan

California has developed an emergency response plan to coordinate emergency services provided by federal, State, and local governments and private agencies. Responding to hazardous materials incidents is one part of this plan. The plan is administered by the California Governor's Office of Emergency Services, which coordinates the responses of other agencies. The Riverside County Emergency Management Department coordinates emergency management, including mitigation, preparation, response, and recovery, in a unified manner that creates recognized leadership in the fields of emergency management and emergency medical services.

California Building Code

The State of California provided a minimum standard for building design through the 2016 California Building Standards Code (CBC), which is located in Part 2 of Title 24 of the California Code of Regulations. The 2016 CBC is based on the 2015 International Building Code, but has been modified for California conditions. It is generally adopted on a jurisdiction by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are plan-checked by local City and County building officials for compliance with the CBC. Typical fire safety requirements of the CBC include the installation of sprinklers in all new high-rise buildings and residential buildings; the establishment of fire resistance standards for fire doors, building material; and particular types of construction.

State Education Code, School Siting

Special State requirements apply to the siting of a school facility. Section 17210, *et seq.* of the State Education Code, Section 21151.2, Section 21151.4, and Section 21151.8 of the Public Resources Code require that prospective school sites be reviewed to determine that such sites are not a current or former hazardous waste disposal site, a hazardous substance release site, or the site of hazardous substance pipelines. Specifically, California Education Code Section 17213 specifies that a school district may not acquire land for a school site that contains an aboveground or underground hazardous liquid or gas pipeline. State regulations prohibit school sites "near an aboveground water or fuel storage tank or within 1,500 feet of the easement of an aboveground or underground pipeline that can pose a safety hazard as determined by a risk analysis study, conducted by a competent professional" (Title 5 California Code of Regulations [CCR] § 14010(h)). Consultation is required with local hazardous materials agencies and air quality districts to ensure that no sites within 0.25 mile of a school that handle or emit hazardous substances would potentially endanger future students or workers at the prospective school site.

All school districts receiving State funds must prepare a Phase I ESA on prospective school sites. The Phase I ESA would detail the historical uses of the property and indicate any potential for

contamination. DTSC must review this assessment and make one of the following findings: (1) that no further action is required; or (2) that concerns about contamination exist and the district must conduct a Preliminary Endangerment Assessment. The process entails site sampling and the development of a detailed risk assessment of any contaminants present on the proposed school property.

Regional

Riverside County Emergency Operations Plan

The Riverside County Emergency Management Department (EMD) is responsible for coordinating all emergency management activity in the City and implementing the County's EOP. The County's EOP addresses how Riverside County and City should respond to extraordinary events or disasters (e.g., aviation accidents, civil unrest and disobedience/riot, dam and reservoir failure, disease, earthquake, flood, etc.), from preparedness phase through recovery.¹¹

Riverside County Fire Service Fire Prevention Guidelines

The Riverside County Fire Service has set fire prevention guidelines that address such matters as fire flow, fire access, building construction, flammable and combustible liquids, and fire protection systems.

Local

City of Jurupa Valley General Plan

The following General Plan policies are directly related to the project in regard to hazards and hazardous materials. Please refer to Section 3-11, Land Use and Planning, for analysis of the proposed project's consistency with these policies.

- CSSF 1.1 Fault Rupture Hazards.** When reviewing new development, minimize fault rupture hazards through enforcement of Alquist-Priolo Earthquake Fault Zoning Act provisions and the following requirements:
1. Require geologic studies or analyses for new, critical structures, such as schools, medical facilities, senior or disabled housing, or other high-risk occupancies located within 0.5 mile of all active or potentially active faults.
 2. Require geologic trenching studies for new developments within all designated Earthquake Fault Studies Zones, unless adequate evidence is presented and accepted by the City Engineer or a Building Official. The City may also require geologic trenching for new development located outside designated fault zones for especially critical or vulnerable structures or lifelines.
 3. Require that critical infrastructure, including roads, bridges, and utilities be designed to resist, without failure, their crossing of a fault, if fault rupture occurs.

¹¹ Riverside County Emergency Management Department. 2019. Emergency Operations Plan (EOP), Riverside County Operational Area (OA). August.

4. Encourage and support efforts by the geologic research community to better define the locations and risks of County faults. Such efforts could include data sharing and database development with regional entities, State and local governments, private organizations, utility agencies, or universities.

CSSF 1.2 *Geologic Investigations.* Require geological and geotechnical investigations as part of the environmental and development review process. This requirement shall apply to the development of any structure proposed for human occupancy or to unoccupied structures whose damage could cause secondary hazards in areas with potential for earthquake-induced liquefaction, landslides, or settlement.

CSSF 1.5 *Hillside Development.* Encourage and, where possible require, mitigation of potential erosion, landslide, and settlement hazards for existing public and private development located on unstable hillside areas, especially slopes with recurring failures where City property or public right-of-way is threatened from slope instability, or where considered appropriate and urgent by the City Engineer, CAL FIRE, or County Sheriff's Department.

CSSF 1.8 *Building Codes.* Enforce provisions of the Building Code in conjunction with the following guidelines:

1. Critical facilities shall not be permitted in flood-plains unless the project design ensures that there are at least two routes for emergency ingress and egress, and minimizes the potential for debris or flooding to block emergency routes.
2. Development using, storing, or otherwise involved with substantial quantities of on-site hazardous materials shall not be permitted unless all standards for evaluation, anchoring, and flood-proofing have been satisfied; and hazardous materials are stored in watertight containers, not capable of floating, to the extent required by State and federal laws and regulations.
3. Specific flood-proofing measures that may be required include, but are not limited to: use of paints, membranes, or mortar to reduce water seepage through walls; installation of water tight doors, bulkheads, and shutters; installation of flood water pumps in structures; and proper modification and protection of all electrical equipment, circuits, and appliances so that the risk of electrocution or fire is eliminated. Fully enclosed areas that are below finished floors shall require openings to equalize the forces on both sides of walls.

CSSF 1.23 *Fire Prevention.* Develop and enforce construction and design standards that ensure that proposed development incorporates fire prevention features through the following:

1. All proposed construction shall meet minimum standards for fire safety as defined in the City Building or Fire Codes, or by City zoning, or as dictated by the Building Official or the Transportation Land Management Agency based on building type, design, occupancy, and use.

2. In addition to the fire safety provisions of the Uniform Building Code and the Uniform Fire Codes, apply additional standards for high-risk, high-occupancy hospital and health care facilities, dependent care, emergency operation centers, and other essential or “lifeline” facilities, per county or State standards. These shall include assurance that structural and nonstructural architectural elements of the building will not:
 - impede emergency egress for fire safety staffing/personnel, equipment, and apparatus; nor
 - hinder evacuation from fire, including potential blockage of stairways or fire doors.

CSSF 1.24 Adjacent Natural Vegetation. Development that adjoins large areas of native vegetation will require drought tolerant landscaping that blends with the natural vegetation to the greatest extent possible.

CSSF 1.25 Wildfire Hazards. Encourage and, as resources allow, support CAL FIRE and other agency efforts to reduce wildfire hazards and improve fire-fighting capacity to successfully respond to multiple fires.

City of Jurupa Valley Municipal Code

Municipal Code Section 6.45.010 establishes a hazardous vegetation abatement program to prevent wildfires due to flammable vegetation and Santa Ana wind events.¹²

Jurupa Valley Local Hazard Mitigation Plan

The purpose of the LHMP is to identify the hazards in the City, review and assess past disaster occurrences, estimate the probability of future occurrences, and set goals to mitigate potential risks to reduce or eliminate long-term risk to people and property from natural and man-made hazards. The plan identifies vulnerabilities, provides recommendations for prioritized mitigation actions, evaluates resources, and identifies mitigation shortcomings, provides future mitigation planning and maintenance of existing plans.¹³ The City’s LHMP was approved by the Federal Emergency Management Agency (FEMA) on February 25, 2019.¹⁴ The LHMP identifies the most prominent hazards faced by City residents as major earthquakes, flooding potential from 100-year storm events in winter months along the Santa Ana River bank, and windstorms causing power outages. In addition, the LHMP identifies mitigation actions and ongoing mitigation strategy programs, as well as lead departments or jurisdictions responsible for these actions and programs.

¹² City of Jurupa Valley. Jurupa Valley Municipal Code Chapter 6.45 – Hazardous Vegetation. Website: https://library.municode.com/ca/jurupa_valley/codes/municipal_code?nodeId=TIT6HESA_CH6.45HAVE. Accessed November 26, 2021.

¹³ City of Jurupa Valley Emergency Services. 2018. Local Hazards Mitigation Plan. January 1. Website: https://www.jurupavalley.org/DocumentCenter/View/990/2018-Local-Hazard-Mitigation-Plan_Jurupa-Valley?bidId=. Accessed March 8, 2022.

¹⁴ United States Department of Homeland Security, Federal Emergency Management Agency (FEMA). 2019. Letter to Riverside County Emergency Management Department. February 25.

3.9.4 - Thresholds of Significance

Significance Criteria

In accordance with Section 15064.7 of the California Environmental Quality Act (CEQA) Guidelines, the City adopted local CEQA Guidelines. The City's local CEQA Guidelines are based, in part, on the CEQA checklist included in Appendix G of the State CEQA Guidelines. The City of Jurupa Valley Guidelines recognizes the following significance thresholds and Significance Criteria related to Hazards and Hazardous Materials. Based on these significance thresholds, a project would have a significant impact on Hazards and Hazardous Materials Resources if it would:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Under the City's local significance threshold, the project would have significant effects if: The project handles a hazardous material or mixture containing a hazardous material that has a quantity at any one time during the reporting year equal to or greater than the amounts specified by Health and Safety Code Section 25507 *et seq.*

- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Under the City's local significance threshold, the project would have significant effects if:

- The project handles a hazardous material or mixture containing a hazardous material (as defined in the Health and Safety Code Section 25501(o), see definition above in introduction) that has a quantity at any one time during the reporting year equal to or greater than the amounts specified by Health and Safety Code Section 25507 *et seq.*
- The project handles or stores hazardous materials in a quantity equal or greater to the amounts specified by Health and Safety Code Section 25507 and is located within designated 100- or 500-year flood zones.

- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Under the City's local significance threshold, the project would have significant effects if: The project site is located within ¼ mile of an existing public or private school and the project handles a hazardous material or mixture containing a hazardous material (see definitions above) that has a quantity at any one time during the reporting year equal to or greater than the amounts specified by Health and Safety Code Section 25507 *et seq.*

- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.

Under the City's local significance threshold, the project would have significant effects if: The project is located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

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

Under the City's local significance threshold, the project would have significant effects if: The project is located within a compatibility zone of the Flabob Airport, Riverside Municipal Airport and does not meet the Compatibility Criteria for Land Use Actions identified in the applicable Airport Land Use Compatibility Plan for the airport.

- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Under the City's local significance threshold, the project would have significant effects if:

- The project is inconsistent with the City of Jurupa Valley Local Hazard Mitigation Plan and the Riverside County Operational Area Multi-Jurisdictional Local Hazard Mitigation Plan.
 - Any required street improvements do not meet General Plan and/or City standards.
 - The project has less than two (2) routes for emergency egress and ingress (unless otherwise allowed by the Fire Department).
- g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury, or death involving wildland fires.

Under the City's local significance threshold, the project would have significant effects if: The project is located within a "High" fire hazard zone per General Plan Figure 8-10: Wildfire Severity Zones in Jurupa Valley.

Approach to Analysis

This evaluation focuses on whether the proposed project would result in changes to the physical environment that would cause or exacerbate adverse effects related to the use, transportation, disposal, accidental release, or emission of hazardous materials. The evaluation also includes a determination of whether the proposed project would result in changes to the physical environment, or would impair or interfere with emergency response plans, or would expose people or structures to increased wildfire hazards, dangers from overhead power lines or other hazards. The following analysis is based, in part, on information provided by the General Plan and the Phase I ESA, included in Appendix G.

Additional analyses regarding hazards and health risk related to emissions of toxic air contaminants (TACs) are addressed in Section 3.3, Air Quality. Flooding and inundation hazards, including those related to erosion and mudflow, are addressed in Section 3.10, Hydrology and Water Quality. Transportation-related safety hazards are addressed in Section 3.17, Transportation. Other geotechnical-related safety hazards, such as earthquakes, are addressed in Section 3.7, Geology and Soils. Finally, excessive noise exposure with respect to airport use or air traffic is addressed in Section 3.13, Noise.

3.9.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Routine Transport, Use, or Disposal of Hazardous Materials

Threshold HAZ-1: Would the proposed project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Under the City's local significance threshold, the project would have significant effects if: The project handles a hazardous material or mixture containing a hazardous material that has a quantity at any one time during the reporting year equal to or greater than the amounts specified by Health and Safety Code Section 25507 *et seq.*

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

These include existing regulatory requirements such as plans, policies, or programs applied to the proposed project based on federal, State, or local laws currently in place which effectively reduce impacts to hazards and hazardous materials.

The following PPP applies to the proposed project and would reduce impacts related to Threshold HAZ-1:

PPP 4.9-1 As required by Health and Safety Code Section 25507, a business shall establish and implement a business plan for an emergency response to a release or threatened release of hazardous material in accordance with the standards prescribed in the regulations adopted pursuant to Section 25503 if the business handles a hazardous material or a mixture containing a hazardous material that has a quantity at any one time above the thresholds described in Section 25507(a) (1) through (6).

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of hazards and hazardous materials.

Impact Analysis

The proposed project consists of a master planned mixed-use community. It would include construction of approximately 19.6 acres of roadways, including an approximately 1.3-mile extension of 20th Street to be developed as a modified secondary highway (100-foot right-of-way) enhanced with a 30-foot-wide trail easement, Collector Roads (74-foot right-of-way), and Local Streets (56-foot right-of-way). A significant impact would occur if the proposed project construction or operation would include handling a hazardous material or mixture containing a hazardous material that has a quantity at any one time during the reporting year equal to or greater than the amounts specified by the California Health and Safety Code Section 25507 *et seq.*

Potential hazards are described below for construction and operation of the proposed project.

New development or redevelopment in the project site area would involve the routine management of some hazardous materials that could pose a significant threat to human health or the environment if not properly managed or if accidentally released. Grading and construction activities associated with implementation of the proposed project may involve the limited transport, storage, usage, or disposal of hazardous materials commonly associated with construction. These hazardous materials would include gasoline, diesel fuel, lubricants, and other petroleum-based products used to operate and maintain construction equipment and vehicles.

The handling of hazardous materials would be a temporary activity that would occur during buildout of proposed project roadways, as well as future buildout of the project site. The routine handling, transporting, use, or disposal of hazardous materials during construction and operation activities are addressed by applicable federal, State, and local laws, regulations, and programs set forth by various federal, State, and local agencies. Required compliance with applicable hazardous material laws and regulations would ensure that construction-related hazardous material use associated with roadway improvements, land use changes, and new development within the plan area would not result in significant impacts. Therefore, adherence to federal, State, and local regulations regarding potential impacts associated with construction activities creating a significant hazard to the public or the environment during the routine transport, use, or disposal of hazardous materials would ensure impact level remain less than significant.

Because of the nature of the proposed project, hazardous materials used by future development in the plan area may vary but would likely be limited to compressed gas for cooking, and storage of common household cleaning supplies and pesticides for landscaping and maintenance, that could result in potentially significant impacts. However, these materials are transported, stored, and used in accordance with existing federal, State, and local regulations. In addition, hazardous materials associated with future development would not be used, stored, or transported in quantities sufficient enough to create a significant hazard to the public. Furthermore, the quantities of these materials are not expected to be equal to or greater than those identified in the California Health and Safety Code Section 25507. Impacts would be less than significant.

Level of Significance

Less than significant impact.

Risk of Upset

Threshold HAZ-2: Would the proposed project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?

Under the City's local significance threshold, the project would have significant effects if:

- The project handles a hazardous material or mixture containing a hazardous material (as defined in the Health and Safety Code Section 25501(o), see definition above in introduction)

that has a quantity at any one time during the reporting year equal to or greater than the amounts specified by Health and Safety Code Section 25507 *et seq.*

- The project handles or stores hazardous materials in a quantity equal or greater to the amounts specified by Health and Safety Code Section 25507 and is located within designated 100- or 500-year flood zones.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to the proposed project related to risk of upset.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of hazards and hazardous materials.

Impact Analysis

As discussed above, the proposed project would involve the handling of material in quantities that are not expected to be equal or greater than the conditions specified in Health and Safety Code Section 25503. The project is not located within a designated 100- or 500-year flood zone (see Section 3.10, Hydrology and Water Quality).

The Phase I ESA determined that there was one REC in the plan area. There were no Historical RECs or Controlled RECs found in the plan area. The REC includes the following:

- Based on the prior Phase I ESA issued by Hillman Consulting, Double Barrel Environmental Services removed 6,000 pounds of oil debris and soil from the central portion of the site. Soil remaining in the vicinity of the removed soil may contain elevated contaminants, which is identified as a REC in connection with the site.¹⁵

This REC is located in the vicinity of the roundabout proposed at the center of the project site, near Planning Area (PA) 8 (residential), PA 12 (light industrial), PA 14 (business park), PA 18 (proposed elementary school), PA 19 (community park), and the proposed 20th Street extension. Impacts associated with this REC could be potentially significant. MM HAZ-2a would require future development in the project site area where the oily debris and soil was removed to conduct a limited subsurface soil investigation prior to development of PAs 8, 12, 14, 18, and 19 and the 20th Street extension. With implementation of MM HAZ-2a, which requires, prior to the issuance of a grading or building permit, the completion of a limited subsurface soil investigation in the area of the site where the oily debris and soil was removed and further excavation, if needed, to ensure levels are within adopted thresholds for residential use and a no further action letter is issued by the oversight agency, impacts would be less than significant.

While not identified as a REC in the Phase I ESA, four 15-gallon containers containing vinyl product were dumped into a ravine on the site; two 5-gallon gasoline containers were observed on-site but

¹⁵ Hillman Consulting. 2017. Phase I Environmental Site Assessment Rio Vista Rubidoux, California 92509. March 27.

found empty; and miscellaneous household and construction materials were scattered throughout the site. MM HAZ-2b would require removal and proper disposal of dumped items throughout the site prior to the issuance of a grading or building permit. To address various items dumped at the project site, the Phase I ESA recommend removal and proper disposal of all dumped items, which would be addressed by MM HAZ-2b.

With implementation of MM HAZ-2a and MM HAZ-2b, construction of the proposed project would not create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions related to the release of hazardous materials into the environment, and potential impacts would be reduced to a less than significant level.

The operations associated with development of the proposed project would comply with all applicable federal, State, and local regulations. Because of the nature of the proposed project, hazardous materials used on-site may vary but would likely be limited to small quantities of fertilizers, herbicides, pesticides, solvents, cleaning agents, and similar materials used for landscaping and maintenance activities. These types of materials are common for general landscaping and maintenance activities associated with residential and commercial uses and represent a low risk to people and the environment when used as intended.

Hazardous materials may be used in the light industrial uses of the proposed project, as well as the technical school, proposed to be constructed and operational within the Business Park area of the proposed project. However, all usage would be in accordance with federal, State, and local regulations, and quantities would not be equal to or greater than those listed in the California Health and Safety Code Section 25507. Potential impacts would be less than significant.

Level of Significance

Potentially significant impact.

Mitigation Measures

MM HAZ-2a

Prior to the issuance of a grading or building permit for development of PAs 8, 12, 14, 18 or 19, or the 20th Street extension, whichever occurs first, a limited subsurface soil investigation in the area of the site where the oily debris and soil were removed shall be conducted. If the subsurface investigation results indicate soil concentrations above Regional Water Quality Control Board (RWQCB) environmental screening levels, the applicant must obtain regulatory oversight from the California Department of Toxic Substances Control (DTSC), or the Riverside County Department of Environmental Health under their Site Cleanup Program. A Site Management Plan (SMP), Removal Action Plan (RAP), or equivalent document shall be prepared by a qualified environmental consultant under regulatory oversight and approval that identifies remedial measures and/or soil management practices to ensure construction worker safety and the health of future site occupants or other significant impacts. The plan and evidence of case closure and no further action by the regulatory oversight agency shall be

provided to the City of Jurupa Valley before issuance of a grading permit for development in PAs 8, 12, 14, 18, or 19.

MM HAZ-2b

Prior to the issuance of a grading or building permit for any development of the site, potentially hazardous dumped items scattered throughout the site (such as gasoline containers and containers containing vinyl product) shall be properly disposed of before commencement of construction in accordance with the California Department of Industrial Relations, Division of Occupational Safety and Health regulations. Nonhazardous waste and debris (such as miscellaneous household and construction materials) shall be properly disposed in a permitted facility. The completion of the disposal of dumped items or other applicable abatement activities shall be documented by a qualified environmental professional(s) and submitted to the City for review with applications for issuance of construction permits.

Level of Significance After Mitigation

Less than significant impact.

Hazardous Emissions Proximate to a School

Threshold HAZ-3: Would the proposed project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Under the City's local significance threshold, the project would have significant effects if: The project site is located within ¼ mile of an existing public or private school and the project handles a hazardous material or mixture containing a hazardous material (see definitions above) that has a quantity at any one time during the reporting year equal to or greater than the amounts specified by Health and Safety Code Section 25507 *et seq.*

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)***Plans, Policies, and Programs***

There are no PPPs applicable to the proposed project related to hazardous emissions proximate to a school.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of hazards and hazardous materials.

Impact Analysis

Currently, the nearest school to the project site is Mission Middle School, located approximately 1.1 miles to the southwest. In addition, the proposed project would include the construction of a new public elementary school, serving grades Kindergarten through eighth grade. Construction activities associated with implementation of the proposed project would be expected to involve the transport, use, and disposal of hazardous materials, such as diesel fuels, aerosols, and paints. The handling,

transport, use, and disposal of hazardous materials must comply with the Hazardous Materials Transportation Act, California Public Resources Code, and other State and local regulations, which further limits the risk of emissions. As such, the proposed project would not emit hazardous emissions or handle hazardous materials within 0.25 mile of a school, and impacts would be less than significant.

As stated in Section 3.9.3, Regulatory Framework, the Jurupa Unified School District (JUSD) would be responsible for investigating the proposed elementary school site in consultation with the appropriate State and local agencies to ensure site conditions do not pose a health risk to future students, teachers, and workers. This site investigation, as well as potential remediation if needed, would be conducted under DTSC oversight. With compliance with this State regulation, impacts would be less than significant.

Level of Significance

Less than significant impact.

Government Code Section 65962.5 Sites

Threshold HAZ-4: Would the proposed project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Under the City's local significance threshold, the project would have significant effects if: The project is located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to the proposed project related to Government Code Section 65962.5 sites.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of hazards and hazardous materials.

Impact Analysis

Based on a review of available agency records and a regulatory database search as described in the Phase I ESA, there are no ASTs or USTs located on the project site. The closest LUST listing is Certainteed Corporation, located at 2100 Avalon Street, approximately 2,188 feet east of the project site and at lower elevation relative to the project site. As of January 2008, this listing is indicated as "Inactive" and the site type is noted as Corrective Action. Because of the distance and topographic relation, the Phase I ESA does not consider it to be an REC in connection with the project site. The other 4 listings are not considered to be REC either according to the Phase I ESA.

According to the Phase I ESA, one CERCLIS listing was identified within a 0.5-mile radius of the project site. The listing is described as Riverside Cement Company Crestmore PLT. It is located at 1500 Rubidoux Boulevard, 2,130 feet east of the project site and at a lower elevation relative to the project site. The listing's status is "Other Cleanup Activity: State-Lead Cleanup" and in 1995 DTSC issued a No Further Action letter. Because of the status and the No Further Action letter, this site is not considered to be a REC in connection with the project site.

Potential impacts associated with these two listings would be less than significant.

Level of Significance

Less than significant impact.

Proximity to Public Airport Safety Hazard

Threshold HAZ-5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the proposed project result in a safety hazard or excessive noise for people residing or working the project area?

Under the City's local significance threshold, the project would have significant effects if: The project is located within a compatibility zone of the Flabob Airport, Riverside Municipal Airport and does not meet the Compatibility Criteria for Land Use Actions identified in the applicable Airport Land Use Compatibility Plan for the airport.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to the proposed project related to proximity to public airport safety hazards.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of hazards and hazardous materials.

Impact Analysis

The proposed project would not be located within an airport land use plan or within 2 miles of a public airport. The closest airport, Flabob Field, a privately owned airport, is located approximately 1 mile to the south of the project site. Riverside Municipal Airport is located approximately 4.5 miles to the southwest of the project site. Flabob Airport is privately owned but is available for public use. The City's Significance Criteria addresses both airports. According to Map FL-1 of the Riverside County Airport Land Use Compatibility Plan, the project site is not located within a Compatibility Zone for Flabob Airport, and according to Map RI-1 of this plan, the project site is not located within a Compatibility Zone for Riverside Municipal Airport.¹⁶ Because the project site is located outside of

¹⁶ Riverside County Airport Land Use Commission. 2004. Riverside County Airport Land Use Compatibility Plan. October 14. Website: <https://www.rcaluc.org/Plans/New-Compatibility-Plan>. Accessed September 15, 2022.

the two Airport Compatibility Zones, no further analysis is required. Therefore, no impacts related to exposure of people to safety hazards or excessive noise in proximity to an airport would occur.

Level of Significance

No impact.

Emergency Response and Evacuation

Threshold HAZ-6: Would the proposed project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

The following PPP applies to the proposed project and would reduce impacts related to emergency response and evacuation.

PPP 4.9-3 As required by General Plan Policy ME 8.10 *Right-of-Way Improvements*, developers shall be responsible for right-of-way dedication and improvements that provide access to and enhance new developments. Improvements include street construction or widening, new paving, frontage improvements like curb, gutter, sidewalks, street trees, trails and parkways, installation of traffic signals, pavement markings and annunciators, and other facilities needed for the safe and efficient movement of pedestrians, bicyclists, equestrians, and motor vehicles.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of hazards and hazardous materials.

Impact Analysis

The proposed project consists of a master planned residential community. It would include the construction of approximately 19.6 acres of roadways, including a 1.3-mile extension of 20th Street developed as a modified secondary highway (100-foot right-of-way), enhanced with a 30-foot-wide trail easement, Collector roads (74-foot right-of-way), and Local Streets (56-foot right-of-way). There are no changes to existing roads that could potentially impair emergency response or evacuation (lane reductions, narrowing, permanent road closures, etc.).

The proposed project would include two public access points, one at 20th Street at the eastern portion of the project site, between PAs 13 and 16, and a second at 20th Street at the western portion of the site, near PAs 2, 3, and 4. All road improvements would meet the General Plan and City standards. In addition, there would be three emergency vehicle access points: one at PA 7 in northwest corner of the project site via Rorimer Drive, a second at PA 10 in northeast corner via Alicante Avenue, and one at PA 1 in southwest area of the project site via Paramount Drive. Access roads are shown in Exhibit 2-7. The Rio Vista Specific Plan further states that “Emergency Vehicle Access roads shall provide all-weather surface, meet minimum width and maximum grade requirements per Fire Department, and built-in accordance with Riverside County Fire Department

(CAL FIRE) standards.” As such, area-wide emergency vehicle access would be provided by the main roadway network within the project site.

Furthermore, future development within the project site would be required to comply with City’s congestion management practices to reduce traffic impacts during construction and operation. Consequently, the proposed project would be required to comply with guidelines necessary for emergency and fire vehicle access. Additionally, future development within the project site would be included in implementation of the Jurupa Valley LHMP.

Through the construction of new roads as part of its design and connection to existing City roadways, the proposed project would provide access for emergency vehicles. In addition, the proposed project would be required to comply with City regulations related to emergency access during construction and operation. The proposed project would also be required to provide adequate access for emergency vehicles per the California Fire Code. Any short-term impacts on roadways would be temporary and limited to the construction period. Thus, the proposed project would not impair implementation or physically interfere with the City’s ability to implement Riverside County’s EOP. Impacts would be less than significant.

Level of Significance

Less than significant impact.

Wildland Fires

Threshold HAZ-7: Would the proposed project expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?

Under the City’s local significance threshold, the project would have significant effects if: The project is located within a "High" fire hazard zone per General Plan Figure 8-10: Wildfire Severity Zones in Jurupa Valley.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

The following PPP applies to the proposed project and would reduce impacts related to wildland fires:

PPP 4.9-2 The project shall comply with all applicable County of Riverside Fire Department codes (Chapter 8.10 of the City’s Municipal Code), ordinances, and standard conditions regarding fire prevention and suppression measures relating to water improvement plans, fire hydrants, automatic fire extinguishing systems, fire access, access gates, combustible construction, water availability, and fire sprinkler systems.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of hazards and hazardous materials.

Impact Analysis

According to the California Department of Forestry and Fire Protection (CAL FIRE), the project site is located within a high wildfire severity zone and within a State Responsibility area (SRA) (Section 3.20, Wildfire, Exhibit 3.20-1). The project site is also located within an area identified by the General Plan Figure 8-10, Wildfire Severity Zones in Jurupa Valley, as having “High” fire risk. The General Plan notes that due to the mountainous nature of Riverside County, mountainsides and foothill areas are subject to fire hazards. However, compliance with applicable State and local plans and regulations would decrease the risk of impacts related to wildland fire hazards. Specifically, General Plan policies incorporate requirements for fire-safe construction into the land use planning and approval process and ensure special fire protection for high-risk land uses and structures. Riverside County also implements an EOP, which addresses responses to emergency incidents within it. Furthermore, all proposed construction in the City is required to meet minimum fire safety standards as defined in the County Building or Fire Codes, or by Riverside County Zoning, or as dictated by the Building Official of the Transportation Land Management Agency based on building type, design, occupancy, and use. With adherence to all State and local regulations, impacts would be less than significant.

Level of Significance

Less than significant impact.

3.9.6 - Cumulative Impacts

Cumulative projects would be subject to the requirements and regulations set forth by the United States Department of Transportation (USDOT), California Department of Transportation (Caltrans), California Highway Patrol (CHP), CAL FIRE, and Riverside County Fire Department related to transport, use, and disposal of hazardous materials. Accordingly, cumulative development would not result in physical changes that would result in a significant environmental effect. Cumulative projects will also be required to implement a Stormwater Pollution Prevention Plan (SWPPP) and comply with the California Code of Regulations during construction, site grading, excavation operations, and building demolition to ensure less than significant impacts. For these reasons cumulative projects would have a less than significant effect.

Additionally, the proposed project would not have a cumulatively considerable contribution to this less than significant impact related to hazards. The Phase I ESA did not identify any CRECs or HRECs. The Phase I ESA determined that there was one REC in the plan area. While temporary construction activities would result in the use, transport, or disposal of hazardous materials, compliance with applicable hazardous material laws and regulations would ensure that construction-related hazardous material use would not result in significant impacts. Similar development projects in the area would also be required to comply with such laws and regulations, and there would be no greater risk associated with the transport, use, disposal, or accidental release of these substances than would occur on any other similar construction sites. Therefore, there would not be a cumulative significant impact related to the use, transport, or disposal of hazardous materials.

In addition, the project site is not listed as a hazardous materials site, and the nearest school is more than 0.25 mile from the site. However, the proposed project would include the construction and operation of a public elementary school. Therefore, the proposed project in conjunction with other

projects would not result in a cumulatively significant impact related to hazardous materials sites or the emission of hazardous materials near a school. Similarly, the project site is outside of the airport influence area of both Flabob Airport and Riverside Municipal Airport and not located near a private airstrip. Therefore, no cumulative significant impacts associated with airports or private airstrips have been identified.

Cumulative impacts related to emergency response and evacuation plans would be less than significant. Riverside County and local law enforcement and fire departments conduct evacuation exercises annually to prepare for emergency situations. Evacuations in the project site area are an emergency support function that local law enforcement organizes and coordinates with Riverside County. Larger regional and statewide impacts would be regulated by State agencies to address larger-scale statewide issues. For these reasons, cumulative impacts associated with emergency response and evacuation plans would be less than significant. Moreover, the proposed project's incremental contribution to these less than significant cumulative impacts would not be significant. The proposed project would not conflict with or impair an emergency response plan or emergency evacuation plan, because it consists of various roadway improvements and improved circulation and would not result in any impairment to access roads. In addition, while the proposed project is located in a high fire severity zone, the proposed project would be required to comply with minimum fire safety standards as defined in the City Building or Fire Codes, or by City zoning, or as dictated by the Building Official of the Transportation Land Management Agency based on building type, design, occupancy, and use. To ensure a less than significant contribution to cumulative impacts, development consistent with the Rio Vista Specific Plan would be required to implement all applicable policies during the design review process. As the City receives development applications, those applications will be reviewed by the City for compliance with the applicable policies. In addition, a provision will be required to ensure that adequate fire protection service through agreements with Riverside Fire Department, CAL FIRE/Riverside County Fire Department, and local law enforcement and fire departments. The proposed project would not have a significant cumulative impact related to emergency response plans, emergency evacuation plans, or wildland fire hazards.

Level of Cumulative Significance

Less than significant impact.

3.10 - Hydrology and Water Quality

3.10.1 - Introduction

This section describes the existing hydrology and water quality setting and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on the City of Jurupa Valley General Plan (General Plan), as well as the Preliminary Hydrology Study¹ (Preliminary Hydrology Study) and the Project-Specific Water Quality Management Plan² (WQMP) prepared by Hunsaker and Associates in January 2022 and included in Appendix H.

A Notice of Preparation (NOP) was released for public review on December 6, 2021, and an Environmental Impact Report (EIR) Scoping Meeting was held on December 14, 2021. No public comments were received during the scoping period related to the proposed project's potential hydrologic impacts.

3.10.2 - Environmental Setting

Climate

Jurupa Valley is located within northwestern Riverside County, which is characterized by an inland Mediterranean climate consisting of mild winters and hot, dry summers. The average annual high temperature is 94.4°F (degrees Fahrenheit) in August and the average annual low temperature is 39.1°F in January. Precipitation averages 10.21 inches annually. General meteorological data for the Jurupa Valley area, as measured at Riverside Fire Station No. 3 weather station,³ are presented in Table 3.10-1.

Table 3.10-1: Jurupa Valley Meteorological Summary

Month	Temperature (°F)		Precipitation (inches)
	Average Low	Average High	
January	39.1	66.8	2.01
February	41.1	68.3	2.20
March	43.2	71.3	1.84
April	46.7	75.6	0.77
May	51.1	80.0	0.23
June	54.8	87.0	0.05
July	59.5	94.2	0.04
August	59.6	94.4	0.13
September	56.2	90.9	0.19

¹ Hunsaker and Associates Irvine, Inc. 2022. Preliminary Hydrology Study, Tract Map 37074, Rio Vista, County of Riverside. January.
² Hunsaker and Associates Irvine, Inc. 2022. Project-Specific Water Quality Management Plan, Rio Vista TTM 37074. January 24.
³ Western Regional Climate Center. Riverside Fire Station 3, California (047470), Period of Record Monthly Climate Summary, Period of Record 01/01/1983 to 06/05/2016. Website: <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7470>. Accessed February 23, 2022.

Month	Temperature (°F)		Precipitation (inches)
	Average Low	Average High	
October	50.0	82.9	0.44
November	42.8	74.5	0.84
December	39.2	67.8	1.46
Annual	48.6	79.5	10.21
Notes: Measurements recorded between January 1, 1983, and June 5, 2016 Source: Western Regional Climate Center, 2022.			

Surface Water Bodies

Santa Ana River

The City of Jurupa Valley is located within the upper Santa Ana River Watershed; refer to Exhibit 3.10-1. The Santa Ana River Watershed is approximately 2,650 square miles and encompasses portions of Los Angeles, Riverside, San Bernardino, and Orange counties. The river originates in the San Bernardino Mountains and discharges into the Pacific Ocean at Huntington Beach, a distance of 96 miles. Major tributaries include Bear Creek (which originates at Big Bear Lake), City Creek, Lytle Creek, Cucamonga/Mill Creek, Temescal Creek, Chino Creek, and Santiago Creek. More than 4.5 million people reside within the watershed.⁴

According to the Santa Ana River Basin Plan, the river slows as it reaches the City of Anaheim, where Orange County Water District diverts and recharges essentially all the dry weather flows. Except during the wet season, the Santa Ana River is dry downstream of Anaheim.⁵

Drainage

In the project vicinity, stormwater runoff is collected and disposed of through an integrated system of curbside gutters, catch basins, drainage ditches, man-made channels, and creeks. The Riverside County Flood Control and Water Conservation District oversees and manages municipal storm drainage facilities within the City of Jurupa Valley.

There are no existing storm drainage facilities within the project site. The project site area lies along a ridge and its topography naturally drains in two directions. According to the Preliminary Hydrology Study, storm flows generated in approximately 416 acres lying to the west of the ridge are tributary to the Sunnyslope Channel, which runs along the western portion of the Specific Plan area, while storm flows generated in approximately 225.4 acres lying to the east of the ridge are tributary to the Market Street Storm Drain. Both the Sunnyslope Channel and Market Street Storm Drain discharge to the Santa Ana River.

⁴ Santa Ana Watershed Project Authority. 2014. One Water One Watershed 2.0 Plan – Chapter 3 Watershed Setting. Website: https://www.sawpa.org/wp-content/uploads/2014/01/3.0-Watershed-Setting_tc_11-20-2013_FINAL1.pdf. Accessed January 28, 2022.

⁵ Ibid.

Surface Water Quality

The City of Jurupa Valley is within the section of Santa Ana River's Reach 4 of the Basin Plan. Reach 4 includes the river from the Bunker Hill Dike down to Mission Boulevard Bridge in the City of Riverside. In 1996, the Nitrogen and Total Dissolved Solids (N/TDS) Task Force (N/TDS Task Force) was formed to conduct scientific investigations regarding the existing N/TDS water quality objectives for the Santa Ana River Basin and was comprised of 22 water supply and wastewater agencies. Certain participants, including participants within Reach 4, are required to conduct the following investigations:⁶

- Re-computation of the Triennial Ambient Water Quality over a 20-year period; and
- Preparation of an Annual Report of Santa Ana River Water Quality

According to the 2020 Annual Report of Santa Ana River Water Quality prepared by the Santa Ana Watershed Project Authority, the average total dissolved solids (TDS) concentration for the samples collected from Reach 4 of the Santa Ana River was 525 milligrams per liter (mg/L) which complies with the applicable water quality objective of 550 mg/L. The average total inorganic nitrogen (TIN) concentration in these same two samples was 7.1 mg/L which complies with the applicable water quality objective of 10 mg/L.⁷

Groundwater

Riverside-Arlington Subbasin

The project site overlies the Riverside-Arlington Subbasin of the Upper Santa Ana River Groundwater Basin; refer to Exhibit 3.10-2. The Riverside-Arlington Subbasin is summarized as follows, based on information provided in California Department of Water Resources Bulletin 118.⁸

Basin Boundaries

The Riverside-Arlington Groundwater Subbasin underlies a portion of the Santa Ana River Valley in northwestern Riverside County and southwestern San Bernardino County. The subbasin is bound on the northwest by impermeable plutonic rocks of the Pedley Hills and Jurupa Hills and by the Chino Basin groundwater adjudication boundary. The northeast boundary of the subbasin is the Rialto-Colton Fault. The subbasin is bound on the southeast by impermeable rocks of the Box Springs Mountains and on the south by Arlington Mountain. The subbasin is bound on the west by the La Sierra Hills and by the adjoining Temescal Subbasin, which is separated from the Riverside-Arlington Subbasin by a narrow bedrock constriction. The Santa Ana River flows over the northern portion of the subbasin.

⁶ Santa Ana Watershed Project Authority. 2021. Basin Monitoring Program 2020 Annual Report of Santa Ana River Water Quality. April. Website: https://sawpa.org/wp-content/uploads/2021/06/2021-06-29-SAWPA_DRAFT-2020-Annual-Rpt-of-SAR-Water-Quality-06_28_21.pdf. Accessed February 23, 2022.

⁷ Ibid.

⁸ California Department of Water Resources (DWR). 2004. California Groundwater Bulletin 188: Upper Santa Ana Valley Groundwater Basin, Riverside-Arlington Subbasin. Website: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/8_002_03_Riverside-ArlingtonSubbasin.pdf. Accessed February 23, 2022.

Water Bearing Formations

Groundwater in the subbasin is found chiefly in alluvial deposits. Quaternary age alluvial deposits in the subbasin consist of sand, gravel, silt, and clay deposited by the Santa Ana River and its tributaries. Near the City of Riverside, the upper 50 feet of deposits are principally clay; however, deposits near Arlington have considerable sand and little clay. At the northern end of the subbasin, coarser gravels with cobbles 4 to 6 inches in diameter are common. Based on data from wells, a minimum specific yield of 15 percent was assigned to unweathered gravels at the extreme northern end of the subbasin. The specific yield increases sharply to 18 percent near the Santa Ana River, then increases gradually to a maximum of 20 percent near Arlington.

Recharge Areas

The Riverside-Arlington Subbasin is replenished by infiltration from Santa Ana River flow, underflow past the Rialto-Colton fault, intermittent underflow from the Chino Subbasin, return irrigation flow, and deep percolation of precipitation.

Groundwater Storage

The total storage capacity of the Riverside-Arlington Subbasin is estimated to be 243,000 acre-feet. The Riverside portion of the subbasin is estimated to have a storage capacity of about 207,000 acre-feet and the Arlington portion, a storage capacity of 36,000 acre-feet.

Flooding and Inundation

According to the Federal Emergency Management Agency (FEMA), the project site is not located within a known flood hazard area.⁹ The nearest flood zone is Flood Zone X and is located approximately 0.66 mile southwest of the project site. FEMA Flood Zone X are areas with moderate or minimal risk of flooding. In addition, according to the General Plan Figure 8.8, Flood Insurance Rate Map (FIRM), the project site is located outside of 100-Year Floodplain Zones delineated by FEMA.¹⁰

3.10.3 - Regulatory Framework

Clean Water Act

The Clean Water Act (CWA) (33 United States Code [USC] § 1251, *et seq.*) is the major federal legislation governing the water quality aspects of construction and operation of the project. The CWA established the basic structure for regulating discharges of pollutants into waters of the United States (not including groundwater) and waters of the State. The objective of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the nation’s waters.” The CWA establishes the basic structure for regulating the discharge of pollutants into waters of the United States.

⁹ Federal Emergency Management Agency (FEMA). 2021. FEMA Flood Map Service Center – 06065C0043G and 06065C0045G. Website: <https://msc.fema.gov/portal/search?AddressQuery=Jurupa%20Valley%2C%20CA#searchresultsanchor>. Accessed January 28, 2022.

¹⁰ City of Jurupa Valley. 2017. Jurupa Valley General Plan. Website: <https://www.jurupavalley.org/DocumentCenter/View/217/2017-Master-General-Plan-PDF>. Accessed January 28, 2022.

The CWA authorizes the United States Environmental Protection Agency (EPA) to implement pollution control programs. Under the CWA, it is unlawful for any person to discharge any pollutant from a point source into navigable waters unless a National Pollution Discharge Elimination System (NPDES) permit is obtained. In addition, the CWA requires each state to adopt water quality standards for receiving water bodies and to have those standards approved by the EPA. Water quality standards consist of designated beneficial uses for a particular receiving water body (e.g., wildlife habitat, agricultural supply, fishing), along with water quality objectives necessary to support those uses.

Responsibility for protecting water quality in California resides with the California State Water Resources Control Board (State Water Board) and nine Regional Water Quality Control Boards (RWQCBs). The State Water Board establishes Statewide policies and regulations for the implementation of water quality control programs mandated by federal and State water quality statutes and regulations. The RWQCBs develop and implement water quality control plans (basin plans) that consider regional beneficial uses, water quality characteristics, and water quality problems. Water quality standards applicable to the project are listed in the Santa Ana (Region 8) RWQCB's Basin Plan.

Section 303—Water Quality Standards and Total Maximum Daily Loads

Section 303(c)(2)(b) of the CWA requires states to adopt water quality standards for all surface waters of the United States based on the water body's designated beneficial use. Where multiple uses exist, water quality standards must protect the most sensitive use. Water quality standards are typically numeric, although narrative criteria based on biomonitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards.

CWA Section 303(d) requires states and authorized Native American tribes to develop a list of water quality-impaired segments of waterways. The list includes waters that do not meet water quality standards necessary to support a waterway's beneficial uses even after the minimum required levels of pollution control technology have been installed. Listed water bodies are to be priority ranked for development of a total maximum daily load (TMDL). A TMDL is a calculation of the total maximum daily load (amount) of a pollutant that a water body can receive and still safely meet water quality standards. The TMDLs include waste load allocations for urban stormwater runoff as well as municipal and industrial wastewater discharges, with allocations apportioned for individual Municipal Separate Storm Sewer Systems (MS4s) and wastewater treatment plants, including those in Riverside County. For stormwater, load reductions would be required to meet the TMDL waste load allocations within the 20 years required by the TMDLs.

The State Water Board, RWQCBs, and EPA are responsible for establishing TMDL waste load allocations and incorporating approved TMDLs into water quality control plans, NPDES permits, and Waste Discharge Requirements (WDRs) in accordance with a specified schedule for completion. The Santa Ana RWQCB develops TMDLs for the Riverside County area.

Section 401—Water Quality Certification

Section 401 of the CWA requires compliance with State water quality standards for actions within State waters. Under CWA Section 401, an applicant for a Section 404 permit (to discharge dredged or fill material into waters of the United States) must first obtain a certificate from the appropriate agency stating that the fill is consistent with the State's water quality standards and criteria. In California, the State Water Board delegates authority to either grant water quality certification or waive the requirements to the nine RWQCBs. The Santa Ana RWQCB is responsible for the project site.

Section 402—National Pollution Discharge Elimination System Permits

The RWQCBs administer the NPDES stormwater permitting program, under Section 402(d) of the federal CWA, on behalf of EPA. The objective of the NPDES program is to control and reduce levels of pollutants in water bodies from discharges of municipal and industrial wastewater and stormwater runoff. CWA Section 402(d) establishes a framework for regulating nonpoint-source stormwater discharges (33 USC 1251). Under the CWA, discharges of pollutants to receiving water are prohibited unless the discharge complies with an NPDES permit. The NPDES permit specifies discharge prohibitions, effluent limitations, and other provisions, such as monitoring deemed necessary to protect water quality based on criteria specified in the National Toxics Rule (NTR), the California Toxics Rule (CTR), and the basin plan.

Section 404—Permitting Discharges of Dredge or Fill Material

Section 404 of the CWA regulates temporary and permanent fill and disturbance of wetlands and waters of the United States. Under Section 404, the discharge (temporary or permanent) of dredged or fill material into waters of the United States, including wetlands, typically must be authorized by the United States Army Corps of Engineers (USACE) through either the Nationwide Permit (general categories of discharges with minimal effects) or the Individual Permit.

Federal Antidegradation Policy

The federal antidegradation policy is designed to protect existing water uses, water quality, and national water resources. The federal policy directs states to adopt a Statewide policy that includes the following primary provisions:

- Existing instream uses and the water quality necessary to protect those uses shall be maintained and protected.
- Where existing water quality is better than necessary to support fishing and swimming conditions, that quality shall be maintained and protected unless the state finds that allowing lower water quality is necessary for important local economic or social development.
- Where high-quality waters constitute an outstanding national resource, such as waters of national and state parks, wildlife refuges, and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act of 1969 (Porter-Cologne Act) is California's statutory authority for the protection of water quality. Under the Porter-Cologne Act, the State must adopt water quality policies, plans, and objectives that protect the State's waters for the use and enjoyment of the people. Regional authority for planning, permitting, and enforcement is delegated to the nine RWQCBs. The RWQCBs are required to formulate and adopt basin plans for all areas in the region and establish water quality objectives in the plans. The Porter-Cologne Act sets forth the obligations of the State Water Board and RWQCBs to adopt and periodically update basin plans. The Santa Ana RWQCB is responsible for the project site.

Basin plans are the regional water quality control plans required by both the CWA and the Porter-Cologne Act that establish beneficial uses, water quality objectives, and implementation programs for each of the nine regions in California. The Act also requires waste dischargers to notify the RWQCBs of their activities by filing reports of waste discharge and authorizes the State Water Board and RWQCBs to issue and enforce WDRs, NPDES permits, CWA Section 401 water quality certifications, or other approvals. The RWQCBs are also authorized to issue waivers to reports of waste discharge and WDRs for broad categories of "low threat" discharge activities that have minimal potential to cause adverse water quality effects when implemented according to prescribed terms and conditions.

National Pollutant Discharge Elimination System

The NPDES permits all involve similar processes, which include submitting notices of intent for discharging to water in areas under the Santa Ana River RWQCB's jurisdiction and implementing Best Management Practices (BMPs) to minimize those discharges. The San Francisco Bay RWQCB may also issue site-specific WDRs, or waivers to WDRs, for certain waste discharges to land or waters of the State.

Construction Activity

The State Water Board stormwater general permit for construction activity (Order 2009-009-DWQ, as amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ) applies to all construction activities that would disturb 1 acre of land or more. Construction activities subject to the general construction activity permit include clearing, grading, stockpiling, and excavation. Dischargers are required to eliminate or reduce non-stormwater discharges to storm sewer systems and other waters.

Through the NPDES and WDR processes, the State Water Board seeks to ensure that the conditions at a project site during and after construction do not cause or contribute to direct or indirect impacts on water quality (i.e., pollution and/or hydromodification) upstream and downstream. To comply with the requirements of the construction general permit, the project applicant must file a Notice of Intent (NOI) with the State Water Board to obtain coverage under the permit; prepare a Storm Water Pollution Prevention Plan (SWPPP); and implement inspection, monitoring, and reporting requirements appropriate to the project's risk level as specified in the SWPPP. The SWPPP includes a site map, describes construction activities and potential pollutants, and identifies BMPs that will be

employed to prevent soil erosion and discharge of other construction-related pollutants that could contaminate nearby water resources, such as petroleum products, solvents, paints, and cement. The permit also requires the discharger to consider using post-construction permanent BMPs that will remain in service to protect water quality throughout the life of the project. All NPDES permits also have inspection, monitoring, and reporting requirements.

Project sites served by the combined sewer system are not required to obtain coverage under the NPDES construction general permit.

Industrial General Stormwater Permit

The Statewide stormwater NPDES permit for general industrial activity (Order 2014-0057-DWQ, superseding Order 97-03-DWQ) regulates discharges associated with 10 broad categories of industrial activities, such as operation of wastewater treatment works, and with recycling facilities. The industrial general permit requires the implementation of Best Available Technology Economically Achievable and Best Conventional Pollutant Control Technology to achieve performance standards. The permit also requires development of an SWPPP that identifies the site-specific sources of pollutants and describes the measures at the facility applied to reduce stormwater pollution. A monitoring plan is also required.

California Toxics Rule and State Implementation Policy

The CTR, presented in 2000 in response to requirements of EPA's NTR, establishes numeric water quality criteria for approximately 130 priority pollutant trace metals and organic compounds. The CTR criteria are regulatory criteria adopted for inland surface waters, enclosed bays, and estuaries in California that are on the CWA Section 303(c) list for contaminants. The CTR includes criteria for the protection of aquatic life and human health. Human health criteria (water- and organism-based) apply to all waters with a municipal and domestic water supply beneficial use designation as indicated in the basin plans. The Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, also known as the State Implementation Policy, was adopted by the State Water Board in 2000. It establishes provisions for translating CTR criteria, NTR criteria, and basin plan water quality objectives for toxic pollutants into:

- NPDES permit effluent limits,
- Effluent compliance determinations,
- Monitoring for 2,3,7,8-tcdd (dioxin) and its toxic equivalents,
- Chronic (long-term) toxicity control provisions,
- Site-specific water quality objectives, and
- Granting of effluent compliance exceptions.

The goal of the State Implementation Plan is to establish a standardized approach for permitting discharges of toxic effluent to inland surface waters, enclosed bays, and estuaries throughout the State.

Local

City of Jurupa Valley General Plan

The following General Plan policies are directly related to the project in regard to hydrology and water quality. Please refer to Section 3.11, Land Use and Planning, for analysis of the proposed project's consistency with these policies.

Land Use Element

LUE 5.53 Utilities. Discourage utility lines within the river corridor and floodplain. If approved, lines shall be placed underground where feasible and shall be located and designed in a manner to harmonize with the natural environment and to be visually unobtrusive.

Mobility Element

ME 8.46 Runoff Control. Implement National Pollutant Discharge Elimination System Best Management Practices relating to construction of roadways to control runoff contamination from affecting the groundwater supply.

Conservation and Open Space Element

COS 3 Working with the Jurupa Community Services District, Rubidoux Community Services District, and other community services districts and agencies to help meet Jurupa Valley's urban water needs without substantial harm to the natural environment or to agriculture, to help meet water needs including requiring conservation measures such as drought-tolerant landscaping and water-saving fixtures in new homes, and to:

- a. Protect and maintain water quality in aquifers, the Santa Ana River, streams, and wetlands that help support beneficial uses, including domestic and commercial/industrial uses, agricultural uses, and wildlife habitat.
- b. Protect and improve the quality of local water sources, including groundwater and the Santa Ana River.
- c. Encourage Jurupa Community Services District and Rubidoux Community Services District to retain and, where possible, expand the capacity of wells, aquifers, and other groundwater reserves.
- d. Preserve natural floodways, floodplains, and wetlands, and avoid actions that adversely affect waterways or riparian areas, or that increase flood hazards to urban uses.

COS 3.3 Water Quality. Employ the best available practices for pollution avoidance and control and encourage others to do the same. "Best available practices" means actions and equipment that result in the highest water quality, considering available equipment, life-cycle costs, social and environmental side effects, and the regulations of other agencies.

- COS 3.9** **Pollution Discharge.** Minimize pollutant discharge into storm drainage systems and natural drainage and aquifers.

Community Safety, Services, and Facilities Element

- CSSF 1.6** **Flood Risk.** In reviewing new construction and substantial improvements within the 100-year flood plain, the City shall disapprove projects that cannot minimize the flood risks to acceptable levels in areas mapped by FEMA or as determined by site-specific hydrologic studies for areas not mapped by FEMA.
- CSSF 1.9** **Permanent Structures.** Prohibit the construction of permanent structures for human housing or employment to the extent necessary to floodwaters without property damage or risk to public safety. Agricultural, recreational, or other similar, non-habitation uses are allowable if flood control and groundwater recharge functions are maintained.
- CSSF 1.10** **Floodway Alteration.** Prohibit alteration of floodways and channelization unless alternative methods of flood control are not technically feasible or unless alternative methods are already utilized to maximum extent practicable. The intent is to balance the need for protection with prudent land use solutions, recreation needs, and habitat preservation requirements, and as applicable to provide incentives for natural watercourse preservation. Preservation incentives may include density transfer programs as may be adopted.
- CSSF 1.11** **Modification of Water Courses.** Prohibit substantial modification to water courses, unless modification does not increase erosion or adjacent sedimentation, or increase water velocities, so as to be detrimental to adjacent property, nor adversely affect adjacent wetlands or riparian habitat.
- CSSF 1.12** **Flood Control Improvements.** Direct flood control improvement measures toward the protection of existing and planned development.
- CSSF 1.13** **Environmental Protection.** Ensure that any substantial modification to a watercourse is accomplished in the least environmentally damaging manner possible to maintain adequate wildlife corridors and linkages and maximize groundwater recharge.
- CSSF 1.14** **Ability to Withstand Flooding.** Require development within the floodplain to be capable of withstanding flooding and to minimize use of fill. Compatible uses shall not, however, obstruct flows or adversely affect upstream or downstream properties with increased velocities, flood heights, erosion backwater effects, or concentration flows.
- CSSF 1.15** **Regional Storm Drain System.** All proposed development projects shall address and mitigate any adverse impacts on the carrying capacity of local and regional storm drain systems.

- CSSF 1.21 Flood Hazard Zones.** Encourage periodic reevaluation of the 500-year, 100-year, and 10-year flood hazard zones by State, federal, county, and other sources and use such studies to improve existing protection, review flood protection standards for the new development and redevelopment, and update emergency response plans.
- CSSF 1.22 Specific Plans.** Encourage the use of specific plans to allow increased densities in certain areas of a proposed redevelopment and to transfer density to locate residential, commercial, industrial, and public facility uses outside of natural hazard areas; and to direct appropriate uses to these areas, such as open space, passive recreational uses, or other uses compatible with these hazards.

City of Jurupa Valley Municipal Code

Municipal Code Chapter 6.05 establishes the Stormwater/Urban Runoff Management and Discharge Controls Ordinance. This is intended to protect and enhance the water quality of the City watercourses, water bodies, groundwater, and wetlands pursuant to and consistent with applicable requirements contained in Santa Ana Region Order No. R8-2013-0024, NPDES No. CAS 618033 regulated by the Santa Ana RWQCB. This chapter provides guidelines for reduction of pollutants in stormwater, prohibits discharge of non-stormwater into the storm drain system, and provides for inspections and enforcement authority.¹¹ Furthermore, the Municipal Code Section 8.70.290 states that all projects requesting a grading permit shall comply with the provisions in Chapter 6.05 and with all applicable requirements of the State Water Board and the Santa Ana RWQCB.¹²

3.10.4 - Thresholds of Significance

Significance Criteria

In accordance with Section 15064.7 of the State California Environmental Quality Act (CEQA) Guidelines, the City of Jurupa Valley adopted local CEQA Guidelines. The City's local CEQA Guidelines are based, in part, on the CEQA checklist included in Appendix G of the State CEQA Guidelines. The City of Jurupa Valley Guidelines recognizes the following significance thresholds and Significance Criteria related to hydrology and water quality. Based on these significance thresholds, a project would have a significant impact on hydrology and water quality if it would:

- a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

Under the City's local significance threshold, the project would have significant effects if: The project is inconsistent with Municipal Code Chapter 6.05.050, Storm Water /Urban Runoff Management and Discharge Controls.

¹¹ City of Jurupa Valley Municipal Code. Chapter 6.05 Stormwater/Urban Runoff Management and Discharge Controls. Website: https://library.municode.com/ca/jurupa_valley/codes/municipal_code?nodeId=TIT6HESA_CH6.05STWAURRUMADICO. Accessed February 23, 2022.

¹² City of Jurupa Valley Municipal Code. Section 8.70.290 National Pollution Discharge Elimination System (NPDES). Website: https://library.municode.com/ca/jurupa_valley/codes/municipal_code?nodeId=TIT8BUCO_CH8.70GRRE_S8.70.290NAPODIELSYNP. Accessed February 23, 2022.

- b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

Under the City's local significance threshold, the project would have significant effects if: The project would conflict with an applicable Ground Water Management program as identified in the applicable Urban Water Management Plan.

- c) Substantially alter the existing drainage pattern of the area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

- (i) Result in substantial erosion or siltation on- or off-site.

Under the City's local significance threshold, the project would have significant effects if: The project is inconsistent with Municipal Code Chapter 6.05.050, Storm Water/Urban Runoff Management and Discharge Controls.

- (ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.

Under the City's local significance threshold, the project would have significant effects if: The project drainage system is not designed to manage runoff from 10- and 100-year storm events.

- (iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

Under the City's local significance threshold, the project would have significant effects if: The project is inconsistent with the County of Riverside Master Drainage Plan or Municipal Code Chapter 6.05.050, Storm Water/Urban Runoff Management and Discharge Controls.

- (iv) Impede or redirect flood flows.

Under the City's local significance threshold, the project would have significant effects if: The project would impede or redirect flood flows in a manner that would adversely impact upstream or downstream properties.

- d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.

Under the City's local significance threshold, the project would have significant effects if: The project is located in a 100-year flood hazard zone and inconsistent with Municipal Code Chapter 6.05.050, Storm Water/Urban Runoff Management and Discharge Controls.

- e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Under the City's local significance threshold, the project would have significant effects if: The project is inconsistent with Municipal Code Chapter 6.05.050, Storm Water/Urban Runoff Management and Discharge Controls or Santa Ana Region Basin Plan.

Approach to Analysis

Impacts related to hydrology and water quality were determined by reviewing information regarding regional and local hydrology, climate, topography, and geology contained in the General Plan, Santa Ana RWQCB Basin Plan, FEMA FIRMs, and the site-specific Preliminary Hydrology Study (Appendix H).

The evaluation of impacts is based on a comparison of existing conditions to anticipated conditions, once the proposed project is constructed and operational, such as changes in impervious area, as well as facilities potentially located within flood zones. Specifically, the impact evaluation focuses on the effect of the proposed project on surface and groundwater quality, groundwater supply, and drainage (in terms of erosion, siltation, flooding, stormwater system exceedance, and polluted runoff). Water quality conditions are compared with water quality standards and WDRs by identifying potential contaminants and pollution pathways, amount of impervious area, and runoff treatment requirements. Finally, as part of the analysis, inundation and flooding on the project site is assessed by reviewing potential inundation zone elevations relative to the final grade elevations of facilities and features for the proposed project.

3.10.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Surface and Groundwater Quality

Threshold HYD-1: Would the proposed project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Under the City's local significance threshold, the project would have significant effects if: The project is inconsistent with Municipal Code Chapter 6.05.050, Storm Water /Urban Runoff Management and Discharge Controls.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

These include existing regulatory requirements such as plans, policies, or programs applied to the project based on federal, State, or local law currently in place which effectively reduce impacts to hydrology and water quality.

The following PPPs apply to the proposed project and would reduce impacts related to surface and groundwater quality:

PPP 3.10-1 As required by Municipal Code Chapter 6.05.050, Stormwater/Urban Runoff Management and Discharge Controls, Section B (1), any person performing construction work in the City shall comply with the provisions of this chapter and shall control stormwater runoff to prevent any likelihood of adversely affecting human health or the environment. The City Engineer shall identify the Best

Management Practices (BMPs) that may be implemented to prevent such deterioration and identify the implementation manner. Documentation on the effectiveness of BMPs implemented to reduce the discharge of pollutants to the Municipal Separate Storm Sewer System (MS4) shall be required when requested by the City Engineer.

PPP 3.10-2 As required by Municipal Code Chapter 6.05.050, Stormwater/Urban Runoff Management and Discharge Controls, Section B (2), any person performing construction work in the City shall be regulated by the State Water Resources Control Board in a manner pursuant to and consistent with applicable requirements contained in the General Permit No. CAS000002, State Water Resources Control Board Order Number 2009-0009-DWQ. The City may notify the State Board of any person performing construction work that has a non-compliant construction site per the General Permit.

PPP 3.10-3 As required by Municipal Code Chapter 6.05.050, Stormwater/Urban Runoff Management and Discharge Controls, Section C, new development, or redevelopment projects shall control stormwater runoff to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. The City Engineer shall identify the Best Management Practices (BMPs) that may be implemented to prevent such deterioration and identify the implementation manner. Documentation on the effectiveness of BMPs implemented to reduce the discharge of pollutants to the Municipal Separate Storm Sewer System (MS4) shall be required when requested by the City Engineer.

PPP 3.10-4 As required by Municipal Code Chapter 6.05.050, Stormwater/Urban Runoff Management and Discharge Controls, Section E, any person or entity that owns or operates a commercial or industrial facility(s) shall comply with the provisions of this chapter. All such facilities shall be subject to a regular program of inspection as required by this chapter, any National Pollutant Discharge Elimination System (NPDES) permit issued by the State Water Resource Control Board, Santa Ana Regional Water Quality Control Board, Porter-Cologne Water Quality Control Act (Water Code Section 13000 *et seq.*), Title 33 USC Section 1251 *et seq.* (Clean Water Act), any applicable State or federal regulations promulgated thereto, and any related administrative orders or permits issued in connection therewith.

Project Design Features

The proposed project would include a comprehensive storm drainage system that consists of in-street catch basins and piping that convey runoff to 12 drainage basins (detention basins, debris basins, and water quality basins) that are designed to mitigate storm runoff flow rates and provide water treatment and hydromodifications required for the proposed project. These basins would treat storm water prior to discharging to downstream storm water facilities. This PDF would reduce impacts to water quality.

Impact Analysis

Implementation of the proposed project would result in construction activities that could have the potential to contribute to pollutants in off-site surface waters, potentially impacting the water quality of the Santa Ana Watershed. Generally, construction-phase activities could generate pollutants such as increased silts, debris, chemicals, and dissolved solids related to the activities described below:

- Grading—Disruption of surface soils and increased susceptibility to erosion.
- Building construction—Use of sealants, glues, wood preservatives, oils, concrete, and the generation of debris related to construction activities.
- Painting—Paint fragments and stucco flakes.
- Construction equipment and vehicle maintenance—Washing, chemical degreasing.
- Water quality in jurisdictional areas can be negatively affected by potential surface runoff and sedimentation during construction. The use of petroleum products (e.g., fuels, oils, and lubricants) and erosion of cleared land during construction could potentially contaminate surface water. Decreased water quality may adversely affect vegetation, aquatic animals, and terrestrial wildlife that depend upon these resources. Impacts to water quality may be significant unless mitigated.

Because construction activities have the potential to result in increased pollutants to surface water, construction of the proposed project could potentially result in a short-term degradation to surface water quality. However, and as required by federal, State, and local regulations, prior to the issuance of grading or construction permits, the project applicant shall prepare a SWPPP conforming to the State Water Board NPDES permit. The SWPPP shall identify BMPs to prevent construction-related pollutants from reaching stormwater and all products of erosion from moving off-site. Therefore, with compliance with federal, State, and local regulations, temporary construction impacts would be less than significant.

Long-Term Operational Impacts

Long-term operations of the proposed project have the potential to increase the potential of stormwater runoff transporting contaminants from roadway surfaces, parking lots, roofs, and other exposed structural and landscape surfaces into the storm drain system. Typical industrial runoff contaminants (e.g., oil, grease, surfactant, heavy metals, solvents, pesticides, nutrients, or fecal coliform bacteria) can be expected within runoff. BMPs proposed in the WQMP to offset these potential impacts are discussed below.

- **Trash and Debris (expected)**—Trash (such as paper, plastic, polystyrene packing foam, and aluminum materials) and biodegradable organic matter (such as leaves, grass cuttings, and food waste) are general waste products on the landscape. The presence of trash and debris may have a significant impact on the recreational value of a water body and aquatic habitat. Excess organic matter can create a high biochemical oxygen demand in a stream and thereby lower its water quality.

- **Oil and Grease (expected)**—Oil and grease are characterized as organic compounds of high molecular weight. Primary sources of oil and grease are petroleum hydrocarbon products, motor products from leaking vehicles, esters, oils, fats, waxes, and high molecular-weight fatty acids. Introduction of these pollutants to the water bodies is very possible, due to the wide uses and applications of some of these products in municipal, residential, commercial, industrial, and construction areas.
- **Sediments (potential)**—Sediments are soils or other surficial materials eroded and then transported or deposited by the action of wind, water, ice, or gravity. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organisms' survival rates, smother bottom-dwelling organisms, and suppress aquatic vegetation growth.
- **Nutrients (potential)**—Nutrients are inorganic substances, such as nitrogen and phosphorus. They commonly exist in the form of mineral salts that are either dissolved or suspended in water. Primary sources of nutrients in urban runoff are fertilizers and eroded soils. Excessive discharge of nutrients to water bodies and streams can cause excessive aquatic algae and plant growth. Such excessive production, referred to as cultural eutrophication, may lead to excessive decay of organic matter in the water body, loss of oxygen in the water, release of toxins in sediment, and the eventual death of aquatic organisms.
- **Pathogens (potential)**—Pathogens (bacteria and viruses) are ubiquitous microorganisms that thrive under certain environmental conditions. Their proliferation is typically caused by the transport of animal or human fecal wastes from the watershed. Water containing excessive bacteria and viruses can alter the aquatic habitat and create a harmful environment for humans and aquatic life.
- **Pesticides (potential)**—Pesticides (including herbicides) are chemical compounds commonly used to control nuisance growth or prevalence of organisms. Excessive or improper application of a pesticide may result in runoff containing toxic levels of its active ingredient.
- **Metals (potential)**—The primary source of metal pollution in urban runoff is typically commercially available metals and metal products. Metals of concern include cadmium, chromium, copper, lead, mercury, and zinc. However, at higher concentrations, certain metals can be toxic to aquatic life. Humans can be impacted from contaminated groundwater resources, and bioaccumulation of metals in fish and shellfish.

The proposed storm drainage system would collect runoff and direct it to basins where pollutants, trash, and debris would either be collected or sequestered. This drainage system would ensure long-term operational impacts are less than significant.

Water Quality Features

The project area is currently vacant with no existing buildings, and there are no major drainage improvements on-site.

The WQMP provides detailed descriptions and instructions for implementing various BMPs for the proposed project. The WQMP includes BMPs such as optimizing site utilization with Low Impact Development (LID) principles, delineating drainage management areas, implementing LID BMPs,

alternative compliance for areas that are infeasible for LID BMPs, hydromodification, and source control BMPs.

The proposed project includes the above listed PPPs to protect water quality in and around the planning area during project construction. Additionally, PDFs would include water quality basins throughout the project site (see Exhibit 2-10). The water quality basins would treat storm water prior to discharging to proposed and/or existing off-site storm water facilities. In addition, the proposed project would be subject to Municipal Code Chapter 6.05, which establishes the Stormwater/Urban Runoff Management and Discharge Controls Ordinance to protect and enhance the water quality of the City. Further compliance with the CWA, mandatory NPDES permit requirements, adherence to the Municipal Code, and implementation of the PPPs, along with the project-specific WQMP, would ensure that impacts related to water quality degradation from construction activities would be less than significant.

Best Management Practices

Operation

New development under the proposed project could add additional areas of impervious surfaces within the planning area and could therefore increase the volume of pollutants that are typically associated with urban runoff into the stormwater. These pollutants can include sediments, petroleum hydrocarbons, pesticides, fertilizers, and heavy metals such as lead, zinc, and copper that tend to build up during the dry months of the year. Precipitation during the early portion of the wet season (generally from November to April) washes away most of these pollutants, resulting in high pollutant concentrations in the initial wet weather runoff. This initial runoff is referred to as the “first flush” of storm events. Subsequent periods of rain would result in less concentrated pollutant levels in the runoff.

The amount and type of runoff generated could potentially be greater than under existing conditions. An increase in impervious surfaces could result in a corresponding increase in urban runoff pollutants and first flush roadway contaminants, as well as an increase in nutrients and other chemicals from landscaped areas. These constituents have the potential to result in water quality impacts to on-site and off-site drainage flows to area waterways.

The proposed project includes the PDFs listed above to protect water quality in and around the project site during project operation. These policies require adherence to Municipal Code Chapter 6.05, Stormwater/Urban Runoff Management and Discharge Controls. Future development under the proposed project would be required to comply with the CWA and regulations enforced by the RWQCB. Therefore, future operation of the proposed project would not violate any water quality standards or WDRs or otherwise substantially degrade surface or groundwater quality. As such, implementation of the proposed project would result in less than significant impacts.

Level of Significance

Less than significant impact.

Groundwater Supply/Recharge

Threshold HYD-2: Would the proposed project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Under the City's local significance threshold, the project would have significant effects if: The project would conflict with an applicable Ground Water Management program as identified in the applicable Urban Water Management Plan.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to the proposed project related to groundwater supply/recharge.

Project Design Features

The proposed project would include a comprehensive storm drainage system that consists of in-street catch basins and piping that convey runoff to 12 drainage basins (detention basins, debris basins, and water quality basins). These drainage basins would capture storm water and control its release into downstream storm water facilities. This PDF would promote groundwater recharge.

Impact Analysis

The project site would be annexed into the Rubidoux Community Service District (RCSD). Buildout of the proposed project could lead to an increased demand for water, which could lead to an increased demand for groundwater production.

According to the RCSD 2022 Water Master Plan (WMP),¹³ the agency obtains all of its water supply from groundwater pumped from the Riverside County portion of the Riverside-Arlington Basin, which is a subbasin to the Upper Santa Ana Valley Groundwater Basin. The WMP noted that sufficient water supplies are available from the basin to meet its existing needs and ultimate average day demand needs, which is the buildout scenario for the RCSD. The WMP accounts for the proposed project. RCSD's groundwater supplies have been proven to be stable and reliable, even in dry seasons. As a result, the WMP concluded that RCSD anticipates having adequate water supplies to meet future demands. Accordingly, the Riverside-Arlington Basin is within its safe yield and is not in a state of overdraft. Refer to Section 3.19, Utilities and Service Systems for further discussion of potable water. The WMP does not identify a Groundwater Management Program.

Subsequent development under the proposed project could result in an increase in impervious surfaces, which could reduce rainwater infiltration. However, upon compliance with the PPPs and the Municipal Code, implementation of the project-specific WQMP as described under Threshold HYD-5 below to protect groundwater recharge, and meeting stormwater requirements at all regulatory levels, including those for stormwater infiltration, impacts related to groundwater supplies and groundwater management would be less than significant.

¹³ Albert E. Webb Associates. 2022. 2022 Water Master Plan for Rubidoux District. May 5.

Level of Significance

Less than significant impact.

Drainage Leading to Erosion/Siltation, Flooding, Additional Sources of Polluted Runoff, or Impedance of Flood Flows

Threshold HYD-3: Would the proposed project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial erosion or siltation on- or off-site.

Under the City's local significance threshold, the project would have significant effects if: The project is inconsistent with Municipal Code Chapter 6.05.050, Storm Water/Urban Runoff Management and Discharge Controls.

(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.

Under the City's local significance threshold, the project would have significant effects if: The project drainage system is not designed to manage runoff from 10- and 100-year storm events.

(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

Under the City's local significance threshold, the project would have significant effects if: The project is inconsistent with the County of Riverside Master Drainage Plan or Municipal Code Chapter 6.05.050, Storm Water/Urban Runoff Management and Discharge Controls.

(iv) Impede or redirect flood flows.

Under the City's local significance threshold, the project would have significant effects if: The project would impede or redirect flood flows in a manner that would adversely impact upstream of downstream properties.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to the project related to Threshold HYD-3.

Project Design Features

The proposed project would include a comprehensive storm drainage system that consists of in-street catch basins and piping that convey runoff to 12 drainage basins (detention basins, debris basins, and water quality basins) that are designed to mitigate storm runoff flow rates and provide water treatment and hydromodifications required for the proposed project. These basins would treat storm water prior to discharging to proposed and/or existing off-site storm water facilities. This PDF would reduce impacts to storm drainage.

Impact Analysis

Buildout of the proposed project would result in the development of new buildings and infrastructure within the 917-acre project site. Development contemplated by the proposed project would increase the amount of impervious surface coverage on the project site and would create the potential for increased runoff leaving the project site that may release pollution into or create potential flooding conditions in downstream waterways.

The Preliminary Hydrology Report identifies the stormwater management measures that are proposed to be implemented, including structural BMPs, landscaped areas, and storm drainage infrastructure. A network of vegetated swales, inlets, and underground piping would convey runoff to 12 detention basins located throughout the project site. Table 3.10-2 summarizes the characteristics of each basin.

Table 3.10-2: Drainage Basin Characteristics

Basin	Area Draining to Basin (Acres)	Cubic Feet Per Second		Receiving Downstream Drainage Facility
		Peak Rational Inflow Rate	Peak Outflow Rate	
A	53.7	146.9	139.8	Sunnyslope Channel
B	134.0	261.7	161.6	Sunnyslope Channel
C	47.2	116.5	76.9	Sunnyslope Channel
D	21.1	56.1	14.0	Sunnyslope Channel
E	51.4	148.8	80.6	Sunnyslope Channel
F	16.7	54.7	9.9	Market Street Storm Drain
G	22.4	72.5	16.6	Market Street Storm Drain
H	81.8	209.1	60.8	Market Street Storm Drain
I	20.3	73.6	13.5	Market Street Storm Drain
J	211.8	—	83.7	Market Street Storm Drain
Notes: Basin J is a Flow-By Basin and does not have a peak rational inflow rate. Source: Hunsaker & Associates Irvine, Inc. 2022.				

All basins would be developed in accordance with the Riverside County Hydraulic Manual's design standard of detaining a 100-year storm event over a 24-hour period. The basins would detain stormwater runoff from the site prior to discharging into the Sunnyslope Channel at four separate locations or into the Market Street Storm Drain at one location. The latter connection would require the construction of an approximately 2,500 lineal foot off-site storm drain line within 20th Street from the project site boundary to the intersection of 20th Street and Avalon Street.

Collectively, these measures would serve to slow, reduce, and meter the volume of runoff leaving the project site and ensure that downstream storm drainage facilities are not inundated with project-related stormwater. In addition, the proposed project would be subject to Municipal Code

Chapter 6.05, which establishes the Stormwater/Urban Runoff Management and Discharge Controls Ordinance to protect and enhance the water quality of the City, further reducing on- or off-site erosion or siltation. Impacts would be less than significant.

Level of Significance

Less than significant impact.

Risk of Pollutant Release Due to Inundation

Threshold HYD-4: Would the proposed project be located in a flood hazard zone, tsunami, or seiche zone, or risk release of pollutants due to project inundation?

Under the City's local significance threshold, the project would have significant effects if: The project is located in a 100-year flood hazard zone and inconsistent with Municipal Code Chapter 6.05.050, Storm Water/Urban Runoff Management and Discharge Controls.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to the project related to risk of pollutant release due to inundation.

Project Design Features

The proposed project would include a comprehensive storm drainage system that consists of in-street catch basins and piping that convey runoff to 12 drainage basins (detention basins, debris basins, and water quality basins). These basins would capture runoff and control its release into downstream storm water facilities. This PDF would reduce impacts to flooding and inundation.

Impact Analysis

The project site is surrounded by residential and industrial uses and vacant land. A seiche is an earthquake or slide-induced wave that can be generated in an enclosed body of water. There are no enclosed bodies of water on-site or in the project site vicinity. The nearest enclosed body of water, Lake Matthews, is located approximately 10 miles to the south of the project site.

A tsunami is a sea wave generated by an earthquake, landslide, volcanic eruption, or even by a large meteor hitting the ocean. An event such as an earthquake creates a large displacement of water resulting in a rise or mounding at the ocean surface that moves away from this center as a sea wave. Tsunamis generally affect coastal communities and low-lying (low-elevation) river valleys in the vicinity of the coast. Buildings closest to the ocean and near sea level are most at jeopardy. The project site is located inland, approximately 38 miles from the Pacific Ocean to the southwest and approximately 80 miles from the Salton Sea to the southeast. The project site is not located in a 100-Year Floodplain Zone delineated by FEMA. While there are slopes within the project site, potential for mudflow is low given the low annual rainfall.

In addition, the proposed project would be subject to Municipal Code Chapter 6.05, which establishes the Stormwater/Urban Runoff Management and Discharge Controls Ordinance to protect and enhance the water quality of the City and reduces the potential for release of pollutants due to project inundation.

Therefore, the project would not expose people or structures to potential hazards to inundation by seiche, tsunami, or mudflow. No impact would occur.

Level of Significance

No impact.

Water Quality Control or Sustainable Groundwater Management Plans Consistency

Threshold HYD-5: Would the proposed project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Under the City's local significance threshold, the project would have significant effects if: The project is inconsistent with Municipal Code Chapter 6.05.050, Storm Water/Urban Runoff Management and Discharge Controls or Santa Ana Region Basin Plan.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to the project related to conflict with a water quality control plan.

Project Design Features

The proposed projects would include a comprehensive storm drainage system that consists of in-street catch basins and piping that convey runoff to 12 drainage basins (detention basins, debris basins, and water quality basins). These basins would treat storm water prior to discharging to downstream storm water facilities. This PDF would reduce impacts to water quality.

Impact Analysis

The City is within the jurisdiction of the Santa Ana RWQCB. The RWQCB has established regulatory standards and objectives for water quality in the Santa Ana River region in its Santa Ana River Basin Plan.¹⁴

As discussed under Impact HYD-1, construction and development of the proposed project would be required to comply with CWA, General Plan policies and programs, the Municipal Code, and the NPDES permit requirements. The proposed project would also implement a project-specific WQMP. Therefore, future development under the proposed project at construction and operation would not violate any water quality standards or WDRs or otherwise substantially degrade surface or groundwater quality, in compliance with the Santa Ana River Basin Plan.

As discussed under Impact HYD-2, while buildout of the proposed project could lead to an increased demand for water, which could lead to an increase in groundwater pumping, the 2022 WMP, which considers the future development of the proposed project, states that the RCSD groundwater supply is sufficient in normal, single dry years and multiple dry years through the year 2040.¹⁵

In reviewing individual project applications, the City would determine which policies and actions

¹⁴ California State Water Resources Control Board (State Water Board). 1995. Santa Ana River Basin Plan, Chapter 1. January 24. Website: https://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/index.html. Accessed February 1, 2022.

¹⁵ Albert A. Webb Associates. 2021. 2020 Urban Water Management Plan for Jurupa Community District. June 28. Website: <https://www.jcsd.us/home/showdocument?id=7229>. Accessed February 1, 2022.

apply, depending on the specific characteristics of the project type and/or project site during the development and environmental review process.

Finally, the Riverside-Arlington Basin is an adjudicated basin; adjudicated basins are exempt from the 2014 Sustainable Groundwater Management Act (SGMA) because such basins already operate under a court-ordered management plan to ensure the long-term sustainability of the sub-basin. No component of the Project would obstruct with or prevent implementation of the management plan for the Riverside-Arlington Basin.

In addition, the proposed project would be subject to Municipal Code Chapter 6.05, which establishes the Stormwater/Urban Runoff Management and Discharge Controls Ordinance to protect and enhance the water quality of the City.

Therefore, implementation of the proposed project would not conflict with or obstruct implementation of a sustainable groundwater management plan and impacts would be considered less than significant.

Level of Significance

Less than significant impact.

3.10.6 - Cumulative Impacts

Hydrology and Water Quality

The geographic scope of the cumulative hydrology and water quality analysis is the project vicinity, as well as other projects located in the Santa Ana River Basin and the Upper Santa Ana Valley Groundwater Basin

The proposed project would involve short-term construction and long-term operational activities that would have the potential to degrade water quality in downstream water bodies. BMPs proposed in the WQMP would require implementation of various construction and operational water quality control measures that would prevent the release of pollutants into downstream waterways. Other projects that propose new development would be required to implement similar mitigation measures in accordance with adopted regulations. The combined implementation of construction and operation water quality control measures among the other cumulative development projects would be expected to reduce related cumulative impacts.

The various cumulative projects would have the potential to increase the use of groundwater resources. However, the RCSD, which is the water provider for most of Jurupa Valley, indicates in its 2022 WMP that adequate groundwater supplies are available to serve projected demand through the ultimate buildout scenario. These demand figures account for existing water use, plus increased water use in the future from population growth, including that associated with the other projects. All customers within the RCSD, including the proposed project, would be required to comply with any rationing or demand reduction measures as required to ensure adequate water supplies in time of drought or other emergencies. As such, the proposed project, in conjunction with other projects, would not deplete groundwater supplies.

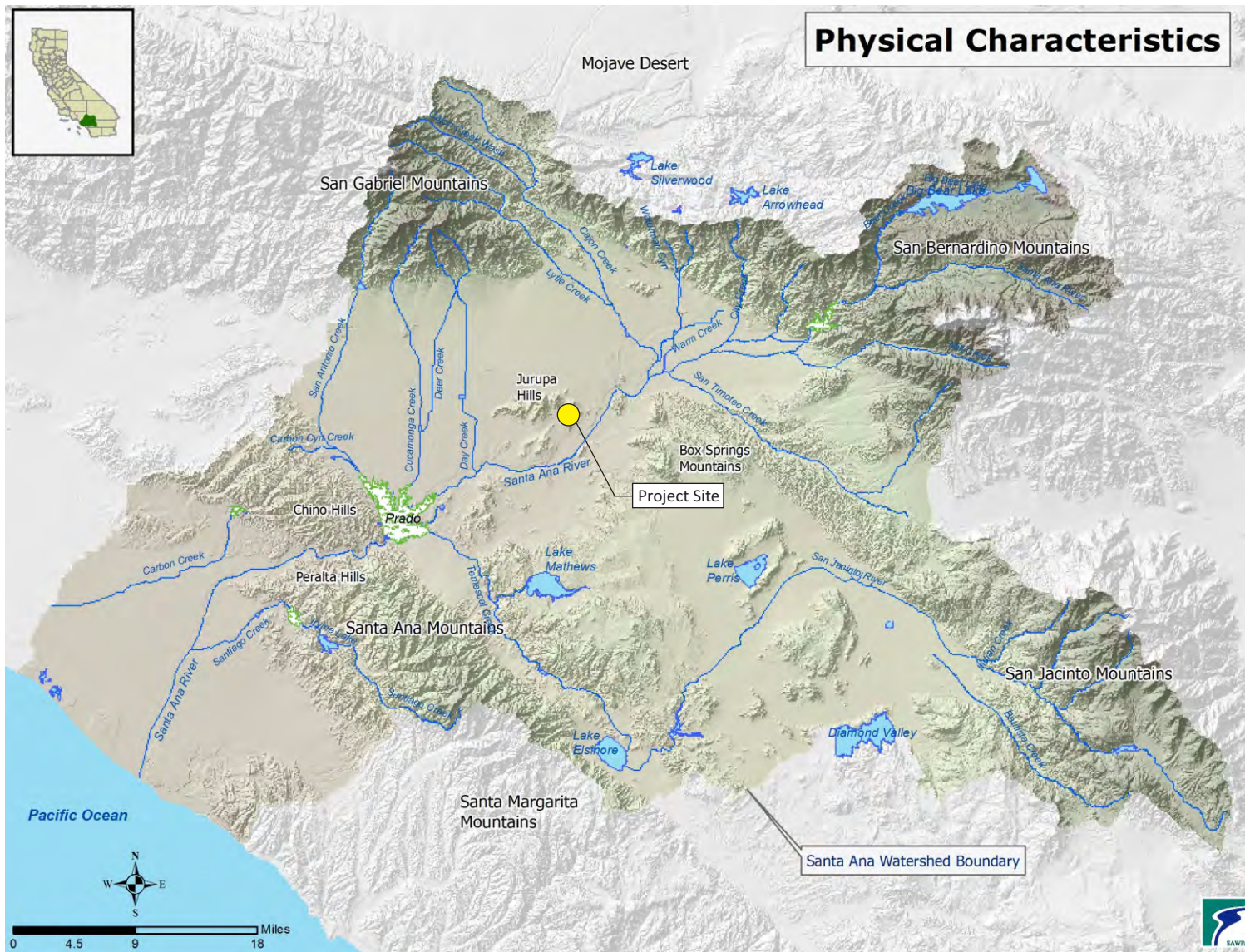
The various cumulative projects that are located in the project site vicinity may have the potential to increase impervious surface coverage and, therefore, may result in increased runoff volumes in downstream waterways. These projects would be required to provide drainage facilities that collect and detain runoff such that off-site releases are controlled and do not create flooding in accordance with State and local regulations. Additionally, all cumulative projects would be subject to local, State and federal permit requirements and would be required to comply with City ordinances and General Plan policies, as well as other water quality regulations that control construction-related and operational discharge of pollutants in stormwater. The water quality regulations implemented by the RWQCB take a basin-wide approach regarding water quality in a regional context. For example, qualifying projects in the cumulative context would be required to adhere to the Construction General Permit which ties receiving water limitations and basin plan objectives to terms and conditions of the permit, and the MS4 Permit works with all municipalities to manage stormwater systems to be collectively protective of water quality. For these reasons, cumulative impacts to hydrology and water quality would be less than significant.

Moreover, the proposed project's incremental contribution to less than significant cumulative impacts would not be cumulatively considerable. As noted in this EIR, the proposed project's impacts related to hydrology and water quality would be less than significant or no impact with the implementation of applicable regulations including project design features and General Plan policies and programs. No mitigation is necessary. The proposed project would install an on-site storm drainage system sized to detain runoff in accordance with the applicable jurisdictions regulations. As discussed in Impact HYD-3 above, the storm drainage system would be able to reduce peak storm event flows such that they do not inundate downstream drainage facilities. This would ensure that the proposed project, in conjunction with other projects, would not contribute to downstream flooding conditions during peak storm events.

Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively considerable impact on hydrology and water quality.

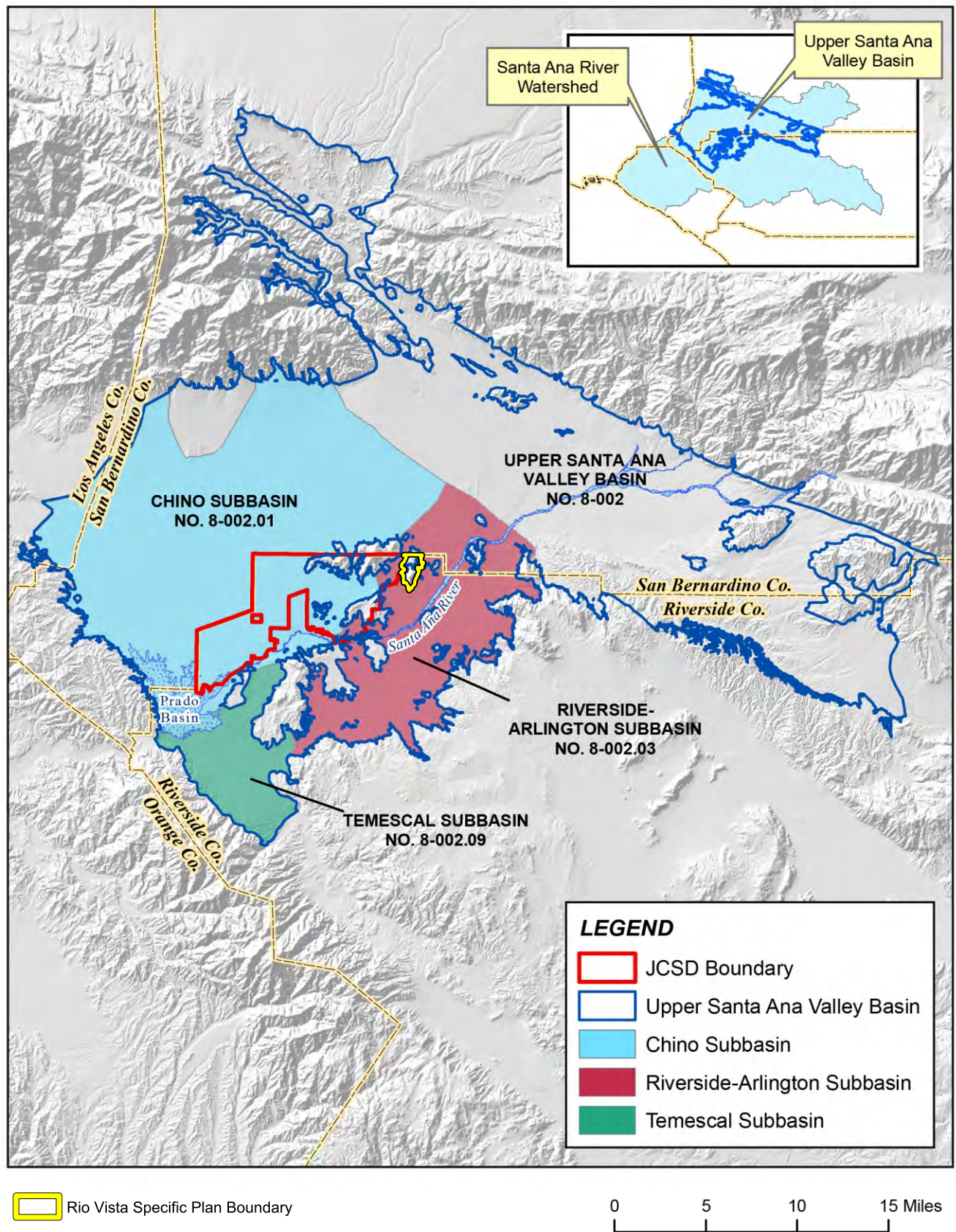
Level of Cumulative Significance

Less than significant impact.



Source: Santa Ana Watershed Project Authority (SAWPA).

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Source: Albert A. Webb Associates, 2020. Calif. Dept. of Water Resources, 2018.

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3.11 - Land Use and Planning

This section describes existing conditions related to land use and planning as well as the relevant regulatory framework. The evaluation of impacts to land use and planning is based on a comparison of the proposed project to applicable plans, policies, and regulations to determine whether construction or operation would conflict with a plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Land use impacts can be either direct or indirect. Direct impacts are those that result in land use incompatibilities, division of neighborhoods or communities, or interference with other land use plans, including habitat or wildlife conservation plans. This section focuses on direct land use impacts. Indirect impacts are secondary effects resulting from land use policy implementation, such as an increase in demand for public utilities or services, or increased traffic on roadways. Indirect impacts are addressed in other sections of this Draft EIR. Information included in this section is based on review of the proposed Rio Vista Specific Plan (proposed project),¹ as well as applicable land use policies and regulations, including the Jurupa Valley General Plan (General Plan)

A Notice of Preparation (NOP) was released for public review on December 6, 2021, and an Environmental Impact Report (EIR) Scoping Meeting was held on December 14, 2021. No public comments were received during the scoping period related to land use and planning.

3.11.1 - Environmental Setting

Existing Land Use Activities

Project Site

The project site is in the northeastern portion of the City of Jurupa Valley (City), adjacent to the Riverside County-San Bernardino County boundary. The project site is vacant with no existing buildings. The project site consists of foothill terrain, including Pepe's Peak and Rattlesnake Mountain, both standing at more than 1,600 feet above mean sea level. Unpaved roads and trails cross the project site. The Sunnyslope Channel extends along the western portion of the project site. The West Riverside Canal and the Union Pacific Railroad Crestmore branch line run along the southeastern portion of the project site.

Regional access to the project site is available from State Route (SR) 60 to the south, via Rubidoux Boulevard. Interstate 10 (I-10) also provides regional access to the project site from the north, via Cedar Avenue.

Surrounding Area

West

The Sunnyslope single-family residential neighborhood is located west of the project site area at the location of a former quarry site.

¹ T&B Planning, Inc. 2021. Rio Vista Specific Plan (SP16001) (MA160645) A Master Planned Community. 5th Draft Screencheck. November 2021.

North

The Riverside-San Bernardino County line forms the northern boundary of the project site. North of the County line are vacant land and the Crestmore single-family residential neighborhood.

East

The Crestmore Heights single-family residential neighborhood and an industrial area are located east of the project site.

South

A single-family residential neighborhood and SR-60 are located south of the project site. Mission Middle School is located beyond SR-60.

Land Use Designations and Zoning

Project Site

The project site is designated as a combination of Medium Density Residential (MDR), Medium High Density Residential (MHDR), High Density Residential (HDR), Very High Density Residential (VHDR), Commercial Retail (CR), Open Space-Conservation Habitat (OS-CH), and Open Space-Recreation (OS-R) by the General Plan; refer to Chapter 2, Project Description, Exhibit 2-5.

The project site is currently zoned as a Specific Plan Zone (SP Zone) (see Chapter 2, Project Description, Exhibit 2-6).

Surrounding Land Use Designations

Table 3.11-1 summarizes the surrounding General Plan and zoning designations.

Table 3.11-1: Surrounding Land Use Designations

Surrounding Area	Jurisdiction	Relationship to Project Site	Land Use Designation	
			General Plan Land Use Designation	Zoning
Sunnyslope Residential Community	City of Jurupa Valley	West	Medium Density Residential	One Family Dwellings (R-1)
Vacant Land (City of Fontana)	City of Fontana	North	Residential Estate	Residential Planned Community (R-PC)
Crestmore Single-Family Residential	Unincorporated San Bernardino County	North	Single Residential—20,000 Square Feet Minimum	Single Residential—20,000 Square Feet Minimum
Crestmore Heights Residential Community	City of Jurupa Valley	East	Very Low Density Residential	General Commercial (C-1/C-P)
Alpha Materials, Inc.	City of Jurupa Valley	East	Light Industrial	Manufacturing Medium (M-M-3)
Robertson's Ready Mix	City of Jurupa Valley	East	Light Industrial	Manufacturing Medium (M-M-3)

Surrounding Area	Jurisdiction	Relationship to Project Site	Land Use Designation	
			General Plan Land Use Designation	Zoning
Ecco Equipment Corporation	City of Jurupa Valley	East	Light Industrial	Manufacturing Medium (M-M-3)
Rubidoux Residential Community	City of Jurupa Valley	South	Medium Density Residential, Medium High Density Residential, Very High Density Residential, Highest Density Residential	One Family Dwellings (R-1), (R-2-5000), Rubidoux Village-Commercial (R-VC), General Residential (R-3), Residential Incentive (R-6)

Sources: City of Jurupa Valley 2017 General Plan. T&B Planning 2021.

3.11.2 - Regulatory Framework

Regional

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the nation's largest Metropolitan Planning Organization (MPO), representing six counties, 191 cities, and over 18 million residents. SCAG undertakes a variety of planning and policy initiatives to encourage a more sustainable Southern California. SCAG functions as the MPO for the following six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. As the designated MPO, SCAG is mandated by federal and State law to research and draw up plans for transportation, growth management, hazardous waste management, and air quality.

2016–2040 Regional Transportation Plan/Sustainable Communities Strategy Connect SoCal

In 2020, SCAG adopted the 2020–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): Connect SoCal.² The RTP/SCS is the culmination of a multi-year effort involving stakeholders from across the SCAG Region. The RTP is a long-range transportation plan that is developed and updated by SCAG every 4 years. The RTP/SCS provides a vision for transportation investments throughout the region. Using growth forecasts and economic trends that project out over a 20-year period, the RTP considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address our mobility needs.

Local

City of Jurupa Valley General Plan

The General Plan was adopted on September 7, 2017, and serves as a blueprint for growth within the Jurupa Valley city limits. The General Plan contains the following elements: Air Quality;

² Southern California Association of Governments (SCAG). 2020. Connect SoCal. September 3. Website: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial-plan_0.pdf?1606001176. Accessed: February 22, 2022.

Community Safety, Services, and Facilities; Economic Sustainability; Environmental Justice; Healthy Communities; Housing; Land Use; Mobility; Noise; and Open Space/Conservation. The General Plan includes multiple goals and policies related to land use; refer to Table 3.11-5.

City of Jurupa Valley Municipal Code

The Jurupa Valley Municipal Code (Municipal Code) regulates land use activities within the Jurupa Valley city limits. The Municipal Code contains 15 titles, with Title 9 consisting of the Zoning Ordinance. The Zoning Ordinance establishes zoning districts and development standards for new construction.

3.11.3 - Thresholds of Significance

Significance Criteria

In accordance with Section 15064.7 of the State California Environmental Quality Act (CEQA) Guidelines, the City of Jurupa Valley adopted local CEQA Guidelines. The City's local CEQA Guidelines are based, in part, on the CEQA checklist included in Appendix G of the State CEQA Guidelines. The City of Jurupa Valley Guidelines recognizes the following significance thresholds and Significance Criteria related to land use and planning. Based on these significance thresholds, a project would have a significant impact on land use and planning if it would:

- a) Physically divide an established community.

Under the City's local significance threshold, the project would have significant effects if: The project involves the construction of a new freeway, highway, or roadway or proposes the construction of any physical feature that would serve to impede the connectivity between parts of a cohesive neighborhood or community.

- b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Under the City's local significance threshold, the project would have significant effects if: The project's conflict with any land use plan is related to an environmental issue under CEQA and the project's conflict results in an adverse environmental impact. The applicable plans include, but are not limited to:

- Jurupa Valley General Plan
- South Coast Air Quality Management District Air Quality Management Plan
- Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)
- Santa Ana Region Basin Plan
- Airport Land Use Compatibility Plan for either Flabob Airport or Riverside Municipal Airport.

Approach to Analysis

Analysis in this section focuses on whether project implementation would physically divide an established community and whether the proposed project would conflict with land use plans, policies, or regulations adopted to avoid or mitigate an environmental effect.

Conflicts and inconsistencies with a policy, in and of themselves, do not constitute significant environmental impacts, unless such conflicts or inconsistencies result in direct physical environmental impacts. Physical project impacts are discussed throughout Chapter 3, Environmental Impact Analysis, of this Draft EIR.

State CEQA Guidelines Section 15125 (d) states:

(d) The EIR shall discuss any inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans. Such regional plans include, but are not limited to, the applicable air quality attainment or maintenance plan or State Implementation Plan, area-wide waste treatment and water quality control plans, regional transportation plans, regional housing allocation plans, regional blueprint plans, plans for the reduction of greenhouse gas emissions, habitat conservation plans, natural community conservation plans and regional land use plans for the protection of the Coastal Zone, Lake Tahoe Basin, San Francisco Bay, and Santa Monica Mountains.

The proposed project's compliance with applicable plans and policies relating to a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the proposed project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted to *avoid or mitigate an environmental effect* are contained in other Chapters of the EIR as summarized below.

- South Coast Air Quality Management District 2016 Air Quality Management Plan (Refer to Threshold AIR-1 in Section 3.3, Air Quality, for analysis).
- Western Riverside County MSHCP. (Refer to Threshold BIO-6 in Section 3.4, Biological Resources, for analysis).
- California Air Resources Board Scoping Plan. (Refer to Threshold GHG-2 in Section 3.8, Greenhouse Gas Emissions, for analysis).
- Southern California Association of Governments Connect SoCal – The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy. (Refer to Threshold GHG-2 in Section 3.8, Greenhouse Gas Emissions, for analysis).
- Santa Ana Regional Water Quality Control Board's Santa Ana River Basin Water Quality Control Program (Refer to Threshold HYD-5 in Section 3.10, Hydrology and Water Quality, for analysis).

3.11.4 - Project Impacts Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

Divide an Established Community

Threshold LU-1: Would the proposed project physically divide an established community?

Under the City's local significance threshold, the project would have significant effects if: The project involves the construction of a new freeway, highway, or roadway or proposes the construction of any

physical feature that would serve to impede the connectivity between parts of a cohesive neighborhood or community.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

These include existing regulatory requirements such as plans, policies, or programs applied to the project based on federal, State, or local laws currently in place which effectively reduce impacts to land use and planning.

There are no PPPs that are applicable to the project related to land use and planning.

Project Design Features

There are no PDFs applicable to the project related to land use and planning.

Impact Analysis

The physical division of an already established community typically refers to construction of a linear feature, such as an interstate, railroad tracks, or the removal of a means of access that would impact mobility within an established community and an outlying area. The proposed project does not propose the type of large linear construction that would impact mobility within the existing community and surrounding area.

The project site is privately-owned undeveloped land. There are no existing residences or established communities within the project site boundaries, nor are there developed connecting roadways. Development of the proposed project would include the construction of approximately 19.6 acres of roadways, including an approximately 1.3-mile extension of 20th Street to be developed as a modified secondary highway, collector roads, and local streets. The extension of 20th Street would not impede the connectivity between parts of a cohesive neighborhood or community; rather it would provide a mobility corridor through the project site between the existing residential area to the west and the existing industrial/residential areas to the east. An 8-foot-wide decomposed granite soft-surface trail and a 10-foot-wide Class I hard surface bicycle trail would be located within the 30-foot-wide trail easement along 20th Street, forming a central spine of trails through the project site. Sidewalks would be constructed on all local collectors and local streets in order to provide a pedestrian network. As such, buildout of the proposed project would not divide an established community but would instead provide connectivity internally and externally. Impacts would be less than significant.

Level of Significance

Less than significant impact.

Land Use Consistency

Threshold LU-2:	Would the proposed project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?
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Under the City's local significance threshold, the project would have significant effects if: The project's conflict with any land use plan is related to an environmental issue under CEQA and the project's conflict results in an adverse environmental impact. The applicable plans include, but are not limited to:

- Jurupa Valley General Plan
- South Coast Air Quality Management District Air Quality Management Plan
- Western Riverside County MSHCP
- Santa Ana Region Basin Plan
- Airport Land Use Compatibility Plan for either Flabob Airport or Riverside Municipal Airport.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs that are applicable to the project related to land use and planning.

Project Design Features

There are no PDFs applicable to the project related to land use and planning.

Impact Analysis

Connect SoCal Consistency

Codified in 2009, California's Sustainable Communities and Climate Protection Act (referred to as "SB 375"), calls for the integration of transportation, land use, and housing planning, and establishes the reduction of greenhouse gas (GHG) emissions as part of the regional planning process. SCAG, working with individual County Transportation Commissions (CTCs) and the subregions within the SCAG region, is responsible for complying with SB 375 in the Southern California region. SB 375 requires SCAG, as the MPO, to submit to the State every four years a Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan (RTP). The SCS, when integrated with the transportation network, and other transportation measures and policies, will reduce GHG emissions from automobiles and light trucks to achieve the State-determined regional GHG emission reduction target, if it is feasible to do so.³

Connect SoCal is an important planning document for the region, allowing public agencies that implement transportation projects to do so in a coordinated manner, while qualifying for federal and State funding. Connect SoCal is supported by a combination of transportation and land use strategies that outline how the region can achieve California's GHG emissions reduction goals and federal Clean Air Act requirements. The plan also strives to achieve broader regional objectives, such as the preservation of natural lands, improvement of public health, increased roadway safety, support for the region's vital goods movement industries and more efficient use of resources.

³ Southern California Association of Governments (SCAG) Revised for use in developing the 2024 Regional Transportation Plan/Sustainable Communities Strategy (2024 RTP/SCS). Website: <https://scag.ca.gov/sites/main/files/file-attachments/2024-subregional-scs-framework-guidelines.pdf>. Accessed October 12, 2023.

The Connect SoCal goals are meant to provide guidance for considering proposed projects for municipalities throughout the SCAG jurisdictional area within the context of regional goals and policies

As shown in Table 3.11-2, SCAG Connect SoCal Goal Consistency Analysis, implementation of the proposed project would not result in an inconsistency with the regional goals contained in Connect SoCal. Accordingly, the proposed project would have a less than significant impact with respect to a conflict with the SCAG's Connect SoCal.

Table 3.11-2: Connect SoCal Consistency Analysis

Goal		Consistency Determination
No.	Text	
1	Encourage regional economic prosperity and global competitiveness.	Consistent: The proposed project would facilitate new housing, employment, educational, and recreational opportunities while also providing essential infrastructure. This would promote regional economic prosperity through new capital investment, expansion of the tax base, and the creation of new jobs.
2	Improve mobility, accessibility, reliability, and travel safety for people and goods.	Consistent: The proposed project would complete the missing link in 20 th Street that would provide a through connection between Sierra Avenue and Rubidoux Boulevard. This linkage would improve mobility and safety for people and goods.
3	Enhance the preservation, security, and resilience of the regional transportation system.	Consistent: The proposed project would complete the missing link in 20 th Street that would provide a through connection between Sierra Avenue and Rubidoux Boulevard. This linkage would enhance the regional transportation system by providing a direct through route suitable for passenger vehicles, trucks, public transit, bicycles, and pedestrians.
4	Increase person and goods movement and travel choices within the transportation system.	Consistent: The proposed project would complete the missing link in 20 th Street that would provide a through connection between Sierra Avenue and Rubidoux Boulevard. This linkage would enhance person and goods movement by providing a direct through route suitable for passenger vehicles, trucks, public transit, bicycles, and pedestrians.
5	Reduce greenhouse gas emission and improve air quality.	Consistent: The proposed project would promote reductions in greenhouse gas emissions and improvements in air quality by: (1) locating jobs next to housing; (2) locating schools and recreational opportunities next to housing; (3) completing the missing link in 20 th Street, allowing for shorter and more direct trips; and (4) developing new buildings that adhere to the latest adopted energy efficiency standards.
6	Support healthy and equitable communities.	Consistent: The proposed project would support healthy and equitable communities by including a mix of use and densities (e.g., residential, light industrial, business park, school, recreation, etc.) that provide housing, employment, education, and recreational opportunities.

Goal		Consistency Determination
No.	Text	
7	Adapt to a changing climate and support an integrated regional development.	Consistent: The proposed project would promote adaption to climate change by preserving the most rugged areas as open space, not placing new development in flood plains, and developing new buildings that adhere to the latest adopted energy efficiency standards.
9	Encourage development of diverse housing types in areas that are supported by multiple transportation option.	Consistent: The proposed project would construct up to 1,697 dwelling units, including very low density, medium density, medium high density, and very high-density housing products. The proposed project would complete the missing link in 20 th Street between Sierra Avenue and Rubidoux Boulevard, allowing for improved mobility for passenger vehicles, trucks, public transit, bicycles, and pedestrians.
10	Promote conservation of natural and agricultural lands and restoration of habitats.	Consistent: The proposed project would preserve 510 acres as open space. This area includes Pepe’s Peak and Rattlesnake Mountain, the two most significant topographical features within the project site boundaries.
Source: Southern California Association of Governments (SCAG) 2020.		

Consistency with Connect SoCal Sustainable Development Strategies

As part of the State’s mandate to reduce per capita GHG emissions from automobiles and light trucks, Connect SoCal presents strategies and tools that are consistent with local jurisdictions’ land use policies and incorporate best practices for achieving the state-mandated reductions in GHG emissions at the regional level through reduced per capita Vehicle Miles Traveled (VMT). The following strategies are intended to be supportive of implementing the regional Sustainable Communities Strategy that can reasonably be implemented by the project. Examples of the project’s consistency with these strategies are embedded throughout this Draft EIR and are referenced in Table 3.11-3 below.

Table 3.11-3: Consistency with Connect SoCal Sustainable Development Strategies

Strategy	Consistency Determination
Emphasize land use patterns that facilitate multimodal access to work, educational and other destinations.	Consistent: The proposed project would complete the missing link in 20 th Street that would provide a through connection between Sierra Avenue and Rubidoux Boulevard. This linkage would facilitate multimodal access to work, educational and other destinations.
Prioritize infill and redevelopment of underutilized land to accommodate new growth, increase amenities and connectivity in existing neighborhoods.	Consistent: The proposed project would develop a master planned community on an infill site within the City limits. The proposed project would also complete the missing link in 20 th Street that would provide a through connection between Sierra Avenue and Rubidoux Boulevard. This linkage would increase and enhance connectivity in the project site vicinity.

Strategy	Consistency Determination
Promote low emission technologies such as by providing supportive and safe infrastructure such as dedicated lanes, charging and parking/drop-off space.	Consistent: The proposed Specific Plan includes PDFs for low and zero-emission vehicles including charging infrastructure in parking lots.
Promote more resource efficient development focused on conservation, recycling and reclamation.	Consistent: Future development under the proposed project would be subject to the latest adopted edition of the California Building Standards Code including the energy efficiency standards. Refer to Section 3.6, Energy, for further discussion.
Neighborhood Connectivity. Focus on creating, improving, restoring and enhancing safe and convenient connections to schools, shopping, services, places of worship, parks, greenways and other destinations.	Consistent: The proposed project would develop a master planned community that includes residential, commercial, educational, and recreational land uses. The proposed project would also complete the missing link in 20 th Street that would provide a through connection between Sierra Avenue and Rubidoux Boulevard. This linkage would increase connectivity in the project site vicinity.
Urban Greening. Provide facilities that increase active transportation; increase trail and greenway connectivity; improved water quality, groundwater recharge and watershed health; reduce urban runoff; reduced energy consumption and costs; provide for wildlife habitat and increased biodiversity; and expand recreation opportunities and beautification.	Consistent: The proposed project would develop a master planned community that includes parks, trails, open space, and stormwater infrastructure that promotes groundwater recharge and sequesters pollutants.
Goods Movement Environmental Strategy. Integration of advanced technologies that have benefits such as air quality improvements, This plan reaffirms zero and near-zero-emission technologies.	Consistent: The proposed project includes PDFs and this Draft EIR includes mitigation measures for low and zero-emission vehicles. Refer to Section 3.3, Air Quality, for further discussion.
Source: Source: Southern California Association of Governments (SCAG) 2020.	

As an individual project, a Specific Plan (such as the Rio Vista Specific Plan) is limited in its ability to directly implement the broader goals of Connect SoCal as described in Table 3.11-2, SoCal Consistency Analysis, above. As such, in addition to demonstrating compliance with the regional level goals of Connect SoCal, the proposed project is evaluated in comparison to the regional growth forecast and strategies.

Consistency with Regional Growth Forecast

Connect SoCal addresses regional challenges in several ways. A key, formative step is to develop a Regional Growth Forecast in collaboration with local jurisdictions, which helps SCAG identify opportunities and barriers to development. The plan forecasts the number of people, households, and jobs (at the jurisdictional level) expected throughout SCAG's 191 cities and in unincorporated areas by 2045. This forecast helps the region understand in a very general sense where to expect growth, and it allows Connect SoCal to focus attention on areas experiencing change and increases in transportation needs. The SCAG region is diverse and extensive, and the types and classifications

of land use used by one jurisdiction often differ from those used by another. The result is that there are many different land use types and categories that SCAG must organize for its analyses.

Given the number of square miles the SCAG region encompasses, SCAG developed a simplified series of Land Development Categories (LDCs) to represent the dominant themes taken from the region's many general plans. This was created to facilitate regional modeling of land use information from nearly 200 distinct jurisdictions. The LDCs employed in the RTP/SCS are not intended to represent detailed land use policies but are used to describe the general conditions likely to occur within a specific area if recently emerging trends, such as transit-oriented development, were to continue in concert with the implementation of the 2016 RTP/SCS.

SCAG then classified the Place Types into three LDCs. The agency used these categories to describe the general conditions that are likely to exist within a specific area. They reflect the varied conditions of buildings and roadways, transportation options, and the mix of housing and employment throughout the region. The three LDCs that SCAG used are:

- 1. Urban:** These areas are often found within and directly adjacent to moderate and high-density urban centers. Nearly all urban growth in these areas would be considered infill or redevelopment. Most housing is multi-family and attached single-family (townhome), which tend to consume less water and energy than the larger types found in greater proportion in less urban locations. These areas are supported by high levels of regional and local transit service. They have well connected street networks, and the mix and intensity of uses result in a highly walkable environment. These areas offer enhanced access and connectivity for people who choose not to drive or do not have access to a vehicle.
- 2. Compact:** These areas are less dense than those in the Urban LDC, but they are highly walkable with a rich mix of retail, commercial, residential and civic uses. These areas are most likely to occur as new growth on the urban edge or as large-scale redevelopment. They have a rich mix of housing, from multi-family and attached single-family (townhome) to small- and medium-lot single-family homes. These areas are well served by regional and local transit services, but they may not benefit from as much service as urban growth areas and are less likely to occur around major multimodal hubs. Streets in these areas are well connected and walkable, and destinations such as schools, shopping, and entertainment can typically be reached by walking, biking, taking transit, or with a short auto trip.
- 3. Standard:** These areas comprise the most separate-use, auto-oriented developments that have characterized the American suburban landscape for decades. Densities in these areas tend to be lower than those in the Compact LDC, and they are generally not highly mixed. Medium- and larger-lot single-family homes comprise the majority of this development form. Standard areas are not typically well served by regional transit service, and most trips are made by automobile.

According to Exhibit 29, *Forecasted Regional Development Types by Land Development Categories (2012)-Western Riverside County*, of the Sustainable Communities Strategy (SCS) Background Documentation Appendix L, the City is classified as within the Standard LDC.⁴

The changes in population described in Section 3.14, Population and Housing, would not result in the project site being reclassified to the Urban or Compact LDCs. As such, the proposed project is consistent with the growth projections in Connect SoCal.

Jurupa Valley General Plan

General Plan Amendment

The proposed project would guide the development of residential, light industrial, business park, open space, recreational, and school uses on 917.3 acres. As shown in Table 3-11.4, the project site contains land designated by the General Plan for MDR, MHDR, HDR, and VHDR residential uses; CR nonresidential use; and OS-CH and OS-R public uses (Chapter 2, Project Description, Exhibit 2-5).

The proposed project requires a General Plan Amendment to allow the establishment of a mixed-use community, which would include more varied residential and nonresidential uses, as well as additional public uses. As shown in Table 3-11.4, the proposed land use designations would include Very Low Density Residential (VLDR), MDR, MHDR, HDR, and Highest Density Residential (HHDR) uses; Business Park (BP) and Light Industrial (LI) nonresidential uses; Open Space-Conservation (OS-C), OS-R, Open Space-Water (OS-W), Public Facilities (PF), and circulation public uses (Chapter 2, Project Description, Exhibit 2-7).

Table 3.11-4: Existing and Proposed Land Use Designations

Land Use Category	Land Use Designation (acres)	Existing Acreage (acres)	Proposed Acreage (acres)
Residential Uses	VLDR	0	6.4
	MDR	458.0	58.7
	MHDR	19.5	59.0
	HDR	6.2	58.6
	VHDR	29.1	0
	HHDR	0	21.7
Total Residential Uses	—	512.8	204.4
Nonresidential Uses	CR	4.8	0
	BP	0	82.0
	LI	0	58.3
Total Nonresidential Uses	—	4.8	140.3

⁴ Southern California Association of Governments (SCAG). 2016. Sustainable Communities Strategy (SCS) Background Documentation. April. Website: https://planning.lacity.org/odocument/2a7e374a-5c53-4db8-8ea1-a75f12a73b31/Appendix_L_SCAGs_2016-2040_RTP_SCS_Background_Documentation.pdf. Accessed October 26, 2022.

Land Use Category	Land Use Designation (acres)	Existing Acreage (acres)	Proposed Acreage (acres)
Public Uses	OS-C	0	510.8
	OS-CH	386.0	0
	OS-R	13.7	18.4
	OS-W	0	9.0
	PF	0	14.8
	Circulation	0	19.6
Total Public Uses	–	399.7	572.6
Total Project Site	–	917.3	917.3
Notes: BP = Business Park CR = Commercial Retail HDR = High Density Residential HHDR = Highest Density Residential LI = Light Industrial MDR = High Density Residential MHDR = Medium High Density Residential OS-CH = Open Space-Conservation Habitat OS-R = Open Space-Recreation OS-W = Open Space-Water PF = Public Facilities VHDR = Very High Density Residential VLDR = Very Low Density Residential Source: Jurupa Valley Land Use Layers (Map Server).			

As shown in Table 3.11-4 above, approval of the proposed General Plan Amendment would reduce the area within the project site that is designated for residential uses from 512.8 acres to 204.4 acres while increasing public uses area (open space and public facilities) from 399.7 acres to 572.6 acres, mostly due to a large increase in open space area. As described in Section 2, Project Description, the total number of units under the proposed project would not change from the Rio Vista Specific Plan No. 243; therefore, the proposed project is consistent with Senate Bill (SB) 330, Housing Crisis Act of 2019. Nonresidential uses would increase from 4.8 acres to 140.3 acres.

When a project itself entails amendments to the general plan designations or zoning, inconsistency with the existing designations or zoning is an element of the project itself, which then necessitates a legislative policy decision by the agency and does not signify a potential environmental effect. Impacts would be less than significant.

General Plan Consistency

Table 3.11-5 below assesses the proposed project's consistency with the applicable policies of the City of Jurupa Valley General Plan. As shown in the table, the proposed project is consistent with all applicable policies. Impacts would be less than significant.

Table 3.11-5: General Plan Consistency Analysis

Element	Policy		Consistency Determination
	No.	Text	
Land Use	Policy LUE 1.1	Compatible Structures. Require that structures be designed and operated in a manner that preserves and is compatible with the environmental character where they are located, including lighting, telecommunications equipment and other facilities and equipment.	Consistent: The proposed project sets forth development standards and design guidelines intended to ensure that new structures are visually compatible with their surroundings.
	Policy LUE 1.7	Accessibility. Require that open space recreation facilities be accessible to the community, regardless of age, physical limitation, or income level.	Consistent: The proposed project would preserve 510 acres (55 percent) as publicly accessible open space.
	Policy LUE 1.8	Quimby Act. Require that new development meet the parkland requirements as established in the Quimby Act and City enabling ordinances.	Consistent: The proposed project would include 14 acres of recreational facilities including parkland.
	Policy LUE 2.1	Residential Development. Accommodate the development of single-family and multi-family residential units in areas appropriately designated by the General Plan, specific plans, the Equestrian Lifestyle Protection Overlay, and community and town center plans land use maps.	Consistent: The proposed project would construct up to 1,697 dwelling units including very low density, medium density, medium high density, and very high-density housing products.
	Policy LUE 2.3	Infrastructure. Ensure that circulation facilities, water resources, sewer and storm drainage facilities, and other utilities available or provided by the developer are adequate to meet the demands of a proposed residential land use in addition to those services and resources required to serve existing residents and businesses.	Consistent: The proposed project would provide new roadway and utility systems that would ensure acceptable service delivery.
	Policy LUE 2.4	Housing Quality and Variety. Accommodate the development of a variety of highest quality housing types, styles and densities that are accessible to and meet the needs of a range of lifestyles, physical abilities, and income levels.	Consistent: The proposed project would construct up to 1,697 dwelling units including very low density, medium density, medium high density, and very high-density housing products.

Element	Policy		Consistency Determination
	No.	Text	
	Policy LUE 2.5	Connectivity. Integrate residential development with a continuous network of parks, open space, public areas, bicycle trails, equestrian trails, public transit routes, and pedestrian paths to connect neighborhoods and communities with key nodes. Key nodes include parks and recreation facilities, schools, town and neighborhood centers, and other in-city communities and surrounding cities and points of interest.	Consistent: The proposed project would provide a network of multiuse facilities that would link residential areas with open space, recreational amenities, schools, and other areas.
	Policy LUE 2.6	Buffering. Require setbacks and other design elements to buffer residential units from the impacts of abutting agricultural, roadway, commercial, and industrial uses, to the maximum extent possible.	Consistent: The proposed project sets forth development standards and design guidelines that include measures to promote land use compatibility between different land uses.
	Policy LUE 3.12	Industrial and Business Park Development. Accommodate the continuation of existing and the development of new industrial, manufacturing, research and development, and professional offices in areas designated by the General Plan, specific plans, community and town center plans.	Consistent: The proposed project would develop 1.27 million square feet of light industrial on 58 acres and 1.43 million square feet of business park uses on 82 acres.
	Policy LUE 3.15	Locations. Concentrate industrial and business park uses near major transportation facilities and utilities and along public transit corridors. Avoid siting such uses close to residentially zoned neighborhoods or where truck traffic will be routed through residential neighborhoods.	Consistent: The proposed project would locate light industrial and business park uses adjacent to similar existing uses along 20 th Street and Rubidoux Boulevard. This would avoid the need for trucks to travel through residential areas.
	Policy LUE 4.1	Public Facility Development. Accommodate the development of public facilities and services in areas designated by the General Plan, specific plans, and community and town center plans.	Consistent: The proposed project would reserve 13.4 acres designated Public Facilities (PF) for a new Jurupa Unified School District elementary school.
	Policy LUE 5.37	Specific Plan Content. Require that all specific plans must meet the requirements of State law and include four planning frameworks: Land Use, Design, Circulation, and Infrastructure/Public Facilities.	Consistent: The proposed project contains the State-mandated Land Use, Design, Circulation, and Infrastructure/Public Facilities chapters, as well as additional discretionary chapters for open

Element	Policy		Consistency Determination
	No.	Text	
		Within each framework, the specific plan will provide the goals and policies that will guide future decisions on projects within the specific plan area. The plan will also include a detailed implementation plan that will identify responsibilities, financing requirements, and phasing/timing.	space/recreation, phasing, maintenance, and public safety.
	Policy LUE 5.47	Sensitive Habitat and Species. Public and private development, operations, and maintenance shall avoid damaging sensitive habitat or species, including significant native trees, species of local significance, and threatened and endangered species.	Consistent: The proposed project would preserve 510.8 acres (approximately 55 percent of the project site) as open space. This area includes sensitive habitat.
	Policy LUE 5.53	Utilities. Discourage utility lines within the river corridor and floodplain. If approved, lines shall be placed underground where feasible and shall be located and designed in a manner to harmonize with the natural environment and to be visually unobtrusive.	Consistent: The proposed project would underground all new utilities.
	Policy LUE 9.1	Hillside Development Limitations. Limit development in areas that contain natural slopes, canyons, ravines, or other significant elevation changes, regardless of land use designation, and apply the following policies: [See Policy LUE 9.2 through 9.5].	Consistent: The proposed project would preserve 510 acres (55 percent) as open space. This area includes Pepe's Peak, Rattlesnake Mountain, and the most visible ridgelines and slopes. Development is clustered in the lowest portions of the project site boundaries.
	Policy LUE 9.2	Natural Landforms. Require that hillside development preserve and protect the site's natural landforms and native vegetation, and preserve established trails.	Consistent: The proposed project would preserve 510 acres (55 percent) as open space. This area includes Pepe's Peak, Rattlesnake Mountain, and the most visible land formations and slopes.
	Policy LUE 9.3	Cluster Development. Require that development clustering be used, where appropriate, to retain natural slopes, protect native trees, vegetation, wildlife corridors, riparian areas and springs, cultural resources,	Consistent: The proposed project would cluster development in the lowest portions of the project site in order to preserve Pepe's Peak, Rattlesnake Mountain, and the most visible land formations and slopes as open space.

Element	Policy		Consistency Determination
	No.	Text	
		and open space, and preserve scenic views.	
	Policy LUE 9.4	Hillside Grading. Ensure that hillside structures, site improvements, landscaping and drainage, and public facilities (including but not limited to public streets, utilities, grading and drainage, signs and other features) are developed in a manner that minimizes hazards from erosion and slope failures.	Consistent: The proposed project sets forth hillside grading standards to minimize the deleterious effects of such activities.
	Policy LUE 9.5	Visually Sensitive Areas. Development on visually significant ridgelines, canyon edges, and hilltops shall use sensitive siting, architectural design, and appropriate landscaping to ensure that development is visually unobtrusive and compatible with its setting.	Consistent: The proposed project sets forth development standards and design guidelines for hillside development to ensure it is visually compatible with its surroundings.
	Policy LUE 10.1	Land Use Balance. Encourage communities that provide a balanced mix of land uses, including open space, employment, recreation, shopping, and housing.	Consistent: The proposed project would develop 204 acres of residential, 58 acres of light industrial, 82 acres of business park, 510 acres of open space, 14 acres of recreational, and 13 acres of school uses. This range of uses is consistent with the policy of land use balance.
	Policy LUE 10.2	Infill Development. Assist in and promote the development of infill and underutilized parcels that are located in Opportunity and specific plan areas as identified on the General Plan Land Use Map.	Consistent: The proposed project is within the Jurupa Valley city limits and assigned a 'Specific Plan Overlay' by the General Plan Land Use Map. It is also surrounded by urban development on four sides and, therefore, is considered infill development.
	Policy LUE 10.4	Street and Trail Connectivity. Create street and trail networks that directly connect local destinations and that promote use by pedestrians, equestrians, and bicyclists.	Consistent: The proposed project would link the non-contiguous ends of 20 th Street, which would further the objective of street connectivity.
	Policy LUE 12.1	Service Capacity. Ensure that development does not exceed the City's or the community services districts' or special districts' ability to	Consistent: This Draft EIR evaluates the ability of the City and other service providers to serve the project and determines

Element	Policy		Consistency Determination
	No.	Text	
		adequately provide supporting infrastructure and services, such as water, wastewater treatment, energy, solid waste and public services such as police/fire/emergency medical services, recreational facilities, and transportation systems.	that adequate service delivery would occur. Refer to Section 3.15, Public Services.
	Policy LUE 12.3	Urban Water Management Plans. Review all projects for consistency with the appropriate community services district's urban water management plans.	Consistent: A Water Supply Assessment (WSA) was prepared for the proposed project and concluded that adequate water supplies are available to serve the proposed project. Refer to Section 3.19, Utilities and Service Systems, for further discussion.
	Policy LUE 13.1	Fair Share Infrastructure Funding. Require that new development contribute its fair share to fund infrastructure and public facilities, such as police and fire facilities, parks, streets, and trail improvements.	Consistent: The proposed project would provide fair share fees in accordance with latest adopted fee schedules.
Mobility	Policy ME 2.2	Transportation Infrastructure. Traffic control devices and transportation infrastructure shall operate to serve the needs of all roadway users, including motorists, public transit, pedestrians, equestrians, and cyclists.	Consistent: The proposed project would provide a circulation network consisting of arterial roadways, collectors, local streets, as well as on-street and off-street facilities for bicycles, pedestrians, and equestrians.
	Policy ME 2.3	Development Project Impacts. Require development projects to analyze potential off-site traffic impacts and related environmental impacts through the CEQA process and to mitigate adverse impacts to less than significant levels.	Consistent: This Draft EIR evaluates Vehicle Miles Traveled (VMT) and impacts to transit, bicycle, and pedestrian facilities. This Draft EIR sets forth mitigation as appropriate. Refer to Section 3.17, Transportation, for further discussion.
	Policy ME 2.4	Transportation Options. Support development of a variety of transportation options for major employment and activity centers, including direct access to transit routes, primary highways, bikeways, Park-n-Ride facilities, and pedestrian facilities.	Consistent: The proposed project would provide a circulation network consisting of arterial roadways, collectors, local streets, as well as on-street and off-street facilities for bicycles, pedestrians, and equestrians. The network would link residential and nonresidential areas.

Element	Policy		Consistency Determination
	No.	Text	
	Policy ME 2.9	Project Integration. Encourage development of projects that facilitate the use of alternative modes of transportation, including public transit, light rail, pedestrian-oriented retail and activity centers, equestrian trails and related facilities, and bicycle facilities.	Consistent: The proposed project would provide a circulation network consisting of arterial roadways, collectors, local streets, as well as on-street and off-street facilities for bicycles, pedestrians, and equestrians. The network would link residential and nonresidential areas.
	Policy ME 2.11	Street Improvements with New Development. Require street improvements as a condition of new developments, including undergrounding of utility lines, installation of fiber optic cable and other utilities, sidewalk, curb, gutter and street pave-out, bicycle and equestrian facilities, street lighting (where appropriate), street trees, and landscaping.	Consistent: The proposed project would provide a comprehensive internal circulation network. Curb, gutter, sidewalk, and bicycle facilities would be installed with the street sections. All utilities would be located underground.
	Policy ME 2.13	Multimodal Level of Service. When the City determines that there is a suitable tool available, we will measure and evaluate roadway performance and CEQA compliance and mitigation from a multimodal, “complete streets” perspective using Vehicle Miles Traveled (VMT), consistent with SB 743 and State guidelines.	Consistent: This Draft EIR evaluates VMT and impacts to transit, bicycle, and pedestrian facilities. This Draft EIR sets forth mitigation as appropriate. Refer to Section 3.17, Transportation, for further discussion.
	Policy ME 2.15	Traffic Impact Evaluation. New developments shall be reviewed to identify project-related impacts to circulation facilities and shall provide site improvements necessary to mitigate such impacts. The Engineering Department may require developers and/or subdividers to provide traffic impact studies prepared by qualified professionals to identify the impacts of a development.	Consistent: This Draft EIR evaluates VMT impacts and the performance of transit, bicycle, and pedestrian facilities and sets forth mitigation measures to minimize project-related impacts. Refer to Section 3.17, Transportation, for further discussion.
	Policy ME 2.16	Traffic Impacts. Traffic studies prepared for development entitlements (e.g., tracts, plot plans, public use permits, conditional use permits) shall identify project-related traffic impacts and determine the	Consistent: This Draft EIR evaluates VMT impacts and sets forth mitigation measures to minimize project-related VMT impacts and impacts to transit, bicycle, and pedestrian facilities.

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		“significance” of such impacts in compliance with CEQA.	The analysis uses the City’s adopted thresholds of significance. Refer to Section 3.17, Transportation, for further discussion.
	Policy ME 2.17	Impact Mitigation. Mitigate direct project-related traffic impacts by requiring street improvements as a condition of approval, or for indirect and cumulative impacts, through the payment of mitigation fees to fund improvement of streets and other transportation facilities.	Consistent: This Draft EIR evaluates VMT and impacts to transit, bicycle, and pedestrian facilities. This Draft EIR impacts sets forth mitigation measures to minimize project-related transportation impacts. Mitigation includes installation of improvements and payment of fees. Refer to Section 3.17, Transportation, for further discussion.
	Policy ME 3.1	Bicycle and Pedestrian Trail Network. Plan, develop and maintain a bikeway and pedestrian network according to a Bicycle and Pedestrian Plan, to be prepared following General Plan adoption. Bicycle facilities should be located off-road to the greatest extent possible, such as along flood control channels, the Santa Ana River banks, and regional parks and within residential developments and greenbelts.	Consistent: The proposed project would provide a network of on-street and off-street bicycle facilities.
	Policy ME 3.4	Intersections and Crossing Locations. Use federal, State, and local guidelines and standards for traffic operations, signal timing, geometric design, Universal Access (ADA), and roadway maintenance that facilitates walking and bicycling at intersections and other key crossing locations.	Consistent: The proposed project’s circulation network would comply with applicable ADA standards and traffic engineering guidance.
	Policy ME 3.6	Internal Linkages. Bicycle and pedestrian trails networks should be located and designed to link to retail and commercial centers.	Consistent: The proposed project’s bicycle and pedestrian facilities would link residential and nonresidential areas.
	Policy ME 3.7	External Linkages. Link on-road and off-road bicycle and pedestrian facilities to existing and planned bicycle and pedestrian facilities in adjacent and regional jurisdictions.	Consistent: The proposed project’s bicycle and pedestrian facilities would be linked to existing networks outside the project boundaries.

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	Policy ME 3.8	Traffic Control Devices. Traffic control devices and transportation infrastructure will be operated to serve the needs of all users of the roadway and pedestrians.	Consistent: The proposed project's circulation network would be operated to serve the needs of all users.
	Policy ME 3.9	Pedestrian Facilities. Public streets shall provide pedestrian facilities in accordance with adopted City standards. Sidewalks shall be separated from the roadway by a landscaped parkway, except where the Planning Director determines that attached sidewalks are appropriate due to existing sidewalk location, design, or other conditions.	Consistent: The proposed project would provide a network of pedestrian facilities including sidewalks and trails.
	Policy ME 3.10	Accessible Pedestrian Facilities. All new streets shall have provisions for the adequate and safe movement of pedestrians, including improvements for the elderly and disabled.	Consistent: The proposed project's circulation network would be operated to serve the needs of all users.
	Policy ME 3.11	Pedestrian Connectivity. Require development projects and site plans to be designed to encourage pedestrian connectivity among buildings within a site while linking buildings to the public bicycle and pedestrian network.	Consistent: The proposed project would provide on-street and off-street facilities for bicycles and pedestrians that would link residential and nonresidential areas.
	Policy ME 3.12	Pedestrian Facility Improvements. As funding permits, the City will install, or require as a condition of development approval, pedestrian facilities improvements such as installation of signs, signals, sidewalks, street crosswalks, proper lighting, pedestrian and equestrian activated signals, street trees, benches, transit shelters, trails, landscaping, and other ancillary pedestrian features.	Consistent: The proposed project's bicycle and pedestrian circulation network would comply with applicable engineering /design guidance.
	Policy ME 3.14	Public Pedestrian Improvements. Encourage public pedestrian improvement projects, such as public art, fountains, street trees, lighting, directional signs, and enhanced crosswalks.	Consistent: The proposed project's pedestrian circulation network would comply with applicable engineering /design guidance.

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	Policy ME 3.15	Pedestrian Facilities. Provide facilities for the safe movement of pedestrians within new developments, as specified in the General Plan and City Engineering and trail standards.	Consistent: The proposed project's pedestrian circulation network would comply with applicable engineering /design guidance.
	Policy ME 3.16	Removal of Barriers. Maximize visibility and access and encourage the removal of barriers (walls, easements, and fences) for safe and convenient movement of pedestrians within and between adjacent developments where appropriate. Special emphasis should be placed on the needs of disabled persons considering Americans with Disabilities Act (ADA) regulations.	Consistent: The proposed project's pedestrian circulation network would provide direct connections between destinations and would also comply with applicable ADA standards and engineering /design guidance.
	Policy ME 3.17	Public Transit Connections. Ensure safe pedestrian access from developments to existing and future transit routes and terminal facilities through project design.	Consistent: The proposed project's pedestrian circulation network would provide safe linkages to transit facilities.
	Policy ME 3.20	Development Review. Consult the Engineering Department as part of the development review process regarding any development proposals where pedestrian facilities may be warranted. City may require both the dedication and improvement of pedestrian facilities as a condition of development approval.	Consistent: The proposed project's pedestrian circulation network would comply with applicable engineering /design guidance.
	Policy ME 3.21	ADA Compliance. Require safe pedestrian walkways that comply with the Americans with Disabilities Act (ADA) requirements within commercial, office, industrial, mixed use, residential, and recreational developments.	Consistent: The proposed project's pedestrian circulation network would comply with applicable engineering /design guidance.
	Policy ME 3.24	Integration of Bicycle Planning. Integrate development of the bicycle facilities network into larger land use planning and development projects.	Consistent: The proposed project's bicycle facilities would link residential and nonresidential areas.

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	Policy ME 3.25	Bicycle-Friendly Infrastructure. Require bicycle-friendly infrastructure design using new technologies and innovative treatments where necessary to improve bicyclists' safety and convenience.	Consistent: The proposed project's bicycle circulation network would comply with applicable engineering /design guidance.
	Policy ME 3.30	Bicycle and Pedestrian Facility Design Standards. City shall utilize the Caltrans Highway Design Manual and other infrastructure guidelines as appropriate to design and maintain bicycle and pedestrian facilities to high safety standards.	Consistent: The proposed project's bicycle circulation network would comply with applicable engineering /design guidance.
	Policy ME 3.34	Bikeway Width. Where feasible, design bikeways beyond the minimum required widths but within federal, State, or local standards (for example, Class 2 lanes should not exceed 8 feet in width to avoid confusion with driving lanes).	Consistent: The proposed project's bicycle circulation network would comply with applicable engineering /design guidance.
	Policy ME 3.35	Bicycle Parking. Require convenient, secure, attractive, and easy to use bicycle parking to be provided at public buildings, commercial areas, multi-family residential development projects, and schools and parks and encourage other agencies to provide bicycle parking for rail transit and Park-n-Ride facilities.	Consistent: The proposed project would provide bicycle parking at public places such as parks, schools, and industrial/business areas.
	Policy ME 3.36	Bicycle Improvements Conditionally Required. Require the construction or rehabilitation of bicycle facilities and/or "bicycle-friendly" improvements as a condition of approving new development, in accordance with Zoning Ordinance standards.	Consistent: The proposed project's bicycle facilities would link residential and nonresidential areas.
	Policy ME 4.1	Equestrian and Multi-Purpose Trails. Provide trails for the safe movement of pedestrians and equestrians within and between new developments where appropriate and as identified in the General Plan and City Engineering trail standards.	Consistent: The proposed project's equestrian facilities would link residential and nonresidential areas.

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	Policy ME 8.37	Tree Preservation in Rights-of-Way. Preserve mature trees with street or highway rights-of-way that are identified as superior examples of California native species or naturalized tree species.	Consistent: The proposed project would preserve a Palmer's oak, which is considered a superior example of California native tree species.
	Policy ME 8.46	Runoff Control. Implement National Pollutant Discharge Elimination System Best Management Practices relating to construction of roadways to control runoff contamination from affecting the groundwater supply.	Consistent: The proposed project would implement stormwater pollution prevention measures during construction and operation. Refer to Section 3.10, Hydrology and Water Quality for further discussion.
Conservation and Open Space	Policy COS 1.2	Protection of Significant Trees. Protect and preserve significant trees, as determined by the City Council upon the recommendation of the Planning Commission. Significant trees are those trees that make substantial contributions to natural habitat or to the urban landscape due to their species, size, or rarity. In particular, California native trees should be protected.	Consistent: The project site contains an ancient Palmer's oak, which is a significant tree. This Draft EIR includes Mitigation Measure (MM) BIO-5, which requires the tree to be protected with a 200-foot buffer during construction.
	Policy COS 1.3	Other Significant Vegetation. Maintain and conserve superior examples of vegetation, including: agricultural wind screen plantings, street trees, stands of mature native and non-native trees, and other features of ecological, aesthetic, and conservation value.	Consistent: The proposed project would preserve 510.8 acres (approximately 55 percent of the project site) as open space. This area includes significant vegetation.
	Policy COS 2.2	Wildlife Corridors. Identify and maintain a continuous wildlife corridor along the City's northern boundary through the Jurupa Mountains and along the Santa Ana River from the northern boundary to the City's western boundary. Condition development approvals to ensure that important corridors for wildlife movement and dispersal are protected and not interrupted by walls, fences, roadways or other obstructions. Features of particular importance to wildlife include	Consistent: The proposed project would preserve 510.8 acres (approximately 55 percent of the project site) as open space. This includes areas that can be used for wildlife movement.

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		riparian corridors, wetlands, streams, springs, and protected natural areas with cover and water. Linkages and corridors shall be provided to maintain connections between habitat areas.	
	Policy COS 2.3	Biological Reports. Require the preparation of biological reports to assess the impacts of development and provide mitigation for impacts to biological resources when reviewing discretionary development projects with the potential to affect adversely wildlife habitat.	Consistent: This Draft EIR includes an assessment of biological resources and sets forth mitigation measures to reduce impacts. Refer to Section 3.4, Biological Resources, for further discussion.
	Policy COS 3.2	Riparian Area Preservation. Require development projects to preserve and enhance native riparian habitat and prevent obstruction of natural watercourses. Zoning incentives, such as transfer of development credits, should be used to the maximum extent possible.	Consistent: The proposed project would impact 2.74 acres of riparian habitat, which would be mitigated for at a 2:1 ratio. Furthermore, the proposed project avoids impacts to 0.41 of riparian habitat.
	Policy COS 3.3	Water Quality. Employ the best available practices for pollution avoidance and control and encourage others to do the same. “Best available practices” means actions and equipment that result in the highest water quality, considering available equipment, life-cycle costs, social and environmental side effects, and the regulations of other agencies.	Consistent: The proposed project would implement stormwater pollution prevention measures during construction and operation. Refer to Section 3.10, Hydrology and Water Quality for further discussion.
	Policy COS 3.9	Pollution Discharge. Minimize pollutant discharge into storm drainage systems and natural drainage and aquifers.	Consistent: The proposed project would provide a storm drainage system that would consist of inlets, underground piping, bioswales, and basins that would treat runoff and facilitate percolation.
	Policy COS 6.1	Efficient Use of Nonrenewable Resources. Utilize nonrenewable resources efficiently in City buildings and facilities, services and operations, and encourage others to do the same.	Consistent: The proposed project would not result in the wasteful, inefficient, or unnecessary consumption of nonrenewable resources. Refer to Section 3.6, Energy for further discussion.

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	Policy COS 6.6	Renewable Energy Resources. Work with other agencies and utility providers to encourage safe, economical, and renewable energy resources, and to reduce nonrenewable energy use through public education and participation in energy conservation programs.	Consistent: The proposed project would not result in the wasteful, inefficient, or unnecessary consumption of nonrenewable resources. Refer to Section 3.6, Energy for further discussion.
	Policy COS 7.3	Development Review. Evaluate project sites for archaeological sensitivity and for a project's potential to uncover or disturb cultural resources as part of development review.	Consistent: As part of this Draft EIR, the project site was assessed for archaeological resources. Refer to Section 3.5, Cultural Resources, for further discussion.
	Policy COS 8.1	Environmental Resource Protection. Preserve and maintain open space that protects environmental resources and protects public health and safety.	Consistent: The proposed project would preserve 510.8 acres (approximately 55 percent of the project site) as open space.
	Policy COS 8.2	Extension of Public Facilities. Avoid the extension of public streets, facilities, services, and utilities for urban uses into areas designated as Open Space in the General Plan.	Consistent: The project site is designated "Specific Plan" and, therefore, the development of the proposed project would not impact an area designated "Open Space."
	Policy COS 8.3	Conversion of Recreation and Open Space Uses. Discourage the conversion of dedicated parklands and designated open space to non-recreational or non-open space uses. Where conversion is unavoidable, require developers or responsible agencies to replace parklands that are converted to other uses on a 2-for-1 acre basis, with similar or improved facilities and programs, and open space with land of equivalent open space value.	Consistent: The proposed project would preserve 510.8 acres of open space and 14.3 acres of recreational amenities. All of these facilities would be "new." No existing recreational or open space would be converted to other use.
	Policy COS 8.4	Equal Access to Recreation and Open Space Resources. Ensure that the City's open space and recreational network accommodates the needs of all residents, regardless of their income, ethnicity, physical capabilities, or age.	Consistent: The proposed project would preserve 510.8 acres of open space and 14.3 acres of recreational amenities. This includes facilities that would be accessible to all segments of the community.

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	Policy COS 8.5	Parkland Implementation Strategies. Require new development to provide funding and/or long-term implementation strategies for the acquisition and improvement of active and passive parks, open space, and recreational sites, when appropriate.	Consistent: The proposed project would preserve 510.8 acres of open space and 14.3 acres of recreational amenities.
	Policy COS 8.6	Provision of Recreation Facilities. Require that parkland or open space dedication and improvement occur prior to, or concurrent with, construction, as a condition of approval of new residential subdivisions.	Consistent: The proposed project would preserve 510 acres of open space and 14.3 acres of recreational amenities. These uses would be developed in conjunction with the proposed residential and nonresidential uses.
	Policy COS 8.7	Public Access. Provide public access to open space resources when doing so is consistent with protection of the resources, and with the security and privacy of affected landowners and occupants. Access will generally be limited to non-vehicular movement, and may be restricted in sensitive areas.	Consistent: The proposed project would preserve 510.8 acres of open space and 14.3 acres of recreational amenities. These facilities would be accessible to non-vehicular movement.
	Policy COS 9.1	Protect scenic resources, especially skylines, undeveloped ridgelines, rocky hillsides, river view corridors, and outstanding scenic vistas not designated for urban uses from development, and maintain those resources in their current patterns of use.	Consistent: The proposed project would preserve 510 acres of open space that includes Pepe’s Peak, Rattlesnake Mountain, and the most visible ridgelines and slopes.
	Policy COS 9.5	Views to and from public places, including scenic corridors. The City will preserve and improve views of important scenic resources from public places, and encourage other agencies with jurisdiction to do so. Public places include parks, plazas, the grounds of civic buildings, streets and roads, and publicly accessible open space. In particular, the route segments shown in Figure 4-23 below are designated as local scenic corridors.	Consistent: The proposed project would preserve 510 acres of open space that includes Pepe’s Peak, Rattlesnake Mountain, and the most visible ridgelines and slopes. This would advance the policy of protecting views from public places.

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	Policy COS 10.1	Outdoor Lighting. Require outdoor lighting to be shielded and prohibit outdoor lighting that: <ol style="list-style-type: none"> 1. Operates at unnecessary locations, levels, and times 2. Spills onto areas off-site or to areas not needing or wanting illumination 3. Produces glare (intense line-of-site contrast) 4. Includes lighting frequencies (colors) that interfere with astronomical viewing 	Consistent: The proposed project sets forth development standards and design guidelines that would require appropriate levels of lighting and requires fixtures employ full-cutoff fixtures, be shielded, or be directed downward.
	Policy COS 10.2	New Residential Development and Remodeling Projects. Require development projects and major remodel projects to minimize light pollution and trespass while enhancing safety and aesthetics.	Consistent: The proposed project sets forth development standards and design guidelines that would require appropriate levels of lighting and that fixtures employ full-cutoff fixtures, be shielded, or be directed downward.
Housing	Policy HE 4.2	Design Compatibility. Higher density housing should maintain high quality standards for unit design, privacy, security, on-site amenities, and public and private open space. Such standards should be flexible enough to allow innovative and affordable design solutions and shall be designed to enhance prevailing neighborhood architectural and site character.	Consistent: The proposed project includes design standards for multiple-family residential uses to promote compatibility.
	Policy HE 4.3	Neighborhood Integration. New neighborhoods should be an integral part of an existing neighborhood or should establish pedestrian, bicycle, and, where appropriate, equestrian linkages that provide direct, convenient, and safe access to adjacent neighborhoods, schools, parks, and shopping.	Consistent: The proposed project includes a comprehensive circulation system including streets, bicycle facilities, sidewalks, and trails that connect the various residential uses.
	Policy HE 5.1	New Construction. Encourage the development of dwellings with energy efficient designs, utilizing passive and active solar features and energy-saving features that exceed minimum requirements in State law.	Consistent: The proposed project includes design standards to promote energy efficiency in new dwelling units.

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	Policy HE 5.2	<p>Sustainable Design. Residential developments should promote sustainability in their design, placement, and use. Sustainability can be promoted through a variety of housing strategies, including the following:</p> <ol style="list-style-type: none"> 1. Maximize use of renewable, recycled-content and recycled materials, and minimize use of building materials that require high levels of energy to produce or that cause significant, adverse environmental impacts. 2. Incorporate renewable energy features into new homes, including passive solar design, solar hot water, solar power, and natural ventilation and cooling. 3. Minimize thermal island effects through reduction of heat-absorbing pavement and increased tree shading. 4. Avoid building materials that may contribute to health problems through the release of gases or glass fibers into indoor air. 5. Design dwellings for quiet, indoors and out, including appropriate noise mitigation for residential uses near noise sources such as highways, major streets, railroad tracks, and industrial uses. 6. Design dwellings to be economical to live in due to reduced energy or resource use, ease of maintenance, floor area, or durability of materials. 7. Help inform residents, staff, and builders of the advantages and methods of sustainable design, and thereby develop consumer demand for sustainable housing. 8. Consider adopting a sustainable development rating system, such as the LEED® or Green Globes program. 	<p>Consistent: The proposed project includes design standards to promote energy efficiency in new dwelling units.</p>

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	Policy HE 5.3	<p>Site and Neighborhood Design. Residential site, subdivision, and neighborhood designs should consider sustainability. Some ways to do this include:</p> <ol style="list-style-type: none"> 1. Design subdivisions to maximize solar access for each dwelling and site. 2. Design sites so residents have usable outdoor space with access to sun and shade. 3. Streets and access ways should minimize pavement devoted to vehicular use. 4. Use multi-purpose neighborhood “pocket parks”/retention basins to purify street runoff prior to its entering creeks. Retention basins shall be designed to be visually attractive as well as functional. Fenced-off retention basins should be avoided. 5. Encourage cluster developments with dwellings grouped around significantly sized, shared open space in return for City approval of smaller individual lots. 6. Treat public streets as landscaped parkways, using continuous plantings at least 6 feet wide and, where feasible, median planters to enhance, define, and buffer residential neighborhoods of all densities from the effects of vehicle traffic. 	<p>Consistent: Development within the proposed project would be designed and constructed in accordance with the City’s latest adopted energy efficiency standards, which are based on the California Title 24 energy efficiency standards.</p>
Air Quality	Policy AQ 2.1	<p>Site Plan Designs. Require City land use planning efforts and site plan designs to protect people and land uses sensitive to air pollution, using barriers and/or distance from emissions sources, and protect sensitive receptors from polluting sources, wherever possible.</p>	<p>Consistent: The proposed project sets for development standards and design guidelines that include measures to promote land use compatibility between different land uses and reduce exposure to air pollution. Refer to Section 3.3, Air Quality, for further discussion.</p>
	Policy AQ 2.2	<p>Pollution Control Measures. Strongly encourage the use of pollution control measures such as landscaping, vegetation, and other materials that trap particulate matter or control pollution.</p>	<p>Consistent: The proposed project would provide landscaping in public spaces such as along street frontages and within recreational areas.</p>

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	Policy AQ 3.4	Emissions Mitigation. Require every project to mitigate any of its anticipated emissions that exceed allowable levels as established by the South Coast Air Quality Management District [SCAQMD], the [United States Environmental Protection Agency] EPA, and [California Air Resources Board] ARB, to the greatest extent possible.	Consistent: This Draft EIR evaluates project-related construction and operational emissions and sets forth mitigation measures to reduce impacts. Refer to Section 3.3, Air Quality for further discussion.
	Policy AQ 6.9	Mixed-Use Land Use. Support new mixed-use land use patterns with employment centers and community centers, which encourage community self-sufficiency and containment, promote efficient modes of travel, and help reduce automobile dependency.	Consistent: The proposed project would provide a mix of uses including residential, light industrial, business park, school, open space, and recreation.
	Policy AQ 6.12	Housing Types. Provide for a variety of housing types that support a local market for a skilled professional and management labor pool when approving new residential developments.	Consistent: The proposed project would develop up to 1,697 dwelling units including very low density, medium density, medium high density, and very high-density housing products.
	Policy NE 1.2	New Development and Stationary Noise Sources. New development of noise-sensitive land uses near existing stationary noise sources may be permitted only where their location or design allows the development to meet the standards listed in Figure 7-3.	Consistent: The proposed project would locate the light industrial and business park uses adjacent to existing uses along 20 th Street and Rubidoux Boulevard. The residential uses would be located away from these uses and buffered by open space and other uses.
Noise	Policy NE 1.2	New Development and Stationary Noise Sources. New development of noise-sensitive land uses near existing stationary noise sources may be permitted only where their location or design allows the development to meet the standards listed in Figure 7-3.	Consistent: The proposed project would locate the light industrial and business park uses adjacent to existing uses along 20 th Street and Rubidoux Boulevard. The residential uses would be located away from these uses and buffered by open space and other uses.
Community Safety, Services, and Facilities	Policy CSSF 1.1	Fault Rupture Hazards. When reviewing new development, minimize fault rupture hazards through the enforcement of Alquist-Priolo Earthquake Fault Zoning Act	Consistent: A Geotechnical Review was prepared for the proposed project that evaluated seismic hazards. Refer to Section

Element	Policy		Consistency Determination
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		<p>provisions and the following requirements:</p> <ul style="list-style-type: none"> Require geologic studies or analyses for new, critical structures, such as schools, medical facilities, senior or disabled housing, or other high risk occupancies located within 0.5 mile of all active or potentially active faults. Require geologic trenching studies for new developments within all designated Earthquake Fault Studies Zones, unless adequate evidence is presented and accepted by the City Engineer or a Building Official. The City may also require geologic trenching for new development located outside designated fault zones for especially critical or vulnerable structures or lifelines. Require that critical infrastructure, including roads, bridges, and utilities be designated to resist, without failure, their crossing of a fault, if fault rupture occurs. Encourage and support efforts by the geologic research community to better define the locations and risks of County faults. Such efforts could include data sharing and database development within regional entities, State and local governments, private organizations, utility agencies, or universities. 	3.7, Geology and Soils for further discussion.
	Policy CSSF 1.2	<p>Geologic Investigations. Require geological and geotechnical investigations as part of the environmental development and review process. This requirement shall apply to the development of any structure proposed for human occupancy or to unoccupied structures whose damage could cause secondary hazards in areas with potential for earthquake-</p>	<p>Consistent: A Geotechnical Review was prepared for the proposed project that evaluated seismic hazards. Refer to Section 3.7, Geology and Soils for further discussion.</p>

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		induced liquefaction, landslides, or settlement.	
	Policy CSSF 1.3	Structural/Nonstructural Assessment. Require structural and nonstructural assessment and, when necessary, mitigation for other types of potentially hazardous buildings that are undergoing substantial repair or improvements costing more than half of the assessed property value. Potential implementation measures could include: <ul style="list-style-type: none"> • Use of variances, tax rebates, fee waivers, credits, or public recognition as incentives. • Inventory and structural assessment of potentially hazardous buildings based on screening methods developed by the Federal Emergency Management Agency. • Development of a mandatory retrofit program for hazardous, high occupancy, essential, dependent, or high risk facilities. • Development of a mandatory program requiring public posting of seismically vulnerable buildings. 	Consistent: A Geotechnical Review was prepared for the proposed project that provided recommendations for soil engineering and construction to abate seismic hazards. Refer to Section 3.7, Geology and Soils for further discussion.
	Policy CSSF 1.4	Structural Damage. Utilize the latest approaches to minimize damage to structures located in areas determined to have high liquefaction potential during seismic events.	Consistent: A Geotechnical Review was prepared for the proposed project that evaluated liquefaction hazards. Refer to Section 3.7, Geology and Soils for further discussion.
	Policy CSSF 1.5	Hillside Development. Encourage and, where possible, require mitigation of potential erosion, landslide, and settlement hazards for existing public and private development located on unstable hillside areas, especially slopes with recurring failures where City property or public right-of-way is threatened from slope instability or where considered appropriate and urgent by the City Engineer, CAL FIRE, or County Sheriff's Department.	Consistent: A Geotechnical Review was prepared for the proposed project that evaluated landslide hazards. Refer to Section 3.7, Geology and Soils for further discussion.

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	Policy CSSF 1.6	Flood Risk. In reviewing new construction and substantial improvements within the 100-year flood plain, the City shall disapprove projects that cannot minimize the flood risks to acceptable levels in areas mapped by [Federal Emergency Management Agency] FEMA or as determined by site-specific hydrologic studies for areas not mapped by FEMA.	Consistent: The proposed project avoids siting structures within flood hazard areas.
	Policy CSSF 1.8	Building Codes. Enforce provisions of the Building Code in conjunction with the following guidelines: 1. Critical facilities shall not be permitted in flood plains unless the project design ensures that there are at least two routes for emergency ingress and egress, and minimizes the potential for debris or flooding to block emergency routes. 2. Development using, storing, or otherwise involved with substantial quantities of on-site hazardous materials shall not be permitted unless all standards for evaluation, anchoring, and flood-proofing have been satisfied; and hazardous materials are stored in watertight containers, not capable of floating, to the extent required by State and federal laws and regulations. 3. Specific flood-proofing measures that may be required include, but are not limited to: use of paints, membranes, or mortar to reduce water seepage through walls; installation of water tight doors, bulkheads, and shutters; installation of flood water pumps in structures; and proper modification and protection of all electrical equipment, circuits, and appliances so that the risk of electrocution or fire is eliminated. Fully enclosed areas that are below finished floors shall require openings to equalize the forces on both sides of walls.	Consistent: The proposed project avoids siting structures within flood hazard areas.

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	Policy CSSF 1.9	Permanent Structures. Prohibit the construction of permanent structures for human housing or employment to the extent necessary to floodwaters without property damage or risk to public safety. Agricultural, recreational, or other similar, non-habitation uses are allowable if flood control and groundwater recharge functions are maintained.	Consistent: The proposed project avoids siting structures within flood hazard areas.
	Policy CSSF 1.10	Floodway Alteration. Prohibit alteration of floodways and channelization unless alternative methods of flood control are not technically feasible or unless alternative methods are already utilized to maximum extent practicable. The intent is to balance the need for protection with prudent land use solutions, recreation needs, and habitat preservation requirements, and as applicable to provide incentives for natural watercourse preservation. Preservation incentives may include density transfer programs as may be adopted.	Consistent: The proposed project avoids siting structures within flood hazard areas.
	Policy CSSF 1.11	Modification of Water Courses. Prohibit substantial modification to water courses, unless modification does not increase erosion or adjacent sedimentation, or increase water velocities, so as to be detrimental to adjacent property, nor adversely affect adjacent wetlands or riparian habitat.	Consistent: The proposed project would not modify water courses.
	Policy CSSF 1.12	Flood Control Improvements. Direct flood control improvement measures toward the protection of existing and planned development.	Consistent: The proposed project would include a comprehensive storm drainage system that consists of in-street catch basins and piping that convey runoff to 12 drainage basins (detention basins, debris basins, and water quality basins). This would serve to provide flood protection to the proposed project and downstream developments.

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	Policy CSSF 1.13	Environmental Protection. Ensure that any substantial modification to a watercourse is accomplished in the least environmentally damaging manner possible to maintain adequate wildlife corridors and linkages and maximize groundwater recharge.	Consistent: The proposed project would impact 2.74 acres of riparian habitat, which would be mitigated at a 2:1 ratio. Furthermore, the proposed project avoids impacts to 0.41 of riparian habitat.
	Policy CSSF 1.14	Ability to Withstand Flooding. Require development within the floodplain to be capable of withstanding flooding and to minimize use of fill. Compatible uses shall not, however, obstruct flows or adversely affect upstream or downstream properties with increased velocities, flood heights, erosion backwater effects, or concentration flows.	Consistent: The proposed project avoids siting structures within flood hazard areas.
	Policy CSSF 1.15	Regional Storm Drain System. All proposed development projects shall address and mitigate any adverse impacts on the carrying capacity of local and regional storm drain systems.	Consistent: The proposed project would include a comprehensive storm drainage system that consists of in-street catch basins and piping that convey runoff to 12 drainage basins (detention basins, debris basins, and water quality basins). This would serve to provide flood protection to the proposed project and downstream developments.
	Policy CSSF 1.21	Flood Hazard Zones. Encourage periodic reevaluation of the 500-year, 100-year, and 10-year flood hazard zones by State, federal, county, and other sources and use such studies to improve existing protection, review flood protection standards for the new development and redevelopment, and update emergency response plans.	Consistent: This Draft EIR evaluates flood hazards. Furthermore, the proposed project would include a comprehensive storm drainage system. This would serve to provide flood protection to the proposed project and downstream developments.

Element	Policy		Consistency Determination
	No.	Text	
	Policy CSSF 1.22	Specific Plans. Encourage the use of specific plans to allow increased densities in certain areas of a proposed redevelopment and to transfer density to locate residential, commercial, industrial, and public facility uses outside of natural hazard areas; and to direct appropriate uses to these areas, such as open space, passive recreational uses, or other uses compatible with these hazards.	Consistent: The proposed project employs a Specific Plan to guide development.
	Policy CSSF 1.23	Fire Prevention. Develop and enforce construction and design standards that ensure that proposed development incorporates fire prevention features through the following: 1. All proposed construction shall meet minimum standards for fire safety as defined in the City Building or Fire Codes, or by City zoning, or as dictated by the Building Official or the Transportation Land Management Agency based on building type, design, occupancy, and use. 2. In addition to the fire safety provisions of the Uniform Building Code and the Uniform Fire Codes, apply additional standards for high-risk, high-occupancy hospital and health care facilities, dependent care, emergency operation centers, and other essential or “lifeline” facilities, per county or State standards. These shall include assurance that structural and nonstructural architectural elements of the building will not: <ul style="list-style-type: none"> ● impede emergency egress for fire safety staffing/personnel, equipment, and apparatus; nor ● hinder evacuation from fire, including potential blockage of stairways or fire doors. 	Consistent: The proposed project would be subject to the applicable provisions of the California Fire Code.
	Policy CSSF 1.24	Adjacent Natural Vegetation. Development that adjoins large areas of native vegetation will require	Consistent: The proposed project would employ drought tolerant

Element	Policy		Consistency Determination
	No.	Text	
		drought tolerant landscaping that blends with the natural vegetation to the greatest extent possible.	landscaping at the interface with the open space areas.
	Policy CSSF 1.28	Fire Protection Master Plan. Continue to utilize the Riverside County Fire Protection Master Plan and Jurupa Emergency Response Plan as the base documents to implement the goals and objectives of the Community Safety Element.	Consistent: The proposed project is consistent with the applicable provisions of the Riverside County Fire Protection Master Plan and Jurupa Emergency Response Plan, including emergency access and fire abatement requirements. Refer to Section 3.15, Public Services for further discussion.
	Policy CSSF 1.29	Water Resources. Encourage and, as resources allow, support efforts to utilize existing water bodies, tanks, and water wells in the City for emergency fire suppression water sources.	Consistent: The proposed project reserves 1.4 acres for water tanks that would be available to provide water for emergency fire suppression.
	Policy CSSF 1.30	Brush Clearance. Utilize ongoing brush clearance fire inspections to educate homeowners on fire prevention tips.	Consistent: The proposed project would include a Fuel Modification Zone at the urban/wildland interface. This area would be routinely cleared of brush.
	Policy CSSF 2.2	Concurrency with Development. Ensure the provision of sufficient public facilities and services prior to, or currently with, new development.	Consistent: The proposed project would reserve 13.4 acres for a future Jurupa Unified School District K-8 school. The land would be dedicated to the School District at the time the final map is processed. Thus, the School District would have the ability to construct the school in advance of or concurrently with the proposed residential uses. Public services and utilities would also be developed within the plan area concurrent with residential and commercial construction.
	Policy CSSF 2.3	Facility Design. Work with service agencies to ensure that new public facilities are well designed, energy efficient, and compatible with adjacent land uses.	Consistent: Service providers including the City of Jurupa Valley, the Riverside County Sheriff Department, /Riverside County Fire Department, and the Jurupa Unified School District (JUSD) were consulted during the planning process.

Element	Policy		Consistency Determination
	No.	Text	
	Policy CSSF 2.4	Fair Share. Ensure that new development pays its fair share of public facilities and service costs	Consistent: The proposed project would provide fair share fees in accordance with latest adopted fee schedules.
	Policy CSSF 2.5	Joint Use. Promote the joint use of public facilities to meet multiple needs of the community.	Consistent: The proposed project includes joint use public facilities such as school parks.
	Policy CSSF 2.23	Review of Development Proposals. Involve the school districts in the review of large residential development proposals to ensure that adequate schools are provided without affecting existing facilities	Consistent: The JUSD was consulted during the planning process and it was determined that K-8 school site would be required, which is included in the proposed project.
	Policy CSSF 2.44	Drought Tolerant Landscaping. Require the use of drought tolerant landscaping in all new development.	Consistent: The proposed project would employ drought tolerant landscaping.
	Policy CSSF 2.54	Fair Share Costs. Require new development to contribute fair share costs for the provision of wastewater infrastructure and treatment.	Consistent: The proposed project would provide the full cost of the on-site water and wastewater infrastructure necessary to serve the proposed project.
	Policy CSSF 2.57	New Development. Require new development to implement on-site measures to clean and contain stormwater runoff.	Consistent: The proposed project would provide a storm drainage system consisting of inlets, underground piping, bio swales, and basins that would treat runoff and facilitate percolation. Refer to Section 3.10, Hydrology and Water Quality.
	Policy CSSF 2.60	Waste Reduction. Encourage the diversion of waste from landfills through reduction, reuse, and recycling efforts.	Consistent: The proposed project would be served with recycling and green waste collection service.
	Policy CSSF 2.61	Waste Management. Encourage new development to employ construction waste management techniques to divert construction materials and debris away from the landfills.	Consistent: Construction and demolition debris recycling is available at local transfer stations and, thus, the proposed project would be expected to use this service.
	Policy CSSF 2.66	Waste Diversion. Achieve at least the minimum construction and demolition waste diversion requirement of 75 percent.	Consistent: Construction and demolition debris recycling is available at local transfer stations and, thus, the 75 percent diversion target is achievable.

Element	Policy		Consistency Determination
	No.	Text	
	Policy CSSF 2.66	Waste Diversion. Achieve at least the minimum construction and demolition waste diversion requirement of 75 percent.	Consistent: Construction and demolition debris recycling is available at local transfer stations and, thus, the 75 percent diversion target is achievable.

Municipal Code Consistency

The proposed project would require a change of zone to allow for adoption of a Zoning Ordinance for the project and modification of the zone from Specific Plan (SP) No. 243 to a new SP Zone, SP No. 16001. The proposed project would be adopted into the Jurupa Valley Municipal Code and serve as zoning for the project site. The proposed project's development standards and design guidelines would serve as the regulations for new development.

The proposed project sets forth the following zoning districts: VLDR, MDR, MHDR, HDR, LI, BP, OS-R, OS-C, OS-W, PF, and Circulation. These zoning districts correspond to the General Plan land use designations.

When a project itself entails amendments to the general plan designations or zoning, inconsistency with the existing designations or zoning is an element of the project itself, which then necessitates a legislative policy decision by the agency and does not signify a potential environmental effect. Impacts would be less than significant.

Rubidoux Community Services District

On March 17, 2022, the Riverside County Local Agency Formation Commission (LAFCo) informed the applicant that the request to annex the proposed project into the service area of the Rubidoux Community Services District (RCSD) is approved, pending completion of several outstanding approvals.⁵ With the assumption that the proposed project, i.e., the new Rio Vista Specific Plan, would be adopted by the City, consistency with the outstanding items are evaluated in Table 3.11-6 below.

The majority of the items are pending adoption of the proposed project (i.e., the new Rio Vista Specific Plan) and certification of the EIR by the City. With the assumption that these two documents would be adopted by the City, the proposed project would be able to provide the required documents to LAFCo, and RCSD would complete the annexation.

⁵ Riverside Local Agency Formation Commission (LAFCo). 2022. Rio Vista Project Annexation to Rubidoux Community Services District. March 17.

Table 3.11-6: Consistency With LAFCo Required Documents

Requirement	Consistency Determination
New Specific Plan, with land use/zoning maps, and certified EIR with all technical appendices, mitigation measures and mitigation monitoring plans as adopted by the City.	Pending, expected to be consistent: This Draft EIR is being prepared to evaluate the proposed project. It includes land use and zoning maps, technical appendices, and mitigation measures. Upon completion of the Draft EIR and following the conclusion of the 45-day public review period, a Mitigation Monitoring and Reporting Program (MMRP) would be prepared.
Copy of the City Notice of Determination and proof of payment of Fish and Wildlife Fees to the State for the new EIR.	Pending, expected to be consistent: Upon certification of the EIR and project approval by the City, the applicant will pay all required fees.
Revised Plan of Services to reflect the new Specific Plan: RCSD needs to provide the applicant for forwarding to LAFCo.	Pending, expected to be consistent: it is assumed that, upon certification of the EIR and project approval by the City, RCSD would provide the required documentation in support of annexation of the proposed project into its service area.
Total Dissolved Solids (TDS) Compliance: documentation of compliance from RCSD: RCSD needs to provide the applicant for forwarding to LAFCo.	Pending, expected to be consistent: it is assumed that, upon certification of the EIR and project approval by the City, RCSD would provide the required documentation in support of annexation of the proposed project into its service area.
Revised Sphere of Influence Supplemental submittal addressing the five determination factors to reflect the new Specific Plan.	Pending, expected to be consistent: it is assumed that, upon certification of the EIR and project approval by the City, RCSD would provide the required documentation in support of annexation of the proposed project into its service area.
Source: Source: Riverside Local Agency Formation Commission (LAFCo) 2023.	

Level of Significance

Less than significant impact.

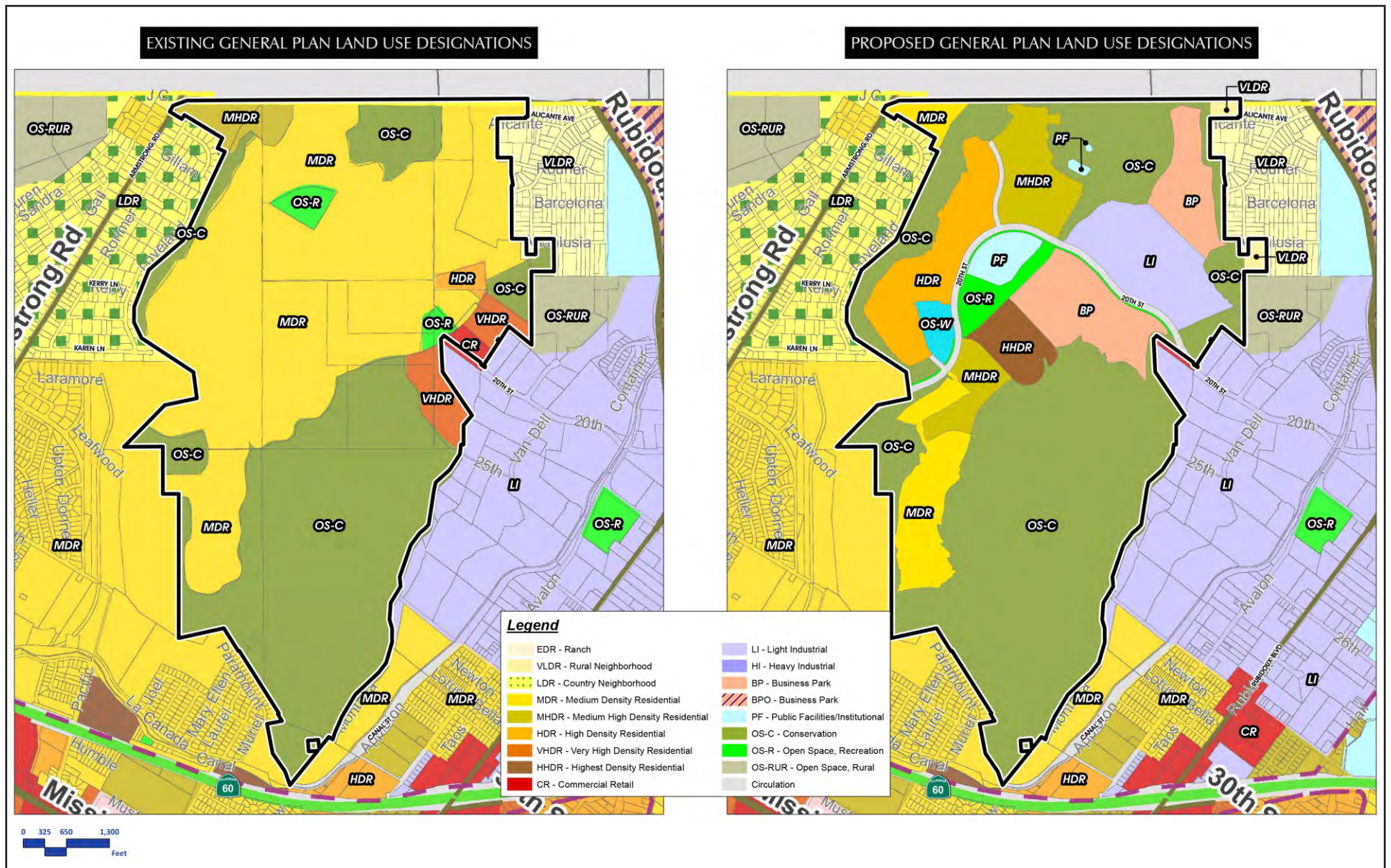
3.11.5 - Cumulative Impact

The geographic scope of the cumulative land use analysis is the vicinity surrounding the project site, including adjacent incorporated and unincorporated areas within the County of Riverside, and the southwestern portion of the County of San Bernardino. Land use decisions are made at the City and County level; therefore, the surrounding vicinity is an appropriate geographic scope.

Cumulative development is likely to continue occurring in the surrounding vicinity. However, most of this development would take place in urbanized areas as infill development and not require significant land use changes that would create land use conflicts, nor would they divide existing communities. Development projects in the City, the County of Riverside, and the southwestern portion of the County of San Bernardino would be required to demonstrate consistency with all

applicable City or County General Plan and Municipal/Ordinance Code requirements. In addition, development would be required to demonstrate consistency with Connect SoCal and SCAG's RTP/SCS. This would ensure that these future projects comply with applicable planning regulations. For cumulative projects listed in Table 3-1, the applicable lead agency would be required to issue findings demonstrating consistency with the applicable General Plan, Municipal/Ordinance Code requirements and Connect SoCal if they are ultimately approved. For these reasons, cumulative impacts with respect to land use would be less than significant.

The proposed project's incremental contribution to cumulative land use impacts would also not be significant. With the proposed General Plan Amendment and rezoning, the proposed project would be consistent with the General Plan and Municipal Code as well as Connect SoCal. New development and redevelopment consistent with the proposed project would be designed to enhance the character of the City and provide connectivity between existing development and new development within the cumulative analysis area. Further, the proposed project is designed to encourage connectivity and cohesive development. It does not approve the construction or development of any new roadways, walls, bridges, major infrastructure, or other features that would divide existing neighborhoods within the cumulative analysis areas. Accordingly, the proposed project's contribution to cumulative impacts would also be less than significant and the proposed project, in conjunction with other existing, planned, and probable future projects, would not have a cumulatively significant impact related to land use.



Source: t&b planning

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Exhibit 3.11-1 General Plan Amendment

CITY OF JURUPA VALLEY
RIO VISTA SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT

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3.12 - Mineral Resources

3.12.1 - Introduction

The following analysis is based on information obtained from the City of Jurupa Valley General Plan (General Plan) and City of Jurupa Valley Municipal Code (Municipal Code).

A Notice of Preparation (NOP) was released for public review on December 6, 2021, and an Environmental Impact Report (EIR) Scoping Meeting was held on December 14, 2021. No public comments were received during the scoping period related to Mineral Resources.

3.12.2 - Environmental Setting

According to the General Plan, mineral extraction has historically been an important component of Jurupa Valley's economy. Western Riverside County has extensive deposits of clay, limestone, iron, sand, and aggregates. The State Mining and Geology Board (SMGB) classifies land within California either according to a priority list that was established by SMGB in 1982, or when the SMGB is petitioned to classify a specific area. The SMGB has also established Mineral Resources Zones (MRZs) to designate lands that contain mineral deposits. The State of California has designated Aggregate Mineral Resource areas within Riverside County. The MRZs within the City of Jurupa Valley are shown in Figure 4-16 of the General Plan¹ and include the following:

- MRZ-1: Areas where available geologic information indicate that little likelihood exists for the presence of significant mineral resources
- MRZ-2: Areas where available geologic data indicate significant Portland Cement Concrete (PCC)-Grade aggregate resources are present
- MRZ-3: Areas containing known or inferred mineral occurrences of undetermined mineral resource significance

Mineral deposits are important to many industries, including construction, transportation, and chemical processing. The value of mineral deposits is enhanced by their proximity to urban areas. However, these mineral deposits are endangered by the same urbanization that enhances their value. The nonrenewable characteristic of mineral deposits necessitates the careful and efficient development of mineral resources to prevent their premature depletion or adverse impacts due to their extraction and use.²

Mineral Resources

The project site does not have a mineral resource land use designation, nor is it proposed in any Planning Areas (PAs). A small MRZ-2 area is located in the southwestern portion of the project site; however, as discussed below under Threshold MIN-1, it is not designated as regionally significant.³

¹ City of Jurupa Valley. 2017. Jurupa Valley General Plan. Website: <https://www.jurupavalley.org/DocumentCenter/View/217/2017-Master-General-Plan-PDF>. Accessed November 23, 2021.

² Ibid.

³ County of Riverside. 2015. County of Riverside Draft Program Environmental Impact Report No. 521. Public Review Draft. February.

Furthermore, the General Plan Land Use Map does not identify any locally important mineral resource recovery sites on the project site, and there are no mineral resource recovery operations located on-site or within the project area.

Aggregate Resources

California is the nation's leading producer of construction aggregate, with a total production of 235 million tons in 2005. This is roughly 6.5 tons of aggregate per person in the State in 2005. Over the next 50 years, it is estimated that California will need approximately 13.5 billion tons of aggregate. However, the industry is highly vulnerable to land use issues on two fronts: Aggregate resources located too close to urban or environmentally sensitive areas can limit or stop their development, and mineral resources may be located too far from a potential market to be economically viable.

Beyond geological viability, MRZ-2 areas are evaluated to determine whether current land uses would preclude mining. Areas currently permitted for mining and areas deemed by the State of California to have land uses compatible with possible mining are identified as "Sectors." To protect construction aggregate resources, in addition to being classified MRZ-2a or MRZ-2b, lands known to contain "significant aggregate resources" are assigned to Sectors. The State of California uses these Sectors to estimate aggregate resources available for the next 50 years. In defining economic viability, the State of California uses large, multi-county "Production-Consumption Regions" as their boundaries for study areas for aggregate production and their associated market areas. As part of the classification process, the State of California has calculated both the 50-year aggregate demand forecast and the amount of aggregate resource available for the given area.⁴

The project site is located in the San Bernardino Production-Consumption Region. Within this region, Sector E-24, located in the Santa Ana River channel north of Mount Rubidoux and the City of Riverside, encompassed approximately 114 acres as of 2008. This is a decrease from the 1987 report which indicated that 208 acres were available, reflecting the general cessation of mining as urban development engulfs the region. As of 2008, the Sector was estimated to possess approximately 16.7 million tons of available aggregate resources. According to the 2008 Special Report No. 206,⁵ since 1987 approximately 18 percent of the San Bernardino Production-Consumption Region's designated lands have been lost to incompatible land uses; a loss of approximately 959 million tons of aggregate resources. However, the 50-year consumption demand for the region was estimated at 1,131 million tons, of which 735 million tons must be PCC-grade aggregate. This is more than double the previous State forecast. In addition to supplying both San Bernardino County and western Riverside County, materials are also exported to northern San Diego County.⁶

Website: https://planning.rctlma.org/Portals/14/genplan/general_plan_2015/DEIR%20521/DEIR%20No.%20521.pdf. Accessed November 24, 2021.

⁴ County of Riverside. 2015. County of Riverside Draft Program Environmental Impact Report No. 521. Public Review Draft. February. Website: https://planning.rctlma.org/Portals/14/genplan/general_plan_2015/DEIR%20521/DEIR%20No.%20521.pdf. Accessed November 24, 2021.

⁵ Ibid.

⁶ Ibid.

3.12.3 - Regulatory Framework

Federal

No federal plans, policies, regulations, or laws related to mineral resources are applicable to the proposed project.

State

California Surface Mining and Reclamation Act of 1975

The California Surface Mining and Reclamation Act of 1975 (SMARA) requires the State Geologist to classify areas identified by the California Office of Planning and Research into MRZs. The primary purpose of mineral land classification is to assure that mineral potential and its significance is recognized and considered before land use decisions that preclude mining are made.

These classifications are based on geological factors without regard to existing land use and ownership. The SMARA requires the State Geologist to classify land according to the presence, absence, or likely occurrence of significant mineral deposits in certain areas of the State subject to urban expansion or land uses incompatible with mining.

Local

The General Plan considers mineral resources a nonrenewable resource. According to the General Plan Conservation and Open Space Element, nonrenewable resources include both mineral resources and certain energy resources. The General Plan contains the following land use categories related to nonrenewable resources and mineral resources:⁷

- **Open Space-Mineral Resources (OS-MIN):** The Open Space-Mineral Resources land use designation allows for mineral extraction and processing facilities designated based on the SMARA classification.
- **Open Space-Water (OS-W):** The Open Space-Water designation primarily includes the Santa Ana River and its floodplain. It also includes natural creeks and springs. The extraction of mineral resources subject to an approved surface mining permit may be permitted if the proposed project can be undertaken in a manner that does not result in increased flooding hazards and that is consistent with maintenance of long-term habitat and riparian values.

City of Jurupa General Plan

The following General Plan Conservation and Open Space policies are directly related to the project in regard to mineral resources. Please refer to Section 3-11, Land Use and Planning, for analysis of the proposed project's consistency with these policies.

⁷ City of Jurupa Valley. 2017. Jurupa Valley General Plan. Website: <https://www.jurupavalley.org/DocumentCenter/View/217/2017-Master-General-Plan-PDF>. Accessed November 23, 2021.

- COS 6.1** **Efficient Use of Nonrenewable Resources.** Utilize nonrenewable resources efficiently in City buildings and facilities, services and operations, and encourage others to do the same.
- COS 6.6** **Renewable Energy Resources.** Work with other agencies and utility providers to encourage safe, economical, and renewable energy resources, and to reduce nonrenewable energy use through public education and participation in energy conservation programs.

3.12.4 - Thresholds of Significance

Significance Criteria

In accordance with Section 15064.7 of the State California Environmental Quality Act (CEQA) Guidelines, the City of Jurupa Valley adopted local CEQA Guidelines. The City's local CEQA Guidelines are based, in part, on the CEQA checklist included in Appendix G of the State CEQA Guidelines. The City of Jurupa Valley Guidelines recognizes the following significance thresholds and Significance Criteria related to Mineral Resources. Based on these significance thresholds, a project would have a potential significant impact on Mineral Resources if it would:

- a) Result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State.

Under the City's local significance threshold, the project would have significant effects if: The project is located within Mineral Resource Zone (MRZ) MRZ-1 or MRZ-2 as shown on General Plan Figure 4-16-Jurupa Valley Mineral Resources.

- b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

Under the City's local significance threshold, the project would have significant effects if: The project site is located on land designated as Open Space, Mineral Resources (OS-MIN) by the General Plan.

Approach to Analysis

The analysis of whether the proposed project would result in impacts to mineral resources is based on review of information presented in the General Plan and the Rio Vista Specific Plan. Analysis is also based on a GIS-based overlay of the proposed project's land uses (as shown in Exhibit 2-6), the General Plan MRZ map (as shown in Exhibit 3.12-1), and the General Plan MRZ map with the proposed project's Conceptual Land Use Plan overlay (as shown in Exhibit 3.12-2).

3.12.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Known Mineral Resources

Threshold MIN-1: Would the proposed project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?

Under the City's local significance threshold, the project would have significant effects if: The project is located within MRZ-1 or MRZ-2 as shown on General Plan Figure 4-16-Jurupa Valley Mineral Resources.

Plans, Policies, Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

These include existing regulatory requirements such as plans, policies, or programs applied to the proposed project based on federal, State, or local law currently in place which effectively reduce impacts to mineral resources.

There are no PPPs that address impacts to mineral resources.

Project Design Features

There are no PDFs applicable to the project related to the topic of mineral resources.

Impact Analysis

The City Municipal Code establishes development regulations to implement the planned vision of the General Plan. Chapter 9.165, M-R Mineral Resources Zone, describes the permitted uses, development standards, and performance standards for uses within the Mineral Resources Zone.⁸

As shown on Exhibit 3.12-1, the majority of the project site is within "Mineral Resource Zone 3 (MRZ-3; Areas containing known or inferred mineral occurrences of undetermined mineral resource significance)" and partially within "Mineral Resource Zone 2 (MRZ-2; Areas where available geologic data indicate significant PCC-grade aggregate resources are present)"⁹ (see Exhibit 3.12-1). Additionally, the General Plan land use designation for the project site includes residential, commercial retail, and open space uses. The project site is located within the San Bernardino County Production-Consumption Region, which spans parts of southwestern San Bernardino County and parts of western Riverside County.

A small MRZ-2 area is located in the southwestern portion of the project site; however, the SMGB does not designate this area as a regionally significant PCC-grade aggregate resource area.¹⁰ Furthermore, the General Plan does not designate the site as a mineral resource land use designation that allows for mineral extraction on the basis of the SMARA classification, or an area

⁸ City of Jurupa Valley. 2021. Municipal Code Chapter 9.165 – M-R Zone (Mineral Resources). Website: https://library.municode.com/ca/jurupa_valley/codes/municipal_code?nodeId=TIT9PLZO_CH9.165ZOMIRE. Accessed November 30, 2021.

⁹ City of Jurupa Valley. 2017. Jurupa Valley General Plan, Figure 4-16: Jurupa Valley mineral resources. Website: <https://www.jurupavalley.org/DocumentCenter/View/217/2017-Master-General-Plan-PDF>. Accessed November 23, 2021.

¹⁰ County of Riverside. 2015. County of Riverside Draft Program Environmental Impact Report No. 521. Public Review Draft. February. Website: https://planning.rctlma.org/Portals/14/genplan/general_plan_2015/DEIR%20521/DEIR%20No.%20521.pdf. Accessed November 24, 2021.

held in reserve for future mining activities.¹¹ The PAs within the MRZ-2 zone would be designated by the proposed Rio Vista Specific Plan as Open Space-Conservation (OS-C) and Medium Density Residential (MDR).

The City's OS-MIN land use designation that applies to other parts of the City is designated in those areas on the basis of a property's SMARA classification. Areas held in reserve for future mining activities also fall under this designation. However, the project site is not designated OS-MIN. Accordingly, because these PAs are not designated as regionally significant PCC-grade resources and are not designated for mineral extraction or held in reserve for future mining activities, implementation of the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State of California.

The California Geological Survey Special Report 206 (Special Report 206) states that the State Geologist is responsible for identifying and calculating the amount of aggregate resources contained in areas classified as MRZ-2. Recognizing that there are lands within these areas that have already been urbanized, and therefore the mineral resources within them have a limited opportunity for conservation, development, and utilization, the State Geologist further limits the aggregate resource calculations to areas within "Sectors." Sectors are areas that have been classified as MRZ-2 by the State Geologist, and that have current land uses deemed compatible with potential mining based on criteria provided by the SMGB.¹² However, Special Report 206 further states that the SMGB's criteria for creating Sectors focuses on the apparent suitability of the land for mining and does not take into consideration land commitments (other than approved tracts or Specific Plans) that may have been made that restrict the accessibility of some of the Sectors for mining. Special Report 206 concludes, that it is possible, therefore, that the available resource base as calculated by the State Geologist may be overestimated.¹³ The project site is zoned Specific Plan Zone (SP Zone) and has an approved Specific Plan.¹⁴ Therefore, it is concluded that the MRZ-2 area within the project site may have been included as an available resource, but it is not actually available because of the approved Specific Plan. Therefore, impacts would be less than significant.

Level of Significance

Less than significant impact.

Locally Important Mineral Resources

Threshold MIN-2: Would the proposed project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

¹¹ City of Jurupa Valley. 2017. Jurupa Valley General Plan. Website: <https://www.jurupavalley.org/DocumentCenter/View/217/2017-Master-General-Plan-PDF>. Accessed November 23, 2021.

¹² California Department of Conservation, California Geological Survey. 2008. Update of Mineral Land Classification for Portland Cement Concrete-Grade Aggregate in The San Bernardino Production-Consumption Region, San Bernardino and Riverside Counties, California. Special Report 206.

¹³ California Department of Conservation, California Geological Survey. 2008. Update of Mineral Land Classification for Portland Cement Concrete-Grade Aggregate in The San Bernardino Production-Consumption Region, San Bernardino and Riverside Counties, California. Special Report 206.

¹⁴ The County of Riverside approved the Rio Vista Specific Plan No. 243 and certified the associated EIR (State Clearinghouse No. 1988122608—Comprehensive GPA No. 174 and Specific Plan No. 243, Rio Vista) on April 14, 1992.

Under the City's local significance threshold, the project would have significant effects if: The project site is located on land designated as Open Space, Mineral Resources (OS-MIN) by the General Plan.

Plans, Policies, Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs that address impacts to mineral resources.

Project Design Features

There are no PDFs applicable to the project related to the topic of mineral resources.

Impact Analysis

Neither the General Plan Land Use Map nor the Rio Vista Specific Plan identify any locally important mineral resource recovery sites on the project site, nor are any mineral resource recovery operations located on-site or in the surrounding area. The City's Zoning Map indicates that the project site is zoned SP Zone. According to the General Plan, the MRZ-2 area that is located within the project area is designated as Open Space – Conservation (OS-C) in the majority of PA 21A and MDR in portions of PAs 1 and 2. As shown in Exhibit 3-12.2, other proposed land uses within the project site do not include mineral resource recovery sites.

Furthermore, as discussed in Impact MIN-1, the SMGB does not designate this area as a regionally significant PCC-grade aggregate resource area.¹⁵ Similarly, the General Plan does not designate the site as a mineral resource land use designation that allows for mineral extraction on the basis of the SMARA classification, or an area held in reserve for future mining activities.¹⁶ In addition, the MRZ-2 area within the project site may have been included as an available resource by the State Geologist, but it is not actually available because of the approved Specific Plan.¹⁷ As such, impacts would be less than significant.

Level of Significance

Less than significant impact.

3.12.6 - Cumulative Impacts

The geographic area for cumulative analysis for minerals would be the San Bernardino Production-Consumption Region. As population levels increase in the region, greater demand for aggregate and other mineral materials will be placed on mineral resources, especially sand and gravel. Similarly, development pressures in areas where these materials are known or expected to occur would result in the loss of availability of these mineral resources. The anticipated consumption of aggregate in the San Bernardino Production-Consumption Region from 2007 through the year 2057 is estimated to be

¹⁵ County of Riverside. 2015. County of Riverside Draft Program Environmental Impact Report No. 521. Public Review Draft. February. Website: https://planning.rctlma.org/Portals/14/genplan/general_plan_2015/DEIR%20521/DEIR%20No.%20521.pdf. Accessed November 24, 2021.

¹⁶ City of Jurupa Valley. 2017. Jurupa Valley General Plan. Website: <https://www.jurupavalley.org/DocumentCenter/View/217/2017-Master-General-Plan-PDF>. Accessed November 23, 2021.

¹⁷ California Department of Conservation, California Geological Survey. 2008. Update of Mineral Land Classification for Portland Cement Concrete-Grade Aggregate in The San Bernardino Production-Consumption Region, San Bernardino and Riverside Counties, California. Special Report 206.

1,131 million tons, of which 735 million tons must be PCC quality. There remains an estimated 5,986 million tons of unpermitted PCC-grade aggregate resources in the San Bernardino Production-Consumption Region.¹⁸

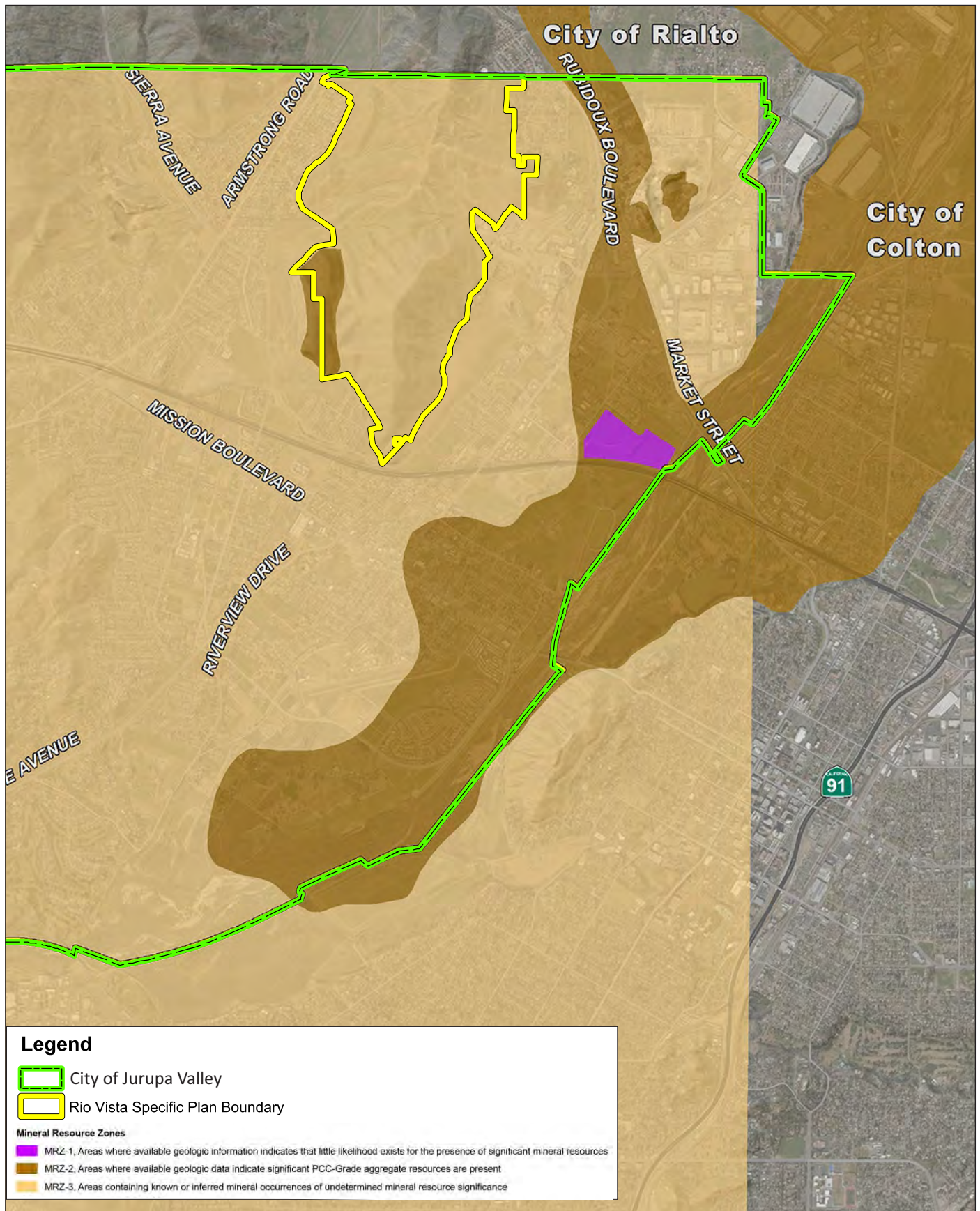
Mineral resource development within the San Bernardino Production-Consumption Region will be conducted in line with SMARA, which requires all cities and counties to incorporate into their General Plans the mapped designations approved by the State Mining Board. Both Riverside County's and the City's General Plan policies require future development to coordinate carefully between proposed mining and existing development, or between existing mining and proposed development. These programmatic goals, policies, and programs would ensure that the cumulative impacts between mining and development within the City would be less than significant.

The proposed project's contribution to less than significant cumulative impacts would not be cumulatively considerable because there are no available resources on the project site as discussed in greater detail above.

Level of Cumulative Significance

Less than significant impact.

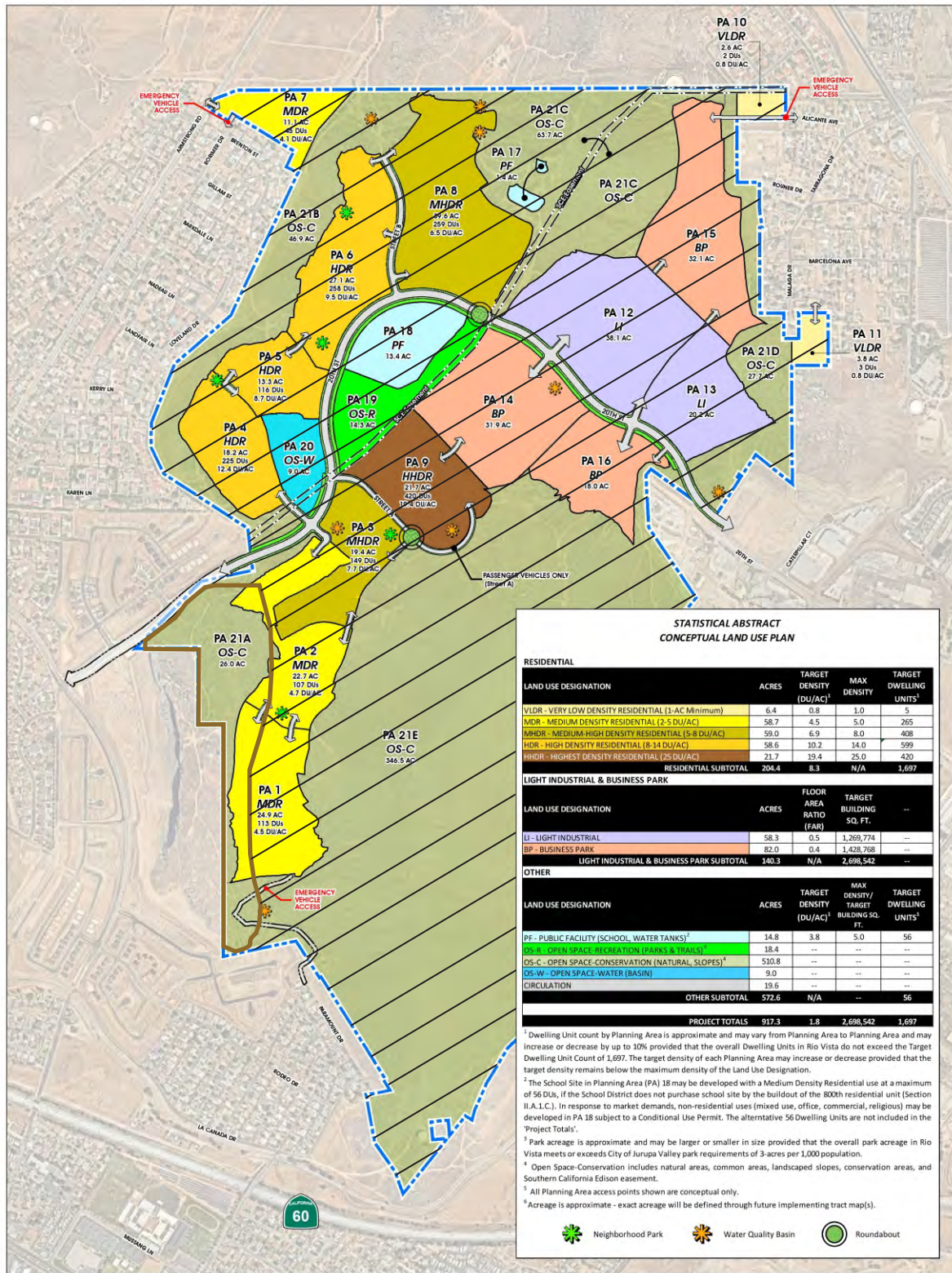
¹⁸ County of Riverside. 2015. County of Riverside Draft Program Environmental Impact Report No. 521. Public Review Draft. February. Website: https://planning.rctlma.org/Portals/14/genplan/general_plan_2015/DEIR%20521/DEIR%20No.%20521.pdf. Accessed November 24, 2021.



Source: LSA, City of Jurupa Valley 2017 General Plan, September 2017.



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Source(s): Nearmap Imagery (2020), RCTLMA (2020)
Composite: Hunsaker and Associates (07-22-2021)



Mineral Resource Zones

- MRZ-2, Areas where available geologic data indicate significant PCC-Grade aggregate resources are present
- MRZ-3, Areas containing known or inferred mineral occurrences of undetermined mineral resource significance

Source: t&b planning, August 5, 2021. LSA, City of Jurupa Valley 2017 General Plan, September 2017.

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Exhibit 3.12-2 Mineral Resource Zones and Conceptual Land Use Plan

CITY OF JURUPA VALLEY
RIO VISTA SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT

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3.13 - Noise

3.13.1 - Introduction

This section describes the existing noise setting and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on noise modeling performed by FirstCarbon Solutions (FCS). The noise modeling output is included in this Draft Environmental Impact Report (Draft EIR) as Appendix H.

A Notice of Preparation (NOP) was released for public review on December 6, 2021, and an EIR Scoping Meeting was held on December 14, 2021. No public comments were received during the scoping period related to noise.

3.13.2 - Environmental Setting

Characteristics of Noise

Noise is generally defined as unwanted or objectionable sound. Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm, or when it has adverse effects on health. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment. Noise effects can be caused by pitch or loudness. *Pitch* is the number of complete vibrations or cycles per second of a wave that result in the range of tone from high to low; higher-pitched sounds are louder to humans than lower-pitched sounds. *Loudness* is the intensity or amplitude of sound.

Sound is produced by the vibration of sound pressure waves in the air. Sound pressure levels are used to measure the intensity of sound and are described in terms of decibels. The decibel (dB) is a logarithmic unit, which expresses the ratio of the sound pressure level being measured to a standard reference level. The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Changes of 3 dB or less are only perceptible in laboratory environments. Audible increases in noise levels generally refer to a change of 3 dB or more, as this level has been found to be barely perceptible to the human ear in outdoor environments. Only audible changes in existing ambient or background noise levels are considered potentially significant.

The human ear is not equally sensitive to all frequencies within the audible sound spectrum, so sound pressure level measurements can be weighted to better represent frequency-based sensitivity of average healthy human hearing. One such specific “filtering” of sound is called “A-weighting.” A-weighted decibels (dBA) approximate the subjective response of the human ear to a broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies that are audible to the human ear. Because decibels are logarithmic units, they cannot be added or subtracted by ordinary arithmetic means. For example, if one noise source produces a noise level of 70 dB, the addition of another noise source with the same noise level would not produce 140 dB; rather, they would combine to produce a noise level of 73 dB.

Noise Descriptors

There are many ways to rate noise for various intervals, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level (L_{eq}) is the total sound energy of time-varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq} and community noise equivalent level (CNEL) or the day-night average level (L_{dn}) based on dBA. CNEL is the time-varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and a 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale but without the adjustment for events occurring during the evening hours. CNEL and L_{dn} are within one dBA of each other and are normally exchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours.

Other noise rating scales of importance when assessing the annoyance factor include the maximum noise level (L_{max}), which is the highest exponential time-averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis are specified in terms of maximum levels denoted by L_{max} for short-term noise impacts. L_{max} reflects peak operating conditions and addresses the annoying aspects of intermittent noise.

Noise Propagation

From the noise source to the receiver, noise changes both in level and frequency spectrum. The most obvious is the decrease in noise as the distance from the source increases. The manner in which noise reduces with distance depends on whether the source is a point or line source, as well as ground absorption, atmospheric conditions (wind, temperature gradients, and humidity) and refraction, and shielding by natural and manmade features. Sound from point sources, such as an air conditioning condenser, a piece of construction equipment, or an idling truck, radiates uniformly outward as it travels away from the source in a spherical pattern.

The attenuation or sound drop-off rate is dependent on the conditions of the land between the noise source and receiver. To account for this ground-effect attenuation (absorption), two types of site conditions are commonly used in noise models: soft-site and hard-site conditions. Soft-site conditions account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. For point sources, a drop-off rate of 7.5 dBA per each doubling of the distance (dBA/DD) is typically observed over soft ground with landscaping, as compared with a 6 dBA/DD drop-off rate over hard ground such as asphalt, concrete, stone, and very hard packed earth. For line sources, such as traffic noise on a roadway, a 4.5 dBA/DD is typically observed for soft-site conditions, compared to the 3 dBA/DD drop-off rate for hard-site conditions. Table 3.13-1 briefly defines these measurement descriptors and other sound terminology used in this section.

Table 3.13-1: Sound Terminology

Term	Definition
Sound	A vibratory disturbance created by a vibrating object which, when transmitted by pressure waves through a medium such as air, can be detected by a receiving mechanism such as the human ear or a microphone.
Noise	Sound that is loud, unpleasant, unexpected, or otherwise undesirable.
Ambient Noise	The composite of noise from all sources near and far in a given environment.
Decibel (dB)	A unitless measure of sound on a logarithmic scale, which represents the squared ratio of sound pressure amplitude to a reference sound pressure. The reference pressure is 20 micropascals, representing the threshold of human hearing (0 dB).
A-Weighted Decibel (dBA)	An overall frequency-weighted sound level that approximates the frequency response of the human ear.
Equivalent Noise Level (L_{eq})	The average sound energy occurring over a specified time period. In effect, L_{eq} is the steady-state sound level that in a stated period would contain the same acoustical energy as the time-varying sound that actually occurs during the same period.
Maximum and Minimum Noise Levels (L_{max} and L_{min})	The maximum or minimum instantaneous sound level measured during a measurement period.
Day-Night Level (DNL or L_{dn})	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring between 10 p.m. and 7 a.m. (nighttime).
Community Noise Equivalent Level (CNEL)	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added to the A-weighted sound levels occurring between 7 p.m. and 10 p.m. and 10 dB added to the A-weighted sound levels occurring between 10 p.m. and 7 a.m.
Source: Data compiled by FirstCarbon Solutions (FCS) 2022.	

Traffic Noise

The level of traffic noise depends on the three primary factors: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the number of trucks in the flow of traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and a greater number of trucks. Vehicle noise is a combination of the noise produced by the engine, exhaust, and tires. Because of the logarithmic nature of noise levels, a doubling of the traffic volume (assuming that the speed and truck mix do not change) results in a noise level increase of 3 dBA. Based on the Federal Highway

Administration (FHWA) community noise assessment criteria, this change is “barely perceptible”; for reference, a doubling of perceived noise levels would require an increase of approximately 10 dBA. The truck mix on a given roadway also has an effect on community noise levels. As the number of heavy trucks increases and becomes a larger percentage of the vehicle mix, adjacent noise levels increase.

Stationary Noise

A stationary noise producer is any entity in a fixed location that emits noise. Examples of stationary noise sources include machinery, engines, energy production, and other mechanical or powered equipment and activities such as loading and unloading or public assembly that may occur at commercial, industrial, manufacturing, or institutional facilities. Furthermore, while noise generated by the use of motor vehicles over public roads is preempted from local regulation, the use of these vehicles is considered a stationary noise source when operated on private property such as a construction site, a truck terminal, or warehousing facility. The emitted noise from the producer can be mitigated to acceptable levels either at the source or on the adjacent property through the use of proper planning, setbacks, block walls, acoustic-rated windows, or dense landscaping or by changing the location of the noise producer.

The effects of stationary noise depend on factors such as characteristics of the equipment and operations, distance and pathway between the generator and receptor, and weather. Stationary noise sources may be regulated at the point of manufacture (e.g., equipment or engines), with limitations on the hours of operation or with provision of intervening structures, barriers, or topography.

Construction activities are a common source of stationary noise. Construction-period noise levels are higher than background ambient noise levels but eventually cease once construction is complete. Construction is performed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on each construction site and, therefore, would change the noise levels as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 3.13-2 shows typical noise levels of construction equipment as measured at a distance of 50 feet from the operating equipment.

Table 3.13-2: Typical Construction Equipment Maximum Noise Levels

Type of Equipment	Impact Device? (Yes/No)	Specification Maximum Sound Levels for Analysis (dBA at 50 feet)
Impact Pile Driver	Yes	95
Auger Drill Rig	No	85
Vibratory Pile Driver	No	95
Jackhammers	Yes	85
Pneumatic Tools	No	85
Pumps	No	77

Type of Equipment	Impact Device? (Yes/No)	Specification Maximum Sound Levels for Analysis (dBA at 50 feet)
Scrapers	No	85
Cranes	No	85
Portable Generators	No	82
Rollers	No	85
Bulldozers	No	85
Tractors	No	84
Front-End Loaders	No	80
Backhoe	No	80
Excavators	No	85
Graders	No	85
Air Compressors	No	80
Dump Truck	No	84
Concrete Mixer Truck	No	85
Pickup Truck	No	55
Notes: dBA = A-weighted decibel Source: Federal Highway Administration (FHWA). 2006. Highway Construction Noise Handbook. August.		

Noise from Multiple Sources

Because sound pressure levels in decibels are based on a logarithmic scale, they cannot be added or subtracted in the usual arithmetical way. Therefore, sound pressure levels in decibels are logarithmically added on an energy summation basis. In other words, adding a new noise source to an existing noise source, both producing noise at the same level, will not double the noise level. Instead, if the difference between two noise sources is 10 dBA or more, the louder noise source will dominate and the resultant noise level will be equal to the noise level of the louder source. In general, if the difference between two noise sources is 0–1 dBA, the resultant noise level will be 3 dBA higher than the louder noise source, or both sources if they are equal. If the difference between two noise sources is 2–3 dBA, the resultant noise level will be 2 dBA above the louder noise source. If the difference between two noise sources is 4–10 dBA, the resultant noise level will be 1 dBA higher than the louder noise source.

Characteristics of Vibration

Groundborne vibration consists of rapidly fluctuating motion through a solid medium, specifically the ground, which has an average motion of zero and in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. The effects of groundborne vibration typically only causes a nuisance to people, but in extreme cases, excessive groundborne vibration has the potential to cause structural damage to buildings. Although groundborne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the

shaking of a building can be notable. Groundborne noise is an effect of groundborne vibration and only exists indoors, since it is produced from noise radiated from the motion of the walls and floors of a room, and may also consist of the rattling of windows or dishes on shelves.

Several different methods are used to quantify vibration amplitude, such as the maximum instantaneous peak in the vibrations velocity, which is known as the peak particle velocity (PPV) or the root mean square (rms) amplitude of the vibration velocity. Because of the typically small amplitudes of vibrations, vibration velocity is often expressed in decibels—denoted as LV—and is based on the reference quantity of 1 microinch per second. To distinguish vibration levels from noise levels, the unit is written as “VdB.”

Although groundborne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. When assessing annoyance from groundborne vibration, vibration is typically expressed as rms velocity in units of decibels of 1 microinch per second, with the unit written in VdB. Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. Human perception to vibration starts at levels as low as 67 VdB. Annoyance due to vibration in residential settings starts at approximately 70 VdB.

Existing Ambient Noise Levels

To understand the current ambient noise environment within the plan area and in the vicinity of the plan area, a total of five short-term noise measurements were taken in the general project vicinity. These measurements provide a baseline for any potential noise impacts that may be result from development of the plan area. The results of these measurements are described below, and the noise survey sheets are provided in Appendix H of this EIR.

Short-Term Noise Measurements

Short-term noise monitoring was conducted on March 3, 2022, between 1:23 p.m. and 4:28 p.m. The noise measurements were taken during the midday hours leading into evening as the midday hours typically have the highest daytime noise levels in urban environments. At the start of the noise monitoring, the sky was clear with average wind conditions ranging between 8 and 10 miles per hour (mph). The field survey noted that noise within the project area is generally characterized by local roadway traffic. The short-term measurement results are summarized in Table 3.13-3. The noise monitoring locations are shown in Exhibit 3.13-1.

Table 3.13-3: Existing Noise Level Measurements

Site ID No.	Description	L _{eq}	L _{min}	L _{max}
ST-1	Taken on 3/3/22 from 4:13 to 4:28	57.9	37.5	71
ST-2	Taken on 3/3/22 from 3:43 to 3:58	47.7	38.1	62.5
ST-3	Taken on 3/3/22 from 2:57 to 3:12	55.1	47.9	65.2
ST-4	Taken on 3/3/22 from 1:23 to 1:38	49.9	45.7	63

Site ID No.	Description	L _{eq}	L _{min}	L _{max}
ST-5	Taken on 3/3/22 from 2:09 to 2:24	39.9	35.4	49.4
Notes: L _{eq} = equivalent sound level L _{max} = maximum noise level L _{min} = minimum noise level The Site ID corresponds to locations shown in Exhibit 3.13-1. Source: FirstCarbon Solutions (FCS). 2022.				

3.13.3 - Regulatory Framework

Federal

The City relies upon the Federal Transit Administration’s (FTA) -established industry-accepted standards for groundborne vibration impact criteria and impact assessment. These guidelines are published in its Transit Noise and Vibration Impact Assessment document.¹ The FTA guidelines include thresholds for construction vibration impacts for various structural categories as shown in Table 3.13-4.

Table 3.13-4: Federal Transit Administration Construction Vibration Impact Criteria

Building Category	PPV (in/sec)	Approximate VdB
I. Reinforced-Concrete, Steel, or Timber (no plaster)	0.5	102
II. Engineered Concrete and Masonry (no plaster)	0.3	98
III. Non-engineered Timber and Masonry Buildings	0.2	94
IV. Buildings Extremely Susceptible to Vibration Damage	0.12	90
Notes: PPV = peak particle velocity VdB = velocity in decibels Source: Federal Transit Administration (FTA) 2006. Transit Noise and Vibration Impact Assessment.		

State

Government Code Section 65302 mandates that the legislative body of each county and city in California adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines published by the State Department of Health Services. These guidelines rank noise and land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable.

Local

City of Jurupa Valley General Plan 2017

The goal of the Jurupa Valley General Plan (General Plan) Noise Element is to actively minimize the effects of noise and vibrations on sensitive receptors. In the Noise Element, the City of Jurupa Valley

¹ Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment. September.

(City) describes how it intends to prevent and mitigate the adverse impacts of excessive noise exposure on its residents, employees, visitors, and other persons. To assist with meeting this goal, the City has adopted noise criteria for land use planning purposes, as shown in Table 3.13-5. These criteria set outdoor noise level standards that are normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable for a variety of land uses.

Table 3.13-5: Land Use Compatibility for Community Noise Exposure

Land Use Category	Community Noise Exposure DNL or CNEL, dB											
	55			60			65			70		
Residential—Low Density Single-family, Duplex, Mobile Homes												
Residential—Multi-family												
Transient Lodging—Motels, Hotels												
Schools, Libraries, Churches, Hospitals, Nursing Homes												
Auditoriums, Concert Halls, Amphitheaters												
Sports Arenas, Outdoor Spectator Sports												

Land Use Category		Community Noise Exposure DNL or CNEL, dB												
		55		60		65		70		75		80		
Playgrounds, Neighborhood Parks														
Golf Courses, Riding Stables, Water Recreation, Cemeteries														
Office Buildings, Business Commercial and Professional														
Industrial, Manufacturing, Utilities, Agriculture														
	Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special insulation requirements.													
	Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design.													
	Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.													
	Clearly Unacceptable: New construction or development clearly should not be undertaken.													

Source: City of Jurupa Valley. 2017. City of Jurupa Valley General Plan. January.

In addition, the following policies from the General Plan are applicable to the proposed project:

- NE 1.1** Utilize the Land Use/Noise Compatibility Matrix, Figure 7-3 [Table 3.13-5], to determine the compatibility of proposed development, including General Plan amendments, Specific Plan amendments, town center plans, and rezonings, with existing land uses and/or noise exposure due to transportation sources.

- NE 1.3** Noise created by new stationary noise sources, or by existing stationary noise sources that undergo modifications that may increase noise levels, shall be mitigated so as not exceed the noise level standards of Figure 7-3 [Table 3.13-5]. This policy does not apply to noise levels associated with agricultural operations existing in 2017.
- NE 1.4** Require an acoustical assessment for proposed General Plan amendments and rezones that exceed the “Normally Acceptable” thresholds of the Land Use/Noise Compatibility Matrix.
- NE 1.5** Consider the following uses noise-sensitive and discourage these uses in areas in excess of 65 CNEL: schools, hospitals, assisted living facilities, mental care facilities, residential uses, libraries, passive recreational uses, and places of worship.
- NE 1.6** Protect noise-sensitive land uses from high levels of noise by restricting noise-producing land uses from these areas. If the noise-producing land uses cannot be relocated, then measures such as building techniques, setbacks, landscaping, and noise walls should be considered.
- NE 2.1** Include noise mitigation measures in the design and construction of new roadway projects in the City. Noise mitigation may include speed reduction, roadway design, noise-reducing materials or surfaces, edge treatments and parkways.
- NE 2.2** Require commercial or industrial truck delivery hours be limited to least sensitive times of the day when adjacent to noise-sensitive land uses, unless there is no feasible alternative or there are overriding transportation benefits, as determined by the Planning Director.
- NE 2.3** Restrict the use of motorized trail bikes, mini-bikes, and other off-road vehicles except where designated for that purpose. Enforce strict operating hours for these vehicles where they are located to minimize noise impacts on sensitive land uses adjacent to public trails and parks.
- NE 3.1** Require that a noise analysis be conducted by an acoustical specialist for all proposed development projects that have the potential to generate significant noise near a noise-sensitive land use, or on or near land designated for noise-sensitive land uses and ensure that recommended mitigation measures are implemented.
- NE 3.3** Require that the loading, shipping, or parking facilities of commercial and industrial land uses that about or are within 200 feet of residential parcels, be located and designed to minimize potential noise impacts upon residents. Overnight commercial truck parking areas shall be regulated in the Zoning Ordinance as a commercial use.

- NE 3.4** Require that all construction equipment utilize noise reduction features (i.e., mufflers and engine shrouds) that are at least as effective as those originally installed by the equipment’s manufacturer.
- NE 3.5** Commercial construction activities adjacent to or within 200 feet of residential uses to weekdays, between 7:00 a.m. and 6:00 p.m., and limit high noise-generating construction activities (e.g., grading, demolition, pile driving) near sensitive receptors
- NE 4.3** Restrict truck idling near sensitive vibration receptors.

City of Jurupa Valley Municipal Code

Municipal Code Chapter 11.05–Intent states

“This chapter is not intended to establish thresholds of significance for the purpose of any analysis required by the California Environmental Quality Act (Pub. Resources Code Section 21000 et seq.) and no such thresholds are established.”²

Based on Guidelines for the Implementation of the California Environmental Quality Act (CEQA), Appendix G, Public Resource Code Sections 15000–15387, a project will normally have a significant effect on the environment related to noise if it will substantially increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and the goals of the community in which it is located. Under CEQA, consideration must be given to the magnitude of the increase, the existing ambient noise levels, and the location of noise-sensitive receivers to determine whether a noise increase represents a significant adverse environmental impact. According to the City, a noticeable increase of 3 dBA or more than City standards is considered a significant impact.

3.13.4 - Methodology

Construction Noise Analysis Methodology

A worst-case scenario was analyzed assuming each piece of modeled equipment would operate simultaneously at the nearest reasonable locations to the closest noise-sensitive receptor for the loudest phase of construction. Noise emission levels recommended by FHWA’s Highway Construction Noise Handbook were used to ascertain the noise generated by specific types of construction equipment. The construction noise impact was evaluated in terms of L_{max} . Analysis requirements were based on the sensitivity of nearby receptors and the Noise Ordinance specifications.

Traffic Noise Modeling Methodology

The FHWA highway traffic noise prediction model (FHWA-RD-77-108) was used to evaluate traffic-related noise conditions in the vicinity of the project site. Traffic data used in the model was obtained from the Traffic Impact Analysis (TIA) prepared for the project (Appendix H).³ The resultant noise levels were weighed and summed over a 24-hour period in order to determine the CNEL

² City of Jurupa Valley. Jurupa Valley Municipal Code Chapter 11.05 Noise Regulations. Website: https://library.municode.com/ca/jurupa_valley/codes/municipal_code?nodeId=TIT11PEMOSA_CH11.05NORE_S11.05.010IN#:~:text=No%20person%20shall%20create%20any,set%20forth%20in%20Section%2011.05. Accessed September 21, 2022.

³ Environmental Planning Development Solutions, Inc. 2023. Rio Vista Specific Plan Traffic Impact Analysis. February 15.

values. The FHWA-RD-77-108 Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level. Adjustments are then made to the reference energy mean emission level to account for the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway); the total average daily traffic (ADT) and the percentage of ADT that flows during the day, evening, and night; the travel speed; the vehicle mix on the roadway; a percentage of the volume of automobiles, medium trucks, and heavy trucks; the roadway grade; the angle of view of the observer exposed to the roadway; and the site conditions (“hard” or “soft”) as they relate to the absorption of the ground, pavement, or landscaping. The ADT used in the noise model is calculated using the standard method of summing the PM peak-hour turning volumes for each modeled roadway segment and then multiplying by a factor of 10.

The level of traffic noise depends on the three primary factors: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the number of trucks in the flow of traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and a greater number of trucks. Vehicle noise is a combination of the noise produced by the engine, exhaust, and tires. Because of the logarithmic nature of traffic noise levels, a doubling of the traffic volume (assuming that the speed and truck mix do not change) results in a noise level increase of 3 dBA. Based on the FHWA community noise assessment criteria, this change is “barely perceptible.” For reference, a doubling of perceived noise levels would require an increase of approximately 10 dBA. The truck mix on a given roadway also has an effect on community noise levels. As the number of heavy trucks increases and becomes a larger percentage of the vehicle mix, adjacent noise levels increase.

The model analyzed the project-related traffic noise impacts along roadways in the project vicinity, which consists of the area that has the potential of being impacted from the on-site noise sources as well as the project-generated traffic on the nearby roadways. The roadways were analyzed based on a single-lane-equivalent noise source combining both directions of travel. A single-lane-equivalent noise source exists when the vehicular traffic from all lanes is combined into a theoretical single lane that has a width equal to the distance between the two outside lanes of a roadway, which provides almost identical results to analyzing each lane separately where elevation changes are minimal.

Stationary Noise Source Analysis Methodology

The proposed project would generate noise from future development that could contain new exterior mechanical equipment sources, such as rooftop ventilation systems on proposed industrial uses and potential new parking lot activities. To provide a conservative analysis, the highest end of the range of reference noise levels for these stationary noise sources was used to calculate the reasonable worst-case hourly average noise levels from each noise source. These noise levels were then compared to the City’s applicable noise performance threshold to determine whether these noise sources would result in a substantial increase in excess of this standard.

Vibration Impact Analysis Methodology

The City has adopted criteria for construction or operational groundborne vibration impacts based on the FTA’s vibration impact criteria and modeling and analysis methodology were utilized to

evaluate potential vibration impacts. The FTA has established industry-accepted standards for vibration impact criteria and impact assessment. These guidelines are published in its Transit Noise and Vibration Impact Assessment document.⁴

3.13.5 - Thresholds of Significance

Significance Criteria

In accordance with Section 15064.7 of the State CEQA Guidelines, the City of Jurupa Valley adopted local CEQA Guidelines. The City's local CEQA Guidelines are based, in part, on the CEQA checklist included in Appendix G of the State CEQA Guidelines. The City of Jurupa Valley Guidelines recognizes the following Significance Criteria related to noise. Based on these significance criteria, a project would have a significant impact on noise if it would:

- a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Under the City's local significance threshold, the project would have a significant impact if:

Construction:

- 1) The project is inconsistent with General Plan Policy NE 3.5: Construction Noise. Limit commercial construction activities adjacent to or within 200 feet of residential uses to weekdays, between 7:00 a.m. and 6:00 p.m., and limit high-noise-generating construction activities (e.g., grading, demolition, pile driving) near sensitive receptors to weekdays between 9:00 a.m. and 3:00 p.m.; and
- 2) Construction noise levels exceed the levels identified in the latest version of the Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual.

Operational Noise (Stationary):

The project may have a significant impact if:

- 3) The project is inconsistent with General Plan Policy NE 1.3 New or modified Stationary Noise Sources. Noise created by new stationary noise sources, or by existing stationary noise sources that undergo modifications that may increase noise levels, shall be mitigated so as not exceed the noise level standards of General Plan Figure 7-3. This policy does not apply to noise levels associated with agricultural operations existing in 2017. If the existing ambient noise levels in the project vicinity (as described in a noise study approved by the City), exceed the noise levels in General Plan Figure 7-3, the impact is significant and require mitigation.

Operational Noise (Transportation):

- 4) A project may have a significant impact if traffic generated by the project would result in a noticeable increase in roadway noise in areas where exterior noise is already in excess

⁴ Federal Transit Administration (FTA). 2006. Transit Noise and Vibration Impact Assessment. May.

of City standards. A noticeable increase in roadway noise would occur in traffic noise increased by 3 dBA or more.

b) Generation of excessive groundborne vibration or groundborne noise levels.

Under the City's local significance threshold, the project would have significant effects if it: Creates construction or operational vibration in excess of 0.20 PPV inch/second adjacent to or within one-quarter mile of sensitive receptors.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

Under the City's local significance threshold, the project would have significant effects if: The project may have significant impact if it generates aircraft noise that exposes people residing or working in the vicinity of a private airstrip or within the Flabob Airport or Riverside Municipal Airport Land Use Compatibility Plan to noise levels in excess of the noise standards of said plans.

The City's noise significance criteria are based on the General Plan Noise Element as shown in Table 4.11-5, General Plan Consistency Analysis (see Section 3.10, Land Use and Planning), and are summarized in Table 3.13-6 below.

Table 3.13-6: Summary of the City's Noise Significance Criteria

Analysis	ReceivingLand Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
Off-Site	Noise-Sensitive	If ambient is < 65 dBA CNEL ¹	Project plus ambient > 65 dBA CNEL and a ≥ 3 dBA CNEL Project increase ²	
	Non-Noise-Sensitive	If ambient is < 70 dBA CNEL ¹	Project plus ambient > 70 dBA CNEL and a ≥ 3 dBA CNEL Project increase ²	
Operational	Noise-Sensitive	Exterior Noise Level Standards ²	65 dBA Leq	45 dBA Leq
		1 If ambient is > 65 dBA Leq	≥ 3 dBA Leq Project increase ²	
		Vibration Level Threshold ²	0.2 in/sec PPV	
Construction	Noise-Sensitive	Limit construction activities adjacent to or within 200 feet of residential uses to weekdays, between 7:00 a.m. and 6:00 p.m., and limit high-noise-generating construction activities (e.g., grading, demolition, pile driving) near sensitive receptors to weekdays between 9:00 a.m. and 3:00 p.m. ³		
		Noise Level Threshold ⁴	80 dBA Leq	70 dBA Leq
		Vibration Level Threshold ²	0.2 in/sec PPV	

Analysis	ReceivingLand Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
<p>Note:</p> <p>¹ City of Jurupa Valley General Plan Noise Element Policy NE 1.5 and Figure 7-3 <i>normally acceptable</i> noise exposure.</p> <p>² City of Jurupa Valley noise-related CEQA thresholds guidance for noise-sensitive receivers (Appendix 4.1).</p> <p>³ City of Jurupa Valley General Plan Policy N.3-5 .</p> <p>⁴ Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual.</p> <p>Daytime = 7:00 a.m. to 10:00 p.m.</p> <p>Nighttime = 10:00 p.m. to 7:00 a.m.</p> <p>PPV = Peak Particle Velocity</p>				

3.13.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Noise Level Increases in Excess of Standards

Threshold NOI-1: Would the proposed project expose persons to or generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Under the City's local significance threshold, the project would have a significant impact if:

Construction:

- 1) The project is inconsistent with General Plan Policy NE 3.5: Construction Noise. Limit commercial construction activities adjacent to or within 200 feet of residential uses to weekdays, between 7:00 a.m. and 6:00 p.m., and limit high-noise-generating construction activities (e.g., grading, demolition, pile driving) near sensitive receptors to weekdays between 9:00 a.m. and 3:00 p.m.; and
- 2) Construction noise levels exceed the levels identified in the latest version of the Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual.

Operational Noise (Stationary):

The project may have a significant impact if:

- 3) The project is inconsistent with General Plan Policy NE 1.3 New or modified Stationary Noise Sources. Noise created by new stationary noise sources, or by existing stationary noise sources that undergo modifications that may increase noise levels, shall be mitigated so as not exceed the noise level standards of General Plan Figure 7-3. This policy does not apply to noise levels associated with agricultural operations existing in 2017. If the existing ambient noise levels in the project vicinity (as described in a noise study approved by the City), exceed the noise levels in General Plan Figure 7-3, the impact is significant and require mitigation.

Operational Noise (Transportation):

- 4) A project may have a significant impact if traffic generated by the project would result in a noticeable increase in roadway noise in areas where exterior noise is already in excess of City standards. A noticeable increase in roadway noise would occur in traffic noise increased by 3 dBA or more.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)*Plans, Policies, and Programs*

These include existing regulatory requirements such as plans, policies, or programs applied to the project based on federal, State, or local law currently in place which effectively reduce impacts to noise.

The following PPPs apply to the proposed project and would reduce impacts related to noise:

- PPP 3.13-1** As required by General Plan Policy NE 3.4 Construction Equipment, all construction equipment shall utilize noise reduction features (i.e., mufflers and engine shrouds) that are at least as effective as those originally installed by the equipment's manufacturer.
- PPP 3.13-2** As required by General Plan Policy NE 3.5 *Construction Noise*, limit commercial construction activities within 200 feet of residential uses to weekdays, between 7:00 a.m. and 6:00 p.m., and limit high noise-generating construction activities between 9:00 a.m. and 3:00 p.m.

Project Design Features

There are no PDFs applicable to the project related to the topic of noise.

Impact Analysis*Short-term Construction Noise Impacts*

Based on the City's significance criteria, construction noise would result in a significant impact if the project would be inconsistent with General Plan Policy NE 3.5: Construction Noise, and construction noise levels exceed the levels identified in the latest version of the Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual. Both conditions would need to be met to identify a potentially significant impact under the City's thresholds.

As stated in PPP 3.13-1 above, the proposed project must comply with General Plan Policy NE 3.4 Construction Equipment, which requires all construction equipment to utilize noise reduction features (i.e., mufflers and engine shrouds) that are at least as effective as those originally installed by the equipment's manufacturer. Furthermore, as stated in PPP 3.13-2 above, the proposed project must comply with General Plan Policy NE 3.5, Construction Noise, which limits commercial construction activities within 200 feet of residential uses to weekdays, between 7:00 a.m. and 6:00 p.m., and limits high noise-generating construction activities to between 9:00 a.m. and 3:00 p.m. To ensure compliance with these requirements, MM NOI-1a requires the construction contractor to

designate a “disturbance coordinator” who would be responsible for responding to any complaints about construction noise. The disturbance coordinator would be responsible for responding to complaints and for identifying measures to correct any problem.

Development of the proposed project is expected to result in construction activities within the planned area. Noise impacts from construction activities associated with the proposed project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities.

For future development projects, two types of short-term noise impacts would occur during site preparation and project construction. The first type would result from the increase in traffic flow on local streets, associated with the transport of workers, equipment, and materials to and from the project site. The transport of workers and construction equipment and materials to a development site would incrementally increase noise levels on access roads leading to the site. Typically, a doubling of the ADT hourly volumes on a roadway segment is required in order to result in an increase of 3 dBA in traffic noise levels, which, as discussed in the characteristics of noise discussion above, is the lowest change that can be perceptible to the human ear in outdoor environments. Individual development project’s construction trips would not be expected to double the hourly or daily traffic volumes along roadway segments in the vicinity of a development site. For this reason, short-term intermittent noise from construction trips would not be expected to result in a perceptible increase in hourly or daily average traffic noise levels. Therefore, short-term construction-related noise impacts associated with the transportation of workers and equipment to a development site would be less than significant.

For future development projects, the second type of short-term noise impact is related to noise generated during site preparation, grading, and construction activities. Construction is performed in discrete steps, each of which has its own mix of equipment, and consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on-site. Thus, the noise levels vary as construction progresses. Despite the variety in the types and sizes of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction noise ranges to be categorized by work phase. Table 3.13-2 shows typical noise levels of construction equipment as measured at a distance of 50 feet from the operating equipment.

The site preparation phase, which includes excavation and grading activities, generates the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery and compacting equipment, such as bulldozers, draglines, backhoes, front loaders, roller compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 or 4 minutes at lower power settings. Operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 or 4 minutes at lower power settings.

Development projects that could occur with implementation of the of the proposed project would be expected to require the use of scrapers, bulldozers, water trucks, haul trucks, and pickup trucks. Based on the information provided in Table 3.13-2 above, the maximum noise level generated by

each scraper is assumed to be 85 dBA L_{\max} at 50 feet from this equipment. Each bulldozer would generate 85 dBA L_{\max} at 50 feet. The maximum noise level generated by graders is approximately 85 dBA L_{\max} at 50 feet. Each doubling of sound sources with equal strength increases the noise level by 3 dBA. Assuming that each piece of construction equipment operates at some distance from the other equipment, a reasonable worst-case combined noise level during this phase of construction would be 90 dBA L_{\max} at a distance of 50 feet from the acoustical center of a construction area. This would result in a reasonable worst-case hourly average of 86 dBA L_{eq} . The acoustical center reference is used because construction equipment must operate at some distance from one another on a project site and the combined noise level as measured at a point equidistant from multiple sources operating simultaneously would represent the worst-case noise levels.

These reasonable worst-case construction noise levels would only occur during the site preparation phase of development. Such noise levels would attenuate at a rate of 6 dBA for every doubling of the distance from the operating equipment.

There are no site-specific development plans for the proposed project; however, project development within the project site could result in a relatively high single-event noise exposure potential, causing a substantial temporary increase that could exceed the City's significance criteria.

Therefore, mitigation is required to reduce this potential impact. Implementation of mitigation limiting construction hours would ensure commercial construction activities would not occur outside the City's time periods for these activities. In addition, implementation of best management noise reduction measures and requiring implementation of temporary sound barriers with Sound Transmission Class (STC) of 35 or greater would ensure construction activities would also not exceed the FTA's threshold of 90 dBA L_{eq} as measured at residential receptors, or 100 dBA L_{eq} as measured at commercial or industrial land use receptors. Therefore, with implementation of MM NOI-1a, the potential short-term construction noise impacts to noise-sensitive receptors in the project vicinity would be reduced to a less than significant level.

Traffic Operational Noise Impacts

Based on the City's significance criteria, project traffic noise would result in a significant impact if traffic generated by the project would result in a noticeable increase in roadway noise in areas where exterior noise is already in excess of City standards. A noticeable increase in roadway noise would occur if traffic noise increased by 3 dBA or more.

The FHWA highway traffic noise prediction model (FHWA-RD-77-108) was used to evaluate existing and future project-related traffic noise conditions along modeled roadway segments in the vicinity of the project site. Traffic modeling was performed using the data obtained from the project-specific traffic impact study conducted by Environmental Planning Development (EPD) Solutions in 2023. The resultant noise levels were weighed and summed over a 24-hour period to determine the CNEL values. The traffic noise modeling input and output files—including the 60 dBA, 65 dBA, and 70 dBA CNEL noise contour distances—are included in Appendix H. Table 3.13-7: shows a summary of the traffic noise levels for existing and General Plan Buildout conditions without and with the proposed project, as measured at 50 feet from the centerline of the outermost travel lane. The identified roadway

segments were chosen to be modeled since they are the segments in the proposed project vicinity that would carry the highest percentages of the proposed project traffic volumes. These traffic scenarios are defined in the traffic impact study prepared for the proposed project by EPD Solutions, Inc.⁵

Table 3.13-7: Without and With Project Modeled Roadway Noise Levels

Roadway Segment	CNEL (dBA) 50 feet from Centerline of Outermost Lane					
	Existing	Existing Plus Specific Plan (dBA)	Increase over Existing No Project (dBA)	General Plan Buildout	General Plan Buildout plus Specific Plan	Increase over General Plan Buildout No Project (dBA)
Armstrong Road—SR-60 to 30 th Street	70.0	71.0	1.0	71.7	72.4	0.7
Armstrong Road—30 th Street to Sierra Avenue	70.0	71.0	1.0	71.5	72.2	0.7
Sierra Avenue—Armstrong Road to 20 th Street	58.2	65.8	7.6	65.2	68.1	2.9
20 th Street—north of Sierra Avenue	53.1	66.0	12.9	53.6	66.0	12.4
Market Street—Via Cerro to Agua Mansa Road	65.5	67.5	2.0	68.4	69.5	1.1
Market Street—Agua Mansa Road to Rubidoux Boulevard	66.4	67.8	1.4	68.5	69.5	1.0
20 th Street—Rubidoux Boulevard to Caterpillar Court	59.4	68.0	8.6	61.8	68.4	6.6
Notes: CNEL = Community Noise Equivalent Level dBA = A-weighted decibel Modeling results do not take into account mitigating features such as topography, vegetative screening, fencing, building design, or structure screening. Rather, they assume a worst-case scenario of having a direct line of site on flat terrain. Source: FirstCarbon Solutions. 2022.						

As shown in Table 3.13-7, the highest traffic noise level increase with implementation of the proposed project would occur along 20th Street, along the segment north of Sierra Avenue, under Existing Plus Specific Plan conditions. The modeling results show that the resulting traffic noise levels would range up to 66.0 dBA L_{dn} as measured at 50 feet from the centerline of the outermost travel lane along this roadway segment. There are existing residences along this roadway segment, located approximately 150 feet from the roadway centerline, with an existing 6-foot-high sound wall along the entire property line facing the roadway. At this distance and with minimal shielding assumed by the sound wall, these noise levels would attenuate to below 59 dBA L_{dn}. These noise levels are below the City's normally acceptable land use compatibility standard of 60 dB L_{dn} for residential land uses.

⁵ EPD Solutions, Inc. 2023. Rio Vista Specific Plan Traffic Impact Analysis. February 15.

Therefore, traffic noise levels would not exceed the City's standards as measured at adjacent land uses, and this impact would be less than significant.

As shown in Table 3.13-7, the second highest traffic noise level increase with implementation of the proposed project would occur along 20th Street, along the segment from Rubidoux Boulevard to Caterpillar Court, under Existing Plus Specific Plan conditions. The modeling results show that the resulting traffic noise levels would range up to 68.4 dBA L_{dn} , as measured at 50 feet from the centerline of the outermost travel lane along this roadway segment, under Cumulative Plus Project conditions. Adjacent land uses along this roadway segment are industrial land uses. These noise levels are below the City's normally acceptable land use compatibility standard of 70 dB L_{dn} for industrial land uses. Therefore, traffic noise levels would not exceed the City's standards as measured at adjacent land uses, and this impact would be less than significant.

The third highest traffic noise level increase with implementation of the proposed project would occur along Sierra Avenue, along the segment from Armstrong Road to 20th Street, under Existing Plus Specific Plan conditions. The modeling results show that the resulting traffic noise levels would range up to 68.1 dBA L_{dn} as measured at 50 feet from the centerline of the outermost travel lane along this roadway segment. The nearest existing residences along this roadway segment are located approximately 60 feet from the roadway centerline, with an existing 6-foot-high sound wall along the entire property line adjacent to the roadway. At this distance and with minimal shielding assumed by the sound wall, these noise levels would attenuate to below 60 dBA L_{dn} , as measured at the residential receptors along this roadway segment. These noise levels are within the City's normally acceptable land use compatibility standard of 60 dB L_{dn} for residential land uses. Therefore, traffic noise levels would not exceed the City's standards as measured at adjacent land uses, and this impact would be less than significant.

As shown in Table 3.13-7, all other modeled roadway segments would experience less than a 3 dBA increase in traffic noise levels compared to traffic noise levels existing without the proposed project. Therefore, proposed project-related traffic would not result in a substantial permanent increase in noise levels along any of these modeled roadway segments.

Since no modeled roadway segment would result in an increase of 3 dBA or greater where traffic noise levels already exceed the City's standards, then project traffic noise impacts would be less than significant and no mitigation would be needed.

Stationary Source Operational Noise Impacts

Based on the City's significance criteria, project operational noise would result in a significant impact if the project would be inconsistent with General Plan Policy NE 1.3 New or Modified Stationary Noise Sources. Noise created by new stationary noise sources, or by existing stationary noise sources that undergo modifications that may increase noise levels, shall be mitigated so as to not exceed the noise level standards of General Plan Figure 7-3 (Table 3.13-5 above). If the existing ambient noise levels in the project vicinity (as described in a noise study approved by the City), exceed the noise levels in General Plan Figure 7-3, then any project-related increase would be significant and require mitigation.

Development projects that could occur with implementation of the proposed project would include new stationary noise sources, such as parking lot activities and mechanical ventilation system equipment. These would be potential point sources of noise that could affect noise-sensitive receptors in the project vicinity.

Parking Lot Activity Noise Impacts

Parking activities include vehicles cruising at slow speeds, doors shutting, or cars starting and would generate noise levels of approximately 60 dBA to 70 dBA L_{max} at 50 feet.⁶ Conversation between two persons at 3 to 5 feet apart would generate a noise level of 60 dBA L_{eq} at 5 feet, or approximately 40 dBA L_{eq} as measured at 50 feet.

These stationary source operational noise levels could exceed the City's thresholds if they were to occur in areas adjacent to sensitive receptor land uses. Therefore, mitigation would be required to reduce this potential impact. Parking activity noise can be mitigated either at the source or at the receiving land use using setbacks, block walls, acoustic-rated windows, or by siting parking areas on sides of buildings opposite sensitive receptors (using buildings as shielding). For example, at a distance of 300 feet, unobstructed parking lot activity noise levels would attenuate to below 55 dBA L_{max} , while properly sited structural (building or sound wall) shielding can provide a minimum of 15 dBA reduction.

Therefore, with implementation of MM NOI-1b, which requires preparation of a noise study that identifies the project's design measures which would ensure that these potential parking lot noise level impacts generated by future development projects would be reduced to a less than significant impact.

Truck Loading Activity Noise Impacts

Noise would be also generated by truck loading and unloading activities at the loading docks along future planned commercial land uses. Based on noise measurement data collected over the years, documented typical noise levels from truck loading and unloading activity range from 70 dBA to 80 dBA L_{max} as measured at 50 feet.⁷ These maximum noise level range includes noise from associated truck loading/unloading activity, including trucks maneuvering, truck trailer loading, truck trailer unloading, backup alarms or beepers, and truck docking noise.

These stationary source operational noise levels could exceed the City's thresholds if they were to occur in areas adjacent to sensitive receptor land uses. Therefore, mitigation would be required to reduce this potential impact. Truck loading activity noises can be mitigated either at the source or at the receiving land use using setbacks, block walls, or by siting truck loading areas on sides of buildings opposite sensitive receptors (using buildings as shielding). For example, at a distance of 300-feet, unobstructed truck loading activity noise levels would attenuate to below 55 dBA L_{max} , while properly sited structural (building or sound wall) shielding can provide a minimum of 15 dBA reduction.

⁶ Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. September.

⁷ City of Jurupa Valley. 2016. City of Jurupa Valley 2017 General Plan Draft Environmental Impact Report, SCH #016021025. December 22.

Therefore, with implementation of MM NOI-1b, which requires preparation of a noise reduction plan that identifies the project's design measures, noise levels from truck loading and unloading activities generated by future development projects would be reduced to less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM NOI-1a Construction Noise Mitigation Plan

Prior to issuance of grading and/or building permits, a note shall be provided on grading and building plans indicating that, during grading and construction, the property owner/developer shall be responsible for requiring contractors to implement the following measures to limit construction-related noise:

- The construction contractor shall limit commercial construction activities adjacent to or within 200 feet of residential uses to weekdays, between 7:00 a.m. and 6:00 p.m., and limit high-noise-generating construction activities (e.g., grading, demolition, pile driving) near sensitive receptors to weekdays between 9:00 a.m. and 3:00 p.m.
- The construction contractor shall ensure that all internal combustion engine-driven equipment is equipped with mufflers that are in good condition and appropriate for the equipment.
- The construction contractor shall locate stationary noise-generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area. In addition, the project contractor shall place such stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site.
- The construction contractor shall prohibit unnecessary idling (no more than 5 minutes) of internal combustion engines.
- The construction contractor shall, to the maximum extent practical, locate on-site equipment staging areas to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.
- For construction activity within 50 feet of any noise-sensitive receptors, a temporary noise barrier shall be installed by the applicant/developer. This temporary noise barrier shall be installed prior to the onset of construction activities that would require the use of heavy construction equipment. The barrier shall be located between the construction zone and all adjacent sensitive receptor land uses. The temporary sound barrier shall provide a reduction in noise that shall meet the City's construction noise threshold of 55 dBA L_{\max} as measured at the façade of the sensitive receptor land uses. The noise barrier shall be a minimum height of 8 feet and be free of gaps and holes and must achieve a Sound

Transmission Class (STC) of 35 or greater. The barrier can be either (a) a 0.75-inch-thick plywood wall or (b) a hanging blanket/curtain with a surface density of at least 2 pounds per square foot. For either configuration, the construction side of the barrier shall have an exterior lining of sound absorption material with a Noise Reduction Coefficient (NRC) rating of 0.7 or higher.

- The construction contractor shall designate a “disturbance coordinator” who would be responsible for responding to any complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., a bad muffler) and shall require that measures be implemented to correct the problem.
- These measures may only be granted an exception if an application for construction-related exception is made to and considered by the Building Official of the City in accordance with Section 11.05.070 of the Municipal Code.

MM NOI-1b Stationary Source Operational Noise Reduction Plan

Prior to issuance of building permits, the property owner/developer shall be responsible to implement the following measures to limit on-site operational stationary noise source impacts:

- Any proposed large scale, mixed-use, or master-planned developments shall demonstrate compliance with Noise Policy NE 1.9 and NE 1.10 of the City’s Noise Element by incorporating acoustic site planning to the satisfaction of the Planning Director that minimizes potential noise impacts to adjacent land uses to meet the City’s standards shown in General Plan Figure 7-3. In addition, in compliance with Noise Policy NE 3.1 of the City’s Noise Element, such projects shall submit an Operational Noise Reduction Plan to the Planning Director for review and approval. The plan shall identify specific techniques and measures to reduce on-site stationary operational noise to ensure compliance with the noise performance standards of Section 11.05.040 of the Municipal Code. Noise reduction design features may include, but are not limited to, locating stationary noise sources on the site to be shielded by structures (buildings, enclosures, or sound walls) or by using equipment that has a quieter noise rating.
- Any future commercial or industrial development projects that would include stationary noise sources, such as loading, shipping, or parking facilities within 200 feet of a residential parcel, shall demonstrate compliance with Noise Policy NE 3.3 of the City’s Noise Element and shall submit an Operational Noise Reduction Plan to the Planning Director for review and approval. The plan shall identify specific techniques and measures to reduce on-site stationary operational noise to ensure compliance with the noise performance standards of Section 11.05.040 of the Municipal Code. Noise reduction design features may include, but are not limited to, locating stationary noise sources on the site to be shielded by structures (buildings, enclosures, or sound walls).

Level of Significance After Mitigation

Less than significant impact.

Groundborne Vibration Impacts

Threshold NOI-2: Would the proposed project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Under the City's local significance threshold, the project would have significant effects if it: Creates construction or operational vibration in excess of 0.20 PPV inch/second adjacent to or within one-quarter mile of sensitive receptors.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)*Plans, Policies, and Programs*

There are no PPPs applicable to the proposed project related to groundborne vibration impacts.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of noise.

Impact Analysis

Based on the City's significance criteria, the project would result in a significant groundborne vibration impact if it would create construction or operational vibration in excess of 0.20 PPV inch/second adjacent to or within one-quarter mile of sensitive receptors.

Off-site sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible groundborne noise or vibration. Construction activities, such as blasting, pile driving, and operating heavy earthmoving equipment, are common sources of groundborne vibration. Construction vibration impacts on building structures are generally assessed in terms of PPV.

This section analyzes both construction and operational groundborne vibration impacts.

Short-term Construction Vibration Impacts to Off-site Receptors

Construction activity can result in varying degrees of ground vibration, depending on the equipment used on the site. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings in the vicinity of a construction site respond to these vibrations with varying results ranging from no perceptible effects at the low levels to slight damage at the highest levels. Table 3.13-8 provides approximate vibration levels for particular construction activities.

Table 3.13-8: Vibration Levels of Construction Equipment

Construction Equipment	PPV at 25 Feet (inches/second)	rms Velocity in Decibels (VdB) at 25 Feet
Water Trucks	0.001	57

Construction Equipment	PPV at 25 Feet (inches/second)	rms Velocity in Decibels (VdB) at 25 Feet
Scraper	0.002	58
Bulldozer—small	0.003	58
Jackhammer	0.035	79
Concrete Mixer	0.046	81
Concrete Pump	0.046	81
Paver	0.046	81
Pickup Truck	0.046	81
Auger Drill Rig	0.051	82
Backhoe	0.051	82
Crane (Mobile)	0.051	82
Excavator	0.051	82
Grader	0.051	82
Loader	0.051	82
Loaded Trucks	0.076	86
Bulldozer—Large	0.089	87
Caisson drilling	0.089	87
Vibratory Roller (small)	0.101	88
Compactor	0.138	90
Clam shovel drop	0.202	94
Vibratory Roller (large)	0.210	94
Pile Driver (impact-typical)	0.644	104
Pile Driver (impact-upper range)	1.518	112
Notes: PPV = peak particle velocity rms = root mean square VdB = velocity in decibels Source: Compilation of scientific and academic literature, generated by Federal Transit Administration (FTA) and Federal Highway Administration (FHWA).		

Of the variety of equipment used during construction, impact pile drivers that could be used in the site preparation phase of construction would produce the greatest groundborne vibration levels. Impact pile drivers produce groundborne vibration levels ranging up to 0.644 inch per second (in/sec) PPV at 25 feet from the operating equipment.

Construction vibration levels from future development projects could exceed the City's threshold criteria of 0.20 in/sec PPV. Therefore, mitigation would be required to reduce this potential impact. Construction vibration sources can be mitigated to acceptable levels either at the source or on the adjacent property using alternate equipment, adequate setbacks, or by digging temporary trenches

between the source and the receptor. For example, at a distance of 100 feet, vibration levels from an impact pile driver would attenuate to 0.19 in/sec PPV, which would be below the City's threshold.

Therefore, implementation of MM NOI-2, which requires preparation of a Construction Vibration Monitoring Plan would ensure that these vibration level impacts generated by future development projects would be reduced to a less than significant impact.

Operational Vibration Impacts

Based on the proposed types of land uses within the proposed project, future related development projects are not anticipated to include any permanent sources of vibration that would expose persons in the project vicinity to excessive groundborne vibration levels. In addition, there are no existing significant permanent sources of groundborne vibration located within the proposed project development area to which future development projects would be exposed. Therefore, project operational groundborne vibration level impacts would be considered less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM NOI-2 Construction Vibration Reduction Plan

Prior to issuance of grading and/or building permits, a note shall be provided on grading and building plans indicating that, during grading and construction, the property owner/developer shall be responsible for requiring contractors to implement the following measures to limit construction-related vibration impacts:

- For any future development projects that would necessitate the use of pile driving within 100 feet of an off-site structure, shall submit a Construction Vibration Reduction Plan that identifies specific techniques, such as the depth and location of temporary trenching, that would reduce potential vibration impacts to less than significant for the impacted structure.
- For any future development projects that would necessitate the use of large vibratory rollers within 30 feet of an off-site structure, or the use of other heavy construction equipment within 15 feet of an off-site structure, shall submit a Construction Vibration Reduction Plan that identifies specific techniques, such as the depth and location of temporary trenching, that would reduce potential vibration impacts to less than significant for the impacted structure.
- The individual project owner/developer shall submit the Construction Vibration Reduction Plan to the Planning Director for review and approval. Upon approval by the City, the construction vibration reduction measures shall be incorporated into the construction documents.

Level of Significance After Mitigation

Less than significant impact.

Excessive Noise Levels from Airport Activity

Threshold NOI-3: Would the proposed project expose people residing or working in the project area to excessive noise levels for a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport?

Under the City's local significance threshold, the project would have significant effects if: The project may have significant impact if it generates aircraft noise that exposes people residing or working in the vicinity of a private airstrip or within the Flabob Airport or Riverside Municipal Airport Land Use Compatibility Plan to noise levels in excess of the noise standards of said plans.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to the proposed project related to excessive noise level from airport activity.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of noise.

Impact Analysis

The project would have a significant impact if it exposes people residing or working in the vicinity of a private airstrip or within the Flabob Airport or Riverside Municipal Airport Land Use Compatibility Plan to noise levels in excess of the noise standards of said plans.

The nearest airport to the project site is the Flabob Airport, located approximately 1 mile south of the project site. At this distance, the project site is located approximately 0.8 mile north of the airport's 55 dBA CNEL noise contours.⁸ The Riverside Municipal Airport is located approximately 4.1 miles from the project boundaries. At this distance, the project site is located well outside of the airport's 55 dBA CNEL noise contours. Therefore, implementation of the proposed project would not expose persons residing or working at the project site to noise levels from airport activity that would be in excess of the noise standards identified in the applicable land use compatibility plans. Therefore, no impact would occur.

Level of Significance

No impact.

3.13.7 - Cumulative Impacts

Construction Noise Impacts

The significance criteria for a cumulative construction noise impact would be a substantial temporary noise increase in areas in the project vicinity that already experience excessive noise levels from construction activities. The geographic scope of the cumulative noise analysis is the

⁸ Riverside City Airport Land Use Commission. 2004. Flabob Airport Noise Contour. Website: <https://www.rcaluc.org/Plans/New-Compatibility-Plan>. Accessed April 29, 2022.

project vicinity. Noise impacts tend to be localized; therefore, the area surrounding the project site (approximately 500 feet) would be the area most affected by proposed project construction activities. While there are industrial, commercial, and residential development projects undergoing construction in the project vicinity, none of them are located within 500 feet of the proposed project's development areas and, thus, do not have the potential to create cumulative impacts. Therefore, since there is not an existing cumulative impact and the proposed project's contribution would be less than significant, the project would result in a less than significant cumulative impact related to construction noise.

Operational Traffic Noise Impacts

The significance criteria for a cumulative traffic noise impact would be substantial permanent increase in traffic noise levels in the vicinity of the project along roadway segments that already experience noise levels in excess of normally acceptable standards for adjacent land uses. Table 3.13-7 shows a summary of the traffic noise levels for cumulative traffic conditions as measured at 50 feet from the centerline of the outermost travel lane. As is shown in the impact analysis discussion above, traffic noise levels along modeled roadway segments with the highest project-related traffic noise increases would not exceed the City's normally acceptable land use compatibility standards for adjacent land uses. In addition, all other modeled roadway segments would experience less than a 3 dBA increase in traffic noise levels compared to traffic noise levels existing without the proposed project. Therefore, since there is not an existing cumulative impact, and the project contribution would also be less than significant, the project would result in a less than significant cumulative impact related to traffic noise.

Stationary Source Operational Noise Impacts

The significance criteria for a cumulative stationary source operational noise impact would be a substantial temporary noise increase in the project vicinity that are already exposed to excessive noise levels from stationary source operational noise. The geographic scope of this potential cumulative noise impact is the project vicinity. Noise impacts tend to be localized; therefore, the area surrounding the project site (approximately 500 feet) would be the area most affected by proposed project activities. While there are industrial, commercial, and residential development projects in the project vicinity, none of them are located within 500 feet of the proposed project's development areas and, thus, do not have the potential to create cumulative impacts. Therefore, implementation of the project would not result in a cumulatively considerable contribution of operational stationary noise in the project vicinity. This impact would be less than significant.

Construction Groundborne Vibration Impacts

The only cumulatively considerable contribution to construction-related groundborne vibration conditions in the project vicinity would result from introduction of construction activities that would generate groundborne vibration levels within the vicinity of existing construction areas. Groundborne vibration impacts are very localized; therefore, only areas within approximately 100 feet could potentially be affected by proposed project construction activities. While there are industrial, commercial, and residential development projects undergoing construction in the project

vicinity, none of them are located within 100 feet of the proposed project's development areas and, thus, do not have the potential to create cumulative impacts. Therefore, the project would result in a less than significant cumulative impact related to construction groundborne vibration impacts.

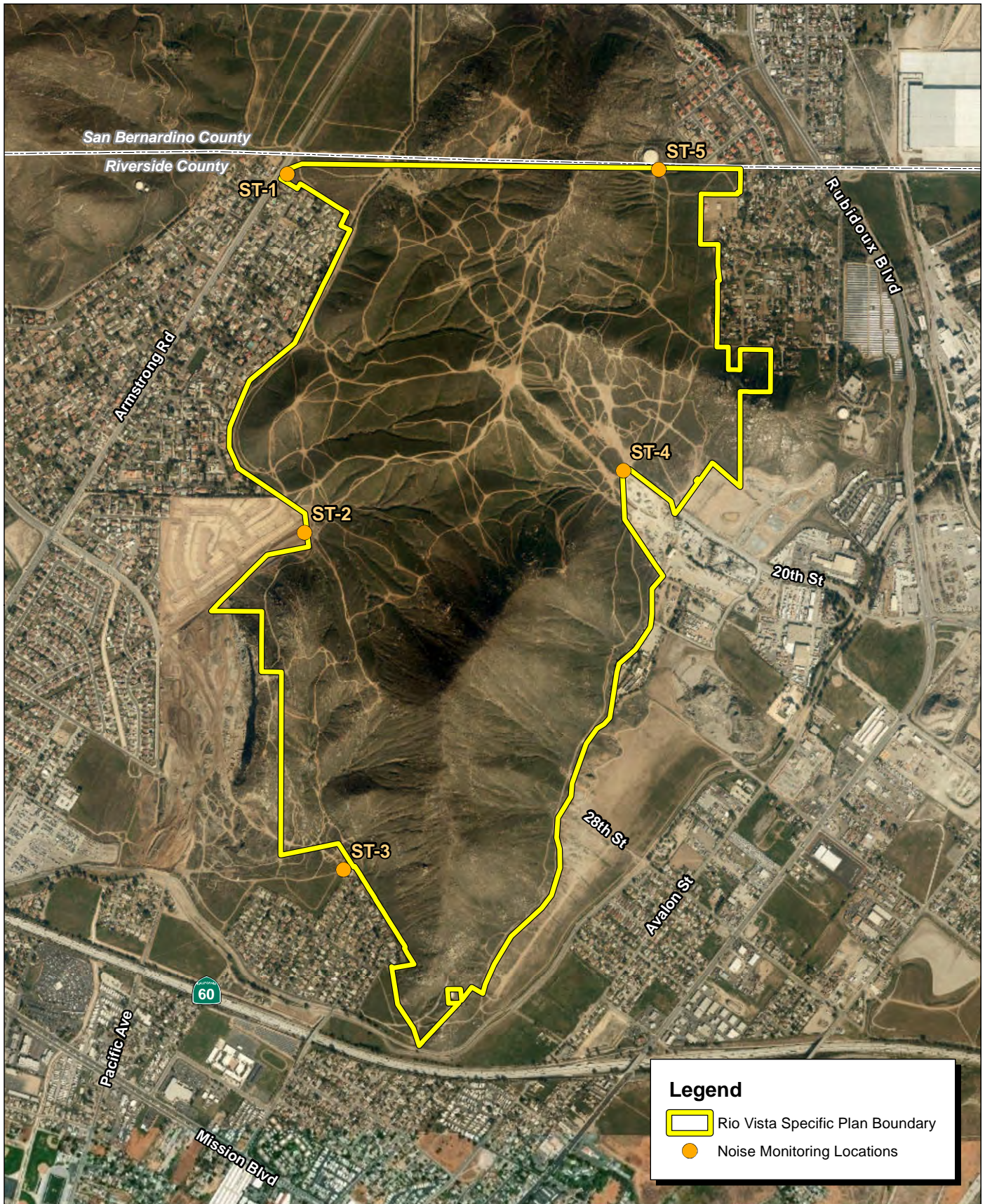
Operational Groundborne Vibration Impacts

The only cumulatively considerable contribution to groundborne vibration conditions in the project vicinity would result from introduction of new permanent sources of groundborne vibration to an existing impacted environment. The only major sources of groundborne vibration in the project vicinity is railroad activity along the rail line located approximately 4,000 feet west of the proposed project's development areas. Implementation of the proposed project would not introduce any new permanent sources of groundborne vibration to the project vicinity and would not increase railroad activity. Therefore, implementation of the proposed project would not result in a cumulatively considerable contribution to vibration conditions in the project vicinity. This impact would be less than significant.

Level of Cumulative Significance

Less than significant.

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Source: ESRI Aerial Imagery.



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3.14 - Population and Housing

This section describes existing population and housing in the region, County, and project area as well as the relevant regulatory framework. This section also evaluates the possible impacts related to population and housing that could result from implementation of the project. Information included in this section is based on databases and reports maintained by the U.S Census, the Southern California Association of Governments (SCAG), California Department of Finance (CDF), California Department of Housing and Community Development (HCD), as well as the City of Jurupa Valley General Plan (General Plan).

A Notice of Preparation (NOP) was released for public review on December 6, 2021, and an Environmental Impact Report (EIR) Scoping Meeting was held on December 14, 2021. No public comments were received during the scoping period related to population and housing.

3.14.1 - Environmental Setting

The proposed project is located within the City of Jurupa Valley, in Riverside County, California. The site consists of vacant and undeveloped land. Land uses surrounding the project site consist of residential, vacant, commercial, and industrial land uses. Existing land uses are shown in Exhibit 2-4.

Population

The CDF estimated Jurupa Valley's population to be 105,384, as of January 1, 2022¹. Table 3.14-1 summarizes the change in population for Jurupa Valley and Riverside County between 2010 and 2021. Note that the City of Jurupa Valley was incorporated in July 2011; prior to that, it was part of unincorporated Riverside County.

Table 3.14-1: Population Characteristics

	2010	2019	2020	2021	Change, 2010-2021	Percent Change, 2010-2021
City of Jurupa Valley	94,986	109,527	105,053	108,097	13,111	13.8
Riverside County	2,189,641	2,470,546	2,418,185	2,454,453	264,812	12.1

Source: U.S. Department of Commerce, United States Census Bureau. QuickFacts, Jurupa Valley city, California. Website: <https://www.census.gov/quickfacts/fact/table/jurupavalleycitycalifornia,US/PST045221>. Accessed December 2, 2021.

Population Forecast

SCAG is a regional planning agency that forecasts population, housing, and employment trends for jurisdictions within Los Angeles, Orange, Riverside, San Bernardino, Ventura, and Imperial counties. SCAG's population forecast for 2040 for the City of Jurupa Valley and Riverside County are shown in

¹ California Department of Finance. 2022. E-5 Population and Housing Estimates for Cities, Counties, and the State 2020-2022. May. Website: <https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/>. Accessed September 11, 2022.

Table 3.14-2. SCAG's forecast shows the City growing at a much slower pace than Riverside County overall.

Table 3.14-2: Population Forecast

	2016	2045	Change, 2016-2045	Percent Change, 2016-2045
City of Jurupa Valley	100,100	117,800	17,700	17.68
Riverside County	2,364,000	3,252,000	888,000	37.56

Source: Southern California Association of Governments (SCAG). Connect SoCal Demographics and Growth Forecast. Website: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial_demographics-and-growth-forecast.pdf?1606001579. Accessed December 2, 2021.

Housing

The CDF estimates housing characteristics including number and type of dwelling units, occupancy/vacancy, and persons per household. Estimated available housing, including unit type characteristics, in the City of Jurupa Valley and Riverside County is detailed in Table 3.14-3. As shown, the City has a larger average household size and a lower vacancy rate than Riverside County.

There are no existing housing units on-site.

Table 3.14-3: Housing Characteristics

Housing Unit Type	City of Jurupa Valley	Riverside County
Single-Family Detached	22,926	592,473
Single-Family Attached	1,023	53,163
Multi-Family	3,277	137,468
Mobile Homes	1,967	80,972
TOTAL	29,193	864,076
Persons Per Household	3.71	3.23
Vacancy Rate	3.4%	13%

Source: California Department of Finance (CDF). 2022. E-5 Population and Housing Estimates for Cities, Counties, and the State, January 1, 2021-2022. Website: <https://dof.ca.gov/forecasting/Demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/>. Accessed October 19, 2022.

Affordable Housing

Regional Housing Needs Assessment

The Regional Housing Needs Assessment (RHNA) is mandated by State housing law as part of the periodic process of updating housing elements of local general plans. State law requires that general plan housing elements identify RHNA targets set by HCD to encourage each jurisdiction in the State

to provide its fair share of very low, low, moderate, and above moderate income housing. The RHNA does not promote growth but provides a long-term outline for housing in the context of local and regional trends and housing goals.

SCAG determines housing need for communities in Southern California based on three factors: 1) the number of housing units needed to accommodate future population and employment growth; 2) the number of additional housing units needed to allow for housing vacancies; and 3) the number of very low, low, moderate, and above moderate income housing units needed in the community. Additional factors include but are not limited to tenure and the average rate of units needed to replace housing units demolished.

The City of Jurupa Valley’s RHNA allocation for the planning period of October 2021 through October 2029 is shown in Table 3.14-4 below. The City is required to ensure that sufficient sites are planned and zoned for housing and are available to accommodate its need and to implement proactive programs that facilitate and encourage the provision of housing to meet the City’s housing needs.

Table 3.14-4: City of Jurupa Valley RHNA Allocation 2021-2029

Household Income Category	Target (Units)
Very Low Income	1,207
Low Income	749
Moderate Income	731
Above Moderate Income	1,810
TOTAL	4,497
Source: Southern California Association of Governments (SCAG). 2021. SCAG 6 th Cycle Final RHNA Allocation Plan. Website: https://scag.ca.gov/sites/main/files/file-attachments/6th-cycle-rhna-final-allocation-plan.pdf?1625161899 . July 1. Accessed December 7, 2021.	

Employment

Based on the U.S. Census 2015–2019 American Community Survey 5-Year Estimates, in 2019 there were 50,424 people in the labor force in the City of Jurupa Valley.² The project site is currently vacant; there are no employees or employment opportunities on-site.

Employment Projections

SCAG employment projections for the City of Jurupa Valley and Riverside County for 2045 are shown in Table 3.14-5 below. As shown in the table, Riverside County is anticipated to have a substantial increase in the workforce by 2045.

² United States Census Bureau. 2019. 2015-2019 American Community Survey 5-Year Estimates, Jurupa Valley city, California, Table ID: DP03. Website: <https://data.census.gov/cedsci/table?q=Employment&t=Employment%20and%20Labor%20Force%20Status&g=1600000US0637692&d=ACS%205-Year%20Estimates%20Data%20Profiles&tid=ACSDP5Y2019.DP03>. Accessed December 8, 2021.

Table 3.14-5: Employment Projections

	2016	2045	Change, 2016-2045	Percent Change, 2016-2040
City of Jurupa Valley	27,100	31,300	4,200	15.5
Riverside County	743,000	1,103,000	360,000	48.45

Source: Southern California Association of Governments (SCAG). Connect SoCal Demographics and Growth Forecast. Website: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial_demographics-and-growth-forecast.pdf?1606001579. Accessed December 2, 2021.

Jobs-Housing Balance

The jobs-housing ratio is a general measure of the total number of jobs and housing units in a defined geographic area, without regard to economic constraints or individual preferences. The balance of jobs and housing in an area, in terms of the total number of jobs and housing units as well as the type of jobs versus the price of housing, has implications for mobility, air quality, and the distribution of tax revenues. The jobs-housing ratio is one indicator of the project's effect on growth and quality of life in the area.

SCAG applies the jobs-housing ratio at the regional and subregional levels to analyze the fit between jobs, housing, and infrastructure. A major focus of SCAG's regional planning efforts has been to improve this balance. The American Planning Association (APA) recognizes that an ideal jobs-housing ratio will vary from jurisdiction to jurisdiction. The APA's recommended target jobs-housing ratio is 1.5, with a recommended range of 1.3 to 1.7.³

As shown in Table 3.14-6 below, the jobs-housing ratio in Jurupa Valley is forecast to decrease between 2016 and 2045, from 1.07 to 0.98 between 2016 and 2045 due to an increase of employment. Additionally, the jobs-housing ratio in Riverside County is estimated to decrease from 1.04 to 1.02 during the same period.

Table 3.14-6: Jobs-Housing Balance

	Year	Employment	Households	Jobs-Housing Ratio
City of Jurupa Valley	2016	27,100	25,300	1.07
	2045	31,300	31,800	0.98
Riverside County	2016	743,000	716,000	1.04
	2045	1,103,000	1,086,000	1.02

Source: Southern California Association of Governments (SCAG). Connect SoCal Demographics and Growth Forecast. Website: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial_demographics-and-growth-forecast.pdf?1606001579. Accessed December 2, 2021.

³ Weitz, Jerry. 2003. Jobs-Housing Balance. American Planning Association Planning Advisory Service Report Number 516. 2003. Website: http://planning-org-uploaded-media.s3.amazonaws.com/publication/download_pdf/PAS-Report-516.pdf. November 30. Accessed December 8, 2021.

3.14.2 - Regulatory Framework

Federal

No federal plans, policies, regulations, or laws related to population and housing are applicable to the project.

State

California Housing Element Law

The State Housing Element Law (Government Code Chapter 1143, Article 10.6, §§ 65580 and 65589) requires each city and county to adopt a general plan for future growth. This plan must include a housing element that identifies housing needs for all economic segments and provides opportunities for housing development to meet that need. The amount of housing that must be accounted for in a local housing element is determined through the RHNA. In the RHNA process, the State gives each region a number representing the amount of housing needed based on existing need and expected population growth.

At the State level, the HCD estimates the relative share of the State's anticipated population growth that would occur in each county in the State, based on CDF population projections and historic growth trends. Where there is a regional council of governments, as in the Southern California area (in this case, the SCAG), the HCD provides the regional housing need to the council. The council then assigns a share of the regional housing need to each of its cities and counties.

Each city and county must update its general plan housing element on a regular basis pursuant to the requirements of Government Code Section 65580, et seq. Among other things, the housing element must incorporate policies and identify potential sites that would accommodate a city's share of the regional housing need. Before adopting an update to its housing element, a city or county must submit the draft to the HCD for review.

Regional

Southern California Association of Governments

SCAG is the regional governing body for the majority of the Southern California region, including the counties of Los Angeles, Orange, Riverside, San Bernardino, Ventura, and Imperial. Regional associations of governments were created by the State to guide land use decisions that overlap multiple local jurisdictions and to provide policy guidance in the region. SCAG is Southern California's forum for addressing regional issues concerning transportation, the economy, community development, and the environment. As a Metropolitan Planning Organization (MPO), SCAG's main responsibilities under State and federal law are completing the Regional Transportation Plan (RTP) and the RHNA. While SCAG does not have formal regulatory authority and therefore cannot directly implement land use decisions, SCAG guides land use planning for the Southern California region through intergovernmental coordination and consensus building.

Local

City of Jurupa Valley General Plan

The following General Plan Housing Element policies are directly related to the proposed project in regard to population and housing. Please refer to Section 3-11, Land Use and Planning, for analysis of the proposed project's consistency with these policies.

- HE 4.2** **Design Compatibility.** Higher density housing should maintain high quality standards for unit design, privacy, security, on-site amenities, and public and private open space. Such standards should be flexible enough to allow innovative and affordable design solutions and shall be designed to enhance prevailing neighborhood architectural and site character.
- HE 4.3** **Neighborhood Integration.** New neighborhoods should be an integral part of an existing neighborhood or should establish pedestrian, bicycle, and, where appropriate, equestrian linkages that provide direct, convenient, and safe access to adjacent neighborhoods, schools, parks, and shopping.
- HE 5.1** **New Construction.** Encourage the development of dwellings with energy-efficient designs, utilizing passive and active solar features and energy-saving features that exceed minimum requirements in State law.
- HE 5.2** **Sustainable Design.** Residential developments should promote sustainability in their design, placement, and use. Sustainability can be promoted through a variety of housing strategies, including the following:
1. Maximize use of renewable, recycled-content and recycled materials, and minimize use of building materials that require high levels of energy to produce or that cause significant, adverse environmental impacts.
 2. Incorporate renewable energy features into new homes, including passive solar design, solar hot water, solar power, and natural ventilation and cooling.
 3. Minimize thermal island effects through reduction of heat-absorbing pavement and increased tree shading.
 4. Avoid building materials that may contribute to health problems through the release of gases or glass fibers into indoor air.
 5. Design dwellings for quiet, indoors and out, including appropriate noise mitigation for residential uses near noise sources such as highways, major streets, railroad tracks, and industrial uses.
 6. Design dwellings to be economical to live in due to reduced energy or resource use, ease of maintenance, floor area, or durability of materials.
 7. Help inform residents, staff, and builders of the advantages and methods of sustainable design, and thereby develop consumer demand for sustainable housing.
 8. Consider adopting a sustainable development rating system, such as the LEED® or Green Globes program.

HE 5.3 **Site and Neighborhood Design.** Residential site, subdivision, and neighborhood designs should consider sustainability. Some ways to do this include:

1. Design subdivisions to maximize solar access for each dwelling and site.
2. Design sites so residents have usable outdoor space with access to sun and shade.
3. Streets and access ways should minimize pavement devoted to vehicular use.
4. Use multi-purpose neighborhood “pocket parks”/retention basins to purify street runoff prior to its entering creeks. Retention basins shall be designed to be visually attractive as well as functional. Fenced-off retention basins should be avoided.
5. Encourage cluster developments with dwellings grouped around significantly sized, shared open space in return for City approval of smaller individual lots.
6. Treat public streets as landscaped parkways, using continuous plantings at least 6 feet wide and, where feasible, median planters to enhance, define, and buffer residential neighborhoods of all densities from the effects of vehicle traffic.

3.14.3 - Thresholds of Significance

Significance Criteria

In accordance with Section 15064.7 of the State California Environmental Quality Act (CEQA) Guidelines, the City of Jurupa Valley adopted local CEQA Guidelines. The City’s local CEQA Guidelines are based, in part, on the CEQA checklist included in Appendix G of the State CEQA Guidelines. The City of Jurupa Valley Guidelines recognize the following significance thresholds and Significance Criteria related to population and housing. Based on these significance thresholds, a project would have a significant impact on population and housing if it would:

- a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

Under the City’s local significance threshold, the project would have significant effects if: The project is in an area that is currently undeveloped or unserved by major infrastructure, and the project would introduce unplanned infrastructure that was not previously evaluated in the adopted General Plan.

- b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

Under the City’s local significance threshold, the project would have significant effects if: The project site contains residential housing which will not be replaced with new residential housing on-site.

Approach to Analysis

Impacts related to population, housing, and employment were determined by analyzing existing and projected population, housing, and employment estimates provided by the U.S. Census, SCAG, CDF, HCD, and the General Plan. The proposed project's impacts were evaluated by determining their consistency with these projections, estimates, and the General Plan.

3.14.4 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

Growth Inducement

Threshold POP-1: Would the proposed project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Under the City's local significance threshold, the project would have significant effects if: The project is in an area that is currently undeveloped or unserved by major infrastructure, and the project would introduce unplanned infrastructure that was not previously evaluated in the adopted General Plan.

Plans, Policies and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

These include existing regulatory requirements such as plans, policies, or programs applied to the project based on federal, State, or local law currently in place which effectively reduce impacts to population and housing.

There are no PPPs applicable to the proposed project related to population and housing.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of population and housing.

Impact Analysis

There are two types of growth-inducing impacts that a project may have: direct and indirect. Direct growth-inducing impacts occur when the development of a project imposes new burdens on a community by directly inducing unplanned population growth or by leading to the construction of additional developments in the same area. Also included in this category are projects that remove physical obstacles to population growth (such as a new road into an undeveloped area or a wastewater treatment plant with excess capacity that could allow additional development in the service area). Construction of these types of infrastructure projects cannot be considered isolated from the development they facilitate and serve. Projects that physically remove obstacles to growth, or projects that indirectly induce growth, may provide a catalyst for future unrelated development in an area such as a new residential community that requires additional commercial uses to support residents.

To assess the potential for growth-inducing impacts, the project's characteristics that may encourage and facilitate activities that individually or cumulatively may affect the environment must be evaluated (CEQA Guidelines § 15126.2(e)). CEQA Guidelines state that a significant growth-inducing impact may result if the project would:

- Induce substantial population growth in an area (for example, by proposing new homes and commercial or industrial businesses beyond the land use density/intensity envisioned in the general plan);
- Substantially alter the planned location, distribution, density, or growth rate of the population of an area; or
- Include extensions of roads or other infrastructure not assumed in the general plan or adopted capital improvements project list when such infrastructure exceeds the needs of the project and could accommodate future developments.

As indicated previously, the City's Significance Criteria would be exceeded if:

- The project is in an area that is currently underdeveloped or unserved by major infrastructure; and
- The project would introduce unplanned infrastructure that was not previously evaluated in the adopted General Plan.

The proposed project consists of a master planned residential community that would include up to 1,697 dwelling units (du), 1.27 million square feet of light industrial uses, and 1.43 million square feet of business park uses. As such, it would have the potential to induce direct population growth through the development of new housing and potentially facilitate indirect population growth through the creation of new jobs and expanded infrastructure.

While the project site is currently undeveloped and is not served by major infrastructure, the project site is surrounded by developed areas and infrastructure. Connections to infrastructure would be completed, as necessary, when individual projects are developed within the project site. Connections would include annexation into the Rubidoux Community Services District (RCSD), Jurupa Community Services District (JCSD), Southern California Edison (SCE), and Southern California Gas Company (SoCalGas). The proposed project would include development of major and minor streets with related infrastructure, including the extension of 20th Street, as planned for in the General Plan. As such, the project would be served by adjacent major infrastructure.

The proposed project would include extension of roads and infrastructure to serve the proposed residential and nonresidential uses. However, the infrastructure would only serve the project site. Furthermore, the project site is surrounded by developed areas already served by roads and infrastructure. Accordingly, buildout of the proposed project would not remove a physical barrier to growth.

Based on the City of Jurupa Valley's average household size of 3.71 persons per dwelling unit (as shown in Table 3.14-3), the proposed project could result in a population increase of approximately

6,296 people. This increase of population represents approximately 36 percent of the SCAG's population forecast, which anticipates an increase of 17,700 people between 2016 and 2045 (see Table 3.14-2). Alternatively, as shown in Table 2.2 of the General Plan, Residential Land Use Statistics and Buildout Projections, the 2014 to 2035 population growth is estimated to be between 37,622 and 53,745 people. The proposed project's estimated population of 6,296 would be approximately 12 to 17 percent of this growth estimate. Furthermore, the General Plan identifies and includes the proposed project's area for future residential and open space development as shown on General Plan Figure 2-5, Land Use Plan. Therefore, population increase resulting from buildout of the proposed project would constitute planned growth in accordance with regional and local projections.

The proposed project would provide needed housing options in the City to support planned population growth. As shown in Table 3.14-4, the City's RHNA Allocation determined that there is a need for 4,497 housing units in order to meet the City's housing needs. The proposed project would provide up to 1,697 housing units, which would help to support the housing needs of the City consistent with City's RHNA Allocation. The Housing Element Update projects that by 2029, approximately 60 percent, or 1,081 of the proposed 1,697 housing units would be built. Of these proposed 1,081 housing units, 578 are expected to be in the RHNA "Above Moderate Income" category, and 440 are expected to be in the RHNA "Moderate Income" category.⁴ The increase in housing resulting from buildout of the proposed project would constitute planned growth in accordance with regional and local projections.

As discussed in further detail in Section 3-11 Land Use and Planning, Connect SoCal, SCAG's plan for the future of the region, forecasts the number of people, households, and jobs (at the jurisdictional level) expected throughout SCAG's 191 cities and in unincorporated areas by 2045. As part of SCAG's effort to facilitate regional modeling of land use information from nearly 200 distinct jurisdictions, it developed a simplified series of Land Development Categories (LDCs) to represent the dominant themes taken from the region's many general plans. The three LDCs that SCAG used are Urban, Compact, and Standard. The City is classified within the Standard LDC, and the projected growth described in this section would not result in the project site being reclassified to the Urban or Compact LDCs. As such, the proposed project is consistent with the growth projections in Connect SoCal.

Development of the proposed project would result in increased employment opportunities associated with the light industrial and business park uses. Using a standard light industrial/business park employment rate of one employee per 1,000 square feet, the proposed project would create an estimated 2,700 jobs. SCAG anticipates that employment within the City will increase by 4,200 between 2016 and 2045 (see Table 3.14-5). The increase in employment opportunities generated by the proposed project would be consistent with SCAG's employment forecast for Jurupa Valley.

The proposed project area was intended for residential and nonresidential uses in 1992, when the County of Riverside approved the Rio Vista Specific Plan No. 243 and certified the associated EIR (State Clearinghouse No. 1988122608). Thus, both local and regional growth projections account for

⁴ City of Jurupa Valley. 2021. Housing Element 2021-2029 Revised Final Draft. December 2.

population and employment growth within the project site. Therefore, buildout of the proposed project would constitute planned growth in accordance with regional and local projections.

Under the City's thresholds, a project may have a significant impact if it is in an area that is currently underdeveloped or unserved by major infrastructure and the project would introduce unplanned infrastructure that was not previously evaluated in the adopted General Plan. Both conditions must be met to identify a significant impact. Accordingly, while the project would result in the extension of infrastructure into the project site, the development of the project site was considered in the General Plan as shown on General Plan Figure 2-5, Land Use Plan. The General Plan identifies and includes the proposed project's area for future residential and open space development. As such, the extension of infrastructure to the project site was considered in the General Plan. Overall, the proposed project's growth has been planned and accounted for, and the proposed project would not induce substantial unplanned population growth either directly or indirectly. Impacts would be less than significant.

Level of Significance

Less than significant impact.

Housing Displacement/Replacement Housing

Threshold POP-2: Would the proposed project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Under the City's local significance threshold, the project would have significant effects if: The project site contains residential housing which will not be replaced with new residential housing on-site.

Plans, Policies and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to the proposed project related to population and housing.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of population and housing.

Impact Analysis

The proposed project consists of a master planned community. The project site is currently vacant and undeveloped and therefore does not currently provide any housing units, does not support a residential population, and would not result in any impacts to existing housing. Therefore, the proposed project would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.

The proposed project would provide needed housing options in the City to support planned population growth. As shown in Table 3.14-4, the City's RHNA Allocation determined that there is a need for 4,497 housing units in order to meet the City's housing needs. The proposed project would provide up to 1,697 housing units, which would help to support the housing needs of the City. As stated under Threshold POP-1, at 60 percent project buildout for 2029, 578 housing units would be in the RHNA "Above Moderate Income," and 440 would be in the RHNA "Moderate Income"

category. Furthermore, additional housing units are needed to support an ideal jobs-housing ratio in the City. According to the APA, an ideal jobs-housing ratio is generally 1.5, with a recommended range of 1.3 to 1.7.⁵ The jobs-housing ratio in the City of Jurupa Valley is anticipated to decrease from 1.07 to 0.98 between 2016 and 2045 due to an increase of employment (Table 3.14-6). Additional housing units provided by the proposed project would help to support the additional anticipated future housing needs caused by the anticipated increase in employment. Thus, there would be no impact related to displacement of housing or construction of replacement housing.

Level of Significance

Less than significant impact.

3.14.5 - Cumulative Impacts

Cumulative population and housing effects must be considered in relationship land use, plans, and policy considerations for development facilitated by the General Plan. The relevant cumulative geographic context is the City and includes projects J-X identified in Table 3-1, Cumulative Projects, that are located within the City (see Exhibit 3-1). Of these, projects S, T, U, W, and X are residential in nature.

Population Growth

The geographic scope of the cumulative population and housing analysis is the City. As of 2022, the City was estimated to have a population of 105,384, persons⁶. Five cumulative residential projects are listed in Table 3-1. These cumulative projects would add approximately 3,372 persons to the City population,⁷ representing an approximate 3.2 percent population growth. This cumulative increase of population represents approximately 19 percent of the SCAG's population forecast, which anticipates an increase of 17,700 people between 2016 and 2045 (see Table 3.14-2).

With a projection for City population growth of 17,700 people between 2016 and 2045, the contribution of the proposed project (6,296 people) and cumulative projects (3,372 people) that are located within the City would total 9,668 and would be within this projection. As such, there would not be substantial direct population growth associated with the proposed project in conjunction with the cumulative projects. Therefore, cumulative impacts related to population growth, both direct and indirect, would be less than significant.

The proposed project's incremental contribution to the less than significant impact associated with population growth is not cumulatively considerable. The proposed project would add 6,296 persons to the City's population, which would represent growth of approximately 6.3 percent of the City's current population and is within the City's planned and anticipated growth. Therefore, the proposed project would not result in a cumulative considerable impact related to population.

⁵ Weitz, Jerry. 2003. Jobs-Housing Balance. American Planning Association Planning Advisory Service Report Number 516. November. Website: http://planning-org-uploaded-media.s3.amazonaws.com/publication/download_pdf/PAS-Report-516.pdf. Accessed December 8, 2021.

⁶ California Department of Finance. 2022. E-5 Population and Housing Estimates for Cities, Counties, and the State 2020-2022. May.

⁷ 906 housing units at an average City household size of 3.71 persons per household (see Table 3.14-3).

Population/Housing Displacement

Cumulative projects listed in Table 3-1 in conjunction with the proposed project would add 906 residential units to the City. None of the listed projects substantially displaces housing units or people within the City. In fact, implementation of the cumulative projects would result in a net increase of housing in the City consistent with planned for growth. The City is further considering establishing incentives and standards to encourage development of affordable housing (see Regulatory Setting). Therefore, cumulative impacts associated with population and housing displacement would be less than significant. Moreover, the proposed project would not have a cumulatively considerable contribution to the less than significant cumulative impact as discussed above.

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3.15 - Public Services

3.15.1 - Introduction

This section describes the existing conditions related to public services in the project area as well as the relevant regulatory framework. This section also evaluates the potential impacts related to public services that could result from implementation of the proposed project. This section is based, in part, on information obtained from the City of Jurupa Valley General Plan (General Plan), Riverside County Fire Department, California Department of Forestry and Fire Protection (CAL FIRE) Riverside County Sheriff's Department, Jurupa Unified School District (JUSD), Riverside County Library System (RCLS), Jurupa Area Recreation and Park District (JARPD), and Riverside County Regional Parks and Open Space District (RivCo Parks).

No public comments were received during the Draft Environmental Impact Report (Draft EIR) scoping period related to public services.

3.15.2 - Environmental Setting

Fire Protection and Emergency Medical Services

The Riverside County Fire Department, in cooperation with CAL FIRE, provides fire protection services to the City. This includes full-service municipal and wildland fire protection, emergency medical response, technical rescue services, and response to hazardous materials discharges.¹ The Riverside County Fire Department 2020 Annual Report identified that in 2020, Riverside County Fire Department responded to 10,912 calls for service, with the majority for emergency medical assistance (7,677 calls, or approximately 70 percent), false alarms (1,045 calls, or approximately 10 percent), and traffic collisions (893 calls, or approximately 8 percent).² The Riverside County Fire Department consists of 15 battalions that staff and operate 101 fire stations.³ As shown in Table 3.15.1, Riverside County Fire Department operates four fire stations within the City. Fire Stations 18 and 38, operated by Battalion 14, are the nearest to the project site.

Table 3.15-1: Riverside County Fire Department Fire Stations in Jurupa Valley

Station No.	Station Name	Station Address	Driving Distance from the Project Site
16	Pedley	9270 Limonite Avenue Jurupa Valley, CA 92509	Approximately 5.8 miles to the southwest
17	Glen Avon	10400 San Sevaie Way Jurupa Valley, CA 1752	Approximately 6.2 miles to the west
18	West Riverside	7545 Mission Boulevard Jurupa Valley, CA 92509	Approximately 2.2 miles to the southwest

¹ City of Jurupa Valley. 2017. General Plan. September.

² Riverside County Fire Department in Cooperation with CAL FIRE. 2020. 2020 Annual Report. May. Website: https://www.rvcfire.org/pdf/administration/annual-reports/AnnualReport_2020.pdf?v=372. Accessed October 26, 2022.

³ Riverside County Fire. 2021. Riverside County Fire Stations. Website: <https://www.rvcfire.org/resources/fire-stations>. Accessed January 22, 2022.

Station No.	Station Name	Station Address	Driving Distance from the Project Site
38	Rubidoux	5721 Mission Boulevard Jurupa Valley, CA 92509	Approximately 1.1 miles to the south
Source: Jurupa Valley 2017 General Plan.			

Project Site

There are no fire protection or emergency medical facilities on the project site.

Four Riverside County Fire Department fire stations are located within the City. Station No. 16, Pedley Station, is located approximately 5.8 miles (driving distance) southwest of the project site's Emergency Vehicle Access (EVA) on Paramount Drive; Station No. 17, Glen Avon Station, is located approximately 6.2 miles (driving distance) west of the 20th Street project site entrance and approximately 6.7 miles (driving distance) southwest of the project site's EVA on Paramount Drive; Station No. 18, West Riverside Station, is located approximately 2.2 miles (driving distance) southwest of the 20th Street project site entrance and approximately 2.8 miles (driving distance) west of the project site's EVA on Paramount Drive; and Station No. 38, Rubidoux Station, is located approximately 1.1 miles (driving distance) south of the project site's EVA on Paramount Drive.

The station that would provide service to the proposed project is Station No. 38, located at 5721 Mission Boulevard. This station is equipped with one Type 1 Engine and is staffed by three personnel, 24 hours per day.⁴

Police Protection

City of Jurupa Valley

The Riverside County Sheriff's Department operates 10 stations and five correctional facilities as well as other facilities. Police services are provided to the City by the Riverside County Sheriff's Department from the Jurupa Valley Station. The Jurupa Valley Station is located at 7477 Mission Boulevard.

Jurupa Valley Sheriff's Station responded to 40,731 service calls in 2021. Calls are classified by priority level: Priority 1 calls are urgent calls that involve a threat to human life or property and have the potential for serious injury, Priority 2 calls involve circumstances that are urgent but not life threatening, and Priority 3 and Priority 4 calls involve non-urgent and non-life threatening issues. In 2021, the average response time was 7.74 minutes for Priority 1 calls and 29.56 minutes for Priority 2 calls.⁵ In addition to emergency response, the Riverside County Sheriff's Department Jurupa Valley Station responds to graffiti reports, operates a Homeless Outreach Team, maintains a noise unit on weekends, and engages in Community-Oriented Policing.⁶

⁴ Reinerston, Adria. Deputy Fire Marshal, Office of the Fire Marshal, California Department of Forestry and Fire Protection (CAL FIRE)/Riverside County Fire Department. Personal communication: email. February 2, 2022.

⁵ Sexton, Jason. Lieutenant, Riverside County Sheriff Department. Personal communication: email. October 20, 2022.

⁶ City of Jurupa Valley 2017. 2017 General Plan. September.

Project Site

There are no police services facilities on the project site. The Riverside County Sheriff Department's Jurupa Valley Station, located at 7477 Mission Boulevard, is approximately 2.7 miles (driving distance) west of the project site; EVA is available along Paramount Drive and approximately 2.2 miles (driving distance) southwest of the 20th Street project site entrance.

School Services

City of Jurupa Valley

The JUSD provides educational services to the project site. . . JUSD includes 16 elementary schools, three middle schools, one Transitional Kindergarten through eighth grade (K-8) school, and three high schools.⁷ Total student enrollment during the 2016-2017 school year was 19,352.⁸ Five years later, total enrollment during the 2021-2022 school year dropped to 18,618.⁹

According to the 2017 General Plan, Jurupa Valley does not have any higher education institutions. However, through a partnership between JUSD and the Riverside Community College District, Rubidoux High School includes the Rubidoux Early College High School program where students can begin their college coursework in their junior year and complete their high school diploma while earning college credit at the same time.

Other institutions of higher education in the area include Norco College, Riverside City College, and the University of California, Riverside.

Project Site

There are no schools or other educational facilities on the project site. Elementary school students would be served by JUSD's new elementary school that is proposed as part of the proposed project. If the school is not developed, students at the proposed project would be served by Rustic Lane Elementary School. Middle school and high school students would be served by Mission Middle School, and Rubidoux High School, respectively^{10,11,12} As of November 1, 2022, the 2022-23 school year Rustic Lane Elementary School enrollment was 542 students, Mission Middle School enrollment was 692 students, and Rubidoux High School enrollment was 1,385 students.¹³ Current (school year 2022-23) school capacities are 900 students for Rustic Lane Elementary School, 1,150 students for Mission Middle School, and 2,400 students for Rubidoux High School.¹⁴

⁷ Jurupa Unified School District (JUSD). 2022. District Maps. Website: <https://jurupausd.org/schools/Pages/Maps.aspx>. Accessed January 22, 2022.

⁸ City of Jurupa Valley 2017. 2017 General Plan. September.

⁹ California Department of Education Data Quest. 2020-21 Enrollment by Grade Jurupa Unified Report (33-67090). Website: <https://dq.cde.ca.gov/dataquest/>. Accessed September 30, 2022.

¹⁰ Jurupa Unified School District (JUSD). 2021. Elementary School Boundaries. December. Website: <https://jurupausd.org/schools/District%20Maps/District-Elementary%20Boundaries.pdf>. Accessed November 1, 2022.

¹¹ Jurupa Unified School District (JUSD). 2021. Middle School Boundaries. December. Website: <https://jurupausd.org/schools/District%20Maps/District-Middle%20School%20Boundaries.pdf>. Accessed November 1, 2022.

¹² Jurupa Unified School District (JUSD). 2021. High School Boundaries. December. Website: <https://jurupausd.org/schools/District%20Maps/District-High%20School%20Boundaries.pdf>. Accessed November 1, 2022.

¹³ Griffin, Robin. Director, Planning and Development, Jurupa Unified School District (JUSD) Personal communication: email. November 1, 2022.

¹⁴ Ibid.

Library Services

City of Jurupa Valley

Library services are provided to the City by the RCLS. As shown in Table 3-15.2, there are two RCLS libraries within the City.

Table 3.15-2: Riverside County Library System Libraries in Jurupa Valley

Library Branch and Location	Distance from Project Site	Hours of Operation	Services and Facilities
Glen Avon Library 9244 Galena Street Jurupa Valley, CA 92509	4 miles to the southwest	Sunday: Closed Monday-Tuesday: 10:00 a.m.–6:00 p.m. Wednesday: 12:00 p.m.–8:00 p.m. Thursday: 10:00 a.m.–6:00 p.m. Friday: 1:00 p.m.–5:00 p.m. Saturday: 10:00 a.m.–2:00 p.m.	<ul style="list-style-type: none"> • Computers • Wireless internet • Printing services • Meeting rooms • Study room
Louis Robidoux Library 5840 Mission Boulevard Jurupa Valley, CA 92509	0.5 mile to the south	Sunday: 1:00 p.m.–5:00 p.m. Monday-Wednesday: 10:00 a.m.–6:00 p.m. Thursday: 12:00 p.m.–8:00 p.m. Friday-Saturday: 10:00 a.m.–6:00 p.m. Saturday: 10:00 a.m.–2:00 p.m.	<ul style="list-style-type: none"> • Computers • Wireless internet • Printing services • Community room • Study room

Source: Riverside County Library System (RCLS). Locations. Website: <https://www.rivlib.net/locations>. Accessed February 4, 2022.

Project Site

There are no libraries on the project site. The RCLS facility closest to the project site is Louis Robidoux Library, located at 5840 Mission Boulevard. This facility is located approximately 0.5 mile south of the project site (direct distance), approximately 3.4 miles (driving distance) south of the project site's 20th Street western access point and approximately 3 miles (driving distance) south of the project site's 20th Street eastern access point.

Parks and Recreation

City of Jurupa Valley

Parks and recreation facilities and programs in the City are provided primarily by the JARPD and by RivCo Parks.

Jurupa Area Recreation and Park District

The JARPD was formed in 1984 to provide parks and recreational facilities for current and future families in the 91752 and 92509 zip code areas,¹⁵ which today comprise the incorporated City.

JARPD offers a diverse range of parks, playgrounds, greenbelts, trails, and recreation facilities. As of June 1, 2022, JARPD owns and maintains approximately 222 acres of developed parks, approximately 249 acres of undeveloped parks and open space, and approximately 23 acres of trails throughout the

¹⁵ Jurupa Area Recreation and Park District (JARPD). 2022. About US. Website: <https://www.jarpd.org/about-us>. Accessed March 1, 2022.

City, with additional parks planned for the near future.¹⁶ JARPD offers a range of recreational programs and opportunities year-round such as youth enrichment and sports and special interest classes for youth, adults, and seniors at their multiple facilities throughout the City. In addition, JARPD offers City residents community center and park shelter rentals for private events.

Riverside County Regional Park and Open Space District

RivCo Parks operates and maintains regional parks, sports facilities, camp sites, trails, nature centers, and special events facilities throughout Riverside County. RivCo Parks operates several important recreation facilities in the City including the Louis Robidoux Nature Center, Rancho Jurupa Regional Sports Park, Rancho Jurupa Park and Campground, Historic Crestmore Manor, and the Cove Waterpark.¹⁷

Project Site

There are no national, State, regional, or local parks on the project site. Approximately 386 acres of open space (land use designation Open Space-Conservation; see Chapter 2, Project Description, Exhibit 2-7) are located on-site, and a number of informal, unpaved trails and dirt roads traverse the project site.

A number of local and regional public parks exist within the project vicinity, which are discussed in Section 3-16, Recreation.

3.15.3 - Regulatory Framework

Federal

No federal plans, policies, regulations, or laws related to public services are applicable to the proposed project.

State

California Fire Code and California Building Code

The International Fire Code and the International Building Code, established by the International Code Council (ICC) and amended by the State of California, prescribe performance characteristics and materials to be used to achieve acceptable levels of fire protection.

California Health and Safety Code

California Health and Safety Code, Sections 13100–13135, establish the following policies related to fire protection:

- **Section 13100.1:** The functions of the office of the State Fire Marshall, including CAL FIRE, shall be to foster, promote, and develop strategies to protect life and property against fire and panic.
- **Section 13104.6:** The Fire Marshall has the authority to require fire hazards to be removed in accordance with the law relating to removal of public nuisances on tax-deeded property.

¹⁶ Diuguid, Colby. General Manager, Jurupa Area Recreation and Park District (JARPD) Personal. communication: email. October 31, 2022.

¹⁷ City of Jurupa Valley 2017. 2017 General Plan. September.

California Government Code, Section 65996—California Senate Bill 50

According to Section 65996 of the California Government Code, development fees authorized by California Senate Bill (SB) 50 (funded by Proposition 1A and approved in 1998) are deemed to be “full and complete school facilities mitigation.” The Government Code limits the power of cities and counties to require mitigation of school facilities impacts as a condition of approving new development, and provides instead for a standardized developer fee. SB 50 generally provides for a 50/50 State and local school facilities funding match. SB 50 also provides for three levels of statutory impact fees. The application level depends on whether State funding is available, whether the school district is eligible for State funding, and whether the school district meets certain additional criteria involving bonding capacity, year-round school, and the percentage of movable classrooms in use.

California Government Code, Section 65995(b) and Education Code, Section 17620

SB 50 amended Section 65995 of the California Government Code, which contains limitations on Section 17620 of the Education Code, the statute that authorizes school districts to assess development fees within school district boundaries. Section 65995(b)(3) of the Government Code requires the maximum square footage assessment for development to be increased every 2 years, according to inflation adjustments. On January 22, 2014, the State approved increasing the allowable amount of statutory school facilities fees (Level I School Fees) from \$3.20 to \$3.36 per square foot of assessable space for residential development of 500 square feet or more, and from \$0.51 to \$0.54 per square foot of chargeable covered and enclosed space for commercial/industrial development. School districts may levy higher fees if they apply to the State and meet certain conditions.

Quimby Act

The Quimby Act (California Government Code § 66477) was established by the California Legislature in 1965 to preserve open space and parkland in rapidly urbanizing areas of the State. The Quimby Act allows cities and counties to establish requirements for new development to dedicate land for parks, pay an in lieu fee, or provide a combination of the two.

The Quimby Act provides two standards for the dedication of land for use as parkland. If the existing area of parkland in a community is greater than 3 acres per 1,000 residents, then the community may require dedication based on a standard of up to 5 acres per 1,000 persons residing in the subdivision based on the current ratio of parkland per 1,000 residents. If the existing amount of parkland in a community is less than 3 acres per 1,000 residents, then the community may require dedication based on a standard of only 3 acres per 1,000 persons residing in the subdivision.

The Quimby Act requires a city or county to adopt standards for recreational facilities in its general plan to adopt a parkland dedication or fee ordinance. According to the General Plan, the City helps meet the diverse recreation needs of existing and new residents by requiring the dedication and improvement of new parks and recreation facilities as a condition of new development. The City Municipal Code 7.25.020 sets forth a standard of 3 acres of parkland per 1,000 persons; the City Council can increase that standard to up to 5 acres per 1,000 persons if a parks and recreation plan determines that the existing amount of neighborhood and community park areas exceeds 3 acres per 1,000 persons. Developers of subdivisions are required to dedicate land and/or pay in lieu fees

for parks.¹⁸ The City can require the payment of development fees pursuant to Chapter 3.75, Development Impact Fee, of the City of Jurupa Valley Municipal Code (Municipal Code).¹⁹

Local

City of Jurupa Valley General Plan

The General Plan sets forth the following policies related to public services applicable to the proposed project:

General

- CSSF 2.2** **Concurrency with Development.** Ensure the provision of sufficient public facilities and services prior to, or concurrently with, new development.
- CSSF 2.4** **Fair Share.** Ensure that new development pays its fair share of public facilities and service costs.
- LUE 12.1** **Service Capacity.** Ensure that development does not exceed the City's or the community services districts' or special districts' ability to adequately provide supporting infrastructure and services, such as water, wastewater treatment, energy, solid waste and public services such as police/ fire/emergency medical services, recreational facilities, and transportation systems.
- LUE 13.1** **Fair Share Infrastructure Funding.** Require that new development contribute its fair share to fund infrastructure and public facilities, such as police and fire facilities, parks, streets, and trail improvements.

Fire

- CSSF 1.28** **Fire Protection Master Plan.** Continue to utilize the Riverside County Fire Protection Master Plan and Jurupa Emergency Response Plan as the base documents to implement the goals and objectives of the Community Safety Element.

Police

Policies CSSF 2.2, CSSF 12.1, LUE-12.1, and LUE 13.1 listed above apply.

Schools

- CSSF 2.23** **Review of Development Proposals.** Involve the school districts in the review of large residential development proposals to ensure that adequate schools are provided without affecting existing facilities

¹⁸ Jurupa Valley Municipal Code. Chapter 7.25 Dedications, Section 7.25.020 Parks and recreation fees and dedications. Website: https://library.municode.com/ca/jurupa_valley/codes/municipal_code?nodeId=TIT7SU_CH7.25DE_S7.25.020PAREFEDE. Accessed October 3, 2023.

¹⁹ City of Jurupa Valley. City of Jurupa Valley Municipal Code, Chapter 3.75 Development Impact Fee. Website: https://library.municode.com/ca/jurupa_valley/codes/municipal_code?nodeId=TIT3REFI_CH3.75DEIMFE. Accessed January 22, 2022.

Park Facilities and Services

- COS 8.5** **Parkland Implementation Strategies.** Require new development to provide funding and/or long-term implementation strategies for the acquisition and improvement of active and passive parks, open space, and recreational sites, when appropriate.
- COS 8.6** **Provision of Recreation Facilities.** Require that parkland or open space dedication and improvement occur prior to, or concurrent with, construction, as a condition of approval of new residential subdivisions.
- LUE 1.8** **Quimby Act.** Require that new development meet the parkland requirements as established in the Quimby Act and City enabling ordinances.

Other

Policies CSSF 2.2, CSSF 12.1, LUE 12.1, and LUE 13.1 listed above apply.

City of Jurupa Valley Municipal Code Section 3.75-Development Impact Fee

The City of Jurupa Valley requires all new residential, commercial, and industrial development to address impacts caused by such development. It is necessary that all new developments pay their fair share cost of providing the facilities and equipment reasonably needed to serve that development.²⁰

City of Jurupa Valley Municipal Code Section 7.25.020-Parks and Recreation Fees and Dedications

The City of Jurupa Valley requires all new residential developments to provide dedication of land, payment of fees in lieu of parkland dedication, or a combination thereof at a rate of 3 acres of parkland per 1,000 residents.²¹

City of Jurupa Valley Municipal Code Section 8.10.010-Adoption of Fire Code

All of the provisions and appendices of the 2019 California Fire Code are adopted and shall apply to the City. The California Fire Code shall be known as the fire code of the City.²²

3.15.4 - Thresholds of Significance**Significance Criteria**

In accordance with Section 15064.7 of the State California Environmental Quality Act (CEQA) Guidelines, the City of Jurupa Valley adopted local CEQA Guidelines. The City's local CEQA Guidelines are based, in part, on the CEQA checklist included in Appendix G of the State CEQA Guidelines. The City of Jurupa Valley Guidelines recognizes the following significance thresholds and Significance

²⁰ Jurupa Valley Municipal Code. Chapter 3.75 Development Impact Fee. Website: https://library.municode.com/ca/jurupa_valley/codes/municipal_code?nodeId=TIT3REFI_CH3.75DEIMFE. Accessed February 4, 2022.

²¹ Jurupa Valley Municipal Code. Chapter 7.25.020. Parks and Recreation Fees and Dedications. Website: https://library.municode.com/ca/jurupa_valley/codes/municipal_code?nodeId=TIT7SU_CH7.25DE_S7.25.020PAREFEDE. Accessed April 12, 2022.

²² Jurupa Valley Municipal Code. Chapter 8.10 Adoption of Fire Code. Website: https://library.municode.com/ca/jurupa_valley/codes/municipal_code?nodeId=TIT8BUCO_CH8.10ADFICO. Accessed February 4, 2022.

Criteria related to Public Services. Based on these significance thresholds, a project would have a significant impact on Public Services if it would:

- a) **Fire protection.** Under the City's local significance threshold, the project would have significant effects if:
 - The project substantially affects Fire-Rescue response times (i.e., increases the existing response times in the project area) to the degree that new or altered fire facilities are required to meet the response times as listed in the County Fire Protection Master Plan or similar performance standard document adopted by the Riverside County Fire Department.
- b) **Police protection.** Under the City's local significance threshold, the project would have significant effects if:
 - The project cannot be served by existing Sheriff Department resources and new or altered sheriff facilities are required to serve the project.
- c) **Schools.** Under the City's local significance threshold, the project would have significant effects if:
 - As required by Section 65995 of the Government Code, a project is required to pay any applicable school district fee following protocol for impact fee collection required by that district. The payment of school impact fees constitutes complete mitigation under CEQA for project-related impacts to school services.
- d) **Parks.** Under the City's local significance threshold, the project would have significant effects if:
 - The project will result in creating park deficiencies in the area resulting in the need for new or altered park facilities that are not offset by the payment of development impact fees or the dedication of parkland.
- e) **Other public facilities (Library).** Under the City's local significance threshold, the project would have significant effects if:
 - The project will result in creating deficiencies to other public facilities the area that are not offset by the payment of development impact fees.

Approach to Analysis

Impacts on fire and police services were determined by evaluating the proposed project's effect on existing fire and police station response times and if increased response times would result in the need to physically alter or construct new facilities to maintain adequate responses times. Projected population, referenced in the General Plan was also reviewed. In addition, fire, and police (emergency) access at the project site was evaluated. Impacts on schools were determined by evaluating the proposed project's effect on existing school enrollment. Projected population and school enrollment data provided by the General Plan, JUSD, and Department of Education were also reviewed. Impacts to police, fire, and school facilities were also based on estimates and information received in response to request letters sent to each of these service providers for their input related to possible project impacts. Impacts to park and recreation facilities were evaluated based on RivCo

Parks and JARPD information. Finally, adequacy of library facilities were based on RCLS and General Plan information. Review of the City's Municipal Code was utilized in the evaluation as well.

3.15.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Fire Protection

Threshold PUB-1: Would the proposed project 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 fire protection?

Under the City's local significance threshold, the project would have significant effects if: The project substantially affects Fire-Rescue response times (i.e., increases the existing response times in the project area) to the degree that new or altered fire facilities are required to meet the response times as listed in the County Fire Protection Master Plan or similar performance standard document adopted by the Riverside County Fire Department.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

These include existing regulatory requirements such as plans, policies, or programs applied to the proposed project based on federal, State, or local law currently in place which effectively reduce impacts to public services.

The following PPP applies to the proposed project and would reduce impacts related to fire protection.

PPP 3.15-1 The project applicant shall comply with all applicable Riverside County Fire Department codes, ordinances, and standard conditions regarding fire prevention and suppression measures relating to water improvement plans, fire hydrants, automatic fire extinguishing systems, fire access, access gates, combustible construction, water availability, and fire sprinkler systems.

Project Design Features

The proposed project would include three EVA points (in addition to two public access roads).

Impact Analysis

The proposed project would include two public access points, one at 20th Street at the eastern portion of the project site, between PAs 13 and 16, and a second at 20th Street at the western portion of the site, near PAs 2, 3, and 4. In addition, there would be three EVA points: one at Alicante Avenue in the northeastern part of the project site, near PAs 10 and 15; a second at Rorimer Drive in

the northwestern part of the project site, near PA 7; and a third at Paramount Drive in the southern part of the project site, near PA 21E with direct access to PA 1. Access roads are shown in Chapter 2, Project Description, Exhibit 2-7.

As shown in Table 3.15-1, the Riverside County Fire Department Station that would provide service to the proposed project is Station No. 38, located at 5721 Mission Boulevard. This station is equipped with one Type 1 Engine and is staffed by three personnel, 24 hours per day.²³

According to CAL FIRE, “Station 38 is approximately a 5-minute response from the Rio Vista project site.”²⁴ The City General Plan considers the proposed project as planned growth within the City. The General Plan EIR²⁵ stated that future development under the General Plan would be required to be designed, constructed, and operated per applicable fire prevention/protection standards established by the City. It further stated that all new development would be required to pay Development Impact Fees (DIF) to the City, concluding that there would be no significant impacts related to fire protection from implementation of the General Plan. Finally, the General Plan identifies the need for expanding public service by establishing Program CSSF 2.2, which would ensure the provision of sufficient public facilities and services prior to, or concurrently with, new development.

The proposed project would be required by the City to provide a minimum of fire safety and support fire suppression activities, including compliance with State and local fire codes, fire sprinklers, a fire hydrant system, paved access, and secondary access routes. In addition, the proposed project would be required to comply with Municipal Code Chapter 3.75 and pay the City’s DIF, which would ensure that the proposed project provides fair share funds for the provision of additional public services, including equipment and personnel for fire protection services, that the proposed project would utilize.²⁶ The addition of equipment to Station 38 could be accommodated within the existing facility and does not require the alteration or construction of new facilities.

As such, construction of new or physically altered facilities would not be required, and impacts would be less than significant.

Level of Significance

Less than significant impact.

²³ Reinerston, Adria. Deputy Fire Marshal, Office of the Fire Marshal, California Department of Forestry and Fire Protection (CAL FIRE)/Riverside County Fire Department. Personal communication: email. February 2, 2022.

²⁴ Ibid.

²⁵ LSA. 2017, City of Jurupa Valley 2017 General Plan Final Environmental Impact Report, SCH #2016021025. April 17.

²⁶ Jurupa Valley Municipal Code. Chapter 3.75 Development Impact Fee. Website: https://library.municode.com/ca/jurupa_valley/codes/municipal_code?nodeId=TIT3REFI_CH3.75DEIMFE. Accessed February 4, 2022.

Police Protection

Threshold PUB-2: Would the proposed project 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 police protection?

Under the City's local significance threshold, the project would have significant effects if: The project cannot be served by existing Sheriff Department resources and new or altered sheriff facilities are required to serve the project.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to the proposed project related to police protection.

Project Design Features

The proposed project would include three EVA points (in addition to two public access roads).

Impact Analysis

According to the General Plan, police services are provided to the City by the Riverside County Sheriff's Department from the Jurupa Valley Station. The Riverside County Sheriff's Department operates 10 stations and five correctional facilities, as well as other facilities. The Jurupa Valley Station is located at 7477 Mission Boulevard.

The Riverside County Sheriff's Department would like to achieve a ratio of 0.68 deputies per 1,000 persons.²⁷ The Riverside County Sheriff's Department expects the proposed "project [would] affect response times unless staffing is increased."²⁸

The General Plan considers the proposed project as planned growth within the City. Furthermore, the General Plan EIR prepared in 2016,²⁹ stated that new development would increase property tax and DIF revenues to the City which would help fund expanded police services in the future. Therefore, the Final EIR concluded that there would be no significant impacts related to police protection from implementation of the General Plan. Finally, the General Plan identifies the need for expanding public service by establishing Program CSSF 2.2, which would ensure the provision of sufficient public facilities and services prior to, or concurrently with, new development.

The proposed project would be required to comply with Municipal Code Chapter 3.75 and pay the City's DIF, which would ensure that the proposed project provides fair share funds for the provision of additional public services, including equipment and personal for police protection

²⁷ Sexton, Jason. Lieutenant, Riverside County Sheriff Department. Personal communication: telephone. February 10, 2022.

²⁸ Ibid.

²⁹ LSA. 2017, City of Jurupa Valley 2017 General Plan Final Environmental Impact Report, SCH #2016021025. April 17.

services, that the proposed project would utilize.³⁰ As such, construction of new or physically altered facilities would not be required, and impacts would be less than significant.

Level of Significance

Less than significant impact.

Schools

Threshold PUB-3: Would the proposed project 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 schools?

Under the City's local significance threshold, the project would have significant effects if: As required by Section 65995 of the Government Code, a project is required to pay any applicable school district fee following protocol for impact fee collection required by that district. The payment of school impact fees constitutes complete mitigation under CEQA for project-related impacts to school services.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

PPP 3.15-2 Before issuing building permits, the project applicant shall pay required Development Impact Fees to the Jurupa Unified School District following protocol for impact fee collection.

Project Design Features

The proposed project would include development of a K-8 elementary school that would serve 950 students.

Impact Analysis

As part of the proposed project, JUSD would have an option of purchasing PA 18 for the purpose of constructing a K-8 school. Rubidoux High School would serve students in grades nine through 12. In the event that JUSD elects not to develop a school on the project site, students residing at the proposed project would be served by Rustic Lane Elementary School, Mission Middle School, and Rubidoux High School. As of November 1, 2022, the 2022-23 school year Rustic Lane Elementary School enrollment was 542 students, Mission Middle School enrollment was 692 students, and Rubidoux High School enrollment was 1,385 students.³¹ These enrollment levels are well within the current (school year 2022-23) school capacities of 900 students for Rustic Lane Elementary School,

³⁰ Jurupa Valley Municipal Code. Chapter 3.75 Development Impact Fee. Website: https://library.municode.com/ca/jurupa_valley/codes/municipal_code?nodeId=TIT3REFI_CH3.75DEIMFE. Accessed February 4, 2022.

³¹ Griffin, Robin. Director, Planning and Development, Jurupa Unified School District (JUSD) Personal communication: email. November 1, 2022.

1,150 students for Mission Middle School, and 2,400 students for Rubidoux High School,³² allowing for increased enrollment that could result from development of the proposed project

In addition, Riverside Community College District (RCCD) intends to construct and operate the Inland Empire Technical Trade Center (IETTC) in PAs 14 and 18. The IETTC provides career training in the fields of logistics, advanced manufacturing, Cybersecurity/Information Technology (IT), and green technologies.

In accordance with the Leroy F. Greene School Facilities Act of 1998 (Senate Bill 50) as implemented by California Government Code Section 65995, JUSD is authorized to levy a new construction fee per square foot of construction to fund the reconstruction or construction of new school facilities. Payment of school impact fees constitutes complete mitigation under the Government Code for project-related environmental impacts to school services. Therefore, the payment of school impact fees for residential development would offset the potential impacts of increased student enrollment related to the implementation of the proposed project. As such, impacts would be less than significant.

Level of Significance

Less than significant impact.

Parks

Threshold PUB-4: Would the proposed project 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 parks?

Under the City's local significance threshold, the project would have significant effects if: The project will result in creating park deficiencies in the area resulting in the need for new or altered park facilities that are not offset by the payment of DIF or the dedication of parkland.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to the proposed project related to parks.

Project Design Features

The proposed project would include approximately 529.2 acres, or 58 percent, of Open Space and Recreational land uses. In addition, a bike path and soft-surface trail would be provided within a 30-foot-wide easement along 20th Street in the central area of the project site.

³² Griffin, Robin. Director, Planning and Development, Jurupa Unified School District (JUSD) Personal communication: email. November 1, 2022.

Impact Analysis

The project applicant proposes to develop a master planned residential community, including 510.8 acres of natural open space and 18.4 acres of recreational amenities. Specifically, the proposed project would include approximately 529.2 acres, or 58 percent, of Open Space and Recreational land uses. In addition, a bike path and soft-surface trail would be provided along 20th Street in the central area of the project site.

Open Space

The project site would contain approximately 510.8 acres of open space, consisting of a combination of natural open space, revegetated manufactured slopes, and regraded and revegetated slopes. Many of the existing informal trails would remain, and no new trails into the open space would be created.

Recreation

The following recreational amenities would be provided on 18.4 acres within the project site:

- A 14.3-acre community park with sports fields, open turf play areas, sports courts, a tot lot/playground, and picnic areas.
- Approximately five Neighborhood Parks ranging from approximately 0.75 acre to 1 acre and located throughout the community, with features such as benches, planters, and open lawn areas.

In addition, an integrated system of hard and soft-surface (decomposed granite) trails would provide access from the residential neighborhoods to the school site, community park, and informal dirt trails located in the Open Space.

Trails

Trails for equestrians, bicyclists, and pedestrians would form an integrated system of hard and soft-surface (decomposed granite) paths throughout the project area. The trails would complement and improve access to the existing informal trails traversing the natural open space. The trail system would include:

- Bike Path and Soft-Surface Trails. An 8-foot-wide decomposed granite soft-surface trail and a 10-foot-wide Class I hard surface bicycle trail would be located within the 30-foot-wide trail easement along 20th Street forming a central spine of trails through the project site.
- Sidewalks. Sidewalks would be constructed on all Local Collectors and Local Streets, in order to provide a pedestrian network that connects residential areas to the trails and amenities located throughout the project site.
- Existing Informal Trails. The proposed project would retain the existing unimproved informal trails located within the open space for use by future residents of the proposed project and the public. Connections from the bike path and soft-surface trail would provide access to these existing informal trails, which would remain unimproved, and would continue to allow public access to the ridges and top of the hills within the proposed community.

The City, JARPD, and RivCo Parks maintain regional and local community parks, trails, and recreational facilities for public use throughout the City. In the absence of a City-approved parks and recreation plan, the City Municipal Code 7.25.020 requires parkland dedication at a rate of 3 acres of parkland per 1,000 persons, or 0.003 acre per person.

The proposed project would be expected to result in a population increase of 6,296 persons, resulting in the need for 18.89 acres of parkland to support the City's parkland standard. The proposed project would provide 529.2 acres of open space and recreational facilities, far exceeding the minimum required to maintain the City parkland standard. As such, impacts would be less than significant.

Level of Significance

Less than significant impact.

Other Public Facilities

Threshold PUB-5: Would the proposed project 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 other public facilities (including libraries)?

Under the City's local significance threshold, the project would have significant effects if: The project will result in creating deficiencies to other public facilities the area that are not offset by the payment of DIF.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

The following PPP applies to the proposed project and would reduce impacts related other public facilities (including libraries).

PPP 3.15-5 As required by Municipal Code Chapter 3.75, the project must pay a Development Impact Fee that the City can use to improve public facilities and offset the incremental increase in the demand for public services that the project would create.

Project Design Features

There are no PDFs applicable to the proposed project related to other public facilities (including libraries).

Impact Analysis

Library services are provided to the City by the RCLS. The RCLS facility closest to the project site is Louis Robidoux Library, located at 5840 Mission Boulevard. This facility is located approximately 0.5 mile south of the project site (direct distance), approximately 3.4 miles (driving distance) south of

the project site's 20th Street western access point and approximately 3 miles (driving distance) south of the project site's 20th Street eastern access point.

The General Plan considers the proposed project as planned growth within the City. Furthermore, at final buildout, the proposed project is expected to have up to 6,296 residents, accounting for approximately 5 percent of the General Plan's population forecast, which anticipates a City population of 126,000 person by 2035. In addition, the proposed project's expected population would account for approximately 0.2 percent of the Southern California Association of Governments' (SCAG) 2045 Riverside County population forecast of 3,252,000 persons.

Furthermore, the General Plan EIR prepared in 2016³³ stated that General Plan policies regarding public services are designed to ensure that the City would have adequate services into the future as the City grows and development and increases in population occur, which would require additional public services. The Final EIR further states that these policies focus on making sure the City has adequate public services in the future, including libraries.

The proposed project would be required to comply with Municipal Code Chapter 3.75, Development Impact Fee, and pay the City's DIF, which would ensure that the proposed project provides fair share funds for the provision of additional public services, including library services, that the proposed project would utilize.³⁴ As such, impacts would be less than significant.

Level of Significance

Less than significant impact.

3.15.6 - Cumulative Impacts

The geographic scope of the cumulative public services analysis is the service area of each of the providers serving the proposed project. Because of differences in the nature of the public service topical areas, they are discussed separately.

Fire Protection Facilities

The geographical scope of the cumulative public services analysis is the boundaries of Riverside County Fire Department.). Cumulative development in the surrounding area would be expected to increase the permanent residents and daytime population, which includes employees and visitors/patrons. The cumulative increase in population could in turn result in an increased demand for fire protection facilities. Similarly, the proposed business park and industrial land use could result in increased demand for fire protection.

To help offset the increased demand, the cumulative projects would be required to pay all applicable fees to the Riverside County Fire Department and CalFire. All developments would also be required to adhere to the California Fire Code, Part 9 of the California Building Standards Code (CBC) in terms of

³³ LSA. 2017, City of Jurupa Valley 2017 General Plan Final Environmental Impact Report, SCH #2016021025. April 17.

³⁴ Jurupa Valley Municipal Code. Chapter 3.75 Development Impact Fee. Website: https://library.municode.com/ca/jurupa_valley/codes/municipal_code?nodeId=TIT3REFI_CH3.75DEIMFE. Accessed February 4, 2022.

meeting standards for fire safety such as fire flow requirements for buildings, fire hydrant location and distribution criteria, automated sprinkler systems, and fire-resistant building materials.

With adherence to CBC Code sections and payment of applicable fees, cumulative projects would not result in the need for new or altered fire protection or emergency medical facilities. Thus, there would be a less than significant cumulative impact regarding the need for new or altered fire protection and emergency medical facilities. Additionally, as discussed above, the proposed project's incremental contribution to the less than significant cumulative impact would not be cumulatively considerable.

Police Protection Facilities

The geographical scope of the cumulative public services analysis is the boundaries of the Riverside County Sheriff's Department.). Cumulative development in the surrounding area could be expected to increase the permanent residents and daytime population, which includes employees and visitors/patrons. The cumulative increase in population could in turn result in an increased demand for police protection facilities.

To help offset the increased demand for police protection facilities, the cumulative projects would be required to pay applicable fees to the Riverside County Sheriff's Department. All developments would also be reviewed for impacts on law enforcement services and would be required to address any potential impacts with mitigation. Because demand for law enforcement services is highly dependent on a number of factors that vary substantially by project (clientele, hours of operation, crime prevention measures, etc.), it is unlikely that there would be substantial overlap in demand that would result in a cumulatively significant impact such that new police protection facilities are necessary.

With payment of applicable fees, cumulative projects would not result in the need for new or altered police protection facilities. Thus, there would be a less than significant cumulative impact regarding the need for new or altered police protection facilities. Additionally, as discussed above, the proposed project's incremental contribution to the less than significant cumulative impact would not be cumulatively considerable.

School Facilities

The geographical scope of the cumulative public services analysis is the boundaries of the JUSD.

All cumulative developments would be required to pay DIF to the JUSD. In accordance with the Leroy F. Greene School Facilities Act of 1998 (Senate Bill 50) as implemented by per California Government Code Section 65995, JUSD is authorized to levy a new construction fee per square foot of construction to fund the reconstruction or construction of new school facilities. Payment of school impact fees constitutes complete mitigation under CEQA for project-related impacts to school services. Under State law, this is the exclusive means of mitigating impacts to school facilities due to increased enrollment. As part of the project entitlement process, the cumulative project applicants would be responsible for paying their fair share of these school facility fees.

With payment of applicable fees, cumulative projects would not result in the need for new or altered school facilities. Thus, there would be a less than significant cumulative impact regarding the need for new or altered school facilities. Additionally, as discussed above, the proposed project's incremental contribution to the less than significant cumulative impact would not be cumulatively considerable.

Parks

The geographic scope of the cumulative parks and recreation analysis consists of the local community and regional parks within the boundaries of JARPD. These include parks and recreational facilities managed by JARPD, RivCo Parks, the City, and private entities. The cumulative projects listed in Table 3-1, Cumulative Projects could result in an increased cumulative demand for park facilities.

However, with payment of applicable fees by the cumulative projects, there would be a less than significant cumulative impact related to potential increased use and physical deterioration of existing parks and recreational facilities or the need for new or altered parks and recreational facilities. Additionally, as discussed above, the proposed project would provide 529.2 acres of open space and recreational facilities, far exceeding the minimum required to maintain the City parkland standard. As such the proposed project would not contribute to the less than significant cumulative impact.

Library Facilities

The geographic scope of the cumulative library facilities analysis is the RCLS. The cumulative projects listed in Chapter 3, Environmental Impact Analysis, Table 3-1, could increase the population and demand for library facilities.

However, with payment of applicable fees by the cumulative projects, there would be a less than significant cumulative impact related to potential increased use and physical deterioration of existing library facilities or the need for new or altered library facilities. Additionally, as discussed above, the proposed project's incremental contribution to the less than significant cumulative impact would not be cumulatively considerable.

Level of Cumulative Significance

Less than significant impact.

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3.16 - Recreation

3.16.1 - Introduction

This section describes the existing conditions related to parks and recreational facilities in the proposed project area as well as the relevant regulatory framework. This section also evaluates the possible impacts related to parks and recreational facilities that could result from implementation of the proposed Rio Vista Specific Plan (proposed project). Information in this section is based on information obtained from the City of Jurupa Valley General Plan (General Plan) and information published by local parks districts.

A Notice of Preparation (NOP) was released for public review on December 6, 2021, and an Environmental Impact Report (EIR) Scoping Meeting was held on December 14, 2021. No public comments were received during the scoping period related to recreation.

3.16.2 - Environmental Setting

Existing Parks and Recreational Facilities

Parks and recreation facilities and programs in the City of Jurupa Valley (City) are provided primarily by the Jurupa Area Recreation and Park District (JARPD) and by Riverside County Regional Parks and Open Space District (RivCo Parks).

Jurupa Area Recreation and Park District

The JARPD was formed in 1984 to provide parks and recreational facilities for current and future families in the 91752 and 92509 zip code areas,¹ which today comprise the incorporated City. The JARPD offers a diverse range of parks, playgrounds, greenbelts, trails, and recreation facilities. As of 2017, JARPD owns and maintains over 125 acres of parkland, 173 acres of undeveloped parks and open space, and approximately 23 acres of trails throughout the City, with additional parks planned for the near future.² The JARPD offers a range of recreational programs and opportunities year-round, such as youth enrichment and sports and special interest classes for youth, adults, and seniors at their multiple facilities throughout the City. In addition, the JARPD offers City residents community center and park shelter rentals for private events.

Riverside County Regional Park and Open Space District

RivCo Parks is divided into three bureaus: Parks and Resources, Planning and Development, and Business Services. The focus of RivCo Parks is to provide high-quality recreational opportunities and to preserve important features of Riverside County's natural, cultural, and historical heritage.³ RivCo Parks operates and maintains regional parks, sports facilities, camp sites, trails, nature centers, and special events facilities throughout Riverside County (County).

¹ Jurupa Area Recreation and Park District (JARPD). 2022. About Us. Website: <https://www.jarpd.org/about-us>. Accessed March 1, 2022.

² City of Jurupa Valley. 2017. 2017 General Plan. September.

³ Riverside County Regional Park and Open Space District (RivCo Parks). 2021. About Us. Website: <https://www.rivcoparks.org/about-us>. Accessed March 1, 2022.

RivCo Parks operates several important recreation facilities in the City including the Louis Rubidoux Nature Center, Rancho Jurupa Regional Sports Park, Rancho Jurupa Park and Campground, Historic Crestmore Manor, and the Cove Waterpark.⁴

Recreational Facilities in the Project Vicinity

There are no national or State parks within a 3-mile radius of the project site. A number of local and regional public parks exist within the project vicinity. The nearest park to the project site is Avalon Park, located approximately 0.4 mile east of the project site. Parks and recreational facilities located within 3 miles of the project site are shown in Exhibit 3.16-1 and listed in Table 3.16-1.

Table 3.16-1: Park and Recreational Facilities within 3 Miles of the Project Site

Name	Acreage	Distance from Project Site	Jurisdiction	Amenities
AB Brown Sports Complex	53.05	2.30 miles	JARPD	Soccer fields
Avalon Park	10	0.4 mile	JARPD	Playground, grassy area, picnic tables, ball fields, outside basketball, sand volleyball, basketball gymnasium, restrooms
Carlson Park	1.63	1.43 miles	City of Jurupa Valley	City park
Centennial Park	23.39	1.90 miles	City of Jurupa Valley	City park
Evans Sports Complex	12.05	2.48 miles	City of Jurupa Valley	Baseball/softball fields
Fairmount Regional Park	213.14	1.38 miles	City of Jurupa Valley	Rose gardens, lake, and golf course
Glen Avon Heritage Park	13.32	2.23 miles	County of Riverside	Playground, grassy area, picnic tables, outside basketball, restrooms, picnic shelter, splash grounds
Jensen Alvarado Ranch	30.03	0.85 mile	City of Jurupa Valley	Historic ranch and museum
Jurupa Mountains Cultural Center (Jurupa Mountains Discovery Center)	61.51	1.73 miles	City of Jurupa Valley	Museum, succulent nursery, educational activities
Loring Park	2.46	1.66 miles	City of Jurupa Valley	Sports park
Louis Robidoux Park	63.82	2.0 miles	County of Riverside	Regional park
Martha Mclean/Anza Narrows	296.78	2.25 miles	City of Riverside	Hiking trails
Milestone Ranch MX Park	11.57	1.43 miles	Private	—

⁴ City of Jurupa Valley. 2017. 2017 General Plan. September.

Name	Acreage	Distance from Project Site	Jurisdiction	Amenities
Mount Rubidoux Park	158.79	1.47 miles	County of Riverside	Hiking trails
Newman Park	0.43	2.60 miles	City of Jurupa Valley	City park
North Park	1.27	2.86 miles	City of Jurupa Valley	City park
Rancho Jurupa Park and Regional Sports Park	350.45	1.18 miles	County of Riverside	Natural and synthetic turf fields, plaza with picnic shelters, restrooms, snack bar, playgrounds, campgrounds, fishing lake
Reid Park	42.70	2.55 miles	Jurupa Community Services District	Educational facility
Santa Ana River Wildlife Area	644.14	1.85 miles	County of Riverside	Hiking trails, educational interpretation
Tequesquite Park	42.81	2.11 miles	County of Riverside	Hiking trails, educational interpretation
Veterans Memorial Park	10.21	1 mile	City of Jurupa Valley	Playground, grassy area, picnic tables, ball fields, sand volleyball, community center, pool, restrooms, picnic shelter
White Park	5.32	2.37 miles	JARPD	Community park
Yost Park	1.96	1.68 miles	JARPD	Community park
San Bernardino County				
Ayala Park	6.10	2.38 miles	San Bernardino County/Bloomington Recreation and Park	Playground, community center, picnic shelters and tables
Catawba Park	12.02	2.62 miles	City of Fontana	Ball fields, barbecue areas, picnic tables, restrooms, tennis courts
Fiesta Park	1.31	1.19 miles	City of Fontana	Playground and restrooms
Kessler Park	21.21	1 mile	San Bernardino County/Bloomington Recreation and Park	Playground, skate park, baseball fields, a batting cage, equestrian arena, picnic shelters and tables
Martin Tudor Jurupa Hills Regional Park	478.04	1.23 miles	City of Fontana	Ball fields, barbecue areas, bocce and horseshoes, picnic shelters and tables, playground, restrooms, trails, volleyball fields
Sycamore Hills Park	3.06	1.55 miles	City of Fontana	Playground and picnic shelters

Name	Acreage	Distance from Project Site	Jurisdiction	Amenities
Village Park	10.67	2.85 miles	City of Fontana	Ball fields, barbecue areas, basketball court, picnic shelters and tables, playground, restrooms, snack bar
Sources: Jurupa Area Recreation and Park District (JARPD) City of Fontana City of Jurupa Valley County of Riverside County of San Bernardino				

3.16.3 - Regulatory Framework

Federal

No federal plans, policies, regulations, or laws related to public services and recreation are applicable to the proposed project.

State

Quimby Act

The Quimby Act (California Government Code § 66477) was established by the California Legislature in 1965 to preserve open space and parkland in rapidly urbanizing areas of the State. The Quimby Act allows cities and counties to establish requirements for new development to dedicate land for parks, pay an in lieu fee, or provide a combination of the two.

The Quimby Act provides two standards for the dedication of land for use as parkland. If the existing area of parkland in a community is greater than 3 acres per 1,000 residents, then the community may require dedication based on a standard of up to 5 acres per 1,000 persons residing in the subdivision based on the current ratio of parkland per 1,000 residents. If the existing amount of parkland in a community is less than 3 acres per 1,000 residents, then the community may require dedication based on a standard of only 3 acres per 1,000 persons residing in the subdivision.

Local

City of Jurupa Valley General Plan

The following General Plan policies are directly related to the project in regard to recreation. Please refer to Section 3-11, Land Use and Planning, for analysis of the proposed project's consistency with these policies.

Community Safety, Services, and Facilities Element

CSSF 2.3 Facility Design. Work with service agencies to ensure that new public facilities are well designed, energy efficient, and compatible with adjacent land uses.

CSSF 2.4 Fair Share. Ensure that new development pays its fair share of public facilities and service costs.

CSSF 2.5 Joint Use. Promote the joint use of public facilities to meet multiple needs of the community.

Conservation and Open Space

COS 8.3 Conversion of Recreation and Open Space Uses. Discourage the conversion of dedicated parklands and designated open space to non-recreational or non-open space uses. Where conversion is unavoidable, require developers or responsible agencies to replace parklands that are converted to other uses on a 2-for-1 acre basis, with similar or improved facilities and programs, and open space with land of equivalent open space value.

COS 8.4 Equal Access to Recreation and Open Space Resources. Ensure that the City's open space and recreational network accommodates the needs of all residents, regardless of their income, ethnicity, physical capabilities, or age.

COS 8.5 Parkland Implementation Strategies. Require new development to provide funding and/or long-term implementation of strategies for the acquisition and improvement of active and passive parks, open space, and recreational sites, when appropriate.

COS 8.6 Provision of Recreation Facilities. Require that parkland or open space dedication and improvement occur prior to, or concurrent with construction, as a condition of approval of new residential subdivisions.

COS 8.7 Public Access. Provide public access to open space resources when doing so is consistent with protection of the resources, and with the security and privacy of affected landowners and occupants. Access will generally be limited to non-vehicular movement and may be restricted in sensitive areas.

Healthy Communities Element

HC 4.8 Trails. Encourage use of public trails and work with civic organizations, community groups, youth groups, homeowner associations, regional and State agencies and nonprofit organizations to improve, expand, and maintain the trail network.

Jurupa Valley Municipal Code

Section 7.25.020.—Park and Recreation Fees and Dedications

Whenever land that is proposed to be divided for residential use lies within the boundaries of a public agency designated to receive dedications and fees pursuant to this section, a fee and/or the dedication of land shall be required as a condition of approval of the division of land.

3.16.4 - Thresholds of Significance

Significance Criteria

In accordance with Section 15064.7 of the State California Environmental Quality Act (CEQA) Guidelines, the City of Jurupa Valley adopted local CEQA Guidelines. The City's local CEQA Guidelines are based, in part, on the CEQA checklist included in Appendix G of the State CEQA Guidelines. The City of Jurupa Valley Guidelines recognizes the following significance thresholds and Significance Criteria related to recreation. Based on these significance thresholds, a project would have a significant impact on recreation if it would:

- a) 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.

Under the City's local significance threshold, the project would have significant effects if: The project proposes a General Plan Amendment which could result in an increase in population over that projected in the adopted General Plan and the project will result in an increase in 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.

- b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

Screening Criteria: If the project is a nonresidential project and does not include on-site or off-site recreational facilities it may be presumed to have a less than significant impact absent substantial evidence to the contrary.

Under the City's local significance threshold, the project would have significant effects if: A project includes recreational facilities or requires the construction or expansion of recreational facilities, significant impacts may occur if any of the Significance Thresholds identified in these Guidelines are exceeded.

Approach to Analysis

Impacts related to parks and recreational facilities were determined by evaluating the proposed project's effect on existing park and recreational facility usage levels. FirstCarbon Solutions (FCS) sent a letter to JARPD and to RivCo Parks on January 14, 2022, that included inquiries regarding local parks use. To date, FCS has not received responses. Analysis in this section is based on information obtained from the General Plan and information published by the local parks districts (JARPD and RivCo Parks).

3.16.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Increase Use of Parks

Threshold REC-1: Would the proposed project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Under the City's local significance threshold, the project would have significant effects if: The project proposes a General Plan Amendment which could result in an increase in population over that projected in the adopted General Plan and the project will result in an increase in 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.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

These include existing regulatory requirements such as plans, policies, or programs applied to the project based on federal, State, or local law currently in place which effectively reduce impacts to recreational opportunities.

There are no PPPs applicable to Threshold REC-1.

Project Design Features

The proposed project would include approximately 529.2 acres, or 58 percent, of Open Space and Recreational land uses. In addition, a bike path and soft-surface trail would be provided within a 30-foot-wide easement along 20th Street in the central area of the project site.

Impact Analysis

The project proposes a General Plan Amendment to develop a master planned residential community, including 510.8 acres of natural open space and 18.4 acres of recreational amenities. Specifically, the project proposes approximately 529.2 acres, or 58 percent, of Open Space and Recreational land uses. In addition, a bike path and soft-surface trail would be provided along 20th Street in the central area of the project site.

Open Space

The project site would contain approximately 510.8 acres of open space, consisting of a combination of natural open space, revegetated manufactured slopes, and regraded and revegetated slopes. Many of the existing informal trails would remain, and no new trails into the open space would be created.

Recreation

The following recreational amenities would be provided on 18.4 acres on the project site:

- A 14.3-acre community park with sports fields, open turf play areas, sports courts, a tot lot/playground, and picnic areas.
- Approximately five Neighborhood Parks, ranging from around 0.75 acre to 1 acre, located throughout the community, with features such as benches, planters, and open lawn areas.

In addition, an integrated system of hard and soft-surface (decomposed granite) trails would provide access from the residential neighborhoods to the school site, Community Park, and informal dirt trails located in the open space.

Trails

Trails for equestrians, bicyclists, and pedestrians would form an integrated system of hard- and soft-surface (decomposed granite) paths throughout the project area. The trails would complement and improve access to the existing informal trails traversing the natural open space. The trail system would include:

- **Bike Path and Soft-Surface Trails.** An 8-foot-wide decomposed granite soft-surface trail and a 10-foot-wide Class I hard-surface bicycle trail would be located within the 30-foot-wide trail easement along 20th Street, forming a central spine of trails through the project site.
- **Sidewalks.** Sidewalks would be constructed on all local collectors and local streets in order to provide a pedestrian network that connects residential areas to the trails and amenities located throughout the project site.
- **Existing Informal Trails.** The proposed project would retain the existing unimproved informal trails located within the open space for use by future residents of the proposed project and the public. Connections from the bike path and soft-surface trail would provide access to these existing informal trails, which would remain unimproved, and would continue to allow public access to the ridges and top of the hills within the proposed community.

The City, JARPD, and RivCo Parks maintain regional and local community parks, trails, and recreational facilities for public use throughout the City. City park standards are established in the General Plan. Specifically, the General Plan Conservation and Open Space Element seeks to achieve a level of parkland equal to 5 acres per new 1,000 residents or 0.005 acre per new resident.

The proposed project would be expected to result in a population increase of 6,296 persons, which is accounted for in the General Plan 2014 to 2035 population growth projection of between 37,622 and 53,745 people (see Section 3.14 Population and Housing). The projected population growth associated with the project would result in the need for 33.03 acres of parkland to support the City's parkland standard. The proposed project would provide 529.2 acres of open space and recreational facilities, far exceeding the minimum required to maintain the City parkland standard. Therefore, the proposed project will not result in an increase in the use of existing parks that would result in a substantial physical deterioration of facilities.

The proposed project could result in increased use of existing neighborhood and regional parks or other recreational facilities. However, in addition to the ample open space and recreational facilities provided by the proposed project, compliance with the Municipal Code, paying development impact fees, and adherence to General Plan policies would offset potential significant impacts related to existing parks and recreational facilities. Therefore, impacts would be less than significant.

Level of Significance

Less than significant impact.

Recreational Facilities Physical Effect on Environment

Threshold REC-2: Would the proposed project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Screening Criteria: If the project is a nonresidential project and does not include on-site or off-site recreational facilities, it may be presumed to have a less than significant impact absent substantial evidence to the contrary.

Under the City's local significance threshold, the project would have significant effects if: A project includes recreational facilities or requires the construction or expansion of recreational facilities, significant impacts may occur if any of the Significance Thresholds identified in these Guidelines are exceeded.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

The following PPP applies to the proposed project and would reduce impacts related to Threshold REC-2:

PPP 3.16-1 Before issuing a building permit, the Project Applicant shall pay required park development impact fees to the Jurupa Area Recreation and Park District according to District Ordinance No. 01-2007 and 02-2008.

Project Design Features

The proposed project would include approximately 529.2 acres, or 58 percent, of Open Space and Recreational land uses. In addition, a bike path and soft-surface trail would be provided within a 30-foot-wide easement along 20th Street in the central area of the project site.

The proposed project would include approximately 529.2 acres of private open space and recreational facilities on the project site. The proposed project's private recreational facilities would include the existing 510.8 acres of open space and informal trails as well as the construction of a community park and five neighborhood parks on 18.4 acres and an integrated system of hard- and soft-surface trails (including bike path, soft-surface trails, and sidewalks).

The environmental impacts associated with construction of the proposed project, including parks and recreational facilities, are analyzed throughout this Draft EIR. In particular, construction-related impacts discussion of air quality, energy, greenhouse gas (GHG) emissions, and noise-related construction impacts are discussed in Sections 3.3, 3.6, 3.8, and 3.13 respectively, and are summarized as follows:

- **Section 3.3, Air Quality:** Less than significant impacts related to consistency with an Air Quality Management Plan (AQMP) (Threshold AQ-1) and odor emissions (Threshold AIR-4) as related to construction and operation of the proposed recreational facilities; and less than significant impact related to potential for air quality standards violation (Threshold AQ-2) and

sensitive receptor exposure to pollutant concentrations ((Threshold AIR-3) as related to construction and operation of the proposed recreational facilities.

- **Section 3.6, Energy:** Less than significant impacts related to construction and operation energy use (Threshold ENER-1) and to energy efficiency and renewable energy standards consistency (Threshold ENER-2) as related to construction and operation of the proposed recreational facilities.
- **Section 3.8, Greenhouse Gas Emissions:** Less than significant impacts related to generation of GHG emissions (Threshold GHG-1) and to conflict with any applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions (Threshold GHG-2) as related to construction and operation of the proposed recreational facilities.
- **Section 3.13, Noise:** While the proposed project would result in a significant unavoidable impact related to traffic noise during operations (Threshold NOI-1), this impact would not be generated as a result of construction of the proposed recreational facilities nor their usage.

The proposed project would result in a less than significant impact with mitigation incorporated related to construction noise and applicable standards (Threshold NOI-2). However, this impact would not be generated as a result of construction of the proposed recreational facilities, nor their usage.

Therefore, the proposed project's construction of parks and recreational facilities on the project site would result in a less than significant impact.

Level of Significance

Less than significant impact.

3.16.6 - Cumulative Impacts

The geographic scope of the cumulative recreation analysis consists of the JARPD and RivCo Parks service area, with a focus on the 3-mile radius surrounding the project site. The cumulative projects listed in Chapter 3, Environmental Impact Analysis, Table 3-1, Cumulative Projects, are mostly commercial and industrial in nature, with only project S, T, U, W, and X being residential. As shown in Table 3-1 and Exhibit 3-1, these cumulative projects are all located within the 3-mile radius of the project site. All projects in the City would need to comply with the Municipal Code, pay development impact fees, and adhere to General Plan policies, which would offset potential significant impacts related to existing parks and recreational facilities. Therefore, cumulative impacts would be less than significant.

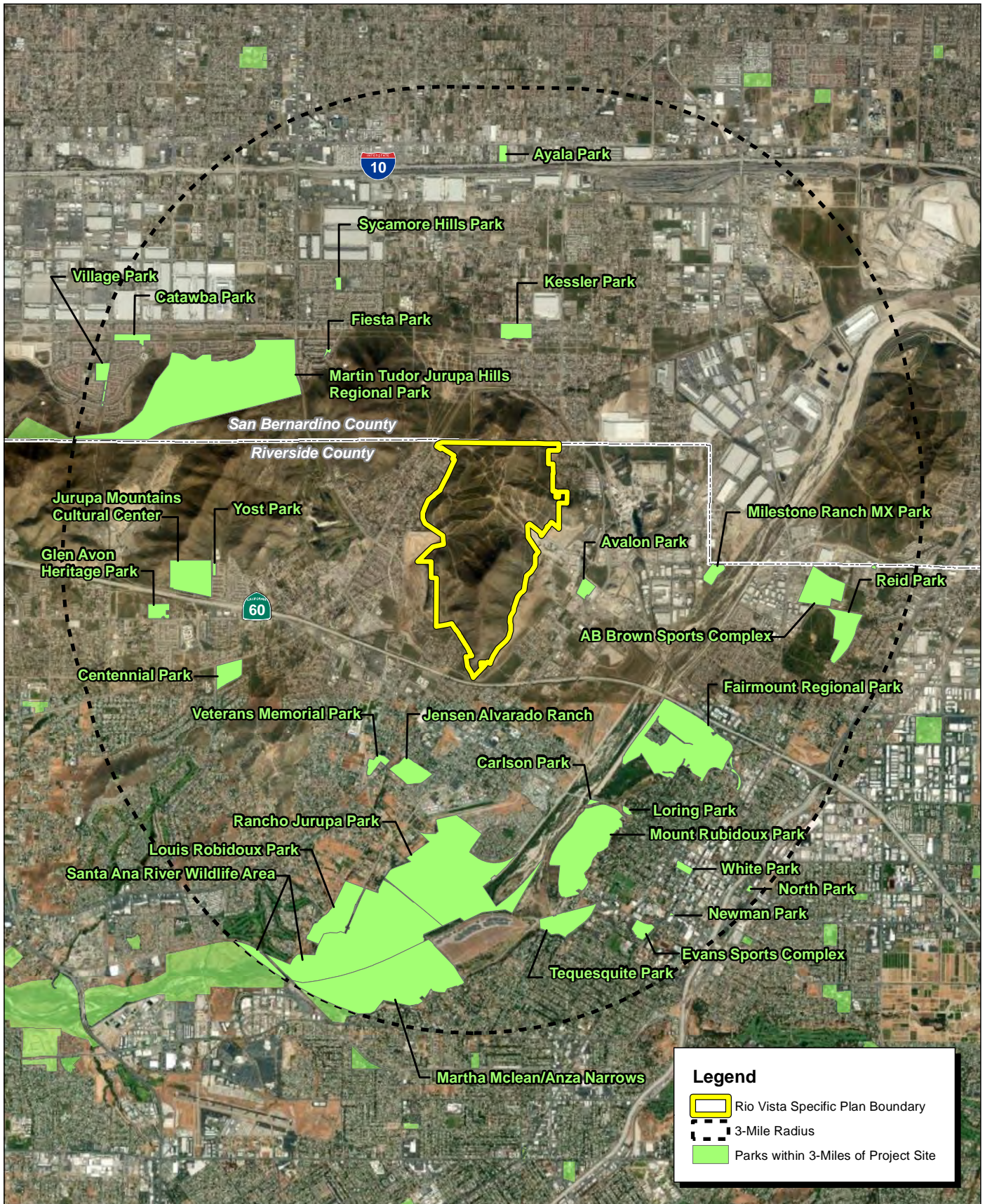
Additionally, the proposed project's contribution to less than significant cumulative impacts would not be cumulatively considerable. The proposed project would include approximately 529.2 acres of private open space and recreational facilities, which would support and exceed the City's parkland standard of 5 acres per new 1,000 residents or 0.005 acre per new resident. Additionally, similar to other development, the proposed project would comply with all General Plan policies. Therefore, the proposed project, in conjunction with the five identified cumulative residential projects, would

provide full mitigation for potential impacts and would not contribute to an increase in permanent population that could result in an increased cumulative demand for park facilities.

Level of Cumulative Significance

Less than significant impact.

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Source: ESRI Aerial Imagery. Riverside County and San Bernardino Parks Data.



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3.17 - Transportation

3.17.1 - Introduction

This section describes existing conditions related to transportation in the project area as well as the relevant regulatory framework. This section also evaluates the possible impacts related to transportation that could result from implementation of the proposed project. Information in this section is based on the City of Jurupa Valley General Plan (General Plan), the project-specific Transportation Impact Analysis (TIA) prepared by Environment Planning Development (EPD) Solutions, Inc., and dated February 15, 2023¹ (Appendix J), and the project-specific Plan Vehicle Miles Traveled (VMT) Analysis memorandum prepared by Urban Crossroads and dated March 31, 2023² (Appendix J).

A Notice of Preparation (NOP) was released for public review on December 6, 2021, and an Environmental Impact Report (EIR) Scoping Meeting was held on December 14, 2021. One public comment letter was received during the scoping period related to transportation:

- California Department of Transportation (Caltrans). Caltrans recommended the following be provided regarding the proposed project's transportation:
 - High quality transit stops on 20th Street.
 - Bike and pedestrian connections every 600 feet to 20th Street from Planning Areas (PAs) 3, 5, 6, 8, 12, 13, 14, 16, and 19.
 - Bike lanes on both sides of 20th Street.
 - Bike facilities at all industrial, business park, and commercial land uses.

3.17.2 - Environmental Setting

The City's transportation setting consists of freeways, highways, and numerous local City routes including expressways, urban arterials, arterials, major roadways, secondary roadways, collector streets, industrial collector streets, and local streets. Bicyclist and pedestrian facilities are located in various locations throughout the City in the form of multiuse paths, bike lanes, cycle track, and sidewalks, as shown in Figure 3-1 of the City's Circulation Master Plan for Bicyclists and Pedestrians (Circulation Master Plan).³

The project site is vacant with no existing buildings or developed roads, however, there are a number of informal, unpaved trails and dirt roads located throughout the site.

The major streets in the project site's vicinity are Sierra Avenue, Cedar Avenue, Rubidoux Boulevard, Valley Way, Armstrong Road Mission Boulevard, Pacific Avenue, and Market Street. According to the

¹ EPD Solutions, Inc. 2023. Rio Vista Specific Plan Traffic Impact Analysis. February 15.

² Urban Crossroads. 2023. Rio Vista Plan Amendment Vehicle Miles Traveled (VMT) Analysis. May 31.

³ City of Jurupa Valley. 2018 Circulation Master Plan for Bicyclists and Pedestrians. June. Website: <https://www.jurupavalley.org/DocumentCenter/View/1569/JV-Circulation-Plan-for-Bicyclists-and-Pedestrians-PDF#:~:text=This%20Circulation%20Master%20Plan%20for,advisory%20meetings%20with%20city%20staff>. Accessed March 8, 2022.

General Plan Mobility Element, Mission Boulevard east of Valley Way is classified as Arterial; Armstrong Road, Valley Way, Rubidoux Boulevard, Market Street, and Mission Boulevard east of the State Route (SR) 60 eastbound ramps are classified as Major; Mission Boulevard west of Valley Way and Sierra Avenue are classified as Secondary; and Pacific Avenue and the existing portion of 20th Street west of Rubidoux Boulevard are classified as Local.⁴

Cedar Avenue is classified as a Major Highway in the County of San Bernardino General Plan Circulation Element. Finally, Sierra Avenue is classified as a Major Highway in the City of Fontana General Plan Community Mobility Circulation Element. Cedar Avenue and Sierra Avenue are roadways designated in the Congestion Management Plan Road system. Table 3.17-1 shows the roadway characteristics that are observed within the project study area.

Table 3.17-1: Existing Roadway Characteristics Within the Study Area

Roadway	Number of Lanes	Sidewalks?	Bike Lane?
20 th Street (E/W)	2-Lane divided east of Sierra Avenue and 2-Lane undivided west of Rubidoux Boulevard (currently unconnected)	Sierra Side: Yes North Side: No South Side: No, in the portion east of Van Dell Road; and Yes in the portion west of Van Dell Road	No
Armstrong Road (N/S)	2-Lane undivided north of Gillam Street 2-Lane divided from Sierra Avenue to Gillam Street 4-Lane Divided south of Sierra Avenue	West Side: No, in the portion north of Sierra Avenue; and Yes, in the portion south of Sierra Avenue. East Side: Yes, in the portion south of Jurupa Valley City Boundary	No
Valley Way (N/S)	4-Lane divided	Yes	No
Pacific Avenue (N/S)	2-Lane undivided (no thru traffic at Union Pacific Railroad [UPRR] Tracks)	Partially south of UPRR tracks	No
Rubidoux Boulevard (N/S)	4-Lane divided north of 24 th street and south of 28 th street. Painted median is present from north of 26 th street to street to south of Arbuckle Road.	North of 24 th Street: No 24 th Street to 30 th Street: Yes South of 30 th Street: No	No
Mission Boulevard (E/W)	4-Lane divided from SR-60 EB Ramps to Soto	East of Valley Way: Yes North Side: No South Side: sporadically	No

⁴ City of Jurupa Valley. 2017. 2017 General Plan. September.

Roadway	Number of Lanes	Sidewalks?	Bike Lane?
	Avenue and east of Valley Way 7000 and 7100 blocks are 4-Lane undivided		
Market Street (N/S)	2-Lane undivided north of Rivera Street, 4-Lane divided south of Rivera Street	West Side: No East Side: No North of Rivera Street, Yes South of Rivera Street	No
Sierra Avenue (Jurupa Valley) (N/S)	4-Lane Divided north of Karen Lane, 4-Lane undivided between Karen Lane and Armstrong Road, 2-Lane undivided from Armstrong Road to WoodBriar Drive, and 2- Lane divided south of WoodBriar Drive	West Side: Yes, south of Karen Lane East Side: Yes, between Karen Lane and Armstrong Avenue and south of 20 th Street	Jurupa Valley: No
Sierra Avenue (Fontana) (N/S)	7-Lane Divided north of Slover, 6-Lane Divided south of Slover, 5-Lane Divided South of Santa Ana, and 4-Lane Divided South of Jurupa Avenue	West Side: Yes north of Martin Tudor Jurupa Hills Regional Park East Side: Yes north of Jurupa Avenue	Fontana: Yes on east side between Santa Ana Avenue and Technology Street
Cedar Avenue (N/S)	4-Lane divided. Solid median south of Slover Avenue, painted median north of Slover Avenue	West Side: Intermittently East Side: Yes north of Santa Ana Avenue and intermittently south of Santa Ana Avenue	No
Source: EPD Solutions, Inc. February 15, 2023.			

Existing Public Transit Service and Facilities

The Riverside Transit Agency (RTA) serves the City of Jurupa Valley. The transit system includes common bus carriers, paratransit services, and Metrolink and other local agency transit services. The City transit routes are shown on Exhibit 3.17-1, Transit Circulation Network. As shown on Exhibit 3.17-1, there are two RTA bus routes that service the project vicinity. RTA Route 49 has stops along Mission Boulevard, with the closest one located at the intersection of Valley Way and Mission Boulevard. Route 29 has stops along Rubidoux Boulevard and Market Street, with the closest stop located at the intersection of Rubidoux Boulevard and 24th Street. There are no developed public transit services within the project site.

Bicycle and Pedestrian Facilities

Caltrans Highway Design Manual and National Association of City Transportation Officials Urban Bikeway Design Guide define four major types of bicycle facilities:

- **Class I: Multiuse Path**—These paths provide a completely separate right-of-way and are designated for the exclusive use of bicycles and pedestrians with vehicle crossflow minimized.
- **Class II: Bicycle Lane**—These bicycle lanes provide a restricted right-of-way and are designated for the use of bicycles for one-way travel with a striped lane on a street or highway. These bicycle lanes are generally a minimum of 5 feet wide, and vehicle/pedestrian crossflow is permitted.
- **Class III: Bicycle Route with Sharrows**—These bikeways provide right-of-way designated by signs or pavement markings for shared use with motor vehicles. These bikeways include sharrows or “shared-lane markings” to highlight the presence of bicyclists.
- **Class IV: Separated Bicycle Lanes**—These bicycle lanes consist of a physically separate lane for increased comfort and protection of bicyclists. These bicycle lanes can be physically separated by a barrier, such as planters or on-street parking, grade-separated from the roadway, or a painted buffer area. These can also be called cycle tracks and can allow for one-way or two-way bicycle travel.

Existing Bicycle and Pedestrian Facilities

The Circulation Master Plan illustrates existing bicycle and pedestrian facilities within the City and surrounding the project site.⁵ Per Exhibit 3.17-2, Existing Bicycle and Pedestrian Facilities, there are no designated bicycle or pedestrian facilities within the project site or its vicinity. Pedestrian facilities adjacent to the project site are limited to sidewalks. The nearest bike lane is located along Crestmore Road, approximately 1.3 miles southeast of the project site, south of SR-60.

Exhibit 3.17-3, Trails, shows existing and tentative trail facilities. These include one tentative Combination Trail (Regional/Class 1 Bike Path) and multiple Community Trails traversing the project site. This figure is reflective of the City’s intent to provide a developed trail through the project site and maintain some of the informal trails existing on the project site. Similarly, Exhibit 3.17-4, Bicycle Projects, illustrates a proposed Multiuse Path (Class 1) bike path traversing the project site. The path is described as 3.5-miles of Class I bike path planned along the future 20th Street from Sierra Avenue to the Proposed Santa Ana River Trail and an additional 0.5-mile planned Class IV bike path along Market Street from the proposed Santa Ana River Trail to the City of Riverside.

3.17.3 - Regulatory Framework

Federal

No federal plans, policies, regulations, or laws related to transportation are applicable to the proposed project.

⁵ City of Jurupa Valley. 2018 Circulation Master Plan for Bicyclists and Pedestrians. June. Website: <https://www.jurupavalley.org/DocumentCenter/View/1569/JV-Circulation-Plan-for-Bicyclists-and-Pedestrians-PDF#:~:text=This%20Circulation%20Master%20Plan%20for,advisory%20meetings%20with%20city%20staff>. Accessed March 8, 2022.

State

California Department of Transportation

Caltrans builds, operates, and maintains the State highway system, including the interstate highway system. Caltrans's mission is to improve mobility Statewide. The department operates under strategic goals to provide a safe transportation system, optimize throughput and ensure reliable travel times, improve the delivery of State highway projects, provide transportation choices, and improve and enhance the State's investments and resources. Caltrans controls the planning of the State highway system and accessibility to the system. Caltrans requires encroachment permits from agencies or new development before any construction work may be undertaken within the State's right-of-way. For projects that would impact traffic flow and levels of services on State highways, Caltrans would review measures to mitigate the traffic impacts.

Senate Bill 743

In November 2017, the Governor's Office of Planning and Research (OPR) released a technical advisory containing recommendations regarding the assessment of VMT, proposed thresholds of significance, and potential mitigation measures for lead agencies to use while implementing the required changes contained in Senate Bill (SB) 743. OPR recommends that for most instances a per service population threshold should be adopted and that a 15 percent reduction below that of existing development would be a reasonable threshold. The updated guidelines eliminate the use of automobile delay metrics, such as Level of Service (LOS), from determining significant environmental impacts from vehicle travel.

In December 2018, the California Natural Resources Agency certified and adopted the California Environmental Quality Act (CEQA) Guidelines update, including a new CEQA Guidelines section implementing SB 743 (State CEQA Guidelines § 15064.3). VMT has been identified as the most appropriate metric to evaluate a project's transportation impacts, as projects that result in lower than average VMT support goals of reducing greenhouse gas (GHG) emissions, while projects that result in higher than average levels of vehicle travel contribute to an increasing rate of GHG emissions.

Accordingly, as of July 1, 2020, under the statute and CEQA Guidelines, localities are required to rely on VMT instead of traffic delay as the primary metric for evaluating transportation impacts in CEQA documents. The existence of automobile delay impacts, or the adequacy of an LOS analysis, is not a basis under CEQA for challenging an EIR (*Citizens for Positive Growth & Preservation v. City of Sacramento* (2019) 43CA5th 609, 624).

Regional

Southern California Association of Governments 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal)

The Southern California Association of Governments (SCAG), a Joint Powers Authority, is designated as a Council of Governments (COG), a Regional Transportation Planning Agency (RTPA), and a Metropolitan Organization (MPO). The project site is within the SCAG's regional authority. SCAG's 2020–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): Connect SoCal is a long-range visioning plan that balances future mobility and housing needs with

economic, environmental, and public health goals.⁶ Using growth forecasts and economic trends that project out over a 20-year period, the RTP considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address our mobility needs. The plan details how the region would address its transportation and land use challenges and opportunities in order to achieve its regional emissions standards and GHG emissions reduction targets.

Local

City of Jurupa Valley General Plan

The following General Plan Mobility Element policies are directly related to the proposed project in regard to transportation. Please refer to Section 3-11, Land Use and Planning, for analysis of the proposed project's consistency with these policies.

Roadway Networks

- ME 2.2** **Transportation Infrastructure.** Traffic control devices and transportation infrastructure shall operate to serve the needs of all roadway users, including motorists, public transit, pedestrians, equestrians, and cyclists.
- ME 2.4** **Transportation Options.** Support development of a variety of transportation options for major employment and activity centers, including direct access to transit routes, primary highways, bikeways, park-n-ride facilities, and pedestrian facilities.
- ME 2.9** **Project Integration.** Encourage development of projects that facilitate the use of alternative modes of transportation, including public transit, light rail, pedestrian-oriented retail and activity centers, equestrian trails and related facilities, and bicycle facilities.
- ME 2.11** **Street Improvements with New Development.** Require street improvements as a condition of new developments, including undergrounding of utility lines, installation of fiber optic cable and other utilities, sidewalk, curb, gutter, and street pave-out, bicycle and equestrian facilities, street lighting (where appropriate), street trees, and landscaping.
- ME 2.13** **Multimodal Level of Service.** When the City determines that there is a suitable tool available, we will measure and evaluate roadway performance and CEQA compliance and mitigation from a multimodal, "complete streets" perspective using Vehicle Miles Traveled (VMT), consistent with SB 743 and State guidelines.
- ME 2.15** **Traffic Impact Evaluation.** New developments shall be reviewed to identify project-related impacts to circulation facilities and shall provide site improvements necessary to mitigate such impacts. The Engineering Department may require

⁶ Southern California Association of Governments (SCAG). 2020. Connect SoCal. September 3. Website: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial-plan_0.pdf?1606001176. Accessed February 3, 2022.

developers and/or subdivides to provide traffic impact studies prepared by qualified professionals to identify the impacts of a development.

ME 2.16 **Traffic Impacts.** Traffic studies prepared for development entitlements (e.g., tracts, plot plans, public use permits, conditional use permits) shall identify project-related traffic impacts and determine the “significance” of such impacts in compliance with CEQA.

ME 2.17 **Impact Mitigation.** Mitigate direct project-related traffic impacts by requiring street improvements as a condition of approval or, for indirect and cumulative impacts, through the payment of mitigation fees to fund improvement of streets and other transportation facilities.

Pedestrian and Bicycle Facilities

ME 3.1 **Bicycle and Pedestrian Trail Network.** Plan, develop, and maintain a bikeway and pedestrian network according to a Bicycle and Pedestrian Plan to be prepared following General Plan adoption. Bicycle facilities should be located off-road to the greatest extent possible, such as along flood control channels, the Santa Ana River banks, regional parks, and within residential developments and greenbelts.

ME 3.4 **Intersections and Crossing Locations.** Use federal, State, and local guidelines and standards for traffic operations, signal timing, geometric design, Universal Access (ADA), and roadway maintenance that facilitates walking and bicycling at intersections and other key crossing locations.

ME 3.6 **Internal Linkages.** Bicycle and pedestrian trails networks should be located and designed to link to retail and commercial centers.

ME 3.7 **External Linkages.** Link on-road and off-road bicycle and pedestrian facilities to existing and planned bicycle and pedestrian facilities in adjacent and regional jurisdictions.

ME 3.8 **Traffic Control Devices.** Traffic control devices and transportation infrastructure will be operated to serve the needs of all users of the roadway and pedestrians.

ME 3.9 **Pedestrian Facilities.** Public streets shall provide pedestrian facilities in accordance with adopted City standards. Sidewalks shall be separated from the roadway by a landscaped parkway, except where the Planning Director determines that attached sidewalks are appropriate due to existing sidewalk location, design, or other conditions.

ME 3.10 **Accessible Pedestrian Facilities.** All new streets shall have provisions for the adequate and safe movement of pedestrians, including improvements for the elderly and disabled.

- ME 3.11 Pedestrian Connectivity.** Require development projects and site plans to be designed to encourage pedestrian connectivity among buildings within a site while linking buildings to the public bicycle and pedestrian network.
- ME 3.12 Pedestrian Facility Improvements.** As funding permits, the City will install, or require as a condition of development approval, pedestrian facilities improvements such as installation of signs, signals, sidewalks, street crosswalks, proper lighting, pedestrian and equestrian activated signals, street trees, benches, transit shelters, trails, landscaping, and other ancillary pedestrian features.
- ME 3.14 Public Pedestrian Improvements.** Encourage public pedestrian improvement projects, such as public art, fountains, street trees, lighting, directional signs, and enhanced crosswalks.
- ME 3.15 Pedestrian Facilities.** Provide facilities for the safe movement of pedestrians within new developments, as specified in the General Plan and City Engineering and trail standards.
- ME 3.16 Removal of Barriers.** Maximize visibility and access and encourage the removal of barriers (walls, easements, and fences) for safe and convenient movement of pedestrians within and between adjacent developments where appropriate. Special emphasis should be placed on the needs of disabled persons considering Americans with Disabilities Act (ADA) regulations.
- ME 3.17 Public Transit Connections.** Ensure safe pedestrian access from developments to existing and future transit routes and terminal facilities through project design.
- ME 3.20 Development Review.** Consult the Engineering Department as part of the development review process regarding any development proposals where pedestrian facilities may be warranted. City may require both the dedication and improvement of pedestrian facilities as a condition of development approval.
- ME 3.21 ADA Compliance.** Require safe pedestrian walkways that comply with the Americans with Disabilities Act (ADA) requirements within commercial, office, industrial, mixed use, residential, and recreational developments.
- ME 3.22 Trail Crossings.** Require, where appropriate and feasible, the construction of overpasses or under crossings where pedestrian, bicycle, and equestrian facilities intersect freeways, expressways, urban arterials, arterials, and primary roadways.
- ME 3.24 Integration of Bicycle Planning.** Integrate development of the bicycle facilities network into larger land use planning and development projects.

- ME 3.25 Bicycle-Friendly Infrastructure.** Require bicycle-friendly infrastructure design using new technologies and innovative treatments where necessary to improve bicyclists' safety and convenience.
- ME 3.30 Bicycle and Pedestrian Facility Design Standards.** City shall utilize the Caltrans Highway Design Manual and other infrastructure guidelines as appropriate to design and maintain bicycle and pedestrian facilities to high safety standards.
- ME 3.34 Bikeway Width.** Where feasible, design bikeways beyond the minimum required widths but within federal, State, or local standards (for example, Class 2 lanes should not exceed 8 feet in width to avoid confusion with driving lanes).
- ME 3.35 Bicycle Parking.** Require convenient, secure, attractive, and easy to use bicycle parking to be provided at public buildings, commercial areas, multi-family residential development projects, and schools and parks and encourage other agencies to provide bicycle parking for rail transit and Park-n-Ride facilities.
- ME 3.36 Bicycle Improvements Conditionally Required.** Require the construction or rehabilitation of bicycle facilities and/or "bicycle-friendly" improvements as a condition of approving new development, in accordance with Zoning Ordinance standards.

Equestrian and Multi-Purpose Trail Facilities

- ME 4.1 Equestrian and Multi-Purpose Trails.** Provide trails for the safe movement of pedestrians and equestrians within and between new developments where appropriate and as identified in the General Plan and City Engineering trail standards.

City of Jurupa Valley Municipal Code

Municipal Code Chapter 12.40, Transportation Demand Management Program, establishes policies and procedures to promote the use of alternative transportation modes through project design and facility planning. The purpose is to ensure the Riverside County Congestion Management Program and the South Coast Air Quality Management District (SCAQMD) requirements are met. In addition, it promotes consideration and incorporation of transportation and demand management measures into project plans and development.

Municipal Code Section 12.40.050, Potential Transportation Demand Management Measures, lists potential Transportation Demand Management (TDM) measures to be considered for inclusion in a project's TDM plan:

- Preferential parking spaces for carpool vehicles;
- Bicycle parking spaces;
- Lockers and shower facilities;

- Rideshare vehicle loading areas;
- Vanpool vehicle accessibility and loading areas;
- Bus stop improvements;
- Local road improvements;
- Pedestrian and bikeway circulation system connections and off-site extensions which encourage pedestrian and bike usage;
- Transit ridership incentives; and
- Others as may be approved by the Public Works Director.

City of Jurupa Valley Traffic Impact Analysis Guidelines

As indicated in the Rio Vista Specific Plan VMT Analysis memorandum, the City has prepared and adopted the City of Jurupa Valley Traffic Impact Analysis Guidelines in November 2020 to address changes to CEQA pursuant to SB-743 to include VMT analysis methodology, screening tools, and VMT thresholds.

City of Jurupa Valley Circulation Master Plan for Bicyclists and Pedestrians

The Circulation Master Plan provides a citywide bicycle and walking improvement planning guidance. It recommends programs and routes designed to make the City more accessible to bicyclists and pedestrians. Maps within the Circulation Master Plan illustrate existing and planned bicycle and pedestrian facilities. Several maps illustrate 20th Street as developed through the project site; however, there are no developed roadways within the project site.

3.17.4 - Thresholds of Significance

Significance Criteria

In accordance with Section 15064.7 of the State CEQA Guidelines, the City of Jurupa Valley adopted local CEQA Guidelines. The City's local CEQA Guidelines are based, in part, on the CEQA checklist included in Appendix G of the State CEQA Guidelines. The City of Jurupa Valley Guidelines recognizes the following significance thresholds and Significance Criteria related to transportation. Based on these significance thresholds, a project would have a significant impact on transportation if it would:

- a) Conflict with a program plan, ordinance, or policy of the circulation system, including transit, roadway, bicycle and pedestrian facilities.

Under the City's local significance threshold, the project would have significant effects if: A project that is inconsistent with the General Plan Mobility Element policies pertaining to the roadway network, pedestrian and bicycle facilities, equestrian and multi-purpose trails network, and public transit may have a significant impact. Note: Level of Service (LOS) is not required to be analyzed under this threshold.

- b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

Under the City's local significance threshold, the project would have significant effects if: Projects that cannot be screened out through the steps outlined in the City of Jurupa Valley Traffic Impact Guidelines as specified in the CEQA Assessment-VMT Analysis section, will require additional analysis in order to determine whether a project exceeds the following thresholds of significance:

Under the City's local significance threshold, the project would have significant effects if:

1. Project VMT Impacts:

A project would result in a significant project-generated VMT impact if, in the Existing Plus Project scenario, its net VMT per capita (for residential projects) or per employee (for office and industrial projects) exceeds the City's average VMT. The City's average VMT per service population shall be the metric that is in effect at the time the Notice of Preparation is published, or if no Notice of Preparation is required, at the time the environmental analysis is commenced.

2. Cumulative VMT Impacts:

If a project is consistent with the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), then the cumulative impacts shall be considered less than significant subject to consideration of other substantial evidence. If it is not consistent with the RTP/SCS, a project would result in a significant VMT if:

- a) For residential projects, its net VMT per capita exceeds the average VMT per capita for Jurupa Valley in the RTP/SCS horizon year.
 - b) For office and industrial projects its net VMT per employee exceeds the average VMT per employee for Jurupa Valley in the RTP/SCS horizon year.
 - c) For all other land development project types, a net increase in VMT in the RTP/SCS horizon year would be considered a significant impact.
 - d) Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impacts consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may be tier from that analysis as is provided in Section 15152.
- c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Under the City's local significance threshold, the project would have significant effects if: A project that is inconsistent with the Improvement Standard Drawings for Road Standards maintained by the Public Works Department, may have a significant impact.

- d) Result in inadequate emergency access.

Under the City's local significance threshold, the project would have significant effects if:

1. The project blocks roadways that provide emergency vehicle access during construction;
or
2. The project does not provide adequate ingress and egress for emergency vehicles from adjacent roadways during operation.

Approach To Analysis

Impacts related to transportation were determined by evaluating the proposed project's consistency with plans, ordinances, or policies applicable to the circulation system, including transit, roadway, bicycle and pedestrian facilities. The proposed project's volume of VMT was calculated and compared to applicable standards. In addition, the proposed project was evaluated for potential roadway hazards and appropriate emergency access. The analysis is based, in part, on review of EPD Solutions' TIA and Urban Crossroads' VMT Analysis memorandum. Both documents are provided in Appendix J.

3.17.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where necessary.

Affect to Circulation System

Threshold TRANS-1: Would the proposed project conflict with a program plan, ordinance, or policy of the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Under the City's local significance threshold, the project would have significant effects if: A project that is inconsistent with the General Plan Mobility Element policies pertaining to the roadway network, pedestrian and bicycle facilities, equestrian and multi-purpose trails network, and public transit may have a significant impact. Note: LOS is not required to be analyzed under this threshold.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

These include existing regulatory requirements such as plans, policies, or programs applied to the proposed project based on federal, State, or local law currently in place which effectively reduce impacts to transportation.

- PPP 4.17-1** As required by General Plan Policy ME 3.17 Public Transit Connections, ensure safe pedestrian access from developments to existing and future transit routes and terminal facilities through project design.
- PPP 4.17-2** As required by General Plan Policy ME 3.36, Bicycle Improvements Conditionally Required require the construction or rehabilitation of bicycle facilities improvements as a condition of approving new development, per Zoning Ordinance standards.

- PPP 4.17-3** As required by General Plan Policy ME 4.1 Equestrian and Multi-Purpose Trails, provide trails for the safe movement of pedestrians and equestrians within and between new developments where appropriate, and as specified in the General Plan and City Engineering and trail standards.
- PPP 4.17-4** As required by General Plan Policy ME 5.5 Transit Right-of-Way, reserve sufficient right-of-way to plan for and accommodate public transit service.

Project Design Features

The proposed project would include the extension of 20th Street through the project site, as well as the construction of a general internal circulation network and connections. The proposed project would also include a 9-foot-wide soft-surface trail and a Class I bicycle trail to be located along 20th Street. Sidewalks would be constructed on all Local Collectors and Local Streets. In addition, the proposed project would retain existing informal trails located within the areas designated for open space.

Impact Analysis

City of Jurupa Valley Municipal Code

Individual projects occurring within the project site would be required to implement TDM Plans as a condition of approval, as applicable. Furthermore, as described in Section 3.11, Land Use, the proposed project would not conflict with provisions of the Jurupa Valley Municipal Code.

City of Jurupa Valley Circulation Master Plan for Bicyclists and Pedestrians

Under the City's CEQA Significance Criteria, a project could have a significant impact if it is inconsistent with General Plan Mobility Element policies. Trails for bicyclists, pedestrians, and equestrians would form an integrated system of hard and soft-surface (decomposed granite) paths throughout the project site. The trails would complement and improve access to the existing informal trails traversing the natural open space. The trail system would include:

- **Bike Path and Soft-Surface Trails.** An 8-foot-wide decomposed granite soft-surface trail and a 10-foot-wide Class I hard surface bicycle trail would be located within the 30-foot-wide trail easement along 20th Street, forming a central spine of trails through the project site.
- **Sidewalks.** Sidewalks would be constructed on all Local Collectors and Local Streets in order to provide a pedestrian network that connects residential areas to the trails and amenities located throughout the project site.
- **Existing Informal Trails.** The proposed project would retain the existing unimproved informal trails located within the open space for use by future residents of the proposed project and the public. Connections from the bike path and soft-surface trail would provide access to these existing informal trails, which would remain unimproved, and would continue to allow public access to the ridges and top of the hills within the proposed community.

The Circulation Master Plan does not outline specific plans, ordinances, or policies, but it does include a recommendation for a Class I (multiuse) bike path along the future 20th Street alignment

within the project site. As listed above, the proposed project would include a Class I trail along 20th Street.

Connect SoCal

SCAG's Connect SoCal is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. As shown in Section 3.11, Land Use, Table 3.11-2, of this Draft EIR, implementation of the proposed project would be consistent with the goals and policies of Connect SoCal.

City of Jurupa Valley General Plan

As described in Section 3.11, Land Use, Table 3.11-2, the proposed project would not conflict with any applicable transportation goals or policies of the General Plan. Furthermore, transportation facilities within the project site would be constructed in accordance with General Plan design standards as a condition of approval.

City of Jurupa Valley Municipal Code

Individual projects occurring within the project site would be required to implement TDM Plans as a condition of approval, as applicable. Furthermore, as described in Section 3.11, Land Use, the proposed project would not conflict with provisions of the Jurupa Valley Municipal Code.

Transit

Plans, ordinances, and policies regarding the transit system surrounding the project site are included in SCAG's Connect SoCal, the General Plan, and the Municipal Code. Intermodal connection to the transit system is also supported by the City's Circulation Master Plan for Bicyclists and Pedestrians.⁷ As previously indicated, the project would not conflict with these plans. Furthermore, future projects to be developed within the project site would be required to coordinate with RTA to identify new bus routes and stops, if warranted. In addition, the paths and sidewalks to be located throughout the project site as well as proposed bus shelters (subject to approval of RTA) would provide intermodal access to transit services. Therefore, the project would not impede the implementation of existing or future transit services.

Conclusion

As discussed above, the proposed project would not conflict with a General Plan Mobility Element policy or any other applicable program plan, ordinance, or policy pertaining to the circulation system, including transit, roadway, bicycle, and pedestrian facilities. As such, impacts would be less than significant.

Level of Significance

Less than significant impact.

⁷ City of Jurupa Valley. 2018. Circulation Master Plan for Bicyclists and Pedestrians. June. Website: <https://www.jurupavalley.org/DocumentCenter/View/1569/JV-Circulation-Plan-for-Bicyclists-and-Pedestrians-PDF>. Accessed: September 11, 2022.

Vehicle Miles Traveled

Threshold TRANS-2: Would the proposed project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Under the City's local significance threshold, the project would have significant effects if: Projects that cannot be screened out through the steps outlined in the City of Jurupa Valley Traffic Impact Guidelines as specified in the CEQA Assessment- VMT Analysis section, will require additional analysis in order to determine whether a project exceeds the following thresholds of significance:

Under the City's local significance threshold, the project would have significant effects if:

1. Project VMT Impacts:

A project would result in a significant project-generated VMT impact if, in the Existing Plus Project scenario, its net VMT per capita (for residential projects) or per employee (for office and industrial projects) exceeds the City's average VMT. The City's average VMT per service population shall be the metric that is in effect at the time the Notice of Preparation is published, or if no Notice of Preparation is required, at the time the environmental analysis is commenced.

2. Cumulative VMT Impacts:

If a project is consistent with the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), then the cumulative impacts shall be considered less than significant subject to consideration of other substantial evidence. If it is not consistent with the RTP/SCS, a project would result in a significant VMT if:

- a) For residential projects, its net VMT per capita exceeds the average VMT per capita for Jurupa Valley in the RTP/SCS horizon year.
- b) For office and industrial projects its net VMT per employee exceeds the average VMT per employee for Jurupa Valley in the RTP/SCS horizon year.
- c) For all other land development project types, a net increase in VMT in the RTP/SCS horizon year would be considered a significant impact.
- d) Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impacts consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may be tier from that analysis as is provided in Section 15152.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to the proposed project related to VMT.

Project Design Features

The proposed project would include a 10-foot-wide decomposed granite soft-surface trail and a 10-foot-wide Class I, hard surface bike path within the 20th Street right-of-way, forming a central spine of trails through the Rio Vista Specific Plan area. The trail would connect to an existing trail at the western boundary of the project site and would transition into a proposed sidewalk at the eastern boundary of Planning Area (PA) 13, where it would ultimately connect to an existing sidewalk system outside the project site boundary. In addition, the proposed project would include 12.5 miles of sidewalks separated by curb-adjacent landscaped parkways located on all Collectors, Industrial Collectors, and Local Streets, to provide pedestrian network that connects each home to the trails and amenities located throughout the project site. These design features would contribute to reduction of VMT impacts.

Impact Analysis

City of Jurupa Valley VMT Thresholds

The following analysis is based on the VMT Analysis memorandum prepared by Urban Crossroads, Inc. for the proposed project. As indicated therein, the proposed project could result in a significant project-generated VMT impact if a net increase in total VMT within the City would occur.

For cumulative impacts, if a project is consistent with the regional RTP/SCS, then the cumulative impacts would be considered less than significant, subject to consideration of other substantial evidence. If it is not consistent with the RTP/SCS, a project would result in a significant VMT impact if a net increase in total VMT in the Cumulative Plus Project scenario versus the RTP/SCS Without Project would occur.

Analysis Methodology

In the VMT Analysis memorandum, VMT is presented as total VMT and total VMT per Service Population, Home Based (HB) VMT per capita, and home-based work (HBW) VMT per employee, consistent with City guidelines. Total VMT represents all VMT generated in the City of Jurupa Valley on a typical weekday. Total VMT per service population, HB VMT per capita and HBW VMT per employee are metrics representing VMT generated on a typical weekday per person who lives and/or works in the City or travels to the City for another purpose. City Guidelines note that VMT per capita should be used for residential projects, VMT per employee used to evaluate employment-based projects (i.e., office, industrial, etc.) and total VMT and total VMT per service population for all other land uses.

Project generated VMT is primarily estimated using the Production/Attraction Method. The Production/Attraction method sums all weekday VMT generated by HB and HBW trips with at least one trip-end in the study area by trip purpose.

According to the VMT Analysis memorandum, the City's existing average VMT per capita or per employee is identified as the metric that is in effect at the time the proposed project's NOP is published. Citywide VMT was calculated from the Riverside County Transportation Model (RIVCOM). The base year RIVCOM was modified to include the proposed project socioeconomic data (SED).

The base and future year (cumulative) “Plus Project” conditions VMT was derived from full model runs performed to isolate the VMT for the proposed project.

Project Analysis

The VMT analysis found that the City’s Baseline average VMT per capita is 21.9, average VMT per employee is 48.0, and average VMT per service population is 40.6. The City’s cumulative average VMT per capita is 22.5, cumulative average VMT for employee is 47.4, and cumulative average VMT per service population is 40.2.

The VMT analysis findings are shown in Table 3.17-2.

As shown, the NOP Year (2021) HBW VMT per capita within the City decreases from 48.0 to 38.3, a 20.2 percent decrease. The Cumulative Year (2045) HBW VMT per capita decreases from 47.4 to 46.3, a 2.3 percent decrease.

However, the 2021 HB VMT per capita within the City increases from 21.9 to 26.8 with the proposed project, a 22.4 percent increase. The 2045 HB VMT per capita increases from 22.5 to 28.4 with the proposed project, a 26.2 percent increase with the proposed project. Based on the City’s threshold of significance (a net increase in total VMT within the City by any component of the project), the proposed project could have a significant impact on VMT.

Table 3.17-2: The Proposed Project’s Effect on VMT

	Baseline Year (2021)	Cumulative Year (2045)
Project HB VMT	168,922	178,861
Project HB VMT per Capita	26.8	28.4
City Threshold VMT per Capita	21.9	22.5
Percent Above Threshold	22.4%	26.2%
Project HBW VMT	81,823	98,979
Project HBW VMT per Employee	38.3	46.3
City Threshold VMT per Employee	48.0	47.4
Percent Below Threshold	-20.2%	-2.3%
HB = Home Based HBW = home-based work VMT = Vehicle Miles Traveled Source: Urban Crossroads 2023.		

As shown in Table 3.17-2 above, project generated Production/Attraction Method HB VMT per capita exceeds the City's VMT per capita impact threshold by 22.4 percent in the baseline condition and 26.2 percent in the cumulative condition and is considered potentially significant. Project generated Production/Attraction Method HBW VMT per employee is below the City's VMT per employee impact threshold by 20.2 percent in the baseline condition and 2.3 percent in the cumulative condition and is considered less than significant. As any component of the proposed project exceeds the City's adopted impact threshold, the proposed project in its entirety is considered potentially significant.

The proposed project would exceed the City HB VMT per capita threshold by 22.4 percent in the baseline condition and by 26.2 percent in the cumulative condition. As such, to achieve an HB VMT below the City's threshold, the proposed project would require a minimum 37,152 reduction in VMT or a 20.8 percent reduction to the proposed project's HB VMT.

The proposed project includes several design features that promote reduction in project generated VMT. In addition, Mitigation Measure (MM) MM TRANS-2a, which would require preparation of a TDM plan; MM TRANS-2b, which would encourage implementation of school pool program; MM TRANS-2c, which would support implementation of transit access improvements; and MM TRANS-2d, which would require improvements to street connectivity, would further reduce VMT impacts.

As future project-specific development plans are submitted to the City, the effectiveness of the above design features and mitigation measures would be evaluated and confirmed by the City in addition. Once a VMT mitigation fee program is available for the City or Riverside County, future development projects can contribute to this fee program to further reduce their project VMT impacts.

The proposed project consists of long-term plans that will guide future development within the Specific Plan Area over the buildout horizon consistent with the General Plan. No specific development projects are proposed as part of the proposed project. Given the programmatic nature of this analysis, it is not possible to fully account for the effect of specific design principles, policies, and improvements that will reduce a specific activity's VMT as part of this analysis.

In sum, the proposed project was evaluated against City screening criteria. The proposed project was not found to meet any available screening criteria, and a VMT analysis was performed. Project generated HB VMT per capita was determined to exceed the City's VMT per capita impact threshold by 22.4 percent in the baseline condition and 26.2 percent in the cumulative condition. Project design features that would contribute to a 10.32 percent reduction in VMT are incorporated as well as additional features that would also contribute to further reductions, but these would not reduce VMT to a less than significant level and impacts would remain significant and unavoidable at the programmatic level.

Conclusion

Based on the above analysis as set forth in the VMT Analysis memorandum, the proposed project is anticipated to have a significant and unavoidable impact related to VMT.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM TRANS-2a Transportation Demand Management Program

Prior to recordation of the Final Map, the Property Owner shall provide assurances that the Transportation Demand Management (TDM) measures described below, will be perpetually implemented, regardless of property ownership, and a mechanism for informing subsequent property owners of the transportation demand management plan requirements. These requirements may be accomplished through recordation of covenants, conditions and restrictions and/or the formation of a transportation management association which assumes responsibility for implementation and monitoring of the Transportation Demand Management measures or other measures deemed acceptable by the City. TDM Requirements for Nonresidential Uses include:

- Prior to the issuance of a building permit for any phase, the Project Applicant shall consult with the Riverside Transit Authority (RTA) on the need to provide infrastructure to connect the proposed project with transit services and to relocate the existing bus stop on northbound Rubidoux Boulevard at Frontage Road southward to the intersection of Rubidoux Boulevard and proposed A Street. The Project Applicant shall fund such relocation. The Project Applicant shall fund a study on behalf of RTA to determine whether adding bus service along proposed A Street in the project site would be warranted by potential ridership and be practicable for RTA. Evidence of compliance with this requirement may include correspondence from the local transit provider(s) regarding the potential need for installing bus turnouts, shelters, or bus stops at the site.
- Prior to the issuance of an occupancy permit for any commercial use, future tenants in employment-generating land uses developed pursuant to the proposed project shall implement measures including, but not be limited to, the following: ride-matching assistance; preferential carpool parking; flexible work schedules for carpools; transportation coordinators; providing a web site or message board for coordinating rides; designating adequate passenger loading and unloading and waiting areas for ride sharing vehicles; and including bicycle end of trip facilities including bike parking, bike lockers, showers, and personal lockers. The measures chosen must achieve a total estimated VMT reduction not less than 8.3 percent. This list may be updated as new methods become available. TDM Requirements for Residential Units:
- Owner-Occupied Units. Upon a residential dwelling being sold or offered for sale, the Project Applicant shall notify and offer to the buyer or prospective buyer, as soon as it may be done, materials describing public transit, ride

sharing, and nonmotorized commuting opportunities available in the vicinity of the Project. Such information shall be transmitted no later than the close of escrow. This information shall be submitted to the City of Jurupa Valley Planning Division for review and approval prior to the issuance of the first certificate of occupancy.

- **Rental Units.** Upon a residential dwelling being rented or offered for rent, the Project Applicant shall notify and offer to the tenant or prospective tenant, materials describing public transit, ride sharing, and nonmotorized commuting opportunities in the vicinity of the development. The materials shall be approved by the City of Jurupa Valley. The materials shall be provided no later than the time the rental agreement is executed. This information shall be submitted to the City of Jurupa Valley Planning Division for review and approval, prior to the issuance of the first certificate of occupancy.

MM TRANS-2b Implement a School Pool Program

If the Jurupa Valley Unified School District purchases the school site in Planning Area 18 by the buildout of the 800th residential unit and constructs a school, then the City of Jurupa Valley shall encourage the District to implement a ride sharing program for school children.

MM TRANS-2c Implement Transit Access Improvements

If the Riverside Transit Agency (RTA) or successor, proposes the installation or construction of bus shelters and/or turnouts within the public right-of-way within the boundaries of the Rio Vista Specific Plan, the City shall consult with RTA to issue encroachment permits for up to four bus shelters and/or turnouts. The City Engineer may allow modification of the roadway cross-sections identified in Figures II-4A and 4B, *Roadway Cross Sections*, of the Rio Vista Specific Plan to accommodate bus turnouts and/or shelters.

MM TRANS-2d Improve Street Connectivity

Before the issuance of a certificate of occupancy for Phase 1, the Project Applicant shall install a signal fiber interconnect along 20th Street between Sierra Avenue and Rubidoux Boulevard. If deemed infeasible by the City, the Project Applicant shall pay cash-in-lieu in the amount to be determined by the City to install an equivalent length of signal interconnect elsewhere Citywide.

Level of Significance After Mitigation

Implementation of MM TRANS-2a, MM TRANS-2b, MM TRANS-2c, and MM TRANS-2d would reduce VMT impacts. However, it would not reduce these impacts to meet the City threshold, resulting in significant unavoidable impacts.

Hazards

Threshold TRANS-3: Would the proposed project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Under the City's local significance threshold, the project would have significant effects if: A project that is inconsistent with the Improvement Standard Drawings for Road Standards maintained by the Public Works Department, may have a significant impact.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to the proposed project related to hazards.

Project Design Features

There are no PDFs applicable to the proposed project related to hazards.

Impact Analysis

The proposed project would include the construction of approximately 19.6 acres of roadways. The precise design and alignment of the proposed project's roadways would be determined with implementation of Tentative Tract Maps and would be reviewed for consistency with applicable Improvement Standard Drawings for Road Standards (maintained by the Public Works Department) at that time. As a part of future individual project approval within the projectsite, the City Traffic Engineering Division would conduct a review, ensuring that no hazardous transportation design features would be introduced. Future project compliance with the proposed Rio Vista Specific Plan would ensure hazards would not occur due to incompatible uses. Impacts related to design hazards would be less than significant.

Level of Significance

Less than significant impact.

Emergency Access

Threshold TRANS-4: Would the proposed project result in inadequate emergency access?

Under the City's local significance threshold, the project would have significant effects if:

1. The project blocks roadways that provide emergency vehicle access during construction; or
2. The project does not provide adequate ingress and egress for emergency vehicles from adjacent roadways during operation.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to the proposed project related to emergency access.

Project Design Features

There are no PDFs applicable to the proposed project related to emergency access.

Impact Analysis

Factors such as the number of access points, roadway width, and proximity to fire stations determine whether a project provides sufficient emergency access.

The proposed project would include two public access points, one at 20th Street at the eastern portion of the project site, between PAs 13 and 16, and a second at 20th Street at the western portion of the site, near PAs 2, 3, and 4. In addition, there would be three emergency vehicle access points: one at PA 7 in northwest corner of the project site via Rorimer Drive, a second at PA 10 in northeast corner via Alicante Avenue, and one at PA 1 in southwest area of the project site via Paramount Drive (access roads are shown in Exhibit 2-6). As such, area-wide emergency vehicle access would be provided by the main roadway network within the project site. The precise design and alignment of the proposed project's internal roadways would be determined with implementation of Tentative Tract Maps and would be reviewed for consistency with applicable design standards, including adequate access and roadway widths, at the time of approval. Furthermore, development within the project site would be required to comply with the City's congestion management practices to reduce traffic impacts during construction and operation. Consequently, any development under the proposed project would be required to comply with guidelines for emergency and fire vehicle access.

As discussed in Section 3.15, Public Services, Riverside County Fire Stations No. 18 and No. 38 are nearest to the project site. Station No. 18, West Riverside Station, is located approximately 2.8 miles (driving distance) west of the project site's emergency vehicle access on Paramount Drive and approximately 2.2 miles (driving distance) southwest of the 20th Street project site entrance. Station No. 38, Rubidoux Station, is located approximately 1.1 miles (driving distance) south of the project site's emergency vehicle access on Paramount Drive. As such, the proposed project is located within sufficient proximity to fire stations enabling sufficient emergency access. Therefore, impacts related to emergency access would be less than significant.

Level of Significance

Less than significant.

3.17.6 - Cumulative Impacts

This analysis evaluates whether the impacts of the proposed project, together with the impacts of cumulative development, could result in a cumulatively significant impact with respect to traffic. This analysis then considers whether incremental contribution of impacts associated with the implementation of the proposed project would be significant. Both conditions must apply for the proposed project's cumulative effects to rise to the level of significance.

The geographic context for this analysis includes the City, as well as the City of Fontana and portions of unincorporated San Bernardino County, as identified in Table 3-1, Cumulative Projects.

Past, present, and future development projects contribute to transportation impacts. Regional growth in the communities listed above would result in increased traffic volumes on area roadways, VMT, and demand for transit, bicycle, and pedestrian facilities. All cumulative projects would be required to comply with City, County, and other local ordinances as well as the General Plan Mobility Element policies (as applicable to projects in the City) that address potential impacts related to transportation.

The VMT Analysis memorandum addresses cumulative VMT impacts using the Boundary VMT Method. The boundary method is the sum of all weekday VMT on the roadway network within a designated boundary. The boundary method estimates VMT by multiplying vehicle trips on each roadway segment boundary by that segment's length. This approach consists of all trips, including those trips that do not begin or end in the designated boundary. A ten-mile radius around the project site was used to calculate VMT. Table 3.17-3 presents boundary VMT for horizon year for the No Project and With Project scenarios. As shown, the proposed project does not increase the VMT for land uses for which the service population metric is applied. Therefore, the cumulative effect on VMT is considered less than significant.

Table 3.17-3: The Proposed Project's Effect on VMT

	City Boundary		10-mile Boundary	
Horizon Year	No Project	With Project	No Project	With Project
Service Population	155,293	157,215	1,488,546	1,490,468
Boundary VMT	5,172,793	5,198,819	30,353,775	30,367,716
Change in Boundary VMT	26,026		13,941	
VMT per Service Population	33.31	33.07	20.39	20.37
Change in VMT per SP	-0.24		-0.02	
SP = Service Population VMT = Vehicle Miles Traveled Source: Urban Crossroads 2023.				

For these reasons, cumulative impacts with respect to transportation and traffic would be less than significant.

Moreover, as discussed under Impact TRANS-1, the proposed project would not conflict with a program, plan, ordinance, or policy related to bicycle, pedestrian or transit facilities. As demonstrated herein, the proposed project would be consistent with the General Plan Mobility Element, Connect SoCal, the Municipal Code, and the Circulation Master Plan. All cumulative projects would be required to comply with applicable local government plans, policies, and ordinances that address potential impacts related to transportation. Therefore, the proposed

project, in conjunction with the construction of other projects, would not result in a significant cumulative impact related to transportation plan, ordinances, or policies of the circulation system.

The proposed project would not exceed cumulative VMT thresholds for land uses for which the service population metric is applied and therefore would not contribute to a conflict or be inconsistent with CEQA Guidelines Section 15064.3(b). Other cumulative projects would be required, as applicable, to demonstrate compliance with CEQA Guidelines Section 15064.3(b). Therefore, the proposed project in conjunction with the construction of other projects would not result in a significant cumulative impact in this regard.

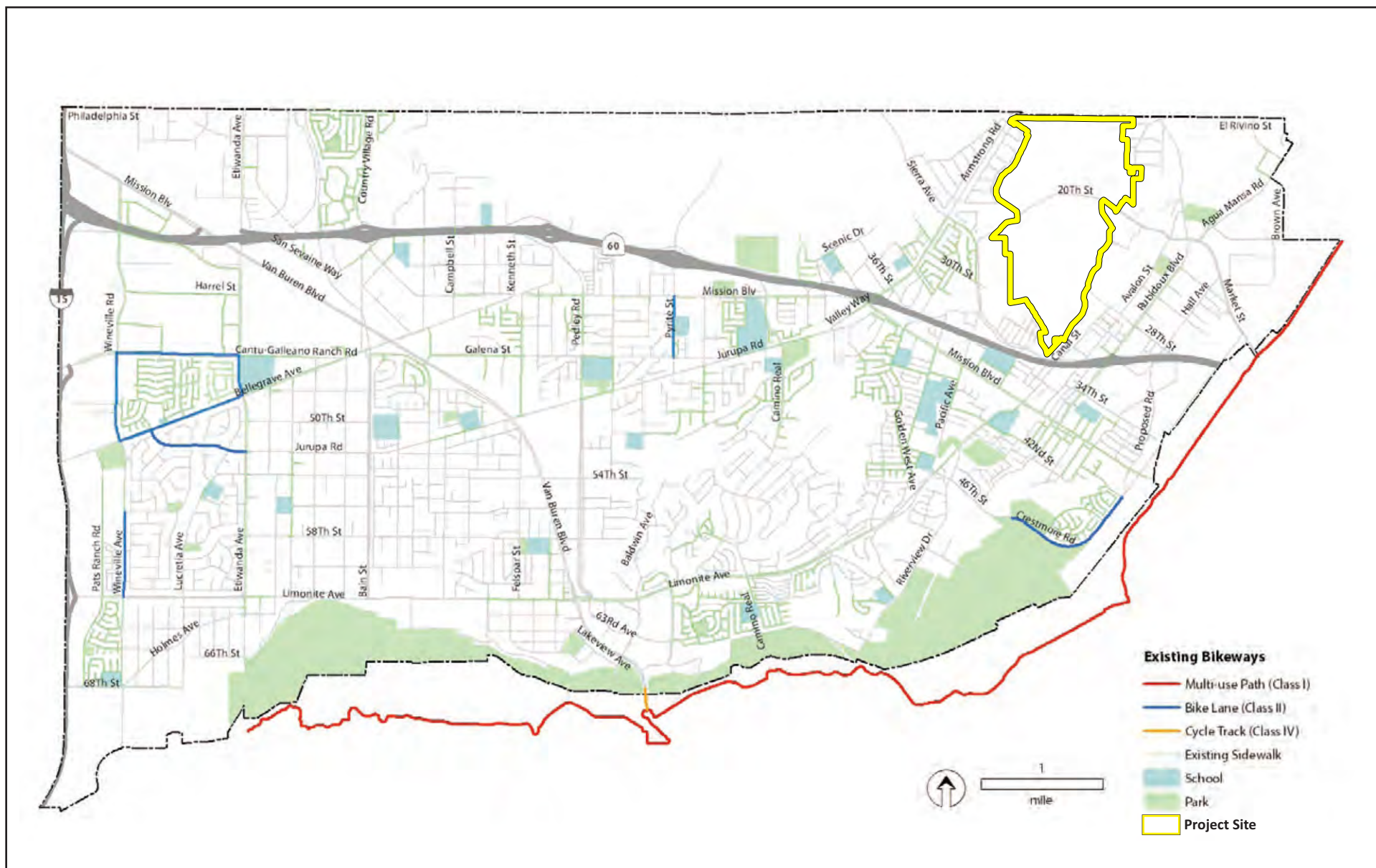
The proposed project would not substantially increase transportation hazards or result in inadequate emergency access. Other cumulative projects would be required to demonstrate appropriate transportation conditions and emergency access. As such, development anticipated under the Specific Plan would not have a cumulatively considerable contribution to cumulative impacts related to transportation hazard or inadequate emergency access.

As discussed above, there is no identified significant cumulative impact related to traffic or transportation. Moreover, the proposed project's contribution to cumulative transportation impacts would be less than significant. Both conditions must apply for the proposed project's cumulative effects to rise to the level of significance, therefore, the proposed project, in conjunction with the construction of other projects, would result in a less than significant cumulative transportation impact.



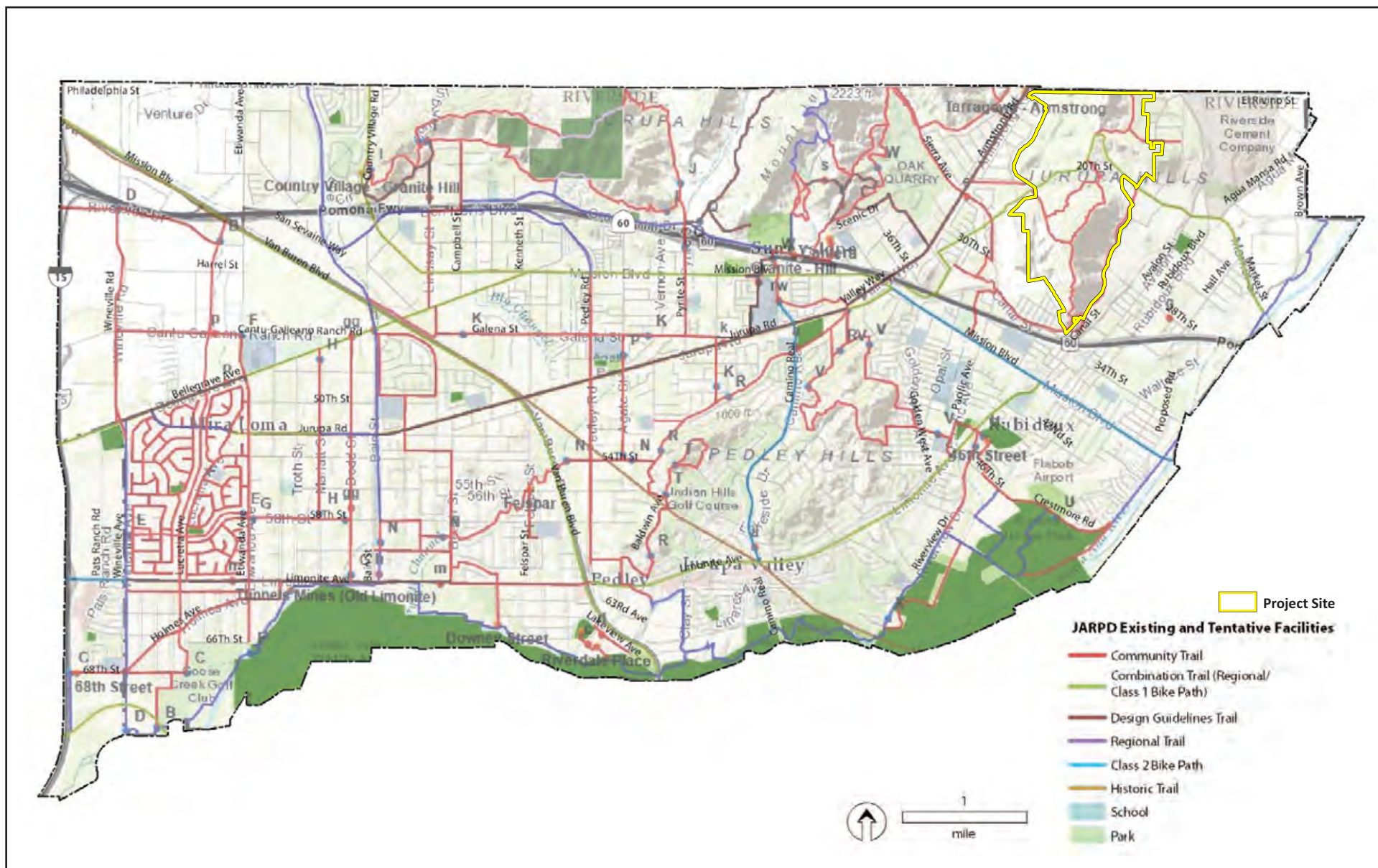
Source: Jurupa Valley General Plan, 2017.

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Source: City of Jurupa Valley, June 2018.

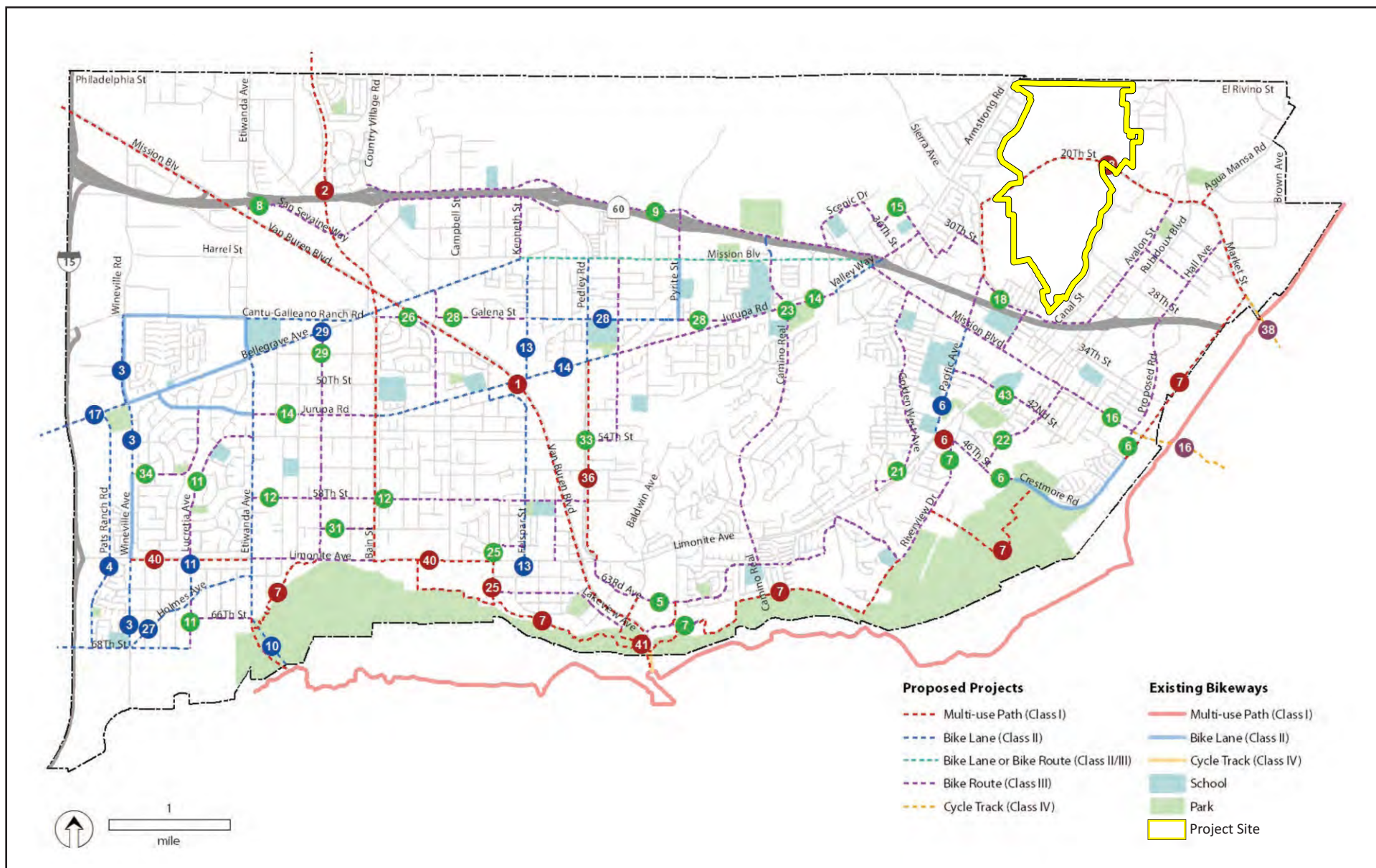
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3.18 - Tribal Cultural Resources

3.18.1 - Introduction

This section describes the existing tribal cultural resources setting and potential effects from project implementation on the site and its surrounding area. Information in this section is based on a Cultural Resources Assessment (CRA) prepared by L&L Environmental, Inc. (L&L) on September 18, 2017, and last revised on December 21, 2021,¹ (Appendix D), and subsequent consultation with tribal representatives identified by the Native American Heritage Commission (NAHC) who may have interest in or additional information on tribal cultural resources that may be impacted by project development. For the purposes of the California Environmental Quality Act (CEQA), the Tribal Cultural Resources (TCRs) may be broadly defined as follows:

- **Tribal Cultural Resources:** Tribal cultural resources include sites, features, places, or objects that are of cultural value to one or more California Native American tribes.

More specifically, TCRs may be understood as resources that have been formally recognized by a lead agency and/or are listed or determined eligible for listing on the California Register of Historical Resources (CRHR) (Public Resources Code [PRC] § 5024.1, Title 14 California Code of Regulations [CCR] § 4852). TCRs may also include archaeological and historic resources (see Section 3.5, Cultural Resources, for discussion and analysis of impacts relating to archaeological and historic resources). It is notable that the fact that a resource is not yet identified as a TCR or found eligible for the CRHR does not preclude a lead agency from determining that said resource is a TCR pursuant to Public Resources Code Sections 5020.1(j) or 5024.1. Under CEQA, a substantial adverse change in the significance of a TCR would constitute a significant effect on the environment.

One public comment letter was received during the Environmental Impact Report (EIR) scoping period related to tribal cultural resources:

- The NAHC recommended tribal consultation as well as record searches pursuant to CEQA and State and federal laws.

3.18.2 - Environmental Setting

The following is a brief ethnographic overview of Native American tribes affiliated with the project site and surrounding area. Unless otherwise stated, information in this section is taken from the CRA prepared by L&L Environmental, Inc. (L&L) on September 18, 2017, and last revised on December 21, 2021.² This report is included in Appendix D. This section is not intended to be a comprehensive review of the current resources available; rather, it serves as a general overview.

¹ L&L Environmental, Inc. 2019. Cultural Resources Assessment, Rio Vista Specific Plan 16001, City of Jurupa Valley, Riverside County, California. June 12. Most recently updated: December 21, 2021.

² Ibid.

Native American Background

Cahuilla

The ethnohistory of the Cahuilla Indians is documented in academic studies, mission records, and major published sources. The San Geronimo Pass, Coachella Valley, and Santa Rosa and San Jacinto Mountains were occupied by the Cahuilla people at the time of Spanish arrival in 1769. By the early 1800s, the Cahuilla had expanded into northern Riverside County. The Cahuilla were organized into at least 12 differed patrilineal clans that owned large spans of territory that included multiple ecological zones at high and low elevations. This allowed the Cahuilla people to exploit a wide range of plant and animal resources in different seasons. Cahuilla groups are often distinguished by the topographic region (i.e., desert, mountain, and pass) in which they established permanent settlements.

Desert Cahuilla settlements congregated around the shoreline of ancient Lake Cahuilla as well as near the mouth of canyons and valleys in areas that could supply many of their food resources within a 5-mile area. As the lake receded, the Cahuilla moved their villages and adapted their subsistence practices. Pass Cahuilla also established settlements in or near the mouths of canyons and valleys. Mountain Cahuilla occupied settlements between 3,000 and 5,000 feet in the San Jacinto and Santa Rosa Mountains.

Cahuilla clans operated within a hierarchical politico-religious structure, each with one or more ceremonial units that served as a “symbolic representation of the sociopolitical reality of the group.” These groups were part of a ritual congregation connecting autonomous groups to the broader sociopolitical, religious, and economic networks.

The Cahuilla were hunter-gatherers for the most part and may have incorporated agriculture into their subsistence foci prior to European contact. Among the animals the Cahuilla hunted were Pronghorn sheep, mule deer, rabbits, squirrels, chipmunks, desert tortoise, rats, and mice. The Cahuilla often organized communal rabbit hunts prior to ceremonial gatherings to provide food for guests and participants. When available, the Cahuilla also hunted fish and birds along the shoreline of ancient Lake Cahuilla.

Cahuilla material culture included an array of utilitarian and ceremonial objects. Cahuilla were well known for their woven baskets. They were also expert potters and used ceramics to craft many different items for storage, cooking, and other uses. Stone and wood implements were integral to daily Cahuilla life. Wooden mortars and pestles were used to process mesquite beans and other seeds and plant materials as were stone manos and pestles used with stone mortars, metates, and bedrock slicks. Cryptocrystalline and microcrystalline silicates, metavolcanics, and obsidian, among other stone materials, were worked into knives, blades, scrapers, and projectile points to tip wood arrows. Wood was utilized for bow construction, pestles and mortars, arrow shafts, throwing sticks, digging sticks, and flutes. The Cahuilla also utilized various parts of animals (e.g., bone and tendons) and plants (e.g., mescal fiber sandals) in everyday life. Ceremonial objects included shell beads, feathers, gourd rattles, crystals, wands, and various items that made up the ceremonial bundle.

Gabrieleño

The arrival of Spanish explorers and the establishment of missions and outposts during the eighteenth century ended the prehistoric period in California. At this time, traditional Gabrieleño society fragmented in the face of foreign diseases and extrication of local Native American groups into the Spanish Missions at San Gabriel and San Juan Capistrano. Bean and Smith believe the Gabrieleño population is impossible to accurately estimate at the time of Spanish arrival but suggest there may have been more than 100 mainland villages, with an average population of 50-200 people per village (i.e., 5,000 to 20,000 people). By 1800, many Gabrieleño people had died or were subjugated under Spanish rule.

The Gabrieleño were one of the most influential and powerful Native American groups in Southern California. They were a chief-oriented society of semisedentary to sedentary hunter-gatherers. The society exhibited ranked individuals, possibly chiefs, who possessed a much higher level of economic power than unranked persons. Influenced by coastal and interior environmental settings, their material culture was quite elaborate and consisted of well-made wood, bone, stone, and shell items. The Inland Gabrieleño lived in primary villages occupied year-round, supplemented by seasonal gathering camps. Their living structures were large, domed, and circular thatched rooms that may have housed multiple families. Other structures included sweathouses and ceremonial structures. The subsistence economy included a variety of plants and animals, including deer, piñon nuts, and acorns. Acorns were used as trade items for marine resources acquired by coastal groups and other goods, such as obsidian, offered by desert groups.

Luiसेño

The term Luiसेño originated as a description of the native peoples associated with Mission San Luis Rey near Oceanside who shared a similar language, culture, and religious worldview. The Luiसेño refer to themselves as *Payómkawichum*, meaning people of the west (R. Basquez, personal communication April 1, 2014), derived from the word *Payómkawic* (i.e., westerner [Harrington 1933]). They were distinguished by name from their neighbors west of the Santa Ana Mountains who were brought under the influence of Mission San Juan Capistrano (i.e., Juaneños or Acjachemen; *'Axátcme Yam*) but shared closely related dialects, culture, and religious customs (Harrington 1933), leading others to argue that the *Payómkawichum* and *'Axátcme Yam* represented one ethnic nationality. As succinctly stated in recent ethnographic work among the Luiसेño, the “anthropological characterization of Luiसेño history and geography . . . differs considerably from the Luiसेño’s own understanding of their origins as explained by the Luiसेño Origin Story, or story of creation.”

The Luiसेño were a patrilineal society, meaning property, rights, and leadership positions were inherited through the father. The Luiसेño also practiced a form of patrilocality in which related males lived in clusters within a village, while females were either married in or married out of the family. The Luiसेño did not maintain moieties, at least not the Coyote and Wildcat moieties common among neighboring groups like the Cahuilla and Serrano, although White suggested that a type of ceremonial moiety system was in place prior to Spanish arrival.

Luiseño territory was divided into a system of village complexes, village territories, and villages. The village complex, which was like a city, contained multiple villages or neighborhoods, each with their own village territory. The Pechanga Tribe has identified several large village complexes in neighboring areas, including *Sóovamay*, centered in Diamond and Domenigoni valleys; *Qaxáalku*, southeast of Lake Matthews; *Paxávxá* in Temescal Canyon; *Páayaxchi* at Lake Elsinore; and *Téemeku* in Temecula.

Areas within a village territory were connected by trails and pathways, all of which communicated information, both public and private, to the Luiseño. A similar system of trails connected village territories and village complexes to one another and emphasized important concepts of community and commonwealth. Oxendine, White, and others recognized the existence of Luiseño settlement land use patterns within historic village territories; future archaeological research in the project site region may determine just how far back these patterns can be traced into prehistory.

The Luiseño were, for the most part, hunters, collectors, and harvesters who utilized available resources within their village territories while also maintaining usufruct rights to gather from other village territories. Most food resources were gathered within close proximity to the village, but during certain seasons the family group would move to the coast for marine resources or into the mountains for acorns and deer. This allowed the Luiseño to obtain resources from a variety of ecological zones, which supplied food in all seasons. Environmental niches of particular importance within the project site would have included Riversidian sage scrub and riparian plant communities.

The Luiseño hunted small and large game, including various hare and rabbit, woodrat, mice, ground squirrels, quail, doves, ducks, and other birds, and both antelope and deer. Tree squirrels, most reptiles, and predators, such as coyotes, mountain lions, and bobcats, were avoided as food resources, except possibly during lean times. Insects were also available as food resources. Luiseño hunting technology employed for small and large game included throwing sticks; the bow and arrow, typically with a wood or bone point; snares; traps; slings; decoys; disguises; and hunting blinds. Fire also assisted in communal rabbit drives. Many villages also had access to creeks and rivers, and nets, traps, spears, hooks and lines, and poisons were used to catch fish.

As in most of California, acorns were a major staple, but the roots, leaves, seeds, and fruit of many other plants also were used. Roots and shoots of various types were gathered from marshes and wetlands. Seeds from various grasses and scrub plants such as buckwheat also played an important role in the aboriginal diet and were available for harvest from summer through fall. Certain mushrooms and tree fungi supplemented the diet and were considered delicacies. Teas were made from a variety of floral resources and were used for medicinal cures as well as for beverages. Tobacco and datura were sacred plants used for rituals and medicine.

Plant and animal processing activities required portable and/or stationary ground stone tools. Bedrock mortars (BRMs) were fixed locations on the landscape utilized in communal, family, and private resource processing settings. They were most populated with slicks but also contained basin metates and mortars that were worked into the outcrop surface or placed within natural depressions. BRMs were used in tandem with manos and pestles. Portable ground stone tools are sometimes found in association with BRMs but are more commonly associated with village sites,

other habitation sites, and resource processing locations that did not contain bedrock outcrops (i.e., complex lithic scatters).

Most Luiseño houses were conical and partially subterranean; however, during the nineteenth century some had rectangular houses. The dwellings were made of locally available material, such as reeds, brush, or bark. Occupants entered using a door at the side of the shelter, which was sometimes accessed through a short tunnel. Smoke from a central fireplace rose through a hole in the center of the roof. Domestic chores, such as cooking, eating, and social interaction, often occurred under a brush-covered ramada that stood near the house. Earth-covered sweat houses for purification and curing rituals, ceremonial houses with fenced areas, and granaries for food storage were found in most villages.

Serrano

The history of the Serrano Indians is retained in the oral history of their surviving members. It is also documented in ethnographic studies, historic diaries, mission records, and published sources. The following is a summary of Serrano ethnohistory.

The Serrano refer to themselves collectively as *Maringayam* in Morongo dialect, which included the *Tumukvayam* in Banning Water Canyon and *Tamianutcem* at Twentynine Palms, or *Maara'yam* in the dialect of the San Manuel Indian Reservation in Highland, California. Serrano Traditional Use Area encompasses the San Bernardino Mountains extending south into the Yucaipa Valley, west to the Antelope Valley, east to Twentynine Palms, and north of Barstow. The Serrano argued the limits of their traditional territory in a Claims Case against the United States in the 1950s. While Bean and Vane note the territorial description was and remains controversial, they opted to use the description in their study of ethnohistory in Joshua Tree National Park because it was agreed upon by the tribes themselves. The Serrano traditional territory identified in the Claims Case against the United States did not include the Jurupa area, though the Serrano may have occupied the area during the Mexican Period succeeding the Gabrieleño and/or Luiseño.

The Serrano were organized into two territorial exogamous totemic moieties known as *Tuktum* (Coyote) and *Wahilyam* (Wildcat) and were composed of more than a dozen autonomous clans divided into smaller patrilineal bands that occupied defined territories. The Serrano sociopolitical, religious, and ceremonial institutions, including exogamous marriage between clans/moieties and the periodic mourning ceremony, promoted reciprocity between clans. Trade and exchange were also important and allowed for resources available in one ecological zone to be distributed to another. The Serrano's practice of reciprocity and the distribution of resources from one ecological zone operated within a broader mutual interdependence network that promoted group unity and survivability.

The Serrano practiced a semisedentary lifestyle moving among occupation sites to take advantage of seasonally available resources. Principal villages where larger corporate groups gathered were occupied in the winter, and in some cases year-round, with seasonal camps occupied by smaller bands during the spring, summer, and fall. Many of the principal villages correspond to place names provided by Serrano Indians and recorded in the Franciscan mission sacramental registers.

Serrano dwellings were used primarily for sleeping and included a central hearth for heat. Most cooking and other residential chores occurred outside in the open or under a ramada-like structure. Serrano material culture included tools and implements for hunting, gathering, and processing food as well as food storage. Common tools included manos and metates, mortars and pestles, knives, scrapers, bows and arrows tipped with stone, bone, and wood tips, ceramic and stone bowls, baskets, and bone implements (e.g., spoons, awls, or stirrers). Other items of Serrano material culture included musical instruments such as rattles and flutes, pipes, strands of shell, stone, and bone beads, abalone shell compacts, and shell and stone pendants.

Flora utilized by the Serrano included acorns, seeds, piñon nuts, bulbs, tubers, shoots, roots, chia, berries, cacti fruit, and mesquite. Game animals primarily exploited by the Serrano included mountain sheep, antelope, deer, rabbits, small rodents, birds, among which quail were the most desired, and sometimes fish. Bow and arrow were the most common hunting implements but curved throwing sticks, traps, snares, and deadfalls were also used. Communal hunts for deer and rabbits were sometimes held, often in association with Serrano ceremonies. Meats were generally baked in earthen ovens or boiled in watertight baskets containing water, meat, and hot stones. Meat was sometimes parched by tossing it along with hot coals in shallow trays. Bones were often boiled to extract nutritious marrow and blood was consumed hot or cold. Surplus meats were dried for future use. Serrano men were primarily responsible for the hunting.

The Spanish incursion devastated indigenous populations in Southern California, but some Serrano survived for many years. This was due to a combination of the ruggedness of the terrain in the far eastern San Bernardino Mountains and Mojave Desert and their dispersed populations. During the Mexican Period and into the American period, Serrano Indians and their neighbors were often targeted and attacked in retribution for the attacks on livestock and ranches by bands of marauders.

In 1866, three cowboys were murdered at Las Flores Ranch by a group of Chemehuevi or Paiute Indians. In retaliation, a group of American settlers living in the San Bernardino Valley formed a militia and attacked the neighboring Serrano Indians. During a 32-day campaign, most of the Native Americans living in the valley, foothills and mountains were driven from their homes or killed. Some Serrano followed Chief Antonio Sever and worked for the local ranchers in the valley while most followed *Yuhaaviatam* clan leader Santos Manuel out of the mountains and into the foothills near Highland. This location became the San Manuel Band of Mission Indians Reservation, which was established by Presidential Order in 1891.

Records Searches to Identify Existing Tribal Cultural Resources

NAHC Sacred Lands File Search and Tribal Correspondence

L&L submitted a Sacred Lands File Search request to the NAHC on February 19, 2015, and an updated request was sent on April 11, 2019. The NAHC responded initially on March 3, 2015, and an updated respond was received on April 29, 2019. These responses stated that the results were positive for Sacred Sites and recommended the Gabrieleño Band of Mission Indians–Kizh Nation be contacted for more information. Furthermore, the NAHC recommended contacting additional local tribes who may have information on Native American cultural resources in the project site and provided a list of names. On March 5, 2015, six scoping letters were sent to the Tribes and

individuals originally identified by the NAHC. On May 1, 2019, an additional 20 scoping letters were sent to Tribes and individuals. Follow-up emails, telephone calls, letters, and field visits were completed between May 2, 2019, and September 28, 2020. The Morongo Band of Mission Indians, the Agua Caliente Band of Cahuilla Indians, the Cahuilla Band of Indians, the Los Coyotes Band of Indians, and the Gabrieleño Band of Mission Indians–Kizh Nation have responded to requests for information.

The Los Coyotes Band provided updated contact information for their Environmental Director but did not comment on the proposed project. The Agua Caliente Band deferred comment to other Tribes in the area and stated they wanted to conclude their consultation efforts for the proposed project. The Cahuilla Band stated that the project site was within the Cahuilla traditional use area and was concerned over the possibility that cultural resources may be unearthed during project construction. The Cahuilla Band requested Tribal Monitors from Cahuilla be present during all ground-disturbing activities associated with the proposed project.

The Morongo Band requested the incorporation of the Tribe's Standard Development Conditions relating to the discovery of human remains and Native American cultural resources. In addition, the Tribe requested a copy of the Eastern Information Center (EIC) records search, an update on the results of the Phase I survey, and monitoring. Further, the Morongo Band indicated that they might provide additional information to the lead agency during the Assembly Bill (AB) 52 consultation process.

The Gabrieleño Band of Mission Indians–Kizh Nation identified an ancient oak tree and 44-acres of land in the Jurupa Mountains (i.e., Rattlesnake Mountain) as a Sacred Site (N-RIV-123). Furthermore, they stated the ancient oak was nominated as the Sacred Oak of the Kizh (aka Gabrieleño). The ancient oak is sacred and of extreme importance to the tribe. Chairman Andy Salas provided L&L confidential maps and records depicting the location of the ancient oak and other known sites in the project site vicinity.

CRHR Significance Evaluations and Summary of Resources Within the Project Site

The L&L CRA identified 26 cultural resources within the direct impact area, 13 of which appear not to be eligible for the CRHR. The 13 other cultural resources are recommended eligible for the CRHR individually and/or as contributors to the significance of a district and are considered historical resources for the purposes of CEQA. These include 10 prehistoric sites (33-003492 [MRN 1], 33-003496 [MRN 5], 33-003498 [MRN 7], 33-014100 [MRN 10], 33-024749 [MRN 11], 33-024757 [MRN 19], 33-024759 [MRN 20], 33-024761 [MRN 23], 33-024762 [MRN 24], and 33-024763 [MRN 25]) and one prehistoric component of a mixed component site (33-003495 [MRN 4]).

Additional historical resources recommended individually eligible for the CRHR include two historically significant areas (*Hurunga* Oak and Rattlesnake Mountain (*Junā'av*)), and a prehistoric rock shelter that is also contributing to the eligibility of Rattlesnake Mountain (*Junā'av*) Ethnographic Area. The *Hurunga* Oak Native American sacred area is recommended eligible for the CRHR under Criteria 1 and Criteria 4. The Rattlesnake Mountain (*Junā'av*) Ethnographic Area is recommended eligible for the CRHR under Criteria 1 and 4. Nine additional prehistoric sites and the prehistoric

component of a mixed component site also contribute to the eligibility of the Rattlesnake Mountain (*Junā'av*) Ethnographic Area.

These 13 cultural resources are considered “historical resources” under CEQA and potential impacts resulting from the proposed project must be assessed and reduced to the greatest extent feasible through avoidance, minimization, and mitigation measures. In addition, the four prehistoric isolated finds that do not qualify as historical resources under CEQA may be of cultural significance to consulting Native American tribes and efforts should be made to avoid direct impacts that may result in damage to, or destruction of, these isolated resources.

3.18.3 - Regulatory Framework

Federal

National Historic Preservation Act

The National Historic Preservation Act of 1966 (NHPA), as amended, established the National Register of Historic Places (NRHP), which contains an inventory of the nation’s significant prehistoric and historic properties. Under 36 Code of Federal Regulations Part 60, a property is recommended for possible inclusion on the NRHP if it is at least 50 years old, has integrity, and meets one of the following criteria:

- It is associated with significant events in history, or broad patterns of events.
- It is associated with significant people in the past.
- It embodies the distinctive characteristics of an architectural type, period, or method of construction; or it is the work of a master or possesses high artistic value; or it represents a significant and distinguishable entity whose components may lack individual distinction.
- It has yielded, or may yield, information important in history or prehistory.

Certain types of properties are usually excluded from consideration for listing in the NRHP, but they can be considered if they meet special requirements in addition to meeting the criteria listed above. Such properties include religious sites, relocated properties, graves and cemeteries, reconstructed properties, commemorative properties, and properties that have achieved significance within the past 50 years.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act (ARPA) amended the Antiquities Act of 1906 (16 United States Code [USC] 431–433) and set a broad policy that archaeological resources are important to the nation and should be protected and required special permits before the excavation or removal of archaeological resources from public or Indian lands. The purpose of ARPA was to secure, for the present and future benefit of the American people, the protection of archaeological resources and sites that are on public lands and Indian lands and to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data that were obtained before October 31, 1979.

American Indian Religious Freedom Act

The American Indian Religious Freedom Act (AIRFA) established federal policy to protect and preserve the inherent rights of freedom for Native groups to believe, express, and exercise their traditional religions. These rights include but are not limited to access to sites, use and possession of sacred objects, and freedom to worship through ceremonies and traditional rites.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 sets provisions for the intentional removal and inadvertent discovery of human remains and other cultural items from federal and tribal lands. It clarifies the ownership of human remains and sets forth a process for repatriation of human remains and associated funerary objects and sacred religious objects to the Native American groups claiming to be lineal descendants or culturally affiliated with the remains or objects. It requires any federally funded institution housing Native American remains or artifacts to compile an inventory of all cultural items within the museum or with its agency and to provide a summary to any Native American tribe claiming affiliation.

State

CEQA Guidelines Section 15064.5(a)—CEQA Definition of Historical Resources

CEQA Guidelines Section 15064.5(a), in Title 14 of the California Code of Regulations, defines a “historical resource” as:

- (1) A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the California Register of Historical Resources.
- (2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- (3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing on the California Register of Historical Resources.
- (4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

Therefore, under the CEQA Guidelines, even if a resource is not included on any local, State, or federal register or identified in a qualifying historical resources survey, a lead agency may still determine that any resource is a historical resource for the purposes of CEQA if there is substantial evidence supporting such a determination. A lead agency must consider a resource to be historically significant if it finds that the resource meets the criteria for listing in the CRHR.

Archaeological and historical sites are protected pursuant to a wide variety of State policies and regulations, as enumerated in the Public Resources Code. Cultural resources are recognized as nonrenewable resources and receive additional protection under the Public Resources Code and CEQA.

CEQA Guidelines Section 15064.5(a)(3)—California Register of Historical Resources Criteria

As defined by CEQA Guidelines, Section 15064.5(a)(3)(A-D), a resource shall be considered historically significant if the resource meets the criteria for listing on the CRHR. The CRHR and many local preservation ordinances have employed the criteria for eligibility to the NRHP as a model (see criteria described above under the description of the NHPA), since the NHPA provides the highest standard for evaluating the significance of historic resources. A resource that meets NRHP criteria is clearly significant. In addition, a resource that does not meet NRHP standards may still be considered historically significant at a local or State level.

California Public Resources Code Section 5024.1—California Register of Historic Resources

Section 5024.1 of the Public Resources Code states that the CRHR is a guide to be used by State and local agencies, private groups, and citizens to identify the State's historical resources and to indicate what properties are to be protected from substantial adverse change. Administration of the CRHR is to be overseen by the NAHC. Section 5024.1 indicates that the register shall include historical resources determined by the NAHC, according to adopted procedures, to be significant and to meet the criteria in subdivision (c).

CEQA Guidelines 15064.5(c)—Effects on Archaeological Resources

CEQA Guidelines state that a resource need not be listed on any register to be found historically significant. CEQA Guidelines direct lead agencies to evaluate archaeological sites to determine whether they meet the criteria for listing in the CRHR. If an archaeological site is a historical resource, in that it is listed or eligible for listing in the CRHR, potential adverse impacts to it must be considered. If an archaeological site is considered not to be a historical resource but meets the definition of a "unique archaeological resource" as defined in Public Resources Code Section 21083.2, then it would be treated in accordance with the provisions of that section.

CEQA Guidelines Section 15064.5(d)—Effects on Human Remains

Native American human remains and associated burial items may be significant to descendant communities and/or may be scientifically important for their informational value. They may be significant to descendant communities for patrimonial, cultural, lineage, and religious reasons. The specific stake of some descendant groups in ancestral burials is a matter of law for some groups, such as Native Americans (CEQA Guidelines § 15064.5(d); PRC § 5097.98). CEQA and other State regulations regarding Native American human remains provide the following procedural

requirements to assist in avoiding potential adverse effects on human remains within the contexts of their value to both descendant communities and the scientific community:

- When an initial study identifies the existence or probable likelihood that a project would affect Native American human remains, the lead agency is to contact and work with the appropriate Native American representatives identified through the NAHC to develop an agreement for the treatment and disposal of the human remains and any associated burial items (CEQA Guidelines § 15064.5(d); PRC § 5097.98).
- If human remains are accidentally discovered, the County Coroner must be contacted. If the County Coroner determines that the human remains are Native American, the coroner must contact the NAHC within 24 hours. The NAHC must identify the most likely descendant (MLD) to provide for the opportunity to make recommendations for the treatment and disposal of the human remains and associated burial items.
- If the MLD fails to make recommendations within 24 hours of notification or the project applicant rejects the recommendations of the MLD, the Native American human remains and associated burial items must be reburied in a location not subject to future disturbance within the project site (PRC § 5097.98).
- If potentially affected human remains or a burial site may have scientific significance, whether or not it has significance to Native Americans or other descendant communities, then under CEQA, the appropriate mitigation of effect may require the recovery of the scientific information of the remains/burial through identification, evaluation, data recovery, analysis, and interpretation (CEQA Guidelines § 15064.5(c)(2)).

California Public Resources Code Section 5097.91—Native American Heritage Commission

Section 5097.91 of the Public Resources Code established the NAHC, whose duties include the inventory of places of religious or social significance to Native Americans and the identification of known graves and cemeteries of Native Americans on private lands. Under Section 5097.91 of the Public Resources Code, a State policy of noninterference with the free expression or exercise of Native American religion was articulated along with a prohibition of severe or irreparable damage to Native American sanctified cemeteries, places of worship, religious or ceremonial sites or sacred shrines located on public property. Section 5097.98 of the Public Resources Code specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a County Coroner. Section 5097.5 defines as a misdemeanor the unauthorized disturbance or removal of archaeological, historic, or paleontological resources located on public lands.

California Senate Bill 18—Protection of Tribal Cultural Places

Senate Bill (SB) 18 (California Government Code § 65352.3) incorporates the protection of California traditional tribal cultural places into land use planning for cities, counties, and agencies by establishing responsibilities for local governments to contact, refer plans to, and consult with California Native American tribes as part of the adoption or amendment of any general or specific plan proposed on or after March 1, 2005. SB 18 requires public notice to be sent to tribes listed on the NAHC SB 18 Tribal Consultation list within the geographical areas affected by the proposed changes. Tribes must respond to a local government notice within 90 days (unless a shorter time

frame has been agreed upon by the tribe), indicating whether or not they want to consult with the local government. Consultations are for the purpose of preserving or mitigating impacts to places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code that may be affected by the proposed adoption or amendment to a general or specific plan.

California Assembly Bill 52—Effects on Tribal Cultural Resources

AB 52 was signed into law on September 25, 2014, and provides that any public or private “project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.” Tribal Cultural Resources include “[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources.” Under prior law, Tribal Cultural Resources were typically addressed under the umbrella of “cultural resources,” as discussed above. AB 52 formally added the category of “tribal cultural resources” to CEQA and extends the consultation and confidentiality requirements to all projects, rather than just projects subject to SB 18 as discussed above.

The parties must consult in good faith, and consultation is deemed concluded when either: (1) the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource (if such a significant effect exists); or (2) when a party concludes that mutual agreement cannot be reached. Mitigation measures agreed upon during consultation must be recommended for inclusion in the environmental document. AB 52 also identifies mitigation measures that may be considered to avoid significant impacts if there is no agreement on appropriate mitigation. Recommended measures include:

- Preservation in place
- Protecting the cultural character and integrity of the resource
- Protecting the traditional use of the resource
- Protecting the confidentiality of the resource
- Permanent conservation easements with culturally appropriate management criteria

California Public Resources Code Section 21074—Effects on Tribal Cultural Resources

AB 52 amended the CEQA statute to identify an additional category of resource to be considered under CEQA, called “tribal cultural resources,” and added Public Resource Code Section 21074, which defines “tribal cultural resources” as follows:

- (a) “Tribal cultural resources” are either of the following:
 - (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - A) Included or determined to be eligible for inclusion in the CRHR.
 - B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
 - (2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of

Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

- (b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
- (c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a “nonunique archaeological resource” as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

Local

Jurupa Valley 2017 General Plan

Conservation and Open Space Element

Goal

COS 7 Ensuring the preservation of cultural, historical, archaeological, and paleontological resources.

Policies

COS 7.3 **Development Review:** Evaluate project sites for archaeological sensitivity and for a project’s potential to uncover or disturb cultural resources as part of development review.

COS 7.4 **Site Confidentiality:** Protect the confidentiality and prevent inappropriate public exposure or release of information on locations or contents of paleontological and archaeological resource sites.

COS 7.5 **Native American Consultation:** Refer development projects for Native American tribal review and consultation as part of the environmental review process, in compliance with State law.

COS 7.7 **Qualified archaeologist present:** Cease construction or grading activities in and around sites where substantial archaeological resources are discovered until a qualified archaeologist knowledgeable in Native American cultures can determine the significance of the resource and recommend alternative mitigation measures.

COS 7.8 **Native American Monitoring:** Include Native American participation in the City's guidelines for resource assessment and impact mitigation. Native American representatives should be present during archaeological excavation and during construction in an area likely to contain cultural resources. The Native American community shall be consulted as knowledge of cultural resources expands and as the City considers updates or significant changes to its General Plan.

COS 7.9 Archaeological Resources Mitigation: Require a mitigation plan to protect resources when a preliminary site survey finds substantial archaeological resources before permitting construction. Possible mitigation measures include presence of a qualified professional during initial grading or trenching; project redesign; covering with a layer of fill; excavation, removal, and curation in an appropriate facility under the direction of a qualified professional.

3.18.4 - Thresholds of Significance

Significance Criteria

According to the State CEQA Guidelines Appendix G Environmental Checklist, cultural resources impacts resulting from the implementation of the proposed project would be considered significant if the project would:

- a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or
 - ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Under the City's local significance threshold, the project would have significant effects if: The project causes a substantial adverse change or materially alters sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

- 1. Included or determined to be eligible for inclusion in the CRHR.
- 2. Included in in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
- 3. A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
- 4. A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

Approach to Analysis

This evaluation focuses on whether the proposed project would impact TCRs. The TCR impact analysis is based on information collected from record searches at the NAHC and information from tribal consultation conducted pursuant to AB 52. Impacts are typically associated with construction and/or ground-disturbing activities that have the potential to immediately alter, diminish, or destroy all or part of the character and quality of Native American Artifacts and/or human remains that could be uncovered.

3.18.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and identifies mitigation measures where appropriate. Mitigation measures are derived from guidance provided by L&L and information provided by the City resulting from the consultation between the City and Native American tribes.

Plans, Policies, and Programs (PPPs), Project Design Features (PDFs), and Mitigation Measures

Plans, Policies, and Programs

These include existing regulatory requirements such as plans, policies, or programs applied to the project based on federal, State, or local law currently in place which effectively reduce impacts to tribal cultural resources.

Three PPP are applicable to cultural resources and are listed under Impacts TCR-1 and TCR-2.

Project Design Features

There are no PDFs applicable to the project related to the topic of tribal cultural resources.

Significance of Tribal Cultural Resource and Eligibility for California Register Listing

Threshold TCR-1:	Would the proposed project cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?
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Significance of Tribal Cultural Resource and Eligibility as Determined by Lead Agency

Threshold TCR-2:	Would the proposed project cause a substantial adverse change in the significance of a tribal cultural resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?
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Under the City's local significance threshold, the proposed project would have significant effects if: The project causes a substantial adverse change or materially alters sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

1. Included or determined to be eligible for inclusion in the CRHR.

2. Included in in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
3. A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
4. A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

These include existing regulatory requirements such as plans, policies, or programs applied to the project based on federal, State, or local law currently in place which effectively reduce impacts to cultural resources.

The following PPP applies to the proposed project and would reduce impacts related to tribal cultural resources:

PPP 3.18-1 The proposed project is required to comply with the applicable provisions of California Health and Safety Code Section 7050.5 as well as Public Resources Code Section 5097 *et seq.*

Project Design Features

There are no PDFs applicable to the project related to the topic of tribal cultural resources.

Impact Analysis

L&L submitted a Sacred Lands File Search request to the NAHC on February 19, 2015, and an updated request was sent on April 11, 2019. The NAHC responded initially on March 3, 2015, and an updated respond was received on April 29, 2019. These responses stated that the results were positive for Sacred Sites in the project site. The L&L CRA identified 26 cultural resources within the direct impact area, 13 of which are recommended eligible for the CRHR individually and/or as contributors to the significance of a district and are considered historical resources for the purposes of CEQA. These resources include 10 archaeological sites, one prehistoric component of a mixed component site, and two historically significant areas (*Hurunga* Oak and Rattlesnake Mountain (*Junā'av*)). All 13 eligible sites are associated with tribes and may be considered eligible TCRs pursuant to CEQA.

Development under the proposed project would result in additional residential and industrial development throughout the project site that would likely result in the alteration and destruction of these resources, which would constitute a substantial adverse change in the significance of a TCR pursuant to Section 15064.5. While specific site plans are not available at this time, the 13 resources would be adversely impacted by the proposed project. In order to reduce these impacts to the greatest extent feasible, the proposed project shall implement Mitigation Measure (MM) CUL-1a,

MM CUL-1b, MM CUL-1c, MM CUL-1d, MM CUL-2a, MM CUL-2b, MM CUL-2c, MM CUL-2d, MM CUL-2e, MM CUL-2f, MM CUL-2g, MM CUL-2h, MM CUL-3a, and MM CUL-3b. However, even with implementation of the proposed mitigation, impacts to these resources would remain significant and unavoidable.

AB 52 and SB 18 Consultation Notices

As required by AB 52, the City sent notification to the six Native American tribes who have previously requested in writing to receive notices pursuant to AB 52. As required by SB 18, the City sent SB 18 notification letters to the same six tribes identified by the NAHC as having traditional lands or cultural places located within the boundaries of Riverside County or project region.

- Gabrieleño Band of Mission Indians—Kizh Nation
- Soboba Band of Luiseño Indians
- Agua Caliente Band of Cahuilla Indians
- Pala Band of Mission Indians
- Yuhaaviatam of San Manuel Nation
- Torres Martinez Desert Cahuilla Indians

The City issued SB 18 Notices in 2016 and AB 52 Notices on February 14, 2022. The results of both the AB 52 and SB 18 processes are shown on Table 3.18-1.

Table 3.18-1: Summary of AB 52 and SB 18 Consultation Process

Tribe	AB 52 Notice	SB 18 Notice	Result
Gabrieleño Band of Mission Indians—Kizh Nation	X	X	City accepted tribes proposed mitigation measures
Soboba Band Luiseño Indians	X	X	City accepted tribes proposed mitigation measures
Agua Caliente Band of Cahuilla Indians	X	X	No response
Agua Caliente Band of Cahuilla Indians	X	X	No response
Pala Band of Mission Indians	X	X	Stated that the project is outside their culturally affiliated area
Yuhaaviatam of San Manuel Nation	X	X	Stated they did not wish to participate
Torres Martinez Desert Cahuilla Indians	X	X	No response

As indicated in Table 3.18-1 above, only the Gabrieleño Band of Mission Indians—Kizh Nation (Gabrieleño) and the Soboba Band Luiseño Indians (Soboba) expressed interest in participating in AB 52/SB 18 consultation. During the tribal consultation process, the City held several meetings with the Gabrieleño and Soboba representatives and received proposed mitigation measures from both entities. The Gabrieleño and the Soboba provided the City with proposed mitigation measures. The

Gabrieleño also prepared a Tribal Cultural Resource Identification Report for the project site (Appendix E). The City agrees with the findings and accepts the proposed mitigation measures.

As discussed under Threshold TCR-1, there are 13 sites within the project site that are associated with tribes and may be considered eligible TCRs pursuant to CEQA, and some of them may be impacted by the proposed project, resulting in potentially significant impact. However, even with implementation of MM TCR-1 through MM TCR-14, impacts would remain significant and unavoidable.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement MM CUL-1a, MM CUL-1b, MM CUL-1c MM CUL-1d, MM CUL-2a, MM CUL-2b, MM CUL-2c, MM CUL-2d, MM CUL-2e, MM CUL-2f, MM CUL-2g, MM CUL-2h, MM CUL-3a, and MM CUL-3b.

MM TCR-1 Multiple Tribe Mitigation

Prior to issuance of grading permit, the Developer/Permit Applicant shall engage each of the consulting tribe(s) regarding Native American Monitoring. The Developer/Permit Applicant shall provide evidence to the City that they have reached an agreement with each consulting tribe(s) regarding the following:

1. The treatment of known cultural resources.
2. The treatment and final disposition of any tribal cultural resources, Sacred Sites, human remains, or archaeological and cultural resources inadvertently discovered on the project site.
3. Project grading, ground disturbance (including but not limited to excavation, trenching, cleaning, grubbing, tree removals, grading and trenching) and development scheduling; and
4. The designation, responsibilities, and participation of professional Tribal Monitor(s) during grading, excavation, and ground-disturbing activities.

If the Developer/Permit Applicant and the consulting tribe(s) are unable to reach an agreement, the mitigation measure shall be considered satisfied if the Developer/Permit Applicant provides sufficient documented evidence that they have made a reasonable good faith effort to reach an agreement, as determined by the City, with the consulting tribes with regards to items a-d, as listed above.

Soboba Band of Luiseño Indians Mitigation

MM TCR-2 Preparation of a Soboba Band Tribal Cultural Resource Management Plan (TCRMP) developed in close consultation with the Soboba Band and approved by the City. The TCRMP shall detail the proposed approach of the Soboba Band's tribal monitoring of ground-disturbing activities for the project. The TCRMP shall provide the appropriate protocol to follow for any unanticipated tribal and/or archaeological finds uncovered

during ground-disturbing activities for the project. The TCRMP shall also discuss the timing and reporting responsibilities for MM TCR-2 through MM TCR-11.

- MM TCR-3** Recognizing that the entire TCR cannot be avoided, the Soboba Band requests avoidance, to the greatest extent possible, of the most significant places within the Tribal Cultural Resource (TCR)—namely the place where one of their three cycles of Cahuilla Wi'kik'mal Taxmu'a end, as part of creation for the Cahuilla people. Additionally, all significant archaeological sites, geologic features, water resource features, and native plants traditionally used by the Soboba Band should be avoided when possible. The Soboba Band proposes to meet with City Planners and to the greatest extent possible redesign the land use plan to avoid critical areas within the TCR.
- MM TCR-4** Avoidance and preservation in place is the preferred method for all Soboba Band cultural and natural elements. If avoidance and preservation is considered not feasible, a feasibility study may be required for final determination regarding the need for avoidance. If the City determines that the study has adequately demonstrated that preservation is not feasible, a Data Recovery/Treatment Plan for the resource shall be drafted and subject to review by the City and the Soboba Band prior to implementation.
- MM TCR-5** Soboba Band cultural and natural elements of the Tribal Cultural Resource (TCR) that cannot be avoided shall be photo documented using high resolution photography (at least 300 pixels per inch [dpi]).
- MM TCR-6** Archaeological sites within the Tribal Cultural Resource (TCR) that cannot be avoided shall be captured in three-dimensional (3D) images for the creation of 3D models.
- MM TCR-7** Tangible Soboba Band cultural resources within the Tribal Cultural Resource (TCR) that cannot be avoided shall be relocated to multiple mutually agreed upon areas within the 917.3-acre Project Area. These areas must be identified by the City as open areas that will be preserved in perpetuity so that no future disturbances will occur. Additional measures including stabilization of the relocated resources, security, and long-term preservation, will be described in a Long-Term Management Plan, which shall be drafted and reviewed by the City and the Soboba Band prior to final approval.
- MM TCR-8** Incorporate a connectivity trail (Soboba Band Tribal Cultural Resource [TCR] corridor) at the developers cost, within the Project Area to connect areas (i.e., open space, plateau) within the TCR.
- MM TCR-9** Where feasible, at the Developer cost, use a drone and/or Google Earth Pro to create a visual simulation of the path walked by Cahuilla ancestors as they traveled along the Peet' Wi'kik'mal to the Jurupa Hills, and then beyond as they traveled to the next destination.

- MM TCR-10** At the plateau on Jurupa Hills, at the developers cost, photo document the 360-degree viewshed using high resolution photographs.
- MM TCR-11** Preparation of a cultural landscape study to fully document the Soboba Band Tribal Cultural Resource (TCR) within the Project Area (the TCR extends beyond this, but for management purposes the TCR shall be defined as the Jurupa Hills).

Gabrieleño Band of Mission Indians–Kizh Nation Mitigation

- TCR-12 Retain a Native American Monitor Prior to Commencement of Ground-disturbing Activities**
1. The project applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians–Kizh Nation. The monitor shall be retained prior to the commencement of any “ground-disturbing activity” for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). “Ground-disturbing activity” shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.
 2. A copy of the executed monitoring agreement between Gabrieleño Band of Mission Indians–Kizh Nation and the Developer shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.
 3. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe Gabrieleño Band of Mission Indians–Kizh Nation. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, Tribal Cultural Resources, or “TCR”), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe.
 4. On-site Gabrieleño Band of Mission Indians–Kizh Nation tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.

MM TCR-13 Unanticipated Discovery of Tribal Cultural Resource Objects (Non-Funerary/Non-Ceremonial)

1. Upon discovery of any Gabrieleño Band of Mission Indians–Kizh Nation Tribal Cultural Resources (TCRs), all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh Monitor and/or Kizh Archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.

MM TCR-14 Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects

1. Native American human remains are defined in Public Resources Code Section 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.
2. If Native American human remains and/or grave goods are discovered or recognized on the project site, then Public Resource Code Section 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed.
3. Human remains and grave/burial goods shall be treated alike per California Public Resources Code Section 5097.98(d)(1) and (2).
4. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods.
5. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

Level of Significance After Mitigation

Significant and unavoidable impact.

3.18.6 - Cumulative Impacts

This analysis evaluates whether the impacts of the proposed project, together with the impacts of cumulative development, could result in a cumulatively significant impact with respect to TCRs. This analysis also considers whether incremental contribution of impacts associated with the implementation of the proposed project would be significant. Both conditions must apply for a project's cumulative effects to rise to the level of a significant impact.

The geographic context for this analysis includes the City of Jurupa Valley, The *Hurunga* Oak Native American sacred area, the Rattlesnake Mountain (*Junā'av*) Ethnographic Area, and other adjacent unincorporated areas.

Additional projects in the area or region would also involve grading and excavation activities and could impact TCRs that may be on or buried in soil under those sites. Therefore, the geographic scope for the cumulative analysis is the project vicinity. This is because TCRs impacts tend to be localized, because the integrity of any given resource depends on what occurs in the immediate vicinity around that resource, such as disruption of soils; therefore, in addition to the project site itself, the area near the project site would be the area most affected by project activities (generally within a 0.5-mile radius). Several cumulative projects shown in Table 3.1 in Chapter 3, Environmental Impact Analysis, are within a 0.5-mile radius of the project site.

Development within the cumulative geographic scope would be required to comply with federal, State, and local laws and policies that protect cultural and TCRs, including the provisions of SB 18 and AB 52, Section 15064.5 of the CEQA Guidelines, Section 7050.5 of the California Health and Safety Code, and Sections 5024.1 and 5097 of the Public Resources Code. Compliance with these policies may also require development projects to prepare site-specific project-level analysis to fulfill CEQA requirements, which also would include additional consultation that could lead to the identification of potential site-specific mitigation that would further reduce impacts.

As noted in Section 3.18.5, Project Impacts and Mitigation Measures, above, there are known TCRs in the cumulative geographic scope that may contribute to the significance of the cultural landscape and/or sites that are associated with tribes and may be considered eligible TCRs. Additionally, there is a potential for yet unidentified TCRs on the surface or subsurface within the geographic scope. Past, present, and foreseeable projects have resulted in or could result in the demolition or material alteration to some aspects of TCRs or the tribal cultural landscape that convey its significance. Implementation of existing regulations and site-specific mitigation, as discussed above, would be required and would reduce impacts. However, since avoidance and preservation in place of such resources cannot be guaranteed, impacts to TCRs in the geographic scope are considered significant and unavoidable. When taken together, past, present, and foreseeable projects within the geographic scope could result in a significant cumulative impact to TCRs.

With respect to the project's contribution, although MM CUL-1a through MM CUL-1d, MM CUL-2a through MM CUL-2h, MM CUL-3a, MM CUL-3b, and MM TCR-1 through MM TCR-14 would lessen the proposed project's impact to TCRs, the proposed project's incremental contribution to the significant cumulative impact remains considerable due to the project's location and the size and scope of the proposed project. Moreover, even with implementation of these measures, the destruction or material alteration of a resource that contributes to the cultural landscape would constitute a substantial adverse change since it would no longer be present on the landscape. No feasible mitigation is available to reduce the proposed project's contribution to below a level of significance. Accordingly, the proposed project would have a significant and unavoidable cumulatively considerable impact with respect to TCRs.

Level of Significance Before Mitigation

Potentially significant impacts.

Mitigation Measures

Implement MM CUL-1a, MM CUL-1b, MM CUL-1c MM CUL-1d, MM CUL-2a, MM CUL-2b, MM CUL-2c, MM CUL-2d, MM CUL-2e, MM CUL-2f, MM CUL-2g, MM CUL-2h, MM CUL-3a, MM CUL-3b, and MM TCR-1 through MM TCR-14.

Level of Significance After Mitigation

Significant and unavoidable impact.

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3.19 - Utilities and Service Systems

3.19.1 - Introduction

This section describes the existing conditions related to utilities and service systems (water, wastewater, stormwater, and solid waste, electricity, and natural gas) in the City of Jurupa Valley (City) and project area as well as the relevant regulatory framework. This section also evaluates the possible impacts related to such utilities and service systems that could result from implementation of the proposed project. Information in this section is based, in part, on information provided by the Water Supply Assessment (WSA) and Written Verification prepared by Kreiger and Stewart in October 2021.¹ The WSA is included in Appendix K.

A Notice of Preparation (NOP) was released for public review on December 6, 2021, and an Environmental Impact Report (EIR) Scoping Meeting was held on December 14, 2021. No public comments were received during the scoping period regarding utilities and service systems.

3.19.2 - Environmental Setting

Water

Instead of relying on imported water, the City takes advantage of local groundwater from the Riverside and Chino Groundwater Basins. There are three agencies that provide water services to the City of Jurupa Valley: Jurupa Community Services District (JCSD), Rubidoux Community Services District (RCSD), and Santa Ana River Water Company. The majority of the project site would be annexed into the RCSD, which would provide water service to the proposed project. Because of its location adjacent to Armstrong Road and existing neighborhoods, Planning Area (PA) 7 would remain in JCSD and connect to adjacent existing JCSD water facilities.

Rubidoux Community Services District

According to the General Plan EIR, RCSD serves the northeastern portion of the City, located around State Route (SR) 60 at Rubidoux Boulevard. RCSD's current and future water supply consists of groundwater extracted from the Riverside South Groundwater Basin. According to the WSA prepared for the proposed project, RCSD can extract groundwater from the Riverside South Groundwater Basin without restrictions until the combined credit of the Colton, Riverside North, and Riverside South Groundwater Basins are depleted. Once the available credit is depleted, the Western Municipal Water District (WMWD) would be obligated to provide groundwater replenishment. It was anticipated that the cost of the replenishment would be allocated to all groundwater extractors, including RCSD. Based on the latest Watermaster Report (dated August 1, 2020), total extractions from the Colton, Riverside North, and Riverside South Basins have increased from 31,810 acre-feet per year (AFY) in 2015 to 35,817 AFY in 2019, an approximate 3 percent increase per year. Based on the assumption that groundwater extractions for the three groundwater basins would continue to increase at a rate of approximately 3 percent per year, total extraction would increase to

¹ Kreiger and Stewart Engineering Consultants. 2021. Water Supply Assessment and Written Verification for Rio Vista Specific Plan 16001 Project. October.

approximately 69,217 AFY by 2050. At this rate, it would take nearly 8 years of no river flow to deplete the currently available credit of 544,221 acre-feet.

Even after the available credit is depleted, RCSD can continue to extract groundwater from the Riverside South Groundwater Basin; however, RCSD could be subject to payment of its share of the cost of groundwater replenishment to maintain pumping to meet future water demand.

In 2021, the RCSD adopted its 2020 Urban Water Management Plan (2020 UWMP), which determined that 100 percent of average water supplies would be available even in the case of multiple dry years.² The 2020 UWMP takes growth associated with the proposed project into account.

Jurupa Community Services District

According to the General Plan EIR, a large portion of the City is within the service area of the JCSD which owns, operates, and maintains its own water system. JCSD currently depends on groundwater from the Chino Groundwater Basin. The Chino Basin is the largest groundwater basin in the Upper Santa Ana River Watershed, and underlies portions of San Bernardino, Riverside, and Los Angeles County. JCSD uses a combination of its own wells and water purchases from the Chino Desalter Authority to extract water from the Chino Basin. In addition, JCSD receives a small portion of its supplies from RCSD.

These underground reservoirs are tapped throughout the year according to the demand for water. Groundwater conditions in the Chino Basin are influenced by natural hydrologic conditions such as percolation of precipitation, groundwater seepage from adjacent basins, and infiltration of surface flow within the watershed areas. According to Section 4.9, Hydrology and Water Quality, in the General Plan EIR, water supply reliability in the Chino Basin is supplemented by artificial recharge facilities that use stormwater, State Water Project water, and recycled water to recharge the basin. Currently, the Inland Empire Utilities Agency and Chino Basin Watermaster 2010 Recharge Master Plan Update do not identify any major groundwater recharge areas within the City or immediate surrounding area.

JCSD's 2020 UWMP determined that 100 percent of average water supplies would be available in the case of multiple dry years.³

Wastewater Service

Wastewater services in the City are also provided by the RCSD and JCSD. There are some areas within the City that use private septic systems (PAs 10 and 11 of the proposed project are planned to be served by septic systems). The Riverside Water Quality Control Plant (RWQCP), located and

² Albert A. Webb Associates. 2021. 2020 Urban Water Management Plan for Rubidoux District. June 17. Website: <https://www.rcsd.org/files/8e37c118a/RCSD+2020+UWMP+Adopted+06.17.21.pdf>. Accessed February 1, 2022.

³ Albert A. Webb Associates. 2021. 2020 Urban Water Management Plan for Jurupa Community Services District. June 28. Website: <https://www.jcsd.us/home/showdocument?id=7229>. Accessed September 12, 2022.

operated by the City of Riverside, serves the project site. The RWQCP currently has capacity for up to 46 million gallons per day (mgd).⁴

Wastewater is treated by the RWQCP to very clean tertiary levels. At this point, water can be discharged into the Santa Ana River. Some wastewater is treated to a reclaimed or recycled level for irrigation. Salty water resulting from groundwater extraction is transferred through the Inland Empire Brine Line, which assists in maintaining the Santa Ana River Watershed's water quality through reduction of the saltwater content of water from the groundwater basin.

Solid Waste

Solid Waste Service

According to the General Plan EIR, private companies offer residential, commercial, and industrial subscriptions in the City. Burrtec Waste Industries, Inc. (Burrtec) and USA Waste of California, Inc. (Waste Management) service all residential and commercial establishments with trash and recycling services within the City limits.⁵ The project site would be served by Burrtec.⁶

As stated in the General Plan, solid waste originating from Jurupa Valley is transported to Agua Mansa Transfer Station and Material Recovery Facility (MRF), also known as Robert A. Nelson Transfer Station and MRF, located at 1830 Agua Mansa Road in the City, approximately 1 mile east of the project site. From there, recyclables are transferred to third party providers and waste is transported to landfills throughout Riverside County, such as the Badlands Sanitary Landfill or the El Sobrante Landfill. Members of the community are permitted to drop off recycling, waste, and bulk items at Agua Mansa Transfer Station. Residents may also dispose of hazardous household wastes, such as petroleum products, garden chemicals, and paint, on Saturdays at the Riverside County Regional Household Hazardous Waste Facility, located at 1780 Agua Mansa Road. Table 3.19-1 lists active landfills in the proposed project's vicinity.

Landfills

Landfills in the vicinity of the project site are shown in Table 3.19-1.

Table 3.19-1: Landfill Summary

Facility	Location	Permitted Daily Throughput	Remaining Capacity	Distance from the Project Site
Robert A. Nelson Transfer Station and MRF	1830 Agua Mansa Road, Riverside	4,000 tons/day	Not available	1 mile to the east
Agua Mansa Landfill	588 East Agua Mansa Road, Rialto	Not available	1,350,000 tons (as of 1998)	2.3 miles to the northeast
Mid-Valley Sanitary Landfill	2390 N. Alder Avenue, Rialto	7,500 tons/day	101,300,000 cubic yards (as of 2019)	7.5 miles to the north

⁴ City of Jurupa Valley 2017. 2017 General Plan. September.

⁵ City of Jurupa Valley California. Solid Waste Collection. Website: <https://www.jurupavalley.org/352/Solid-Waste-Collection>. Accessed February 18, 2022.

⁶ Ibid.

Facility	Location	Permitted Daily Throughput	Remaining Capacity	Distance from the Project Site
El Sobrante Landfill	10910 Dawson Canyon Road, Corona	16,054 tons/day	143,977,170 cubic yards (as of 2018)	15 miles to the southwest
Badlands Sanitary Landfill	31125 Ironwood Avenue, Moreno Valley	4,800 tons/day	15,748,799 cubic yards (as of 2015)	16.5 miles to the east

Source: California Department of Resources Recycling and Recovery (CalRecycle), 2019. SWIS Facility/Site Search. Website: <https://www2.calrecycle.ca.gov/SolidWaste/Site/Search>. Accessed February 18, 2022.

Agua Mansa Landfill is located approximately 2.3 miles northeast of the project site. The Mid Valley Sanitary Landfill is located approximately 7.5 miles north of the site in the City of Rialto. The El Sobrante Landfill is located approximately 15 miles southwest of the project site in the City of Corona. The Badlands Landfill is located approximately 16.5 miles east of the project site in the City of Morena Valley.

Stormwater

The Riverside County Flood Control and Water Conservation District is the flood management agency responsible for all of western Riverside County, including the City. The project site is currently vacant and undeveloped, and there are no major stormwater drainage improvements on-site. Existing stormwater facilities are located along 30th Street, west of the project site.

Electricity

Electricity is provided to the City by Southern California Edison (SCE). An SCE easement containing tower-supported transmission lines traverses the project site from the northern boundary to the western boundary along the alignment of 20th Street.

Natural Gas

Natural Gas is provided to the City by the Southern California Gas Company.

Project Site

The project site is currently undeveloped and vacant. There are no land uses that require water, wastewater, solid waste, stormwater, electricity, and natural gas services. An existing RCSD 16-inch water main and a 12-inch trunk sewer main are located off-site at the eastern side of the project site along 20th Street.

3.19.3 - Regulatory Framework

Federal

National Pollutant Discharge Elimination System

The Water Pollution Control Act of 1972, more commonly known as the Clean Water Act (CWA), regulates the discharge of pollutants into watersheds throughout the nation. Under the CWA, the

United States Environmental Protection Agency (EPA) implements pollution control programs and sets wastewater standards.

The National Pollutant Discharge Elimination System (NPDES) permit program was established within the CWA to regulate municipal and industrial discharges to surface waters of the United States. Federal NPDES permit regulations have been established for broad categories of discharges, including point-source municipal waste discharges and nonpoint-source stormwater runoff. NPDES permits generally identify effluent and receiving water limits on allowable concentrations and/or mass emissions of pollutants contained in the discharge; prohibitions on discharges not specifically allowed under the permit; and provisions that describe required actions by the discharger, including industrial pretreatment, pollution prevention, self-monitoring, and other activities. Wastewater discharge is regulated under the NPDES permit program for direct discharges into receiving waters and by the National Pretreatment Program for indirect discharges to a sewage treatment plant.

State

California Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act (Porter-Cologne), which was passed in California in 1969, the State Water Resources Control Board (State Water Board) has the ultimate authority over State water rights and water quality policy. Porter-Cologne also establishes nine Regional Water Quality Control Boards (RWQCBs) to oversee water quality on a day-to-day basis at the local and regional level. The RWQCBs engage in a number of water quality functions in their respective regions and regulate all pollutant or nuisance discharges that may affect either surface water or groundwater.

California Water Code Section 10910

Section 10910 of the California Water Code (as revised by Senate Bill [SB] 610) requires: “The city or county, at the time, that it determines whether an Environmental Impact Report, a Negative Declaration, or a mitigated Negative Declaration is required for any project subject to the California Environmental Quality Act, pursuant to Section 21080.1 of the Public Resources Code, . . . [to] identify a water system . . . that may supply water for the project,” and to prepare a WSA to address the increased water use over existing conditions. The WSA is intended to:

1. Identify the water system or systems that would (or may) supply water to the proposed project;
2. Compare project water demands with those projections included in the most-recently adopted Urban Water Management Plan or Plans for those service providers; and
3. Assess whether the public water system’s total projected water availability for the entire system(s) during normal, single-dry, and multiple dry years over a 20-year period will meet the projected water demand associated with the proposed project, in addition to the public water system’s existing and planned future uses (including agricultural and manufacturing uses).

California Water Code Section 10910(4)(d) requires a discussion of existing water supply entitlements, water rights, or water service contracts relevant to the public water system(s). Also,

Section 10910 (2)(f) requires that, “If a water supply for a proposed project includes groundwater, the following additional information shall be included in the WSA: (1) a review of any information contained in the UWMP relevant to the identified water supply for the proposed project (2) a description of any groundwater basin or basins from which the proposed project will be supplied.”

California Urban Water Management Planning Act

The Urban Water Management Planning Act (California Water Code §§ 10610–10656) requires that all urban water suppliers with at least 3,000 customers prepare UWMPs and update them every 5 years. The act requires that UWMPs include a description of water management tools and options used by that entity that would maximize resources and minimize the need to import water from other regions. Specifically, UWMPs must:

- Provide current and projected population, climate, and other demographic factors affecting the supplier’s water management planning.
- Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier.
- Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage.
- Describe plans to supplement or replace that source with alternative sources or water demand management measures.
- Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis (associated with systems that use surface water).
- Quantify past and current water use.
- Provide a description of the supplier’s water demand management measures, including schedule of implementation, program to measure effectiveness of measures, and anticipated water demand reductions associated with the measures.
- Assess the water supply reliability.

California Senate Bills 610 and 221

SB 610 and SB 221 (Water Code § 10910(c)(2)) amended State law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 and SB 221 seek to promote more collaborative planning between local water suppliers and cities and counties by requiring that detailed information regarding water availability be provided to decision-makers prior to approval of specified large development projects. SB 610 requires that detailed information be included in a WSA, which is then included in the administrative record that serves as the evidentiary basis for an approval action by a city or county. SB 221 requires that the detailed information be included in a verification of water supply. Under SB 610, WSAs must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in Water Code Section 10912(a)) subject to the California Environmental Quality Act (CEQA). In 2021, the RCSD adopted its 2020 UWMP, which determined that 100 percent of average water supplies would be available to RCSD even in the case of multiple dry years.

California Water Conservation Act

The California Water Conservation Act (SB X7-7) was enacted in November 2009 and requires each urban water supplier to select one of four water conservation targets contained in California Water Code Section 10608.20 with the Statewide goal of achieving a 20 percent reduction in urban per capita water use by 2020. Under SB X7-7, urban retail water suppliers are required to develop water use targets and submit a water management plan to the California Department of Water Resources (DWR) by July 2011. The plan must include the baseline daily per capita water use, water use target, interim water use target, and compliance daily per capita water use.

California Model Water Efficient Landscape Ordinance

The California Model Water Efficient Landscape Ordinance was adopted by the California Office of Administrative Law in September 2009 and requires local agencies to implement water efficiency measures as part of their review of landscaping plans. Local agencies can either adopt the Model Water Efficient Landscape Ordinance or incorporate provisions of the ordinance into their own code requirements for landscaping. The City's municipal code Chapter 0.283, Water Efficient Landscape Design Requirements fulfills this requirement.

California Integrated Waste Management Act

To minimize the amount of solid waste that must be disposed of by transformation and land disposal, the State Legislature passed Assembly Bill 939, the California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939), effective January 1990. The legislation required each local jurisdiction in the State to set diversion requirements of 25 percent in 1995 and 50 percent in 2000; established a comprehensive Statewide system of permitting, inspections, enforcement, and maintenance for solid waste facilities; and authorized local jurisdictions to impose fees based on the types or amounts of solid waste generated. In 2007, amendments to the California Integrated Waste Management Act introduced a new per capita disposal and goal measurement system that moves the emphasis from an estimated diversion measurement number to using an actual disposal measurement number as a per capita disposal rate factor. As such, the new disposal-based indicator (pounds per person per year) uses only two factors: a jurisdiction's population (or in some cases employment) and its disposal as reported by disposal facilities.

State Organics Law (SB 1383)

SB 1383 aims to reduce the emission of short-lived climate pollutants specifically regarding the disposal of organic or food waste. It requires Statewide reduction of organic waste disposal by 75 percent by January 2025 and the reduction of at least 20 percent of currently disposed of edible food for human consumption by 2025. SB 1383 applies to all residences and businesses. SB 1383 also requires that jurisdictions conduct education and outreach on organics recycling to all residents, businesses (including those that generate edible food that can be donated), haulers, solid waste facilities, local food banks, and other food recovery organizations.

California Assembly Bill (AB) 341

AB 341 requires all businesses and public entities that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units to recycle. It also established a

Statewide goal to source reduce, recycle, or compost no less than 75 percent of the solid waste generated by 2020 and annually, thereafter.

Local

City of Jurupa Valley General Plan

The following General Plan policies are directly related to the proposed project in regard to utilities and service systems. Please refer to Section 3-11, Land Use and Planning, for analysis of the proposed project's consistency with these policies.

Community Safety, Services, and Facilities Element

- CSSF 2.44 Drought-Tolerant Landscaping.** Require the use of drought-tolerant landscaping in all new development.
- CSSF 2.54 Fair-Share Costs.** Require new development to contribute fair-share costs for the provision of wastewater infrastructure and treatment.
- CSSF 2.57 New Development.** Require new development to implement on-site measures to clean and contain stormwater runoff.
- CSSF 2.60 Waste Reduction.** Encourage the diversion of waste from landfills through reduction, reuse, and recycling efforts.
- CSSF 2.61 Waste Management.** Encourage new development to employ construction waste management techniques to divert construction materials and debris away from the landfills.
- CSSF 2.66 Waste Diversion.** Achieve at least the minimum construction and demolition waste diversion requirement of 75 percent.

City of Jurupa Valley Municipal Code

The following City of Jurupa Valley Municipal Code chapters and sections are relevant to utilities and service systems:

- Chapter 3.65** Consolidated Fees for Land Use and Related Functions, outlines development fees, including utility construction costs.
- Chapter 6.65** Sewage Discharges, outlines fees, construction permit requirements, and other regulations related to sewage discharges. Section 6.65.030 outlines general requirements for an approval and construction permit for sewage discharges. Section 6.65.050 described the required annual operating permit for an on-site wastewater treatment system, such as septic systems.
- Chapter 6.75** Solid Waste Collection and Disposal, outlines regulations related to solid waste collection and disposal. This chapter discusses who is responsible for the removal of solid waste as well as permit requirements for the removal of solid waste.

- Chapter 6.76** Construction and Demolition Waste Management, outlines regulations for construction and demolition waste management, including the requirement to submit a waste management plan and a Water Management Plan compliance report.
- Chapter 6.77** Recyclables and Organic Collections, outlines regulations related to recyclables and organics collection, including mandatory commercial recycling and organics recycling. Commercial waste generators shall arrange for recycling services. Additionally, property owners or managers of multi-family dwellings are required to separate recyclables from solid waste. All businesses (including a multi-family dwelling of five or more units that generates two cubic yards or more of commercial solid waste per week) shall arrange for recycling services specifically for organic waste.

3.19.4 - Thresholds of Significance

Significance Criteria

In accordance with Section 15064.7 of the State CEQA Guidelines, the City of Jurupa Valley adopted local CEQA Guidelines. The City's local CEQA Guidelines are based, in part, on the CEQA checklist included in Appendix G of the State CEQA Guidelines. The City of Jurupa Valley Guidelines recognizes the following significance thresholds and Significance Criteria related to utilities and service systems. Based on these significance thresholds, a project would have a significant impact on utilities and service systems if it would:

- a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

Under the City's local significance threshold, a significant impact may occur if the installation of water and sewer lines impacts land (either disturbed or undisturbed) to a degree that impacts cannot be mitigated to less than significant levels.

- b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

Under the City's local significance threshold, a significant impact may occur if the project results in the water purveyor (e.g., JCSD, RCSD, Santa Ana Water Company) not being able to supply sufficient water for the project during normal, single-dry, and multiple dry years over the next 25 years as described in their respective Urban Water Management Plans.

- c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Under the City's local significance threshold: A significant impact may occur if the project results in the RWQCP, which provides wastewater treatment services to the JCSD and the RCSD, to exceed its capacity for wastewater treatment.

- d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

Under the City's local significance threshold, a project may have a significant impact if it does not participate in programs intended to meet waste diversion requirements of the General Plan as stated below:

- CSSF 2.67 Waste Diversion. Achieve at least the minimum construction and demolition waste diversion requirement of 75 percent.
- State legislation (AB 341) mandates businesses and public entities generating four (4) cubic yards or more of waste per week and multi-family residential dwellings with five (5) units or more to recycle.

- e) Comply with federal, State, and local statutes and regulations related to solid waste.

Under the City's local significance threshold, a project may have a significant impact if it does not participate in individual programs (i.e., solid waste pickup, recycling) identified the Countywide Integrated Waste Management Plan (CIWMP) which was prepared in accordance with the California Integrated Waste Management Act of 1989, Chapter 1095 (AB 939).

Approach to Analysis

The following evaluation discusses whether the proposed project would result in direct or indirect impacts from the relocation or construction of new or expanded utilities and service systems such as wastewater and stormwater drainage facilities, water supply, water treatment, electricity, natural gas, and telecommunication facilities.

The analysis involved reviewing published data and material provided by the JCSD, RCSD, RWQCP, CalRecycle, the City, the site-specific Master Water Plan shown in Exhibit 2-8, the site-specific Master Sewer Plan shown in Exhibit 2-9, the site-specific Master Drainage Plan shown in Exhibit 2-10, and the WSA prepared by Kreiger and Stewart Engineering Consultants (included in Appendix K).

Wastewater production was calculated and compared with the RWQCP treatment capacity to determine whether wastewater treatment requirements would be exceeded. In addition, the demand for potable water was calculated to assist in determining whether enough water supply would be available. The City's wastewater discharge permitting and stormwater requirements were also reviewed.

3.19.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Water or Wastewater Treatment Facilities

Threshold UTIL-1: Would the proposed project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Under the City's local significance threshold, a significant impact may occur if the installation of water and sewer lines impacts land (either disturbed or undisturbed) to a degree that impacts cannot be mitigated to less than significant levels.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

These include existing regulatory requirements such as plans, policies, or programs applied to the proposed project based on federal, State, or local laws currently in place which effectively reduce impacts to utilities and service systems.

The following PPP applies to the proposed project and would reduce impacts related to water or wastewater treatment facilities:

PPP 3.19-1 The project is subject to compliance with the Rubidoux Community Services District rules, regulations, conditions, requirements, and payment of fees for commercial/industrial/residential projects concerning water and sewer service.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of utilities and service systems.

Impact Analysis

Water Facilities

As shown in Exhibit 2-8, the proposed project's water system, with the exception of PA 7, would be connected to the existing RCSD water system via an extension of the existing 16-inch feeder main within 20th Street at the eastern side of the project site. A pressure booster station would be installed at or near the point of connection. A new 16-inch water main would be constructed along the eastern portion of 20th Street, through the proposed Business Park, and connect to the existing line at the eastern edge of the project site. Two new 1.25 million gallon (MG) above-ground reservoirs would provide water for the Zone 1360 portion of the proposed project, while another new 0.25 MG reservoir would provide water for the Zone 1440 portions of the proposed project. PA 7 (only 45 dwelling units) would connect to the existing JCSD water system.

Domestic water would be supplied to individual PAs by 8-inch lines located within local road right-of-way. These lines would connect to the 12-inch water mains that would connect the various PAs to a 16-inch main located within 20th Street. The water infrastructure would include fire hydrants and irrigation to the community's parks. On-site facilities would be sized in accordance with RCSD criteria based on the land uses identified within the project site.

The proposed project would consist of a maximum of 1,697 residential dwelling units on 204.4 acres, 58.3 acres of light industrial development, 82 acres of business park development, a 13.4-acre school site, a 14.3-acre public park, 19.6 acres of circulation, 1.4 acres of water tanks, a 9-acre water basin, 510.8 acres of open space (conservation), and 18.4 acres of open space (recreation) and water tanks and basins. According to the WSA, the water demand for the proposed project is estimated to be approximately 963.86 AFY.

The area designated for the proposed project was identified in RCSD's 2020 UWMP with an annual water demand of approximately 2,000 AFY, which exceeds the currently estimated demand of the proposed project, which is less than 1,000 AFY (as calculated in the WSA).⁷ JCSD, which would serve PA 7, indicates in its 2020 UWMP that 100 percent of average water supplies would be available even in the case of multiple dry years. Water demand of the 45 dwelling units in PA 7 would be a maximum of 126.72 AFY,⁸ which is only 0.4 percent of JCSD's current water use. Therefore, because there are sufficient water supplies available from both RCSD and JCSD, and because the project would connect to existing facilities directly adjacent to the project site, only the construction of on-site water facilities would be required and no new or expanded off-site facilities would be required.

Wastewater Treatment Facilities

RCSD would provide sewer service for the proposed project, with the exception of PA 7 which would be served by JCSD and PAs 10 and 11, which would be served by individual septic systems and therefore would not require connection to a wastewater treatment facility. Wastewater for the proposed project would be transported eastward through the on-site system to the point of connection with the existing sewer main at 20th Street, located at the eastern project site boundary. The sewer system for the proposed project would include a 12-inch gravity main and 8-inch gravity sewer lines within local roads to collect wastewater from individual PAs and transport the wastewater to the existing off-site 15-inch gravity sewer main located southeast of the project site. According to the General Plan EIR, wastewater would be transported to the RWQCP for treatment. Because of its location adjacent to Armstrong Road and existing neighborhoods, PA 7 would connect to the adjacent existing JCSD sewer facilities to be transported to the RWQCP. Septic systems would be provided to serve PAs 10 and 11. The Master Sewer Plan is shown in Exhibit 2-9.

The RWQCP currently has capacity for up to 46 mgd. As discussed in greater detail under Threshold UTIL-3, the RWQCP Integrated Master Plan assumed a project-area wastewater production rate of 511,650 gallons per day (gpd). The proposed project's estimated average of 453,320 gpd of wastewater (per the RCSD Wastewater Master Plan) is within the RWQCP Integrated Master Plan assumptions for the project site used for wastewater treatment planning. Therefore, the RWQCP has planned for the proposed project and would have adequate capacity to serve the proposed project. No additional off-site facilities would need to be constructed.

Stormwater Drainage

Stormwater management within the proposed project would include a combination of in-street catch basins and storm drains, which would consolidate storm flows into detention/water quality basins to treat stormwater prior to discharge into existing off-site stormwater facilities. The project site would be divided into five drainage areas based on topography and proposed stormwater management improvements. These five drainage areas would include the Northern Drainage Boundary (portion of PA 8), the Central Drainage Area (PA 2 and PA 3), the Eastern Drainage Area,

⁷ Albert A. Webb Associates. 2021. 2020 Urban Water Management Plan for Rubidoux District. June 17. Website: <https://www.rcsd.org/files/8e37c118a/RCSD+2020+UWMP+Adopted+06.17.21.pdf>. Accessed February 1, 2022.

⁸ Albert A. Webb Associates. 2021. 2020 Urban Water Management Plan for the Jurupa Community Services District. June 28. Website: <https://www.jcsd.us/home/showdocument?id=7229>. Accessed September 12, 2022.

(PAs 12, 13, 14, 15, and 16), the Southern Drainage Boundary (PA 1), and the Western Drainage Boundary (PAs 4, 5, 6, 9, 17, 18, 19, and 20, and a portion of PA 8).

As part of the proposed project development, a drainage line would extend approximately 2,600 feet southeast of the proposed Business Park and connect to existing facilities in 20th Street. A second point of connection to existing facilities would be located within the project site along the western project site boundary at 20th Street. The Master Drainage Plan is shown in Exhibit 2-10. Off-site expansion of stormwater facilities would be required but would be limited to the 20th Street right-of-way. Impacts would be less than significant.

Electricity, Natural Gas, and Telecommunications.

Electricity would be provided to the project site by SCE via existing electrical lines in the project vicinity. Natural gas would be provided to the project site by Southern California Gas Company (SoCalGas). Phone and internet services would be provided by various companies selected by the individual customers. The proposed project would not require new off-site power, natural gas, or telecommunication facilities because it is located in an urban area that already contains sufficient and adjacent utility infrastructure. Installation of dry utilities on the project site is considered an inherent component of the construction process, and no significant impacts have been identified throughout this EIR specifically related to their installation.

Summary

The installation of the utility and service system infrastructure improvements described above would result in physical environmental impacts inherent in the proposed project's construction process; however, these impacts have already been included in the analyses of construction-related effects presented throughout this EIR. In instances where the proposed project's construction phase would result in specific, significant impacts, feasible mitigation measures are provided. The construction of infrastructure necessary to serve the proposed project would not result in any significant physical effects on the environment that are not already identified and disclosed elsewhere in this EIR. Specifically, these include the following mitigation measures that are intended to mitigate impacts related to ground disturbance: MM BIO-1a, MM BIO-1b, MM BIO-1c, MM BIO-1d, MM BIO-1e, MM BIO-1f, MM BIO-1g, MM BIO-1h, MM BIO-1i, MM BIO-1j, MM BIO-1k, MM BIO-2a, MM BIO-2b, MM BIO-3a, MM BIO-3b, MM BIO-5, MM CUL-1a, MM CUL-1b, MM CUL-1c, MM CUL-2a, MM CUL-2b, MM CUL-2c, MM CUL-2d, MM CUL-3, MM GEO-6a, and MM GEO-6b. Accordingly, impacts would be less than significant and additional mitigation measures beyond those identified throughout other subsections of this EIR (as listed above) would not be required.

Level of Significance Before Mitigation

Potentially significant impacts related to utilities construction.

Mitigation Measures

Implement MM BIO-1a, MM BIO-1b, MM BIO-1c, MM BIO-1d, MM BIO-1e, MM BIO-1f, MM BIO-1g, MM BIO-1h, MM BIO-1i, MM BIO-1j, MM BIO-1k, MM BIO-2a, MM BIO-2b, MM BIO-3a, MM BIO-3b, MM BIO-5, MM CUL-1a, MM CUL-1b, MM CUL-1c, MM CUL-2a, MM CUL-2b, MM CUL-2c, MM CUL-2d, MM CUL-3, MM GEO-6a, and MM GEO-6b.

Level of Significance After Mitigation

Less than significant impact with mitigation.

Water Supplies

Threshold UTIL-2: Would the proposed project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Under the City's local significance threshold, a significant impact may occur if the project results in the water purveyor (e.g., JCSD, RCSD, Santa Ana Water Company) not being able to supply sufficient water for the project during normal, single-dry, and multiple dry years over the next 25 years as described in their respective Urban Water Management Plans.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)*Plans, Policies, and Programs*

The following PPP applies to the proposed project and would reduce impacts related to water supplies:

PPP 3.19-1 The project is subject to compliance with the Rubidoux Community Services District rules, regulations, conditions, requirements, and payment of fees for commercial/industrial/residential projects concerning water and sewer service.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of utilities and service systems.

Impact Analysis

Domestic water supply to the proposed project would be provided by RCSD, with the exception of PA 7 which would be served by JCSD.

Water Demand

The proposed project would consist of a maximum of 1,697 residential dwelling units on 204.4 acres, 58.3 acres of light industrial development, 82 acres of business park development, a 13.4-acre school site, a 14.3-acre public park, 19.6 acres of circulation, and 510.8 acres of open space and water tanks and basins. According to the WSA, the water demand for the proposed project is estimated to be approximately 963.86 AFY.

Water Supply

RCSD's current and future water supply consists of groundwater extracted from the Riverside South Groundwater Basin.

As indicated in the WSA (Appendix K), RCSD can extract groundwater from the Riverside South Groundwater Basin without restrictions until the combined credit of the Colton, Riverside North, and Riverside South Groundwater Basins are depleted. Once the available credit is depleted, WMWD would be obligated to provide groundwater replenishment. It was anticipated that the cost of the

replenishment would be allocated to all groundwater extractors, including RCSD. Based on the latest Watermaster Report (dated August 1, 2020), total extractions from the Colton, Riverside North, and Riverside South Basins have increased from 31,810 AFY in 2015 to 35,817 AFY in 2019, an approximate 3 percent increase per year. Based on the assumption that groundwater extractions for the three groundwater basins would continue to increase at a rate of approximately 3 percent per year, total extraction would increase to approximately 69,217 AFY by 2050. At this rate, it would take nearly 8 years of no river flow to deplete the currently available credit of 544,221 acre-feet.

Even after the available credit is depleted, RCSD can continue to extract groundwater from the Riverside South Groundwater Basin; however, RCSD could be subject to payment of its share of the cost of groundwater replenishment to maintain pumping to meet future water demand. Therefore, as concluded in the WSA, RCSD is guaranteed a sufficient water supply from the Riverside South Groundwater Basin to meet current and future water demands, including the demands of the proposed project.

Projected annual water production requirements for RCSD as set forth in RCSD's 2020 UWMP are summarized as follows:

Table 3.19-2: Annual Projected Groundwater Production

Year	Projected Groundwater Production (rounded) (AFY)
2025	7,960
2030	10,686
2035	11,416
2040	12,149
2045	12,886
Notes: AFY = acre-feet/per year Source: Krieger & Stewart Engineering Consultants, 2021.	

The area designated for the proposed project was identified in RCSD's 2020 UWMP with an annual water demand of approximately 2,000 AFY, which exceeds the proposed project's currently estimated demand of approximately 963.86 AFY calculated in the WSA. As discussed in the RCSD's 2020 UWMP, reliable water supplies are available to meet demands during normal, single-dry, and multiple dry years through 2045⁹.

PA 7 would connect to existing JCSD water lines in Armstrong Drive. JCSD's 2020 UWMP indicates that 100 percent of average water supplies would be available even in the case of multiple dry years. Water demand of the 45 dwelling units in PA 7 would be a maximum of 126.72 AFY¹⁰ which is only

⁹ Albert A. Webb Associates. 2021. 2020 Urban Water Management Plan for the Rubidoux Community Services District. June 17

¹⁰ Albert A. Webb Associates. 2021. 2020 Urban Water Management Plan for the Jurupa Community Services District. June 28.
Website: <https://www.jcsd.us/home/showdocument?id=7229>. Accessed September 12, 2022.

0.4 percent of JCSD's current water use. As discussed in JCSD's 2020 UWMP, reliable water supplies are available to meet demands during normal, single-dry, and multiple dry years through 2045.¹¹

In summary, the proposed project would have sufficient water supplies available to serve the proposed project, and impacts would be less than significant.

Level of Significance

Less than significant impact.

Wastewater Treatment Capacity

Threshold UTIL-3: Would the proposed project result in a determination by the wastewater treatment provider which serves or may serve the proposed project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Under the City's local significance threshold: A significant impact may occur if the proposed project results in the RWQCP, which provides wastewater treatment services to the JCSD and the RCSD, to exceed its capacity for wastewater treatment.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to the proposed project related to wastewater treatment capacity.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of utilities and service systems.

Impact Analysis

The majority of the proposed project's wastewater would be treated at the RWQCP via RCSD transmission. PA 7's wastewater would be transmitted to RWQCP via JCSD. PA 10 and 11 would be served by septic systems and would not connect to a wastewater treatment provider.

The RCSD Wastewater Master Plan specifically includes future generation of wastewater from the proposed project. As indicated in the RCSD Wastewater Master Plan, the proposed project is expected to generate, based upon data from the proposed project's WSA (included in Appendix K), an estimated average of 453,320 gpd of wastewater.

A significant impact may occur if the project causes the RWQCP to exceed its capacity for wastewater treatment.

Ribidoux Community Service District

RCSD has acquired 3.055 mgd of treatment capacity rights at the RWQCP treatment facility. Average mgd flow from RCSD to the RWQCP between March 2019 and February 2021 was 1.75 mgd. As such,

¹¹ Albert A. Webb Associates. 2021. 2020 Urban Water Management Plan for the Jurupa Community Services District. June 28. Website: <https://www.jcsd.us/home/showdocument?id=7229>. Accessed September 12, 2022.

excess capacity is approximately 1.305 mgd.¹² The proposed project's 453,320 gpd represents 34.7 percent of the excess capacity. The RCSD Wastewater Master Plan specifically includes future generation of wastewater from the proposed project. The RCSD Wastewater Master Plan identifies capital improvement projects needed to serve the near- and long-term wastewater transmission needs but does not indicate specific deficiency related to proposed project. The RCSD Wastewater Master Plan identifies an existing water treatment capacity rights shortage of approximately 1.0 for the ultimate buildout scenario (full, future district buildout). However, future projects within the proposed project area would be required to pay fair-share of Capital Investment Program (CIP) fees and treatment plant costs, based on the average day sewer generation for the that project.¹³

Jurupa Valley Community Service District

Based on current purchase agreements, JCSD has a 4.0 mgd allocation limit until 2030, after which the limit increases to 5.0 mgd.¹⁴ Based on 2020 data, the JCSD transmits approximately 2.9 mgd of wastewater to the RWQCP.¹⁵ As such, the JCSD has 1.1 mgd (prior to 2030) to 2.2 mgd (after 2030) of available capacity at the RWQCP.

Riverside Water Quality Control Plant

The RWQCP recently underwent improvements that increased its total capacity from 40 to 46 mgd for average dry weather flows. The Integrated Master Plan for the RWQCP incorporates wastewater flow projections from the RCSD and JCSD and it is recognized that purchase of additional capacity allocations may be negotiated with individual CSDs.¹⁶ As such, the Integrated Master Plan for the RWQCP considers the proposed project and its related wastewater treatment needs. The Integrated Master Plan indicates that total projected wastewater flows at the RWQCP through 2037 will be 38.97 mgd.

Based on the 2015 RCSD Wastewater Facilities Master Plan, which is referenced and included in the Integrated Master Plan, the project site is located in Area 69 (which projects 5,500 gpd), Area 83 (which projects 504,150 gpd), and Area 84 (which projects 2,000 gpd) for a total of 511,650 gpd of wastewater projected for the project site. The project's estimated average of 453,320 gpd of wastewater (per the RCSD Wastewater Master Plan) is within the RWQCP assumptions for the project site used for wastewater treatment planning.

In summary, the flows from RCSD and JCSD have been considered in the RWQCP Integrated Master Plan flow projections and the RWQCP will have sufficient capacity (46mgd) to serve the flows of the

¹² Albert A. Webb Associates. 2022. RCSD 2022 Wastewater Master Plan. June 17. Website: <https://www.rcsd.org/files/8809baf58/RCSD+WWMP+-+May+5+2022.pdf>. Accessed September 13, 2022.

¹³ Albert A. Webb Associates. 2022. RCSD 2022 Wastewater Master Plan. June 17. Website: <https://www.rcsd.org/files/8809baf58/RCSD+WWMP+-+May+5+2022.pdf>. Accessed September 13, 2022.

¹⁴ City of Riverside 2019. Update of the Integrated Master Plan for the Wastewater Collection and Treatment Facilities. June. Website: <https://www.riversideca.gov/publicworks/sewer/master-plan/2019%20Sewer%20Master%20Plan%20Volume%201.pdf>. Accessed: September 13, 2022.

¹⁵ Albert A. Webb Associates. 2022. JCSD 2020 Wastewater Master Plan. August. Website: https://jurupacsd-my.sharepoint.com/personal/lrey_jcsd_us/_layouts/15/onedrive.aspx?id=%2Fpersonal%2Ffrey%5Fjcsd%5Fus%2FDocuments%2FJCS%202020%20Wastewater%20Master%20Plan%20Report%20Final%20Epdf&parent=%2Fpersonal%2Ffrey%5Fjcsd%5Fus%2FDocuments&ga=1. Accessed September 13, 2022.

¹⁶ Carollo Engineers. 2020. City of Riverside Update of the Integrated Master Plan for the Wastewater Collection and Treatment Facilities, Executive Summary. Website: <https://www.riversideca.gov/publicworks/sewer/master-plan/2019%20Sewer%20Master%20Plan%20Volume%201.pdf>. Accessed September 13, 2022.

project as well as existing commitments and other future projects. As such, adequate capacity to serve the project's projected wastewater treatment demand in addition to the provider's existing commitments is available. Impacts would be less than significant.

Level of Significance

Less than significant impact.

Attainment of Solid Waste Reduction Goals

Threshold UTIL-4: Would the proposed project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Under the City's local significance threshold, a project may have a significant impact if it does not participate in programs intended to meet waste diversion requirements of the General Plan as stated below:

- CSSF 2.67 Waste Diversion. Achieve at least the minimum construction and demolition waste diversion requirement of 75 percent.
- State legislation (AB 341) mandates businesses and public entities generating 4 cubic yards or more of waste per week and multi-family residential dwellings with five units or more to recycle.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to the proposed project related to solid waste reduction goals.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of utilities and service systems.

Impact Analysis

According to CalRecycle, single-family residential units generate up to 11.4 pounds of solid waste per household per day, multi-family units generate up to 8.6 pounds of solid waste per unit per day, light industrial uses generate up to 62 pounds of solid waste per 1,000 square feet per day, schools generate up to 0.007 pounds of solid waste per square foot per day, and professional offices generate up to 0.084 pounds per square foot per day.¹⁷ Given that the proposed project would construct five Very Low-Density Residential homes; 1,692 Medium, Medium-High, High-Density, and Highest Density residential units; 1,269,774 square feet of Light Industrial buildings space; 1,428,768 square feet of Business Park building space; and a 644,688-square-foot school, it can be estimated

¹⁷ California Department of Resources Recycling and Recovery (CalRecycle). 2019. Estimated Solid Waste Generation Rates. Website: <https://www2.calrecycle.ca.gov/wastecharacterization/general/rates>. Accessed February 1, 2022.

that the proposed project would generate approximately 246,000 pounds (123 tons) of solid waste per day.¹⁸ This would be equal to approximately 44,895 tons of solid waste per year.

As described above, solid waste originating in the City is transported to Agua Mansa Transfer Station and MRF. From there, recyclables are transferred to third party providers and waste is transported to landfills throughout Riverside County. Mid Valley Sanitary Landfill, located approximately 8.45 miles to the north of the project site (see Table 3.19-1), has a permitted daily throughput of 7,500 tons/day. With a daily generation rate of 123 tons per day, the proposed project would utilize only up to 1.6 percent of the permitted daily throughput at Mid Valley Sanitary Landfill. The proposed project is not expected to exceed this capacity. Additionally, Agua Mansa Landfill is located approximately 1.6 miles to the east of the project site (see Table 3.19-1). The General Plan EIR determined that adequate daily surplus capacity exists at the receiving regional landfills, and that buildout of the General Plan, including the proposed project, would not significantly affect current operations or the expected lifetime of the landfills in the region.

The proposed project would achieve at least the minimum construction and demolition waste diversion requirement of 75 percent by demonstrating compliance with SB 1383 regarding the diversion of organic waste as well as General Plan Policy CSSF 2.66, Waste Diversion. The proposed project is not anticipated to conflict with Riverside County policies and State policies such as AB 341, which requires all businesses that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units to recycle, and the project site would be served by a solid waste disposal provider. The proposed project would also be required to abide by SB 1383. In addition, the proposed project is not anticipated to conflict with AB 341, which requires all businesses that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units to recycle. Therefore, the proposed project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, and impacts would be less than significant.

Level of Significance

Less than significant impact.

Solid Waste Regulations

Threshold UTIL-5: Would the proposed project comply with federal, State, and local statutes and regulations related to solid waste?

Under the City's local significance threshold, a project may have a significant impact if it does not participate in individual programs (i.e., solid waste pickup, recycling) identified in the CIWMP which was prepared in accordance with the California Integrated Waste Management Act of 1989, Chapter 1095 (AB 939).

¹⁸ (11.4 pounds per unit per day*5 units) + (8.6 pounds per unit per day*1,692 units) + (1,269,744-square-feet of industrial uses/1,000 square feet*62 pounds per square foot per day) + (0.007 pounds per square foot per day* 644,688 square feet of school uses) + (0.084 pounds per square foot per day*1,771,672.32-square-feet of business park uses) = ~246,600 pounds of solid waste per day.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)*Plans, Policies, and Programs*

The following PPP applies to the proposed project and would reduce impacts related to solid waste regulation:

Plans, Policies, and Programs

PPP 3.19-2 Before issuing building permits, the project applicant shall submit a construction waste management plan in compliance with Section 4.408 of the 2013 California Green Building Standards Code.

Project Design Features

There are no PDFs applicable to the proposed project related to the topic of utilities and service systems.

Impact Analysis

AB 939, the California Integrated Waste Management Act of 1989, requires that local jurisdictions divert at least 50 percent of all solid waste generated by January 1, 2000. The Riverside CIWMP was prepared in accordance with AB 939 and approved by the California Integrated Waste Management Board in 1996.¹⁹ The City implements the CIWMP through various programs administered by the solid waste providers. The proposed project is not anticipated to conflict with Riverside County policies and State policies such as AB 341, which requires all businesses that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units to recycle, and the project site would be served by a solid waste disposal provider. The proposed project would also be required to abide by SB 1383 regarding the diversion of organic waste as well as General Plan Policy CSSF 2.66, Waste Diversion. Thus, the proposed project would have a less than significant impact.

Level of Significance

Less than significant impact.

3.19.6 - Cumulative Impacts**Water**

The geographic scope of the cumulative potable water analysis is the service areas of the RCSD and JCSD, which provide potable water to residents and businesses within the City and surrounding areas. The RCSD and JCSD considered the existing capacity and future demand for capacity to determine needed updates to water facilities. In the course of preparing the UWMP, the RCSD estimated water demand of future development in the service area and forecast the needed facility upgrades. The forecast included supply facility upgrades needed to accommodate growth in the service area. While the JCSD does not directly identify the proposed project's water needs, only a small portion of the proposed project (PA 7 only) would be served by JCSD.

¹⁹ LSA. 2017. City of Jurupa Valley 2017 General Plan Draft Environmental Impact Report State Clearinghouse NO. 2016021028, City of Jurupa Valley, Riverside County, California. February 14. Section 4.17, Utilities and Service Systems.

Cumulative projects listed in Chapter 3, Environmental Impacts Analysis, Table 3-1 are located within the RCSD and JCSD service areas and would create water supply demand. The RCSD 2021 UWMP determined that RCSD would be able to provide adequate water supplies to its service area, including the proposed project. The RCSD would have adequate water supplies to serve the cumulative projects during normal and dry years. Similarly, the JCSD's 2020 UWMP concluded that it would have adequate water supplies to its service area. Cumulative projects, listed in Table 3-1, would be required to comply with provisions of the Municipal Code and the California Building Standards Code (CBC) related to water conservation. Therefore, the proposed project, in conjunction with identified cumulative projects in the RCSD service area, would result in a less than significant cumulative impact related to water supply and water supply facilities. Additionally, the proposed project's incrementation contribution to the less than significant cumulative impact would not be cumulatively considerable.

Wastewater

The geographic scope of the cumulative wastewater analysis is the service areas of RCSD and JCSD, which provide wastewater collection and treatment services in the City and surrounding areas. Both the RCSD and JCSD transmit wastewater to the RWQCP. The RWQCP currently has capacity for up to 46 mgd, and as of 2016, the RWQCP was treating 29 mgd, or two-thirds of its capacity, each day.²⁰ Therefore, the proposed project, in conjunction with identified cumulative projects in the area, would not result in a significant cumulative impact related to wastewater treatment facilities. Additionally, the proposed project's incrementation contribution to the less than significant cumulative impact would not be cumulatively considerable.

Storm Drainage

The geographic scope for cumulative storm drainage is the areas that drain to Santa Ana River Basin Watershed, which is the watershed the project site lies within. Cumulative projects listed in Table 3-1 predominantly consist of commercial, industrial, and residential uses located in the City of Jurupa Valley, unincorporated San Bernardino County, or the City of Fontana that generate volumes of stormwater. The proposed project may be required to construct improvements such that the storm drain line is adequate, which would include a drainage line that would extend east of the proposed Business Park and connect to existing facilities in 20th Street. A second off-site drainage line would extend southwest from PA 3 and continue off-site along 20th Street, connecting to existing facilities in 30th Street. A third off-site drainage line would extend from the southwestern corner of the project site, south of PA 1, and connect to existing facilities. This would ensure that adequate capacity is maintained. Therefore, the proposed project, in conjunction with identified cumulative projects in the area, would not result in a significant cumulative impact related to stormwater generation and stormwater drainage facilities. Additionally, the proposed project's incrementation contribution to the less than significant cumulative impact would not be cumulatively considerable.

²⁰ Albert A. Webb Associates. 2021. 2020 Urban Water Management Plan for the Jurupa Community Services District. June 28. Website: <https://www.jcsd.us/home/showdocument?id=7229>. Accessed September 12, 2022.

Solid Waste

Burrtec and Waste Management oversee regional waste diversion programs and contracts for the solid waste recycling collection services provided within this area of Riverside County. Cumulative projects listed in Table 3-1 consist predominantly of industrial, commercial, and residential uses and would generate solid waste that would increase demand on solid waste facilities to receive, process, and dispose solid waste.

Several regional landfills are located in the project vicinity, with a combined remaining capacity of at least 262 million cubic yards. Existing solid waste facilities provide sufficient capacity to serve cumulative development. Therefore, the proposed project, in conjunction with identified cumulative projects in the area, would result in a less than significant cumulative impact related to solid waste generation and landfill capacity. Additionally, the proposed project's incrementation contribution to the less than significant cumulative impact would not be cumulatively considerable.

Level of Cumulative Significance

Less than significant impact.

3.20 - Wildfire

3.20.1 - Introduction

This section describes the existing wildfire conditions in the project area as well as the relevant regulatory framework. This section also evaluates the possible impacts related to wildfire that could result from implementation of the project. Information in this section is based on information provided by the City of Jurupa General Plan (General Plan), South Coast Air Quality Management District (SCAQMD), California Department of Forestry and Fire Protection (CAL FIRE), and Riverside County Fire Department.

A Notice of Preparation (NOP) was released for public review on December 6, 2021, and an Environmental Impact Report (EIR) Scoping Meeting was held on December 14, 2021. No public comments were received during the scoping period related to wildfire.

3.20.2 - Environmental Setting

Wildfire Hazard Area Designations

City of Jurupa Valley

The foothill areas and mountainsides of the City of Jurupa Valley (City) are subject to risk of fire hazards. Lush riparian vegetation, including giant cane, along the Santa Ana River also poses conditions conducive to wildfires. The highest danger of wildfires can be found in the most rugged terrain where, fortunately, development intensity is relatively low.¹

Disaster preparedness is important to the City in order to establish the most effective and efficient ways to address hazards and minimize effects of hazards on life and property, reduce potential for disasters, and recover from effects of disasters as quickly as possible. Therefore, the City has adopted a Local Hazard Mitigation Plan (LHMP) and participates in the County of Riverside Multi-Jurisdictional Local Hazard Mitigation Plan. The City also has an Emergency Operations Plan (EOP) that addresses how the City will respond to emergency situations ranging from minor incidents to large-scale disasters.² The City also participates in the Federal Emergency Management Agency (FEMA) Hazards-United States (HAZUS) Program (implemented by Riverside County [County]), which is a standardized methodology for earthquake loss estimation based on Geographic Information Systems (GIS). HAZUS is designed for use by state, regional, and local governments in planning for earthquake loss mitigation, emergency preparedness, response, and recovery.³

According to CAL FIRE's Fire Hazard Severity Zone Map, the City includes several areas within a State Responsibility Area (SRA) that are identified as Very High and High fire severity zones. A few additional areas are identified as Moderate severity zones. These are located primarily in the

¹ City of Jurupa Valley 2017. 2017 General Plan. September.

² City of Jurupa Valley. 2011. Emergency Operations Plan (EOP). April.

³ City of Jurupa Valley 2017. 2017 General Plan. September.

northern portion of the City, north of State Route (SR) 60, with additional areas located in the central part of the City and along the Santa Ana River in the southern portion of the City.⁴

Project Site

According to CAL FIRE, the project site is located within a High Fire Hazard Severity Zone in an SRA⁵ (see Exhibit 3.20-1).

Wildfire-conductive Conditions

Grasslands and other vegetation in California easily ignite, particularly in dry seasons. Wildfire is a serious hazard in high dry-fuel load areas, particularly near areas of natural vegetation and steep slopes since fires tend to burn more rapidly on steeper terrain. Wildfire is also a serious hazard in areas of high wind given that fires will travel faster and farther geographically when winds are higher. Furthermore, wildfire is more likely in areas where electric power lines are located above ground where they may encounter vegetation or building materials.

City of Jurupa Valley

Land uses in the City include primarily residential, vacant land, and industrial. The City includes several areas within an SRA that are identified as Very High and High fire severity zones. A few additional areas are identified as Moderate severity zones. These are located primarily in the northern portion of the City, north of SR-60, with additional areas located in the central part of the City and along the Santa Ana River in the southern portion of the City.⁶

According to the SCAQMD meteorology data gathered at the Fontana Station and the Riverside Airport station, wind speed in the vicinity of the City averages between 5.2 and 5.6 miles per hour (mph) (2.34 to 2.51 meters per second) and blows west.⁷

Electric power lines mostly occur in urban areas and along roadways. However, the General Plan encourages and, where possible, requires undergrounding of overhead utility lines. In addition, undergrounding of utility lines is required as a condition of new development.

Project Site

The project site is located in the northeastern portion of the City. The topography is a mixture of steep hillsides, rolling hills, rocky outcrops, and low-relief canyons combined with relatively flat areas (elevation ranges from approximately 900 feet at the southern corner to approximately 1,739 feet in the central area). The site is undeveloped and vacant. Eleven non-relatively permanent water

⁴ California Department of Forestry and Fire (CAL FIRE). Fire Hazard Severity Zone Viewer. Website: <https://egis.fire.ca.gov/FHSZ/>. Accessed February 1, 2022.

⁵ California Department of Forestry and Fire (CAL FIRE). Fire Hazard Severity Zone Viewer. Website: <https://egis.fire.ca.gov/FHSZ/>. Accessed February 1, 2022.

⁶ Ibid.

⁷ South Coast Air Quality Management District (SCAQMD). 2022. Meteorological Sites. Website: <https://www.aqmd.gov/home/air-quality/meteorological-data/aermod-table-1>. Accessed February 1, 2022.

features (i.e., ephemeral stream that flow for only a short period of time) with a total of 19 tributaries were identified within the project site.^{8, 9}

The project site is surrounded by urban features, both residential and industrial, that could provide fuel breaks in the event of a fire, such as SR-60, the Santa Ana River, Armstrong Road, and Rubidoux Avenue.

Fire Protection and Emergency Medical Services

Southern California and Riverside County

CAL FIRE is responsible for fire protection and stewardship of over 31 million acres of California's privately owned wildlands. CAL FIRE also provides varying levels of emergency services in 36 of the California's 58 counties via contracts with local governments. Because of the Department's size and major incident management experience, it is often asked to assist or take the lead in disasters.¹⁰ In December 2017, a series of wildfires occurred in Southern California, resulting in extensive property damage. In July 2018, the Cranston Fire wildfire occurred in Riverside, burning over 13,000 acres and destroying 12 structures.¹¹ In 2020, the Southern California Apple Fire and El Dorado Fire wildfires resulted in extensive burned areas and damage to structures.

City of Jurupa Valley

According to the General Plan, the Riverside County Fire Department, in cooperation with CAL FIRE, provides fire protection services to the City. This includes full-service municipal and wildland fire protection, emergency medical response, technical rescue services, and response to hazardous materials discharges.¹² Riverside County Fire Department consists of 15 battalions that staff and operate 101 fire stations.¹³

Project Site

The project site is vacant and undeveloped with no existing fire protection or emergency medical services facilities on-site. As shown in Table 3.15.1 (refer to Section 3.15 Public Services), Riverside County Fire Department operates four fire stations within the City. Fire Stations 18 and 38, operated by Battalion 14, are the nearest to the project site.

⁸ Hillman Consulting, 2017. Phase I Environmental Site Assessment Rio Vista Rubidoux, California. March 27.

⁹ L&L Environmental, Inc. 2022. Revised Updated Biological Resources Assessment, Jurisdictional Delineation, MSHCP Narrow Endemic Plant, Burrowing Owl Breeding Season, and Two-Year Delhi Sands Flower-Loving Fly Focused Surveys, Rio Vista, Specific Plan 16001, Jurupa Valley, Riverside County, California. January.

¹⁰ California Department of Forestry and Fire Protection (CAL FIRE). 2021. About Us. Website: <https://www.fire.ca.gov/about-us/>. Accessed February 22, 2022.

¹¹ California Department of Forestry and Fire Protection (CAL FIRE). 2022. Cranston Fire. Website: <https://www.fire.ca.gov/incidents/2018/7/25/cranston-fire/>. Accessed February 1, 2022.

¹² City of Jurupa Valley 2017. 2017 General Plan. September.

¹³ Riverside County Fire. 2021. Riverside County Fire Stations. Website: <https://www.rvcfire.org/resources/fire-stations>. Accessed January 22, 2022.

3.20.3 - Regulatory Framework

State

California Emergency Response Plan

California has developed an emergency response plan to coordinate emergency services provided by federal, State, and local governments and private agencies. Responding to hazardous materials incidents is one part of this plan. The plan is administered by the California Governor's Office of Emergency Services, which coordinates the responses of other agencies. When the City experiences an emergency, an Emergency Operations Center (EOC) may be opened. In the event an EOC is opened, emergency response team members coordinate efforts and work with local fire and police agencies, emergency medical providers, the California Highway Patrol (CHP), CAL FIRE, California Department of Fish and Wildlife (CDFW), and California Department of Transportation (Caltrans).

California Department of Forestry and Fire Protection Threat Potential Mapping

CAL FIRE has mapped fire threat potential throughout California. CAL FIRE maps fire threat based on the availability of fuel and the likelihood of an area burning (based on topography, fire history, and climate). The threat levels include no fire threat and moderate, high, and very high fire threat. Further, the maps designate the majority of the City as a Local Responsibility Area (LRA) with some areas in an SRA. The project site is within an SRA. Additionally, CAL FIRE produced a 2010 Strategic Fire Plan for California, which contains goals, objectives, and policies to prepare for and mitigate the effects of fire on California's natural and built environments. The CAL FIRE Office of the State Fire Marshal provides oversight of enforcement of the California Fire Code as well as overseeing hazardous liquid pipeline safety.

California Building Code

The State of California provided a minimum standard for building design through the 2019 California Building Standards Code (CBC), which is located in Part 2 of Title 24 of the California Code of Regulations. The 2019 CBC is based on the International Building Code but has been modified for California conditions. It is generally adopted on a jurisdiction by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are plan-checked by local City and County building officials for compliance with the CBC. Typical fire safety requirements of the CBC include the installation of sprinklers in all new high-rise buildings and residential buildings; the establishment of fire resistance standards for fire doors and building materials; and particular types of construction.

Regional

Southern California Climate Adaption Planning Guide

The Southern California Association of Governments (SCAG) developed the Regional Climate Adaptation Framework (Framework) to assist local and regional jurisdictions in managing the negative impacts of climate change. The Southern California Climate Adaption Planning Guide (SoCal APG) was developed as part of SCAG's Framework to help the six-county region plan and prepare for

the impacts of sea-level rise, extreme heat, wildfires, rain events, and other climate-related issues.¹⁴ SoCal APG provides resources, examples, and step-by-step guidance to confront challenges of climate change and increase resilience to its hazards.

Riverside County Emergency Operations Plan

The Riverside County EOP is designed as a reference tool for coordinating emergencies, whether it be a localized event or a catastrophic disaster. The EOP serves as the foundation for response and recovery operations for the County as it establishes roles and responsibilities, assigns tasks, and specifies policies and general procedures. The plan includes critical elements of the Standardized Emergency Management System, the National Incident Management System, the Incident Command System, and the National Response Framework. The EOP assists with facilitating an effective response to any emergency by providing a platform that encourages collaboration between the County of Riverside Operational Area EOC, first responders, and support agencies.¹⁵

Riverside County Fire Service Fire Prevention Guidelines

The Riverside County Fire Service has set fire prevention guidelines that address such matters as fire flow, fire access, building construction, flammable and combustible liquids, and fire protection systems.

Local

City of Jurupa Valley General Plan

The following General Plan Community Safety, Services, and Facilities Element policies are directly related to the proposed project in regard to wildfire. Please refer to Section 3-11, Land Use and Planning, for analysis of the proposed project's consistency with these policies.

CSSF 1.23 Fire Prevention. Develop and enforce construction and design standards that ensure that proposed development incorporates fire prevention features through the following:

- All proposed construction shall meet minimum standards for fire safety as defined in the City Building or Fire Codes, or by City zoning, or as dictated by the Building Official or the Transportation Land Management Agency based on building type, design, occupancy, and use.
- In addition to the fire safety provisions of the Uniform Building Code and the Uniform Fire Codes, apply additional standards for high risk, high-occupancy hospital and health care facilities, dependent care, emergency operation centers, and other essential or "lifeline" facilities, per county or State standards. These shall include assurance that structural and nonstructural architectural elements of the building will not:

¹⁴ Southern California Association of Governments (SCAG). 2020. Southern California Climate Adaptation Planning Guide. October. Website: https://scag.ca.gov/sites/main/files/file-attachments/socaladaptationplanningguide_oct2020_0.pdf?1619029039. Accessed March 2, 2022.

¹⁵ County of Riverside Emergency Management Department. 2019. Riverside County Emergency Operations Plan. Website: <http://riversidecountycalifornia.com/Citizens/FileOpen.aspx?Type=4&ID=23364>. Accessed March 2, 2022.

- a.) Impede emergency egress for fire safety staffing/personnel, equipment, and apparatus; nor
- b.) Hinder evacuation from fire, including potential blockage of stairways or fire doors.
- Proposed development in Hazardous Fire areas shall provide secondary public access, unless determined unnecessary by CAL FIRE or City Building Official.

- CSSF 1.24 *Adjacent Natural Vegetation.*** Development that adjoins large areas of native vegetation will require drought tolerant landscaping that blends with the natural vegetation to the greatest extent possible.
- CSSF 1.26 *Gas Shutoff.*** Require automatic natural gas shutoff earthquake sensors in high-occupancy industrial and commercial facilities and encourage their installation in all residences.
- CSSF 1.28 *Fire Protection Master Plan.*** Continue to utilize the Riverside County Fire Protection Master Plan and Jurupa Emergency Response Plan as the base documents to implement the goals and objectives of the Community Safety Element.
- CSSF 1.29 *Water Resources.*** Encourage and, as resources allow, support efforts to utilize existing water bodies, tanks, and water wells in the City for emergency fire suppression water sources.
- CSSF 1.30 *Brush Clearance.*** Utilize ongoing brush clearance fire inspections to educate homeowners on fire prevention tips.

City of Jurupa Valley Local Hazard Mitigation Plan

The LHMP was prepared by the City in order to identify the potential hazards in the City, review and assess past disasters, estimate the probability of future disaster occurrences, and set goals to mitigate potential risks to people and property due to natural and man-made hazards. The LHMP identifies the risk of wildfires in the City, which are most likely to occur within the Santa Ana Riverbed that runs to the southwest of the project site in the southern portion of the City. The LHMP further identifies the City's Department of Public Works as responsible for any mitigation actions that would involve retrofitting infrastructure to prevent fire.¹⁶

City of Jurupa Valley Emergency Operations Plan

The City's EOP addresses the planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies in or affecting the City. It describes the operations of the City's EOC, which is the central management entity

¹⁶ City of Jurupa Valley Emergency Services. 2018. Local Hazards Mitigation Plan. January 1. Website: https://www.jurupavalley.org/DocumentCenter/View/990/2018-Local-Hazard-Mitigation-Plan_Jurupa-Valley?bidId=. Accessed March 3, 2022.

responsible for directing and coordinating the various City departments and other agencies in their emergency response activities.¹⁷

The EOP is intended to facilitate multi-agency and multi-jurisdictional coordination, particularly between the City and Riverside County, special districts, and State agencies, in emergency operations. It also identifies City departments' roles and responsibilities to develop and maintain their own department-specific or local EOPs, including Standard Operating Procedures (SOPs), detailed emergency response position checklists based on and consistent with the EOP.¹⁸

City of Jurupa Valley Municipal Code

Municipal Code, Chapter 6.45, Hazardous Vegetation, establishes a hazardous vegetation abatement program to remove all highly flammable native and non-native plant species to protect the lives and property of the citizens of the City while also protecting the environment.¹⁹

3.20.4 - Thresholds of Significance

Significance Criteria

In accordance with Section 15064.7 of the State California Environmental Quality Act (CEQA) Guidelines, the City of Jurupa Valley adopted local CEQA Guidelines. The City's local CEQA Guidelines are based, in part, on the CEQA checklist included in Appendix G of the State CEQA Guidelines. The City of Jurupa Valley Guidelines recognizes the following significance thresholds and Significance Criteria related to wildfire. Based on these significance thresholds, a project would have a significant impact on wildfire as follows:

If located in or near State Responsibility Areas or lands classified as very high fire hazard severity zones, would the project:

- a) Impair an adopted emergency response plan or emergency evacuation plan?
- b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
- c) Substantially impair an adopted emergency response plan or emergency evacuation plan?
- d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, because of runoff, post-fire slope instability, or drainage changes?

Under the City's local significance Screening Criteria: If the project site is not located in or near State Responsibility Area as shown on the State Responsibility Area Viewer maintained by the Board of Forestry and Fire Protection or within a High Fire Hazard Severity Zone as

¹⁷ City of Jurupa Valley. 2011. Emergency Operations Plan (EOP). April. Revised February 5, 2018.

¹⁸ Ibid.

¹⁹ Jurupa Valley Municipal Code. Chapter 6.45 – Hazardous Vegetation. Website: https://library.municode.com/ca/jurupa_valley/codes/municipal_code?nodeId=TIT6HESA_CH6.45HAVE. Accessed March 8, 2022.

shown in General Plan Figure 8-11: Wildfire Severity Zones in Jurupa Valley, it may be presumed to have a less than significant impact absent substantial evidence to the contrary.

Approach to Analysis

The project site is located in a High Fire Hazard Severity Zone in an SRA. The closest designated Very High Fire Hazard Severity Zone is located immediately northwest of the project site boundary. According to the SCAQMD meteorology data gathered at the Fontana Station and the Riverside Airport station, wind speed in the vicinity of the City averages between 5.2 and 5.6 mph (2.34 to 2.51 meters per second) and blows west.²⁰

The project site is located within a “High Fire Hazard Severity Zone” and within an SRA (Exhibit 3.20-1). The General Plan notes that due to the mountainous nature of Riverside County, mountainsides and foothill areas are subject to fire hazards. The nearest Very High Fire Hazard Severity Zone is directly adjacent to the northwest corner of the project site. The LHMP identifies the Santa Ana Riverbed, which is located approximately 1.7 miles south of the project site, as the area in the City with the greatest wildfire risks.

As the project site is entirely within a High Fire Hazard Severity Zone, in an SRA, and is immediately adjacent to an area in an SRA classified as “Very High Fire Hazard Severity Zone,” this evaluation focuses on whether the project would result in changes to the physical environment that would cause or exacerbate adverse effects related to wildfires or whether the project would be placed in a location susceptible to wildfire or post-wildfire conditions. The evaluation also includes a determination of whether changes to the physical environment caused by the project would impair or interfere with emergency response plans, expose people to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire, expose people/structures to downslope flooding or landslides, or include installation or maintenance of infrastructure that may exacerbate fire risk. The following analysis is based, in part, on information provided by the General Plan and CAL FIRE website.

3.20.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Emergency Response/Evacuation Plan Consistency

Threshold WILD-1: Would the proposed project substantially impair an adopted emergency response plan or emergency evacuation plan?

²⁰ South Coast Air Quality Management District (SCAQMD). 2022. Meteorological Sites. Website: <https://www.aqmd.gov/home/air-quality/meteorological-data/aermod-table-1>. Accessed February 1, 2022.

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

These include existing regulatory requirements such as plans, policies, or programs applied to the project based on federal, State, or local laws currently in place which effectively reduce impacts to wildfire.

There are no PPPs applicable to wildfire resources.

Project Design Features

The Conceptual Land Use Plan for the proposed project identifies three Emergency Vehicle Access (EVA) roads leading in and out of the project site. Furthermore, the project site contains manufactured slopes which abut the natural open space throughout the community. In these conditions, a Fuel Modification Zone (FMZ) would be required for managing the potential fire hazard that this interface of open space and manufactured slopes presents.

Impact Analysis

The major streets in the project site's vicinity are Sierra Avenue, Cedar Avenue, Rubidoux Boulevard, Valley Way, Armstrong Road, Mission Boulevard, Pacific Avenue, and Market Street. According to the General Plan Mobility Element, Mission Boulevard east of Valley Way is classified as Arterial; Armstrong Road, Valley Way, Rubidoux Boulevard, Market Street, and Mission Boulevard east of the SR-60 eastbound ramps are classified as Major; Mission Boulevard west of Valley Way and Sierra Avenue are classified as Secondary; and Pacific Avenue and the existing portion of 20th Street west of Rubidoux Boulevard are classified as Local.²¹ Arterial and Major roads such as Armstrong Road and Rubidoux Boulevard lead to CA-60, which can serve as an evacuation route out of the City.

Factors such as the number of access points, roadway width, and proximity to fire stations determine whether a project provides sufficient emergency access. The proposed project would include three public access points: one at 20th Street at the eastern portion of the project site, between PAs 13 and 16; a second at 20th Street at the western portion of the site, near PAs 2, 3, and 4; and a third at Armstrong Road at the northwestern corner of the site, for PA 7 only. In addition, there would be three EVA points: one at PA 7 in northwest corner of the project site via Rorimer Drive; a second at PA 10 in northeast corner via Alicante Avenue; and one at PA 1 in southwest area of the project site via Paramount Drive (access roads are shown in Exhibit 2-7). As such, area-wide EVA would be provided by the main roadway network within the project site. The precise design and alignment of the proposed project's internal roadways would be determined with implementation of Tentative Tract Maps and would be reviewed for consistency with applicable design standards, including adequate access and roadway widths, at the time of approval. Furthermore, development within the project site would be required to comply with the City's congestion management practices to reduce traffic impacts during construction and operation.

An Evacuation Analysis²² was prepared for the proposed project by EPD Solutions, Inc. in March 2023 and is included as Appendix L. The Evacuation Analysis determined that during construction, vehicle

²¹ City of Jurupa Valley. 2017. 2017 General Plan. September.

²² EPD, Inc. 2023. Evacuation Analysis for the Rio Vista Specific Plan Project. March 29.

volumes at the project site would be lower than at operation. Therefore, the Evacuation Analysis did not conduct a separate evaluation of evacuation time during the construction phase and calculated evacuation time only for the operational phase.

The Evacuation Analysis evaluated a worst-case scenario of a need to evacuate the project site. This worst-case scenario conducted a weekday when the elementary school, technical colleges, and business park would be operating and fully occupied by students, staff, and employees. Under the worst-case scenario, the Evacuation Analysis further assumed that two vehicles per dwelling unit would need to evacuate (even though it is possible that many residents might not be home when a weekday evacuation is ordered and would, therefore, not be evacuating). The worst-case scenario estimates that 12,083 vehicle would need to evacuate from the project site.

The Evacuation Analysis calculated the time it would take to evacuate the volume of vehicles states above based on the outbound hourly capacities and volumes of surrounding intersections (Armstrong Drive at PA 7, Rubidoux Boulevard and Market Street, and Sierra Avenue and 20th Street), and concluded that the evacuation time would be approximately 2 hours and 10 minutes. This calculation assumes that the existing two outbound lanes on 20th Street to get on Rubidoux Boulevard and the existing two outbound lanes would be utilized on 20th Street to get on Sierra Avenue would be utilized. The time to evacuate is reduced to no more than 1 hour and 30 minutes if three outbound lanes are utilized on both segments of 20th Street, which would be possible if the local law enforcement agency (i.e., Riverside County Sheriff's Department) or Riverside County Fire Department restricted one of the inbound lanes and allowed it to be used by the evacuating outbound traffic to provide a rapid evacuation and facilitate efficiency.

The Evacuation Analysis concludes that the proposed project would allow the evacuation of all residents, employees, and students in under 2 hours and 30 minutes. It is important to note that the calculations assume no advanced notice of a fire or other emergency is provided. In reality, as fires grow in intensity, notice is sent out to residences in harm's way to begin evacuating and some residents would leave the area. Additionally, the road capacities utilized in the calculations are based on normal operation of traffic signals. In an evacuation situation, signal timing can be overridden by the local agency, or emergency management personnel may manually direct traffic at critical intersections which would change the capacity of the intersection. Therefore, the actual timeframes are expected to be significantly lower than stated in the Evacuation Analysis. See Appendix L for further detail.

The proposed project would be consistent with the local emergency response plans as well as the Community Safety, Services, and Facilities (CSSF) Element of the General Plan. The General Plan CSSF Element provides information, policies, and programs directed toward reducing the potential for human injury and loss of life and minimizing property damage and economic and social disruption due to natural and human-made hazards. Any construction activities associated with future buildout of the proposed project would be required to comply with the California Fire Code's specifications for access and building materials such as tile or other fire-resistant roofing.

The proposed project would be designed in accordance with City and State standards to accommodate EVA. Furthermore, blockage of an evacuation route would not occur during project

operation because the proposed project would not result in road closures of the streets and roads surrounding and entering the project site. With adherence to General Plan Policy CSSF 1.23, which would require development and enforcement of construction and design standards that ensure that proposed development incorporates fire prevention features, the proposed project would not impair an adopted emergency response plan or emergency evacuation plan. Impacts related to emergency response/evacuation plan consistency would be less than significant.

Level of Significance

Less than significant impact.

Expose Project Occupants to Pollutant Concentrations from Wildfire

Threshold WILD-2: Would the proposed project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to wildfire resources.

Project Design Features

A 100-foot FMZ would be required along the interface of any open spaces starting from the structure into the rear yards and beyond into the open space. The FMZ would be divided into two 50-foot zones. The first zone extends from the back of the home for 50 feet and would be irrigated. Plant material and spacing of trees, shrubs, and groundcover would be made to be consistent with the recommendations of Cal Fire. The second zone extends another 50 feet beyond Zone 1 and would be non-irrigated. Pruning, thinning of natural vegetation, along with removal of any fire hazardous plants, would occur within this zone consistent with Cal Fire standards.

Existing elevated residential lots along the westerly portion of the project site are adjacent to steep, downward slopes that abut existing, off-site residential uses. These elevated residential lots would be approximately 75 feet above the neighboring communities, creating a significant buffer between the existing homes. For the lots abutting manufactured slopes, the majority of the slope area would be preserved in its natural condition, with manufactured slopes landscaped with plants similar in nature and character to the surrounding natural landscape and regular pruning and thinning of vegetation for fuel modification. These features would reduce fire risks on these slopes.

Impact Analysis

Wildfire risk is evaluated in terms of fuel loading, slope, weather, temperature, humidity, and wind speeds. Steep slopes, lots of dry vegetation, low humidity, and strong winds could create a higher likelihood of wildfire and, therefore, a higher likelihood that future residents would be exposed to pollutant concentrations resulting from wildfire.

The project site is located within the northeastern area of the City. Its topography is a mixture of steep hillsides, rolling hills, rocky outcrops, and low-relief canyons combined with relatively flat areas. Elevation ranges from approximately 900 feet at the southern corner to approximately 1,739

feet in the central area. The project site is surrounded by urbanized uses on relatively flat areas lacking in woodlands or vegetation that could provide fuel load for wildfire or steep slopes that could cause fire to spread more rapidly. The project site is surrounded by other features that provide fuel breaks in the event of a fire, such as SR-60, Armstrong Road, and Rubidoux Boulevard.

Construction of future individual development projects within the project site would involve the use of construction materials that can create wildfire hazards, such as petroleum products. However, as described in Section 3.9, Hazards and Hazardous Materials, construction of future individual development projects within the project site would be subject to applicable federal, State, and local laws and regulations regarding the proper use, storage, and transport of hazardous materials.

The proposed project includes large areas of open space in hilly areas and includes manufactured slopes. However, as described above, FMZs would reduce wildfire risk in steep open spaces areas by utilizing plants similar in nature and character to the surrounding natural landscape and pruning and thinning of vegetation for fuel modification.

As described above, according to the SCAQMD meteorology data gathered at the Fontana Station and the Riverside Airport station, wind speed in the vicinity of the City averages between 5.2 and 5.6 miles per hour (mph) (2.34 to 2.51 meters per second) and blows west.²³ Overall, winds are mild to gusty throughout the year. Summers in the City can reach temperatures above 109 degrees during the peak of the day.²⁴

Compliance with applicable State and local plans and regulations would decrease the risk of impacts related to wildland fire hazards. This includes CBC regulations for fire protection. When future individual development projects become operational, any hazardous uses would be subject to local and regional restrictions on use or operation during high fire-risk conditions. Future individual development projects would be required to comply with Chapters 7, Fire and Smoke Protection Features; Chapter 7A, Materials and Construction Methods for Exterior Wildfire Exposure; and Chapter 9, Fire Protection Systems, of the CBC, which outline allowable building materials, structural design for fire containment, safety features, and fire sprinkler systems. Landscaping of future individual development projects would be reviewed and approved by the Riverside County Fire Department as a condition of approval. The City also implements an EOP and LHMP. Furthermore, the proposed project would be required to comply with the California Fire Code regarding emergency access.

In the event of a large wildfire, occupants of future residential development under the proposed project could be exposed to concentrated pollutants or the uncontrolled spread of wildfire. However, several factors would contribute to reduced fire risk at the project site: (1) implementation of the regulations listed above, including compliance with the CBC; compliance with the Riverside County Fire Service Fire Prevention Guidelines; and implementation of General Plan policies related to fire prevention design standards, natural vegetation, automatic natural gas shutoff system, and brush clearance; (2) project-specific PDFs that include FMZs for managing the potential fire hazard at the

²³ South Coast Air Quality Management District (SCAQMD). 2022. Meteorological Sites. Website: <https://www.aqmd.gov/home/air-quality/meteorological-data/aermod-table-1>. Accessed February 1, 2022.

²⁴ City of Jurupa Valley. 2018. Local Hazard Mitigation Plan.

interface of open space and manufactured slopes; (3) multiple circulation routes throughout the proposed project as well as in and out of the project site and three EVA points; and (4) four fire stations located within short driving distance of the project site, including two within approximately 2 miles of the project site.

Therefore, impacts related to exposure of project occupants to pollutant concentrations from a wildfire or uncontrolled spread of wildfire would be less than significant.

Level of Significance

Less than significant impact.

Infrastructure That Exacerbates Fire Risk

Threshold WILD-3: Would the proposed project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)

Plans, Policies, and Programs

There are no PPPs applicable to wildfire resources.

Project Design Features

The Conceptual Land Use Plan for the proposed project identifies three EVA roads leading in and out of the project site. Furthermore, the project site contains manufactured slopes which abut the natural open space throughout the community. In these conditions, a FMZ would be required for managing the potential fire hazard that this interface of open space and manufactured slopes presents.

For the Light Industrial and Business Parks land uses, A 100-foot FMZ is required along the interface of any open spaces starting from the structure into the rear yards and beyond into the open space. The FMZ is divided into two 50-foot zones. The first zone extends from the back of the home for 50 feet and would be irrigated. Plant material and spacing of trees, shrubs and groundcover would be made to be consistent with the recommendations of Cal Fire. The second zone extends another 50 feet beyond Zone 1 and would be non-irrigated. Pruning, thinning of natural vegetation, along with removal of any fire hazardous plants, would occur within this zone as consistent with Cal Fire standards.

Existing elevated residential lots along the westerly portion of the project site are adjacent to steep, downward slopes that abut existing, off-site residential uses. These elevated residential lots would be approximately 75-feet above the neighboring communities, creating a significant buffer between the existing homes. For the lots abutting manufactured slopes, the majority of the slope area would be preserved in its natural condition, with manufactured slopes landscaped with plants similar in nature and character to the surrounding natural landscape and pruning and thinning of vegetation for fuel modification. These features would reduce fire risks on these slopes.

Impact Analysis

The proposed project would include adequate emergency access via existing roads and three EVA points. The project site is surrounded by an urban area with a network of existing roadways. The open space areas included as part of the proposed project would also be surrounded by this network of existing and proposed roadways which would act as firebreaks, and the proposed project would not require the installation of additional firebreaks.

The proposed project would not require emergency water sources because potable water would be provided by Rubidoux Community Services District (RCSD) and Jurupa Community Services District (JCSD), which have adequate water supplies available to serve the project and future development during normal, dry, and multiple dry years. The proposed project infrastructure would also provide water to on-site fire hydrants.

New electrical power and natural gas lines on and connecting to the project site would be installed underground, minimizing potential ignition and related fire risk above ground at the project site according to the CBC, Uniform Fire Code, and General Plan requirements. Therefore, impacts related to infrastructure that exacerbates fire risk would be less than significant.

Level of Significance

Less than significant impact.

Flooding and Landslide Hazards Due to Post-fire Slope Instability/Drainage Changes

Threshold WILD-4: Would the proposed project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Plans, Policies, and Programs (PPPs) and Project Design Features (PDFs)*Plans, Policies, and Programs*

There are no PPPs applicable to wildfire resources.

Project Design Features

A 100- foot FMZ would be required along the interface of any open spaces starting from the structure into the rear yards and beyond into the open space. The FMZ would be divided into two 50-foot zones. The first zone extends from the back of the home for 50 feet and would be irrigated. Plant material and spacing of trees, shrubs, and groundcover would be made to be consistent with the recommendations of Cal Fire. The second zone extends another 50 feet beyond Zone 1 and would be non-irrigated. Pruning, thinning of natural vegetation, along with removal of any fire hazardous plants, would occur within this zone as consistent with Cal Fire standards.

Existing elevated residential lots along the westerly portion of the project site are adjacent to steep, downward slopes that abut existing, off-site residential uses. These elevated residential lots would be approximately 75 feet above the neighboring communities, creating a significant buffer between the existing homes. For the lots abutting manufactured slopes, the majority of the slope area would be preserved in its natural condition, with manufactured slopes landscaped with plants similar in

nature and character to the surrounding natural landscape and pruning and thinning of vegetation for fuel modification. These features would reduce fire risks on these slopes.

Impact Analysis

In a post-fire scenario, wildfires can secondarily cause contamination of reservoirs as well as transmission line and road destruction. Slopes that have been stripped of vegetation are exposed to greater amounts of erosive runoff, which can weaken soils and cause slope failure. Major landslides can occur several years after a wildfire. Most wildfires burn hot and for long durations and can bake soils, especially those high in clay content, thus increasing ground imperviousness and runoff generated by storm events and thereby increasing the chance of flooding.

As described above, open space slopes would be maintained with native vegetation. As described under Threshold GEO-1 in Section 3.7 Geology, Soils, and Seismicity, the project site would not be at risk of landslides because all development would be consistent with the Municipal Code requirements identified in the Geotechnical Review. Additionally, according to the Geotechnical Review, it was determined that the bedrock on the project site is very hard and capable of supporting tall, steep slopes, including the existing and manufactured slopes in the development.

Furthermore, Section 3.10, Hydrology and Water Quality Threshold, HYD-3 outlines how stormwater control measures would reduce impacts related to altered drainage patterns to a less than significant level.

As discussed in Threshold WILD-2, prior to permit issuance, grading and building permit applications would require clearance by the Riverside County Fire Department. Each site-specific project design would be modified as needed prior to approval to ensure compliance with Riverside County Fire Department requirements. Further, as described in Section 3.7, Geology, Soils, and Seismicity, and Section 3.10, Hydrology and Water Quality, the proposed project would be subject to the rules and regulations of the City's Municipal Code and the General Plan regarding development on unstable geologic soils and controlling stormwater runoff during and after construction. Specific policies described in Section 3.10, Hydrology and Water Quality, related to the prevention of flooding, landslides, and drainage changes, include Policies CSSF 1.6 through CSSF 1.22. For example, Policy CSSF 1.12, Flood Control Improvements, ensures that direct flood control improvement measures are made to protect existing and planned development, and Policy CSSF 1.14, Ability to Withstand Flooding, requires development to be capable of withstanding flooding and to minimize use of fill. In addition, the proposed project would implement General Plan Programs COS 3.1.4. Floodway Protection and Enhancement and CSSF 1.1.7. Risk Assessment to minimize risks related to flooding.

Given the stability of the project site, with implementation of Riverside County's EOP, the City's LHMP, review of architectural and development plans by the Riverside County Fire Department, and adherence to General Plan policies, impacts related to exposure of people or structures to significant risks, including downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes would be less than significant.

Level of Significance

Less than significant impact.

3.20.6 - Cumulative Impacts

The geographic scope of the cumulative analysis related to wildfire is the project vicinity and the City. The analysis considers the foreseeable development projects listed in Chapter 3, Environmental Impact Analysis, Table 3-1, Cumulative Projects, in the project vicinity within the City, in addition to the proposed project.

Wildfire Hazards and Emergency/Evacuation Response

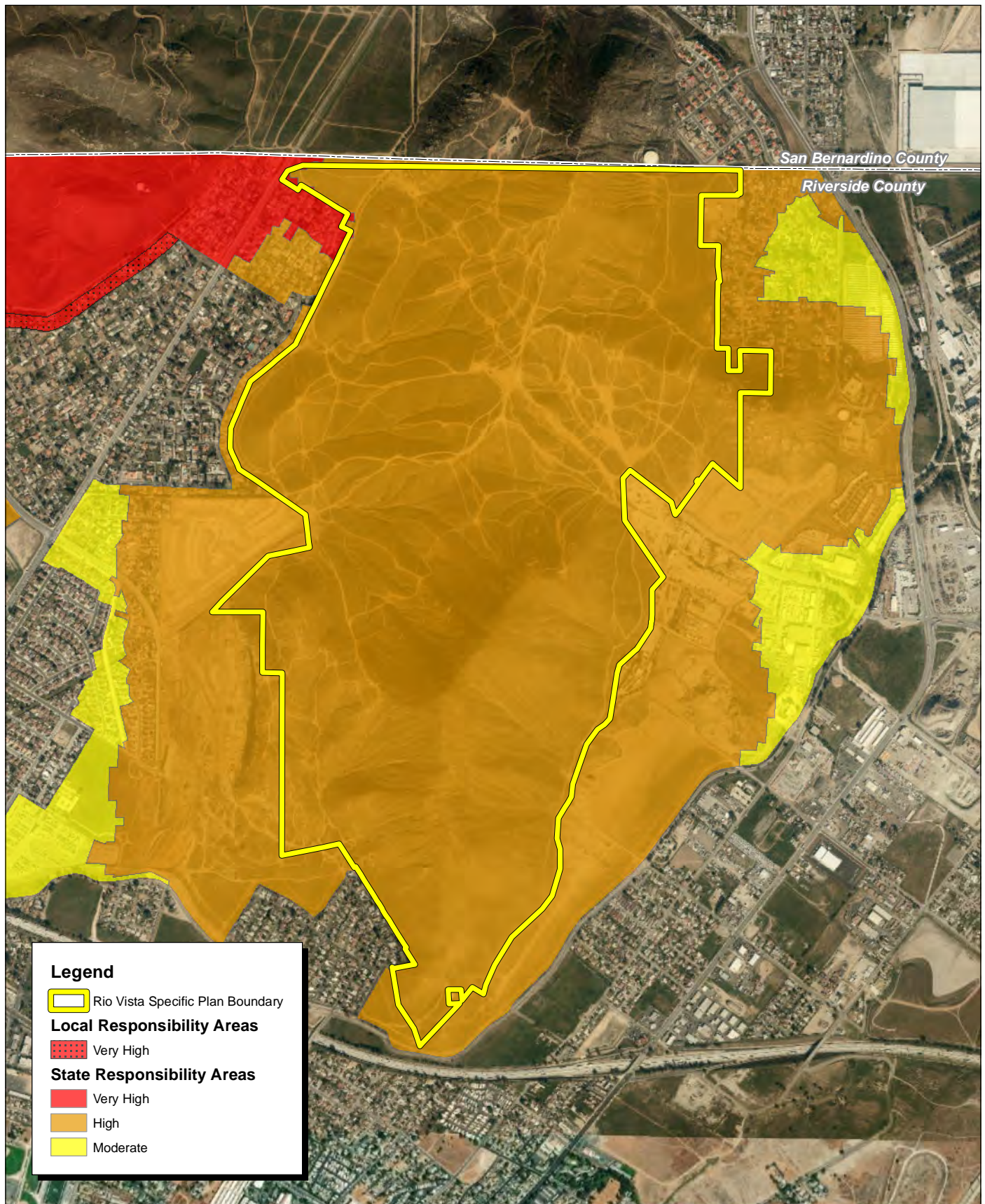
A combination of federal, State, and local regulations limit or minimize the potential for exposure to wildfires by reducing the amount of development in wildland urban interface areas, ensuring new development is developed according to the CBC and Uniform Fire Code and incorporating requirements for fire-safe construction into the land use planning. Development listed in Table 3-1 consists predominantly of industrial and commercial development. Several of the projects anticipated in Table 3-1 would be located in High or Moderate Fire Hazard Zones. However, these projects, as all the other projects listed in Table 3-1, would be in areas that are already developed and do not contain significant levels of dry fuel susceptible to ignition or significantly high average wind speeds.

The cumulative projects listed in Table 3-1 would result in predominantly infill development and would not significantly increase emergency services beyond the existing service area. Furthermore, all cumulative project construction would adhere to the City Municipal Codes that are designed to minimize the potential for uncontrolled fires. Adherence to City Municipal Codes would ensure that California Fire Code standards are included in development. Once cumulative development is proposed, the City assesses the needs for fire protection services and informs efforts to improve or expand needed facilities. All development would, however, comply with emergency access requirements as a condition of construction. Furthermore, the cumulative projects would not result in permanent road closures, nor impede an established emergency or evacuation access route, such as SR-60, nor interfere with emergency response requirements. As such, there would be a less than significant cumulative impact associated with wildfire hazards and emergency/evacuation response.

The proposed project's incremental contribution to cumulative wildfire hazard impacts would not be significant. As previously discussed, development and growth in the City would largely occur in already developed areas and would involve infill development and redevelopment. Limited development could result in an incremental increase in exposure of people and structures to wildland fires and associated hazards. However, PDFs such as FMZs and irrigated landscaped areas would reduce impacts. As a result, the degree of wildland fire hazard, including secondary hazards, would not substantially change with adoption of the proposed project, and current hazards would not significantly increase. Accordingly, the proposed project's contribution to cumulative impacts would also be less than significant.

Level of Cumulative Significance

Less than significant impact.



Source: ESRI Aerial Imagery. Riverside County.



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CHAPTER 4: OTHER CEQA CONSIDERATIONS

California Environmental Quality Act (CEQA) Guidelines Section 15126 requires that all aspects of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation. As part of this analysis, the Draft Environmental Impact Report (Draft EIR) must also identify (1) significant environmental effects of the proposed project; (2) significant environmental effects which cannot be avoided if the proposed project is implemented; (3) significant irreversible environmental changes which would be involved in the proposed project should it be implemented; (4) growth-inducing impact of the proposed project; (5) mitigation measures proposed to minimize the significant effects; and (6) alternatives to the proposed project.

This chapter provides a discussion of other CEQA-mandated topics, including significant unavoidable impacts, growth inducement, and significant irreversible environmental changes which would be involved in the proposed project should it be implemented. Chapter 3, Environmental Impact Analysis, describes the significant environmental effects of the proposed project and provides mitigation measures proposed to minimize significant effects. Chapter 5, Alternatives to the Proposed Project, discusses alternatives to the proposed project.

4.1 - Significant Unavoidable Impacts

CEQA Guidelines Section 15126.2(c) requires an EIR to describe significant environmental effects of the proposed project that cannot be avoided if the proposed project were implemented.

The proposed project was analyzed for potentially significant impacts related to each of the environmental issues discussed in Sections 3.1 through 3.20. The results of the analysis indicate that the proposed project would result in significant and unavoidable impacts to the following environmental topics:

- Air Quality
- Greenhouse Gas Emissions
- Transportation

The following environmental topics addressed in the Draft EIR were determined to be less than significant, or could be reduced to less than significant levels with mitigation measures:

- | | |
|---------------------------------------|---------------------------------|
| • Aesthetics | • Mineral Resources |
| • Agricultural and Forestry Resources | • Noise |
| • Biological Resources | • Population and Housing |
| • Cultural Resources | • Public Services |
| • Energy | • Recreation |
| • Geology and Soils | • Tribal Cultural Resources |
| • Hazards and Hazardous Materials | • Utilities and Service Systems |
| • Hydrology and Water Quality | • Wildfire |
| • Land Use and Planning | |

4.2 - Growth-inducing Impacts

In compliance with State CEQA Guidelines Section 15126.2(e), this section discusses the potential growth-inducing impacts of a project. Growth-inducing impacts are defined by CEQA as the ways in which a project could directly or indirectly foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth. In addition, as discussed in the CEQA Guidelines, increases in the population may tax existing community service facilities, thus requiring construction of new facilities that could cause significant environmental effects. It must not be assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment.

There are two types of growth-inducing impacts that a project may have: direct and indirect. To assess the potential for growth-inducing impacts, the project's characteristics that may encourage and facilitate activities that individually or cumulatively may affect the environment must be evaluated (CEQA Guidelines § 15126.2(e)). Consistent with the State CEQA Guidelines, the proposed project may result in a significant growth-inducing impact if the proposed project would:

- Induce substantial population growth in an area (for example, by proposing new homes and commercial or industrial businesses beyond the land use density/intensity envisioned in the general plan);
- Substantially alter the planned location, distribution, density, or growth rate of the population of an area; or
- Include extensions of roads or other infrastructure not assumed in the general plan or adopted capital improvements project list when such infrastructure exceeds the needs of the project and could accommodate future developments.

Direct growth-inducing impacts occur when the development of a project imposes new burdens on a community by directly inducing unplanned population growth, or by leading to the construction of additional developments in the same area. Also included in this category are projects that remove physical obstacles to population growth (such as a new road into an undeveloped area or a wastewater treatment plant with excess capacity that could allow additional development in the service area). Construction of these types of infrastructure projects cannot be considered isolated from the development they facilitate and serve. Projects that physically remove obstacles to growth, or projects that indirectly induce growth may provide a catalyst for future unrelated development in an area such as a new residential community that requires additional commercial uses to support residents.

Direct Population Growth

The proposed project consists of a master planned residential community that would include up to 1,697 dwelling units (du), 1.27 million square feet of light industrial uses, and 1.43 million square feet of business park uses. As such, it could induce direct population growth through the development of new housing and indirect growth through the creation of new jobs.

Table 4-1 summarizes project-related population growth. As shown in the table, the proposed project would add an estimated 6,296 persons to the City’s population. This would represent an increase of approximately 6 percent relative to the City’s population of 105,384. This amount of population growth would be within the General Plan’s Residential Land Use Statistics and Buildout Projections for 2014 to 2035 population growth of between 37,622 and 53,745 people. Therefore, the proposed project’s estimated direct population growth would not be considered substantial. Furthermore, it would also be within the Southern California Association of Governments (SCAG) 2016-2045 population growth projection for the City, which forecast 17,700 additional persons being added to the City’s population. As discussed in Section 3-14, Population and Housing, the proposed project’s estimated population of 6,296 would be approximately 12 to 17 percent of the General Plan’s growth estimate. Furthermore, the General Plan identifies and includes the proposed project’s area for future residential and open space development as shown on General Plan Figure 2-5, Land Use Plan. Therefore, population increase resulting from buildout of the proposed project would constitute planned growth in accordance with regional and local projections.

Table 4-1: Project-Related Population Growth

Dwelling Units	Persons Per Household	Population Growth	Population Growth as a Percent of City of Jurupa Valley
1,697	3.71	6,296	6%
<p>Notes: The City’s population was estimated at 105,384 as of January 1, 2022. Source: California Department of Finance. 2022. E-5 Population and Housing Estimates for Cities, Counties, and the State 2020-2022. May. Website: https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/. Accessed September 11, 2022.</p>			

Indirect Population Growth

Development of the proposed project would result in an increase in employment opportunities associated with the light industrial and business park uses. Using a standard light industrial/business park employment rate of one employee per 1,000 square feet, the proposed project would create an estimated 2,700 jobs.

The California Employment Development Department (EDD) estimated that the combined labor force for the City of Jurupa Valley and the adjacent City of Riverside totaled 212,500 as of August 2022.¹ This indicates that the local labor force is sufficiently large enough to fill the proposed project’s new employment opportunities of 2,700 (see Section 3-14, Population and Housing) without needing to attract workers from outside the region. Furthermore, the proposed project’s light industrial and business park uses would build out over a period of years, if not decades. Thus, there would not be a sudden need for workers to fill the new employment opportunities; rather,

¹ California Employment Development Department (EDD). Labor Market Information Division. 2022. Riverside County. Monthly Labor Force Data for Cities and Census Designated Places (CDP) for August 2022. September 16. Website: <https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html>. Accessed September 23, 2022.

employment growth would occur incrementally over time. For these reasons, the proposed project would not induce substantial indirect population growth.

Removal of a Barrier to Growth

The proposed project is an undeveloped area within the Jurupa Valley city limits. It is surrounded by areas served with urban infrastructure and services (e.g., roadways, potable water, sewer, storm drainage, electricity, and natural gas). Hence, the development of the proposed project would be a logical extension of growth in the City, and it would not result in the removal a physical barrier to growth that would allow for substantial population growth to occur.

4.3 - Significant Irreversible Environmental Changes

The environmental effects of the proposed project are summarized in the Executive Summary and are analyzed in detail in Chapter 3, Environmental Impact Analysis, of this Draft EIR.

As mandated by the CEQA Guidelines, the EIR must address any significant irreversible environmental change that would result from implementation of the proposed project. Pursuant to CEQA Guidelines Section 15126.2(d), such an impact may occur if:

- The proposed project would involve a large commitment of nonrenewable resources;
- Primary and secondary impacts would generally commit future generations to similar uses;
- The proposed project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The proposed consumption of resources is not justified (e.g., the project results in the wasteful use of energy).

The proposed project consists of a master planned residential community that would include up to 1,697 du, 1.27 million square feet of light industrial uses, and 1.43 million square feet of business park uses. Implementation of the proposed project would require the long-term commitment of natural resources and land, as discussed in the following paragraphs.

Approval and implementation of actions related to the proposed project would result in an irretrievable commitment of nonrenewable resources such as energy supplies and other construction-related materials. The energy resource demands would be used for construction, heating, and cooling of buildings; transportation of people and goods; heating and refrigeration; lighting; and other associated energy needs.

Environmental changes with implementation of the proposed project would occur as the physical environment is altered through continued commitments of land and construction materials to urban development. There would be an irretrievable commitment of materials used in construction. Nonrenewable resources would be committed primarily in the form of fossil fuels and would include fuel, oil, natural gas, and gasoline used by vehicles and equipment associated with implementation of the proposed project. Refer to Section 3.6, Energy for detailed discussion of energy consumption.

The consumption of other nonrenewable or slowly renewable resources would result from the development of the proposed project. These resources would include but would not be limited to lumber and other forest products, sand and gravel, asphalt, steel, copper, lead, and water. These resources are available in abundance in the Riverside-San Bernardino region and the proposed project would not require a need for new supplies to be secured. Furthermore, the proposed project would be designed and constructed in accordance with the California Building Standards Code (CBC), which includes energy and water efficiency standards. Thus, excessive and wasteful consumption would not occur.

The proposed project is not anticipated to result in significant irreversible environmental damage because, pursuant to CEQA Guidelines Section 15126.2(d), the proposed project does not meet any of the scenarios listed above. Irreversible damage is not anticipated from environmental accidents associated with the proposed project, as it would comply with all applicable local and State regulations regarding handling and storage of hazardous materials. While a large commitment to nonrenewable resources would be required, the proposed project would use the energy efficiently and would not result in the wasteful use of energy.

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CHAPTER 5: ALTERNATIVES TO THE PROPOSED PROJECT

5.1 - Introduction

In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15126.6, this Draft Environmental Impact Report (Draft EIR) contains a comparative impact assessment of alternatives to the proposed project. The primary purpose of this chapter is to provide decision-makers and the general public with a reasonable range of feasible project alternatives that could attain most of the basic project objectives, while avoiding or reducing any of the project's significant adverse environmental effects. Important considerations for these alternatives analyses are noted below (as stated in CEQA Guidelines § 15126.6).

- An EIR need not consider every conceivable alternative to a project;
- An EIR should identify alternatives that were considered by the lead agency, but rejected as infeasible during the scoping process;
- Reasons for rejecting an alternative include:
 - Failure to meet most of the basic project objectives;
 - Infeasibility; or
 - Inability to avoid significant environmental effects.

Alternatives to a project must be considered even if they would impede, to some degree, the attainment of project objectives or be more costly (CEQA Guidelines § 15126.6(b)). However, the range of alternatives addressed in an EIR need not be exhaustive, and is governed by a “rule of reason,” which requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. Of the alternatives considered, the EIR need examine in detail only those that the lead agency determines could feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. An EIR need not consider an alternative whose effects cannot be reasonably ascertained, whose implementation is remote and speculative, or an alternative that would not substantially lessen or avoid the significant effects of the project. CEQA Guidelines Section 15126.6(d) states that if an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternatives shall be discussed, but “in less detail than the significant effects of the project as proposed.”

CEQA Guidelines Section 15364 defines “feasibility” as “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.” The determination of the feasibility of project alternatives may include, but is not limited to, factors such as: site suitability, economic viability, infrastructure availability, general plan consistency, regulatory and jurisdictional limitations, and whether the project proponent can reasonably acquire, control, or otherwise have access to an alternative project site (CEQA Guidelines § 15126.6(f)(1)).

A comparison of impacts associated with the project and alternatives is provided within this chapter. In several cases, the description and severity of the impact may be the same under each scenario when compared with the CEQA Thresholds of Significance (i.e., both scenarios would result in a “less than significant” impact). However, the actual degree of impact may be slightly different under each scenario, and this relative difference is the basis for a conclusion of greater or lesser impacts. In addition, the alternatives analysis includes the assumption that all applicable mitigation measures associated with the project would be implemented with a given project alternative (e.g., Reduced Intensity Alternative).

As required by CEQA Guidelines Section 15126.6(e), this chapter includes an evaluation of a No Project, No Build Alternative. In addition to the No Project, No Build Alternative, this chapter also includes an evaluation of a No Project, Develop the Approved Specific Plan Alternative; and a Develop the 2017 Proposed Land Use Plan Alternative.

An alternative would be considered environmentally superior to the project if it would result in fewer or less significant environmental impacts. As required by the CEQA Guidelines, an environmentally superior alternative has been identified among the alternatives evaluated in this Draft EIR, and is discussed in Section 5.6, Environmentally Superior Alternative.

5.2 - Significant Unavoidable Impacts

The proposed project was analyzed for potentially significant impacts related to each of the environmental topic areas discussed in Sections 3.1 through 3.20. The results of the analysis demonstrate that the proposed project would result in the following significant and unavoidable impacts:

- **Project-level Inconsistency with Air Quality Management Plan:** The proposed would exceed the South Coast Air Quality Management District’s (SCAQMD) regional operational significance thresholds and be inconsistent with the Air Quality Management Plan (AQMP), resulting in significant impacts.
- **Cumulative Inconsistency with AQMP:** In addition to project-level impacts, and because other projects within the South Coast Air Basin (SoCAB) also have the potential to conflict with the AQMP, the proposed project’s impacts due to a conflict with the AQMP would be cumulatively considerable.
- **Project-level Sensitive Receptors:** Construction-related emissions and future permitted commercial and light industrial land uses have the potential to expose sensitive receptors to substantial concentrations of criteria air pollutant emissions toxic air contaminants (TACs) and result in a significant impact.
- **Cumulative Sensitive Receptors:** The potential cumulative impact to sensitive receptors from exposure to TACs is potentially significant and should be further evaluated at a project level for future developments.
- **Project-level Historic Resources:** Future development under the under the proposed project would result in additional residential and industrial development throughout the project site

that would likely result in the alteration to two historically significant areas within the project site, *Hurunga* Oak and Rattlesnake Mountain (*Junā'av*), which would constitute a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5. Therefore impact to historic resources would be significant.

- **Project-level Archeologic Resources:** Future development under the proposed project would result in additional residential and industrial development throughout the project site that would likely result in the demolition or alteration of numerous archeologic resources present on-site including 10 prehistoric archaeological sites, one prehistoric component of a mixed component site, and two historically significant areas, of which archaeological resources are contributing elements, which would constitute a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5. Therefore impact to archeologic resources would be significant.
- **Cumulative Historic and Archeologic Resources:** Implementation of the proposed project has the potential to significantly alter the two on-site historical resources as well as destroy or significantly alter the 13 on-site archeologic on-site resources, all of which are eligible for the California Register of Historical Resources (CRHR) individually and/or as contributors to the significance of a district resources. This could constitute a significant cumulative impact to historic and archeologic resources in the surrounding area.
- **Project-level Conflict with SCAQMD Threshold for Greenhouse Gas Emissions:** The forecast year 2035 threshold of 4.1 metric tons (MT) of CO₂ equivalent (CO₂e) per service population per year would be exceeded in the project site. The increases in overall emissions would be attributable to the additional nonresidential and residential land uses proposed. Therefore, the proposed project's long-term greenhouse gas (GHG) emissions and conflict with the SCAQMD emissions threshold would be considered potentially significant.
- **Cumulative Greenhouse Gas Emissions:** The proposed project would generate a net increase in GHG emissions and would exceed the SCAQMD Working Group's bright-line threshold of 3,000 MT CO₂e for all land use types and the 2035 efficiency target of 4.1 MT CO₂e/service populations, and would therefore, contribute in significant cumulative impacts.
- **Project-level impacts related to Vehicle Miles Traveled:** The proposed project home-based Vehicle Miles Traveled (VMT) per capita was determined to exceed the City's VMT per capita impact threshold by 22.4 percent in the baseline condition and 26.2 percent in the cumulative condition.
- **Project-level Tribal Cultural Resources:** Future development under the proposed project would result in additional residential and industrial development throughout the project site that would likely result in alteration or destruction of 13 cultural resources present on-site that are recommended eligible for the CRHR individually and/or as contributors to the significance of a district. These include 10 prehistoric archaeological sites, one prehistoric component of a mixed component site, and two historically significant areas, of which archaeological resources are contributing elements. Alteration and destruction of these resources, which would constitute a substantial adverse change in the significance of a tribal Cultural Resource (TCR) pursuant to Section 15064.5. Therefore, impact to TCRs would be significant.

- **Cumulative Tribal Cultural Resources:** There are known TCRs in the cumulative geographic scope that may contribute to the significance of the cultural landscape and/or sites that are associated with tribes and may be considered eligible TCRs. Additionally, there is a potential for yet unidentified tribal cultural resources on the surface or subsurface within the geographic scope. Past, present, and foreseeable projects have resulted in or could result in the demolition or material alteration to some aspects of TCRs or the tribal cultural landscape that convey its significance and the proposed project would have a significant and unavoidable impact to TCRs. Although implementation of existing regulations and site-specific mitigation would be required and would reduce cumulative impacts, when taken together, past, present, and foreseeable projects within the geographic scope could result in a significant cumulative impact to TCRs.

5.3 - Alternatives to the Proposed Project

The three alternatives to the proposed project analyzed in this chapter are as listed below and are summarized in Table 5-1.

- **Alternative 1—No Project, No Build:** Under the No Project, No Build Alternative, the proposed project would not be developed. The existing 17 vacant parcels would remain vacant, and no development of any kind would occur. The informal, unpaved trails and dirt roads located throughout the site would remain in their current condition, and no changes to land use designation would take place.
- **Alternative 2—Develop Approved Specific Plan:** Under this alternative, the project site would be developed in accordance with the existing Rio Vista Specific Plan No. 243 that was approved by the County of Riverside on April 14, 1992 (1992 Specific Plan). The 1992 Specific Plan allowed for the development of 1,697 homes, a 5-acre commercial site, two elementary schools, three neighborhood parks, a 14-acre equestrian center, and 405 acres of natural open space.
- **Alternative 3—Develop the 2017 Proposed Land Use Plan Alternative:** Under this alternative, the project site would be developed in accordance with a previously proposed, but not analyzed or approved, 2017 Land Use Plan. This previously contemplated land use plan would allow for the development of 1,799 homes, a school, a 12-acre community park, 23 acres of circulation, 14 acres of public facilities, and 579 acres of open space.

Table 5-1: Summary of Project Alternatives

Land Use	Proposed Project	Alternative 1— No Project, No Build	Alternative 2— No Project, Develop the Approved Specific Plan	Alternative 3— Develop the 2017 Proposed Land Use Plan
Residential	Target: 1,697 DU VLDR, MDR, MHDR, HDR, VHDR 204.4 acres	—	Total: 1,697 DU Low Density Single- family,	Target: 1,299 DU Max:1,799 DU LMDR, MDR, HDR 275 acres

Land Use	Proposed Project	Alternative 1— No Project, No Build	Alternative 2— No Project, Develop the Approved Specific Plan	Alternative 3— Develop the 2017 Proposed Land Use Plan
			Medium Density Single-family, High Density Multi- family, Very High Density Multi-family 432 acres	
Industrial, Business Park, Commercial	Light Industrial Business Park 140.3 acres	—	Commercial 5 acres	—
School	One School 14.8 acres for public facilities (school and water tanks)	—	Two Schools 14 acres (7 acres each)	One School 14 acres
Community parks	One community park Five neighborhood parks Open Space- Recreation 18.4 acres	—	Three Parks, 14 acres Equestrian, 14 acres	One Park 12 acres
Public services/ public facilities	14.8 acres for Public Facilities (school and two water tanks)	—	Southern California Edison (SCE) Easement 11 acres	14 acres
Circulation	19.6 ac	—	23 ac	23 ac
Open Space	OS-Conservation (natural, slopes) 510.8 acres	Some of the project site already designated OS-CH (and small OS-R)	Mountain 353 acres Open Space 52 acres	Natural Slope, Trails 579 acres
Total acres of development:	397.5 acres	0	502 acres	324 acres
Notes: DU = dwelling units HDR = High Density Residential LMDR = Low-Medium Density Residential MDR = Medium Density Residential MHDR = Medium High Density Residential VHDR = Very High Density Residential VLDR = Very Low Density Residential Sources: T&B Planning 2021; Florian Martinez Associated, undated (1992 Specific Plan); T&B Planning, undated (2017 proposed Land Use Plan). Compiled by FirstCarbon Solutions (FCS) 2022.				

The analyses compare the proposed project and each individual project alternative. In several cases, the description of the impact may be the same under each alternative when compared with the

CEQA Thresholds of Significance (i.e., both the project and the alternative would result in a less than significant impact). The actual degree of impact may be slightly different between the proposed project and each alternative, and this relative difference is the basis for a conclusion of greater or lesser impacts.

5.4 - Project Objectives

As stated in Chapter 2, Project Description, the Rio Vista Specific Plan states that the proposed project would establish a mixture of residential and employment generating land uses arranged in a functional and efficient manner which complements the surrounding community and provides convenient access to the nearby regional circulation system. Specifically, the objectives of the proposed project are as follows:

1. Provide a long-range comprehensive planning approach to guide the development of Rio Vista.
2. Assist the City in meeting its housing goals and reflect anticipated market needs and public demand, by providing a diverse range of home types with the intent to blend into the City of Jurupa Valley's rural character.
3. Anticipate market demand by providing for a mixture of residential, light industrial, and business park land uses that are marketable and financially feasible within the City's evolving economic profile.
4. Provide economic growth and employment opportunities with the City by authorizing the development of light industrial and business park land uses at a sufficient scale to attract financially stable, long-term tenants and fund the necessary proposed critical infrastructure improvements that will serve Rio Vista and the greater Jurupa Valley community.
5. Adopt a Specific Plan that allows for a range of industrial uses, research and development uses, business park and other nonresidential uses that would encourage private capital investment sufficient to support the significant public infrastructure improvements proposed on the project site.
6. Provide for the establishment of a mixed-use master planned community that is sensitive to the environment and is aesthetically pleasing.
7. Create a community design that complements the land's topography by respecting and preserving the geology, rock formations, and basic landforms.
8. Protect valuable scenic resources within large expanses of open space, thereby preserving Rio Vista's character and identity and the surrounding region.
9. Provide a potential JUSD school site to serve the needs of Rio Vista and the surrounding area, if JUSD determines it is needed to serve projected demand.
10. Provide a community park and neighborhood parks to meet the needs of Rio Vista residents and surrounding neighborhoods.

11. Establish a cohesive trail system that promotes active recreational uses and provides pedestrian links between the school site, parks, residential neighborhoods, and open space.
12. Provide guidelines for architecture, landscaping, entry treatments, walls, fencing, parks, and trails that reinforce this community's identity and its relationship to the City of Jurupa Valley.

5.5 - Alternative 1—No Project, No Build

CEQA Guidelines Section 15126.6(e) requires EIRs to evaluate a “No Project,” alternative which is defined as the “circumstance under which the project does not proceed.” Under the No Project, No Build Alternative, the elements of the proposed Rio Vista Specific Plan would not be constructed on the project site and no other development would be approved. In this scenario, the existing 17 vacant parcels would remain vacant, and the proposed roads and additional infrastructure such as water and sewer improvements would not be developed, all existing vegetation and riparian/riverine habitat would remain on-site, no public facilities such as a new elementary school and water tanks would be constructed, and grading would not take place. Under this alternative, all current General Plan land use designations would remain unchanged and no residential, Light Industrial, Business Park, Public Facilities, and Open Space-Recreation land use activities would occur.

5.5.1 - Impact Analysis

Aesthetics

The Draft EIR determined that aesthetic impacts of the proposed project would be less than significant and would not require mitigation; however, the proposed project would change the visual character of the site and introduce new sources of light and glare. Under the No Project, No Build Alternative, the project site would remain in its undeveloped condition, resulting in no impacts related to aesthetics, light, and glare. Therefore, the No Project, No Build Alternative would have reduced direct impacts on aesthetics, light, and glare as compared with the proposed project.

Agriculture and Forestry Resources

Under the No Project, No Build Alternative, the site would remain in its undeveloped condition and no construction would occur, therefore resulting in no direct impacts related to agricultural or forestry resources, including no impacts to the 55.57 acres on-site categorized as Farmland of Local Importance.

The Draft EIR determined that the proposed project would have less than significant impacts on agricultural resources, and no impacts to forestry resources, and no mitigation would be required. Therefore, impacts related to agricultural resources under the No Project, No Build Alternative would be less than the proposed project and similar to impacts related to forestry resources compared to the proposed project.

Air Quality

Under the No Project, No Build Alternative, there would be no ground disturbance both within the project site and within the areas proposed for off-site improvements; therefore, no impacts to air

quality would occur under this alternative during construction. At operation, there would be no impacts related to air quality as the none of the residential, light industrial, business park, public facilities, and circulations land uses would be developed. Thus, there would be no impacts related to air quality under this alternative. The Draft EIR determined that the proposed project would have significant and unavoidable impacts related to air quality; therefore, the No Project, No Build Alternative would have reduced impacts related to air quality as compared with the proposed project.

Biological Resources

The No Project, No Build Alternative would leave the site in its undeveloped condition, which would allow plant and wildlife species to continue utilizing the site. There would be no new development that could affect special-status species, riparian/riverine habitat, sensitive natural communities, wetlands, or migratory wildlife corridors. Impacts under this alternative, including potential impacts to burrowing owl, coastal California gnatcatcher, migratory birds, and western pond turtle as well as potential impacts to jurisdictional features would be avoided entirely. Therefore, the No Project, No Build Alternative would have reduced impacts related to biological resources as compared with the proposed project.

Cultural Resources

Under the No Project, No Build Alternative the site would remain in its undeveloped condition and no construction would occur. There would be no ground-disturbing activities that could alter or destroy known historic and archaeological resources or that result in the inadvertent discovery of cultural resources not previously recorded. Thus, no mitigation would be required and there would be no impacts to cultural resources under this alternative. The Draft EIR determined that the proposed project would have significant and unavoidable project and cumulative impacts related to archaeological and historic resources; therefore, the No Project, No Build Alternative would have reduced impacts related to cultural resources as compared with the proposed project.

Energy

Under the No Project, No Build Alternative, there would be no ground disturbance both within the project site and within the areas proposed for off-site improvements; therefore, no impacts related to energy consumption would occur under this alternative during construction. At operation, there would be no impacts related to energy consumption as none of the residential, light industrial, business park, public facilities, and circulations land uses would be developed. Thus, no mitigation would be required and there would be no impacts related to energy consumption under this alternative. The Draft EIR determined that the proposed project would have less than significant impacts related to energy and would not require mitigation; however, the proposed project would have an incremental impact on energy. Therefore, the No Project, No Build Alternative would have reduced impacts related to energy as compared with the proposed project.

Geology and Soils

Under the No Project, No Build Alternative, the site would remain in its undeveloped condition, and there would be no potential impacts to people or to future structures from geotechnical hazards.

The Draft EIR determined that implementation of the proposed project would have less than significant impacts with mitigation incorporated. The No Project, No Build Alternative would have less impacts on geology and soils compared with the proposed project because it would not add residential and other uses to the site.

Greenhouse Gas Emissions

Under the No Project, No Build Alternative, there would be no ground disturbance either within the project site or within the areas proposed for the off-site improvements; therefore, no impacts related to GHG emissions would occur under this alternative during construction. At operation, there would be no impacts related to GHG emissions as none of the residential, light industrial, business park, public facilities, and circulations land uses would be developed. Thus, no mitigation would be required and there would be no impacts related to GHG emissions under this alternative. The Draft EIR determined that the proposed project would have significant and unavoidable impacts related to greenhouse gas emissions; therefore, the alternative would have reduced impact as compared to the proposed project.

Hazards and Hazardous Material

Under the No Project, No Build Alternative, the site would remain in its undeveloped condition, and there would be no increased impacts from hazards or hazardous materials associated with new uses. There would be no development on the site that would involve the transport, use, or disposal of hazardous materials, interfere with an emergency response plan or evacuation plan, or expose people or structures to significant risk of loss, injury, or death involving fires.

Potentially impacted soil, identified in the Phase I Environmental Site Assessment as a Recognized Environmental Condition, and additional debris (four 15-gallon containers containing vinyl product, two 5-gallon empty gasoline containers, and miscellaneous household and construction materials) would remain on-site; however, the site would remain vacant, so exposure to these materials would be limited. In comparison, implementation of the proposed project would have less than significant impacts with mitigation incorporated and would result in the removal of hazardous materials. As the potentially hazardous materials present on the project site would not be removed, the No Project, No Build Alternative would result in greater impacts related to hazards and hazardous materials in comparison with the proposed project; however, these impacts would remain less than significant.

Hydrology and Water Quality

Under the No Project, No Build Alternative, the site would remain in its undeveloped condition. The Draft EIR determined that the proposed project would have less than significant impacts related to hydrology and water quality and would not require mitigation. Therefore, because no additional impervious surfaces would be developed under the No Project, No Build Alternative, this alternative would result in no potential impacts to hydrology and water quality. Therefore, the No Project, No Build Alternative would have less impacts on hydrology and water quality compared with the proposed project.

Land Use and Planning

Under the No Project, No Build Alternative, the site would remain in its undeveloped condition and would have no effect on established communities in its vicinity. Under the No Project/No Development Alternative, no development would occur on the project site, and no new land uses would be introduced. Therefore, no impacts related to physically dividing an established community or conflicting with applicable plans, policies, or regulations would occur under this alternative. As such, the No Project, No Build Alternative would result in reduced impacts related to land use and planning as compared to the proposed project.

Minerals

The Draft EIR determined that the proposed project would result in less than significant impacts to mineral resources and would not require mitigation. A small portion of the project site that is designated under the proposed project for residential and open space uses is located within a Mineral Resource Zone 2 (MRZ-2), which are areas where available geologic data indicate significant PCC-grade aggregate resources are present. Under the No Project, No Build Alternative, the site would remain in its undeveloped condition and no construction would occur that could potentially impact mineral resources. Therefore, the No Project, No Build Alternative would have comparatively reduced impacts on mineral resources compared with the proposed project.

Noise

The Draft EIR determined that the proposed project would result in less than significant impacts related to noise with mitigation incorporated. Under the No Project, No Build Alternative, there would be no ground disturbance or construction-related activities both within the project site and within the areas proposed for off-site improvements; therefore, no impacts related to noise would occur under this alternative during construction. At operation, there would be no impacts related to noise none of the residential, light industrial, business park, public facilities, and circulations land uses would be developed. Thus, no mitigation would be required and there would be no impacts related to noise under this alternative. Therefore, impacts related to ambient noise levels and groundborne vibration under the No Project, No Build Alternative would be less than the proposed project and similar to impacts related to exposure to excessive noise levels from a public airport compared to the proposed project.

Population and Housing

The Draft EIR determined that the proposed project would result in planned growth consistent with what is accounted for in the General Plan population projections. Therefore, potential impacts were determined to be less than significant and no mitigation is identified.

Under the No Project, No Build Alternative, the site would remain in its undeveloped condition, and therefore would not result in increased housing or help improve the City's jobs to housing ratio. There would be no construction of new residential, light industrial, or business park uses on the project site. Similar to the proposed project, no displacement of existing residents or business owners would occur. The No Project, No Build Alternative would not result in any impacts related to population growth, while the proposed project would result in less than significant impacts. The No

Project, No Build Alternative would have less impacts on population and housing compared with the proposed project.

Public Services

The Draft EIR determined that the proposed project would result in less than significant impacts to public services, and no mitigation was identified. Under the No Project, No Build Alternative, the site would remain in its undeveloped condition and would not involve any new development, and therefore, would not require any additional public services. However, police and fire services would continue to monitor the area. Therefore, this Alternative would have no direct impacts related to public services. The No Project, No build Alternative would have less impacts on public services compared with the proposed project.

Recreation

The No Project, No Build Alternative would not involve any new residential or other development and would therefore not result in an increased need for recreation and park services. Under this Alternative, existing conditions on the project site would not change, so there would be no increase in the demand for recreational facilities or accelerate the deterioration of current facilities, and therefore this Alternative would have no impacts related to recreation.

The Draft EIR determined that the proposed project would result in less than significant impacts related to recreation and would not require mitigation. The No Project, No build Alternative would have reduced impacts on recreation as compared with the proposed project. However, under this alternative, the amenities, including new parks, included in the proposed project, would not be realized.

Transportation

The Draft EIR determined that the proposed project would result in less than significant impacts related to transportation and would not require mitigation. Under the No Project, No Build Alternative, the site would remain in its undeveloped condition, resulting in no impacts related to transportation, hazards due to new road configuration, or emergency access. This Alternative would have less impacts on transportation compared with the proposed project.

Tribal Cultural Resources

The Draft EIR determined that the proposed project would result in significant and unavoidable impacts related to tribal cultural resources. Under the No Project, No Build Alternative the site would remain in its undeveloped condition and no construction would occur. There would be no ground-disturbing activities that could alter or destroy known TCRs or that result in the inadvertent discovery of a TCR not previously recorded. Thus, no mitigation would be required and there would be no impacts to cultural resources under this alternative. Therefore, the No Project, No Build Alternative would have reduced impacts on tribal cultural resources as compared with the proposed project.

Utilities and Service Systems

The Draft EIR determined that the proposed project would result in less than significant impacts to utilities and service systems with mitigation incorporated. Under the No Project, No Build Alternative, the site would remain in its undeveloped condition, and would not include new residential, light industrial, business park, or other uses, and therefore there would be no demand for utility services such as water and wastewater treatment facilities, water supply, and solid waste. Therefore, this Alternative would have less impacts on utility systems compared with the proposed project.

Wildfire

The Draft EIR determined that the proposed project would result in less than significant impacts related to wildfire and would not require mitigation. Under the No Project, No Build Alternative, the site would remain in its undeveloped condition and site conditions would not be altered, therefore not impairing evacuation plans and not exposing people or structures to wildfire risks. Under this alternative, implementation of manufactured slopes and fuel management zone, which would be implemented under the proposed project, would not occur, and the risk of wildfire would therefore potentially be increased. However, the site would remain vacant, so exposure to wildfire would be limited. The No Project, No Build Alternative would have similar impacts related to wildfire compared with the proposed project.

5.5.2 - Conclusion

The No Project, No Build Alternative would avoid all the proposed project's less than significant impacts, less than significant impacts with mitigation, and significant and unavoidable impacts described in Sections 3.1 through 3.20, as well as avoid the need to implement any mitigation measures. The No Project, No Build Alternative would result in greater impacts than the proposed project associated with hazards and hazardous materials; however, this impact would remain less than significant.

The No Project, No Build Alternative would not meet 11 of the proposed project's 12 objectives because the project site would not be developed with residential, light industrial, business park, public facilities, recreational land uses; roads and additional infrastructure such as water and sewer improvements would not be developed; and no public facilities, such as a new elementary school and water tanks, would be constructed. Instead, the project site would remain vacant and in an undeveloped condition.

As such, the No Project, No Build Alternative would not meet the objectives of providing a long-range comprehensive planning approach to guide the development of the project site; assisting the City in meeting its housing goals and reflecting anticipated market needs and public demand by providing a diverse range of home types; anticipating market demand by providing for a mixture of residential, light industrial, and business park land uses, provide economic growth and employment opportunities with the City; adopting a Specific Plan that allows for a range of industrial uses, research and development uses, business park and other nonresidential uses that would encourage private capital investment; providing for the establishment of a mixed-use master planned

community that is sensitive to the environment and is aesthetically pleasing; creating a community design that complements the land's topography by respecting and preserving the geology, rock formations, and basic landforms; providing a potential Jurupa Unified School District (JUSD) school site to serve the needs of future residents of the proposed project and the surrounding area; providing a community park and neighborhood parks to meet the needs of future residents of the proposed project and surrounding neighborhoods; establishing a cohesive trail system that promotes active recreational uses and provides pedestrian links between the school site, parks, residential neighborhoods, and open space; providing guidelines for architecture, landscaping, entry treatments, walls, fencing, parks, and trails that reinforce this community's identity and its relationship to the City. In addition, this alternative would not advance the approved 1992 Rio Vista Specific Plan nor the current General Plan, and it would be inconsistent with the City's established and proposed vision for the future. This alternative would only meet the objective of protecting valuable scenic resources within large expanses of open space, thereby preserving Rio Vista's character and identity and the surrounding region. However, this open space would not be managed or available for public use. Therefore, this alternative would be environmentally inferior to the proposed project.

5.6 - Alternative 2—No Project, Develop the Approved Specific Plan

Under the No Project, Develop the Approved Specific Plan Alternative, the project site would be developed in accordance with the existing Rio Vista Specific Plan No. 243 that was approved by the County of Riverside on April 14, 1992 (1992 Specific Plan). Under this scenario, up to 1,697 homes, a 5-acre commercial site, two elementary schools, three neighborhood parks, and a 14-acre equestrian center would be developed. An area of natural open space, encompassing 405 acres would be included as well.

Under the No Project, Develop the Approved Specific Plan Alternative, the majority of the current General Plan land use designations would remain unchanged. However, land use in an area in the western portion of the project site would change from the current Medium Density Residential (MDR) to a low density residential land use (Low Residential and Single-Family Residential), and the land use in the northwestern corner would change from the current MHDR to a recreational land use (Equestrian). Under this scenario, a small, 5-acre area would be developed as a commercial area, and no Light Industrial or Business Park uses would be developed. Residential land uses would include Low Density, High Density, and Very High Density,¹ and would not include the Very Low Density Residential (VLDR), Medium High Density Residential (MHDR), High Density Residential (HDR), and Very High Density Residential (VHDR) included in the proposed project.

¹ Abbreviation codes are not used for the 1992 land use designation because the City was not incorporated at the time and therefore did not have a General Plan to define these terms.

5.6.1 - Impact Analysis

Aesthetics

As noted in this Draft EIR, the proposed project's impacts to scenic vistas, scenic resources, and the existing visual character and quality of public views of the site and its surroundings, as well as with respect to lighting and glare would be less than significant without mitigation.

The No Project, Develop the Approved Specific Plan Alternative would result in the development of 1,697 homes, a 5-acre commercial site, two elementary schools, three neighborhood parks, a 14-acre equestrian center, and 405 acres of natural open space. Under this alternative, the number of dwelling units would be similar to the proposed project. The amount of open space under this alternative would be approximately 106 acres less than the proposed project, the area devoted to roadways and circulation would increase by approximately 3.4 acres, and the area dedicated to residential land uses would increase by approximately 227.6 acres. Industrial and Business Park uses would decrease by approximately 135 acres to 5 acres of Commercial uses. Because of the increased area dedicated to development and the reduction in open space compared to the proposed project, the No Project, Develop the Approved Specific Plan Alternative would have more significant aesthetic impacts regarding on-site natural features. Development under this alternative would not be developed consistent with the architectural and landscaping guidance provided in the proposed project's Rio Vista Specific Plan Design Guidelines. Additionally, this alternative would involve more grading on lands with a slope greater than 20 percent compared to the proposed project due to the more intense land uses approved in this alternative. Accordingly, vegetation removal and site lighting would be more intense under this alternative compared to the proposed project. Pepe's Peak, Rattlesnake Mountain, and other on-site higher elevation areas and the vegetation and rock outcroppings included therein. The proposed project would, however, include grading in PA 12 and PA 13 that would reduce existing elevations by up to approximately 80 feet. However, the area to be graded is not the most visually prominent on-site and is limited to views as seen from the current end of 20th Street east of the project site. The development with PA 12 and PA 13 would be visually consistent with the light industrial development located along 20th Street.

Similar to the proposed project, the No Project, Develop the Approved Specific Plan Alternative would also yield less than significant impacts. Because there would be less open space, this alternative would not fully meet the project objectives of protecting valuable scenic resources within large expanses of open space; and complementing the land's topography by respecting and preserving the geology, rock formations, and basic landforms. Therefore, the No Project, Develop the Approved Specific Plan Alternative would have impacts on aesthetics similar to the proposed project, and impacts would be less than significant.

Agriculture and Forestry Resources

As noted in this Draft EIR, the proposed project's impacts related to conversion of Farmland to nonagricultural use would be less than significant without mitigation. The proposed project would have no impacts related to existing zoning or Williamson Act Contracts, existing zoning for forest land or timberland, or conversion of forest land.

The project site does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance; is not subject to or eligible for a Williamson Act Contract or agricultural zoning; does not contain forestland; would not result in the loss or conversion or loss of forestland; and would not result in other changes to the environment related to agricultural or forest resources. Therefore, similar to the proposed project, agricultural or forest-related impacts resulting from this alternative would be less than significant.

Air Quality

As noted in this Draft EIR, the project's impacts related to air quality would be less than significant without mitigation with respect to impacts from odors. The Draft EIR identified significant impacts related to AQMP consistency, cumulative criteria pollutant emissions, sensitive receptors exposure to TAC concentrations and cumulative impacts. These impacts could not be mitigated to a less than significant level and are identified as significant and unavoidable.

Similar to the proposed project, this alternative would result in less than significant impacts related to odor. Additionally, impacts related to ground disturbance and development of residences, open spaces, and circulation improvements would be similar to the proposed project. While the specific land uses would be different from the proposed project, the number of dwelling units would be similar to the proposed project. The amount of open space under this alternative would decrease by approximately 106 acres, the area devoted to roadways and circulation would increase by approximately 3.4 acres, and the area dedicated to residential land uses would increase by approximately 227.6 acres. Industrial and Business Park uses would decrease by approximately 135 acres to 5 acres of Commercial uses. Therefore, compared with the proposed project, air quality emissions may be reduced under the No Project, Develop the Approved Specific Plan Alternative, largely due to reduced mobile emissions generated by the reduced amount of commercial and industrial uses. However, the overall ground disturbance would be similar to the proposed project; thus, during construction and buildout of the proposed project, there would be a similar increase in criteria pollutant and TAC emissions, which would require mitigation.

Additionally, although there would be a reduction in plan area and buildout potential, the development of a similar number of housing units under this alternative would contribute a similar amount of population growth to the City, although this amount of population growth is already planned and accounted for in the General Plan. Similar to the proposed project, this alternative would be potentially inconsistent with the assumptions in the AQMP, although to a lesser degree compared to the proposed project.

Under this alternative, similar mitigation measures would be implemented to reduce regional and localized emissions to the extent feasible and to address inconsistencies with the AQMP, and would not be sufficient to fully mitigate the potential impacts. Therefore, similar to the proposed project, impacts would be significant and unavoidable even with implementation of mitigation measures.

Biological Resources

As noted in this Draft EIR, the proposed project's impacts related to biological resources would be less than significant without mitigation or less than significant with mitigation.

This alternative would have less open space compared with the proposed project and would require similar ground-disturbing activities, tree removal, and clearing of vegetation. Similar to the proposed project, biological resources such as Robinson's pepper grass, mesa horkelia, or other special-status plant species could be impacted by the proposed development; invasive species could be spread through ground disturbance. Wildlife species such as Delhi Sands flower-loving fly, Coastal California Gnatcatcher, burrowing owl, and special-status and nesting birds would have the potential to be impacted by the No Project, Develop the Approved Specific Plan Alternative, similar to the proposed project. Therefore, potential impacts to special-status plant and wildlife species such as burrowing owl, and nesting birds would be similar to the potential impacts of the proposed project. The mitigation measures that would be implemented under the proposed project to reduce these impacts would also need to be implemented under this alternative. Therefore, similar to the proposed project, impacts would be less than significant with mitigation under this alternative.

Cultural Resources

As noted in this Draft EIR, should undiscovered human remains be encountered during construction, the proposed project's impacts on these resources would be less than significant with mitigation. The Draft EIR identified potential significant impacts to historic resources, archaeological resources, and cumulative impacts. These impacts could not be mitigated to a less than significant level.

Under the No Project, Develop the Approved Specific Plan Alternative, development that occurs at the site would require ground-disturbing activities in an area larger than those required for the proposed project. Therefore, potential impacts to historic resources, archaeological resources, and cumulative impacts would be larger than the potential impacts of the proposed project. The mitigation measures that would be implemented under the proposed project, including archaeological monitoring, would need to be implemented under this alternative as well. Therefore, impacts would be significant and unavoidable even with mitigation under this alternative; however impacts would be slightly greater as compared to the proposed project because of the larger area of ground disturbance.

Energy

As noted in this Draft EIR, the proposed project's impacts related to energy would be less than significant without mitigation.

Under the No Project, Develop the Approved Specific Plan Alternative, construction would require energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment and the use of electricity for temporary buildings, lighting, and other sources, similar to the proposed project. Operation of this alternative may have a somewhat reduced energy usage because of the reduced commercial/industrial uses, but because this alternative would still consume natural gas and electricity, operational energy consumption impacts would be similar to the proposed project. Additionally, under this alternative, compliance with the 2019 California Energy Code, Title 24 energy efficiency standards, the California Building Standards Code (CBC) and other applicable plans, policies, and regulations would still be required. Therefore, similar to the proposed project, impacts would be less than significant.

Geology and Soils

As noted in this Draft EIR, the proposed project's impacts related to geology and soils would be less than significant without mitigation or less than significant with mitigation.

The project site is subject to hazards posed by seismic ground shaking, seismically induced settlement, the potential for landslides and rockfall, compressible soils, and the possibility of discovering paleontological resources. The project site is not subject to fault rupture, liquefaction, or expansive soil. Development under the No Project, Develop the Approved Specific Plan Alternative could cause potential substantial adverse impacts associated with seismic ground shaking because of the potential for seismic ground shaking, similar to the proposed project. However, the potential impacts would be reduced to less than significant by complying with the latest CBC requirements and the implementation of the mitigation measures. Under this alternative, grading, construction, and building design would be subject to the same requirements and mitigation measures as the proposed project. Additionally, hazards posed by the potential for soil erosion would be addressed through erosion control measures, similar to those set forth in the project's Storm Water Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP). The same mitigation measures that would be implemented under the proposed project would also be implemented under this alternative. Therefore, impacts related to geology and soils would be less than significant with mitigation under this alternative, similar to the proposed project.

Greenhouse Gas Emissions

As noted in this Draft EIR, the proposed project's impacts related to GHG emissions and to plan, policy, or regulation consistency would be significant and could not be mitigated to a less than significant level.

Similar to the proposed project, the No Project, Develop the Approved Specific Plan Alternative would generate temporary short-term GHG emissions from heavy-duty construction equipment, worker trips, and material delivery and hauling, and the operation of off-road construction equipment as well as on-site and off-site truck travel. Therefore, similar to the proposed project, this alternative would incorporate Best Management Practices (BMPs) to reduce GHG emissions during construction and comply with the requirements of the City's General Plan policies and programs related to GHG emissions as well as applicable SCAQMD regulations. Furthermore, operation of this alternative would result in a net increase of GHG emissions as compared to the existing conditions, although the emissions estimated to occur from this alternative would be expected to be less than the proposed project. That is because under this alternative there would be no commercial/industrial uses which would translates to a significant reduction in truck trips. Although there would be an increase in of residential uses (compared to the proposed project), diesel trucks generate much more CO₂ both in terms of fuel consumption and the carbon footprint per gallon compared to passenger vehicles that are associated with the increase in residential uses. Because of the size of development included in this alternative, emissions under the alternative would have the potential to exceed the SCAQMD's applicable bright-line significance threshold of 3,000 MT CO₂e per year. Furthermore, if the GHG emissions from the alternative exceeded the SCAQMD thresholds of significance, this alternative would also result in a cumulative considerable contribution to cumulative GHG emissions. Therefore, the same mitigation measures would be required to reduce

emissions from construction equipment and to reduce GHG impacts from future project operations. Similar to the proposed project, impacts related to generating GHGs would be significant and unavoidable, although less than the potential significant and unavoidable impacts as compared to the proposed project. Similar to the proposed project, exceeding the SCAQMD GHG emission thresholds would result in conflict with plans, policies and regulations, specifically with the State's ability to achieve GHG reduction targets and impacts under this alternative would be significant and unavoidable.

Hazards and Hazardous Material

As noted in this Draft EIR, the proposed project would have no potential hazards impacts with respect to proximity to public airport safety hazard. The Draft EIR noted that the all other proposed project's impacts related to hazards and hazardous materials would be less than significant without mitigation or less than significant with mitigation.

Similar to the proposed project, the No Project, Develop the Approved Specific Plan Alternative would involve the routine management of some hazardous materials that must be properly managed. Similar to the proposed project, the routine handling, transporting, use, or disposal of hazardous materials during construction and operation activities are addressed by applicable federal, State, and local laws, regulations, and programs set forth by various federal, State, and local agencies. Because the existing conditions of the project site are the same, there is one Recognized Environmental Condition (REC) associated with oil debris on the project site. The location of the REC is within the development area of both the proposed project and this alternative, and, thus, there would be similar impacts related to hazards and hazardous materials during construction. During construction, this alternative would require mitigation to reduce potential impacts from contaminated soils encountered during excavation to less than significant.

Hazardous materials may be used in the light industrial uses of the proposed project. Under this alternative, these hazardous materials would not be required. However, small quantities of fertilizers, herbicides, pesticides, solvents, cleaning agents, and similar materials used for landscaping and maintenance activities would be used for the residential and commercial portions of this alternative. This alternative would not increase any of the impacts associated with hazardous and hazardous materials as compared to the proposed project, and the mitigation measures would be the same as the proposed project. Therefore, similar to the proposed project, impacts would be less than significant with mitigation incorporated.

Hydrology and Water Quality

As noted in this Draft EIR, the proposed project would have no impacts related to hydrology and water quality with respect to risk of pollutant release due to inundation. The Draft EIR noted that the proposed project's hydrology and water quality impacts related to surface and groundwater quality, groundwater supply and recharge, drainage concerns would be less than significant without mitigation.

The No Project, Develop the Approved Specific Plan Alternative would result in construction activities that could have the potential to contribute to pollutants in off-site surface waters. The area

of ground disturbance would be larger than the proposed project, and this alternative would have a smaller amount of open space. Similar to the proposed project, this alternative would be required to implement a SWPPP conforming to the California State Water Resources Control Board (State Water Board) National Pollutant Discharge Elimination System (NPDES) permit, and would be required to implement similar BMPs and comply with the same policies and regulations, such as the Municipal Code Chapter 6.05, Stormwater/Urban Runoff Management and Discharge Controls.

Additionally, similar to the proposed project, this alternative would lead to an increased demand for water. As compared to the proposed project, this alternative would result in the same number of dwelling units; however, there would be significantly less Light Industrial/Business Park uses. As such, there would be less demand for water for commercial uses relative to the proposed project. This alternative would also increase impervious surfaces on the project site, although to a lesser extent than the proposed project. Nonetheless, the increased impervious surfaces and water demand of this alternative would have similar impacts to groundwater, runoff, erosion, and flooding as compared to the proposed project.

Because this alternative would utilize the same project site, impacts related to the project's location would be the same as the proposed project. The project site is not located in a flood hazard zone, tsunami, or seiche zone. Furthermore, similar to the proposed project, implementation of this alternative would not conflict with or obstruct implementation of a sustainable groundwater management plan and impacts would be considered less than significant. Therefore, similar to the proposed project, impacts would be less than significant.

Land Use and Planning

As noted in this Draft EIR, the proposed project's impacts related to land use and planning would be less than significant and would not require any mitigation.

The No Project, Develop the Approved Specific Plan Alternative would result in the development of new residential uses, as well as commercial, public facility, and open space uses. This alternative would result in the same number of dwelling units but would have a lower residential density. Furthermore, only a 5-acre site would be proposed for uses under this alternative and there would be no industrial uses, compared to 140.3 acres of Light Industrial/Business Park uses under the proposed project. As such, this alternative would not meet the project objective of allowing a range of industrial uses, research and development uses, business park and other nonresidential uses that would encourage private capital investment sufficient to support the significant public infrastructure improvements proposed on the project site, as well as establishing a mixed-use master planned community. Therefore, impacts related to land use would be similar to the proposed project, but this alternative would not meet the project's objectives related to land use and planning.

Minerals

As noted in this Draft EIR, the proposed project's impacts related to minerals would be less than significant without mitigation with respect to loss of availability of a known mineral resource, and it would have no impact with respect to locally important mineral resource recovery site.

Similar to the proposed project, under the No Project, Develop the Approved Specific Plan Alternative, the project site is not designated OS-MIN, is not designated as a regionally significant PCC-grade resources and is are not designated for mineral extraction or held in reserve for future mining activities, implementation of the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State of California. Similar to the proposed project, impacts would be less than significant.

Noise

As noted in this Draft EIR, the proposed project's impacts related to noise would be less than significant with mitigation with respect to noise level increases and groundborne vibration impacts, and it would have no impact with respect to excessive noise levels from airport activity.

Under the No Project, Develop the Approved Specific Plan Alternative, construction noise impacts would be less than significant with mitigation – similar to the proposed project. This alternative would involve the development of approximately 502 acres, roughly 104.5 acres more than the proposed project (397.5 acres). This increased development footprint could require lengthier construction schedules than the proposed project (i.e., the duration of construction could be increased for this alternative), which could increase the duration that receptors are exposed to the alternative's construction noises. However, this would not translate to greater impacts as measured against the City's construction noise thresholds of significance.

The City's construction noise significance criteria concern whether construction activities in proximity of residential uses would be limited to less-sensitive weekday hours and whether construction activities would expose receptors to elevated noise levels. The criteria do not assess the duration of construction activities, and other than a potentially increased duration of construction activities, impacts associated with this alternative would be similar to the proposed project because construction of the alternative would ultimately require the same types of construction equipment and construction activities as the proposed project. Therefore, the adoption of Mitigation Measure (MM) NOI-1a would similarly ensure that this alternative's construction activities are limited to less-sensitive weekday hours pursuant to the City's General Plan policies and that construction noise levels at noise-sensitive uses are mitigated to below the quantitative thresholds of significance.

Despite this alternative's greater development footprint, it would construct the same number of dwelling units as the proposed project, meaning that traffic generation and therefore operational traffic noises associated with residential uses would likely be similar between the proposed project and this alternative. This alternative would forgo the 140.3 acres of light industrial or business park-type uses proposed by the proposed project and would instead construct just 5 acres of commercial uses. Specifically, this alternative would generate approximately 21,000 vehicle trips per day at buildout, compared with approximately 39,775 daily trips to be generated by the proposed project. This alternative would also construct an additional school and approximately 10 more acres of recreational/park uses. The balance of these changes – especially the elimination of 135.3 acres of Light Industrial/Business Park uses and the associated daily trips as stated above – strongly suggests that operational traffic noises associated with this alternative would be lower than the proposed project and therefore less than significant. The implementation of MM NOI-1b would ensure that

stationary sources associated with this alternative's land uses are reviewed and designed to be in compliance with the City's General Plan policies, which would result in less than significant impacts.

As noted above, construction of the alternative would ultimately require the same types of construction equipment and activities as the proposed project. Therefore, potential construction-related vibration impacts would also be similar. The adoption of MM NOI-2 would ensure that future projects in proximity of off-site structures are required to prepare "Construction Vibration Reduction Plans" that identify and commit to specific construction techniques capable of reducing construction-related vibration impacts to less than significant levels.

Regarding operational vibration impacts, this alternative does not propose the types of land uses that are associated with the generation of substantial, permanent sources of groundborne vibration. The proposed project would involve operational traffic, including regular trips by heavy delivery trucks which can generate groundborne vibration levels of up to 0.076 in/sec peak particle velocity (PPV) (or approximately 53 velocity in decibels [VdB]) as measured at 25-feet. These potential vibration levels from a truck passing a structure would be well below the Federal Transit Administration's (FTA) construction vibration impact criteria of 0.12 in/sec PPV (or 90 VdB) for buildings extremely susceptible to vibration damage. In addition, these vibration levels are well below the FTA's impact criteria of 65 VdB for frequent events for even the most sensitive type of land uses (buildings where vibration would interfere with operations). Therefore, operations of the alternative would also be expected to result in less than significant vibration impacts.

In summary, with the adoption of MM NOI-1 and MM NOI-2, this alternative's noise and vibration-related impacts would be similar to the proposed project and less than significant.

Population and Housing

As noted in this Draft EIR, the proposed project's impacts related to population and housing would be less than significant without mitigation with respect to growth inducement, and it would have no impact with respect to housing displacement or replacement housing.

Under the No Project, Develop the Approved Specific Plan Alternative, the number of housing units would be the same as the proposed project, and the potential for direct and indirect population growth under this alternative would be similar to that of the proposed project. Additionally, the projected employment growth would be lower than the proposed project because the 140.3 acres of Light Industrial/Business Park uses would be replaced with a much smaller area, only 5 acres, of Commercial uses. As compared to the proposed project, however, the No Project, Develop the Approved Specific Plan Alternative would result in one additional school, nearly six additional acres of community parks, an SCE easement instead of two water tanks, over three additional acres of circulation improvements that would benefit this alternative's population. Furthermore, this alternative would not displace people or housing. However, because this alternative would not include industrial and business uses, this alternative would not meet the project objective of providing economic growth and employment opportunities with the City by authorizing the development of light industrial and business park land uses. Therefore, similar to the proposed project, impacts would be less than significant under this alternative.

Public Services

As noted in this Draft EIR, the proposed project's impacts related to public services would be less than significant without mitigation.

As compared to the proposed project, the No Project, Develop the Approved Specific Plan Alternative would result in the same number of dwelling units, less Light Industrial/Business Park uses, one additional school, nearly six additional acres of community parks, an SCE easement instead of two water tanks, over three additional acres of circulation improvements, and less open space. This alternative would result in similar levels of population growth (planned and accounted for in the General Plan) and would be subject to similar impacts to public services, including fire protection, police protection, and other public facilities such as libraries. With respect to schools and parks, due to the additional facilities anticipated under this alternative, impacts would be less than those under the proposed project. However, because there would be less open space under this alternative, this alternative would have fewer opportunities to meet the project objectives of establishing a cohesive trail system that promotes active recreational uses and provides pedestrian links between the school site, parks, residential neighborhoods, and open space. Therefore, similar to the proposed project, this alternative would have less than significant impacts.

Recreation

As noted in this Draft EIR, the proposed project's impacts related to recreation would be less than significant without mitigation.

As compared to the proposed project, the No Project, Develop the Approved Specific Plan Alternative would result in the same number of dwelling units, less Light Industrial/Business Park uses, one additional school, nearly six additional acres of community parks, an SCE easement instead of two water tanks, over three additional acres of circulation improvements, and 106 acres less open space. This alternative would result in similar levels of population growth (planned and accounted for in the General Plan) and would therefore result in a similar demand on public services including recreation, which would lead to similar levels of deterioration of these facilities. However, because there would be less open space under this alternative, this alternative would have fewer opportunities to meet the project objectives of establishing a cohesive trail system that promotes active recreational uses and provides pedestrian links between the school site, parks, residential neighborhoods, and open space. Because the population growth (which is planned and accounted for in the General Plan) would be similar to the proposed project, there would be a similar need for constructing or expanding recreational facilities to meet the increased demand. Therefore, similar to the proposed project, impacts would be less than significant.

Transportation

As noted in this Draft EIR, the proposed project's impacts related to VMT could not be mitigated to a less than significant level.

Similar to the proposed project, the No Project, Develop the Approved Specific Plan Alternative would not conflict with a program plan, ordinance, or policy of the circulation system, including transit, roadway, bicycle, and pedestrian facilities. This alternative would comply with the City's

congestion management practices to reduce traffic impacts and with guidelines for emergency and fire vehicle access. With respect to circulation, impacts under this alternative would be similar to, but slightly less than, the proposed project because the No Project, Develop the Approved Specific Plan Alternative would also include over three additional acres of circulation improvements.

The No Project, Develop the Approved Specific Plan Alternative would have a similar-sized population compared with the proposed project. Although this alternative would generate fewer trips than the proposed project, it is anticipated to result in similar level of VMT as the proposed project because this alternative would not include the project design features such as bike lanes and sidewalks to reduce VMT impacts. Furthermore, this alternative would have additional VMT because this alternative would only contain 5 acres of commercial uses and would not provide for a mixture of residential, light industrial, and business park land uses that would likely reduce the distance required for future residents to travel to employment opportunities. Because this alternative does not have the same mix of land use and does not contain design features to reduce VMT, impacts would be similar to the proposed project under this alternative.

This alternative would not fully meet the project objectives of establishing a cohesive trail system that promotes active recreational uses and provides pedestrian links between the school site, parks, residential neighborhoods, and open space. Therefore, this alternative would result in similar, but slightly greater, impacts on transportation as compared the proposed project and may require mitigation to reduce VMT.

Tribal Cultural Resources

The Draft EIR identified potential significant impacts to TCRs and cumulative impacts. These impacts could not be mitigated to a less than significant level, and would remain significant and unavoidable.

Under the No Project, Develop the Approved Specific Plan Alternative, development that occurs at the site would require ground-disturbing activities in an area larger than those required for the proposed project. Therefore, potential impacts to tribal cultural resources would be larger than the potential impacts of the proposed project. The mitigation measures that would be implemented under the proposed project, including archaeological monitoring, would need to be implemented under this alternative as well. Therefore, impacts would be potentially significant even with mitigation under this alternative and would be slightly greater compared to the proposed project because of the larger area of ground disturbance.

Utilities and Service Systems

As noted in this Draft EIR, the proposed project's impacts related to utilities and service systems would be less than significant with mitigation.

As compared to the proposed project, this alternative would result in the same number of dwelling units and significantly less business and industrial uses. As such, there would be less demand for water and less wastewater generation from commercial uses (there would not be any industrial uses) relative to the proposed project. As this alternative would result in the same number of dwelling units and less business and industrial uses, demand for certain utilities and service systems

would be similar for residential water use and less for commercial and industrial use than under the proposed project. Therefore, the No Project, Develop the Approved Specific Plan Alternative would result in fewer impacts on utilities and service systems than the proposed project; however, similar to the proposed project, impacts would be less than significant with mitigation.

Wildfire

As noted in this Draft EIR, the proposed project's impacts related to wildfire would be less than significant without mitigation.

Under the No Project, Develop the Approved Specific Plan Alternative, wildfire conditions would be the same as those for the proposed project. The proposed project's less than significant impacts related to emergency response plans and emergency evacuation plans would be the same under this alternative. Additionally, the emergency access and adherence to the applicable General Plan policies and programs and the CBC and Uniform Fire Code requirements, as well as the proposed infrastructure improvements would be applicable under this alternative. As such, project site conditions would remain the same under this alternative as compared to the proposed project conditions. Therefore, similar to the proposed project, impacts would be less than significant under this alternative.

5.6.2 - Conclusion

This alternative would have similar impacts to the proposed project's no impact or less than significant impacts associated with aesthetics; agricultural and forestry resources; energy; hydrology and water quality; land use and planning; minerals; population and housing; public services; recreation; and wildfire. This alternative would require similar mitigation measures and could be mitigated to a less than significant level, similar to the proposed project's impacts on biological resources; geology and soils; hazards and hazardous materials; noise; and utilities and service systems. This alternative would have similar impacts to the proposed project's significant and unavoidable impacts associated with air quality; cultural resources; greenhouse gas emissions; VMT; and TCRs.

The No Project, Develop the Approved Specific Plan Alternative would not meet all of the project objectives because it does not include the mixed-use light industrial business park uses. Therefore, this alternative would not meet the objectives of providing for a mixture of residential, light industrial, and business park land uses that are marketable and financially feasible within the City's evolving economic profile; providing economic growth and employment opportunities with the City by authorizing the development of light industrial and business park land uses at a sufficient scale to attract financially stable, long-term tenants and fund the necessary proposed critical infrastructure improvements that will serve Rio Vista and the greater Jurupa Valley community; adopting a Specific Plan that allows for a range of industrial uses, research and development uses, business park and other nonresidential uses that would encourage private capital investment sufficient to support the significant public infrastructure improvements proposed on the project site; and providing for the establishment of a mixed-use master planned community that is sensitive to the environment and is aesthetically pleasing.

Furthermore, this alternative contains significantly reduced open space and would therefore not fully meet the objectives of creating a community design that complements the land's topography by respecting and preserving the geology, rock formations, and basic landforms; protecting valuable scenic resources within large expanses of open space, thereby preserving Rio Vista's character and identity and the surrounding region; and establishing a cohesive trail system that promotes active recreational uses and provides pedestrian links between the school site, parks, residential neighborhoods, and open space. Therefore, this alternative would be environmentally inferior to the proposed project.

5.7 - Alternative 3—Develop the 2017 Proposed Land Use Plan

Under the Develop the 2017 Proposed Land Use Plan Alternative, the project site would be developed in accordance with the previously proposed, but not analyzed or approved, 2017 Land Use Plan. This previously contemplated land use plan would allow for the development of a targeted 1,299 dwelling units (but up to 1,799), a school, a 12-acre community park, 23 acres of circulation, and 14 acres of public facilities. An area of natural open space encompassing 579 acres would also be included.

Under the Develop the 2017 Proposed Land Use Plan Alternative, several of the current General Plan land use designations would change to allow for a variety of density levels. While the majority of the project site is currently designated as MDR, this alternative would also include the same designation as well as areas designated as Low-Medium Density Residential (LMDR) and HDR. There would not be a Very High Density Residential (VHDR) designation. A larger area would be dedicated to Open Space than the proposed project. Under this scenario there would be no industrial, commercial, or business park designations.

5.7.1 - Impact Analysis

Aesthetics

As noted in this Draft EIR, the proposed project's impacts to scenic vistas, scenic resources, and the existing visual character and quality of public views of the site and its surroundings, as well as with respect to lighting and glare would be less than significant without mitigation.

The Develop the 2017 Proposed Land Use Plan Alternative would result in the development of 1,299 homes (but up to 1,799), a school, a 12-acre community park, 23 acres dedicated to roadways and circulation, and 14 acres of public facilities, as well as 579 acres of natural open space. This would be a reduction of 398 dwelling units but an increase in the residential development area relative to the proposed project, as well as an increase in open space. Similar to the proposed project, the Develop the 2017 Proposed Land Use Plan Alternative would also yield less than significant impacts on aesthetics because of the reduction in buildout potential. However, because of this reduction, this alternative would not fully meet the project objectives of assisting the City in meeting its housing goals and reflect anticipated market needs and public demand; anticipating market demand by providing for a mixture of residential, light industrial, and business park land uses that are marketable and financially feasible; providing economic growth and employment opportunities with the City by authorizing the development of light industrial and business park land uses at a sufficient

scale to attract financially stable, long-term tenants and fund the necessary proposed critical infrastructure improvements that will serve Rio Vista and the greater Jurupa Valley community; allowing for a range of industrial uses, research and development uses, business park and other nonresidential uses; and providing for the establishment of a mixed-use master planned community. Therefore, the Develop the 2017 Proposed Land Use Plan Alternative would have fewer impacts on aesthetics. Similar to the proposed project, impacts would be less than significant.

Agriculture and Forestry Resources

As noted in this Draft EIR, the proposed project's impacts related to conversion of Farmland to nonagricultural use would be less than significant without mitigation. The proposed project would have no impacts related to existing zoning or Williamson Act Contracts, existing zoning for forest land or timberland, or conversion of forest land.

The project site does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance; is not subject to or eligible for a Williamson Act Contract or agricultural zoning; does not contain forestland; would not result in the loss or conversion or loss of forestland; and would not result in other changes to the environment related to agricultural or forest resources. Therefore, similar to the proposed project, agricultural or forest-related impacts would be less than significant.

Air Quality

As noted in this Draft EIR, the project's impacts related to air quality would be less than significant without mitigation with respect to impacts from odors. The Draft EIR identified significant impacts related to AQMP consistency, cumulative criteria pollutant emissions, sensitive receptors exposure to TAC concentrations and cumulative impacts. These impacts could not be mitigated to a less than significant level and would remain significant and unavoidable.

Similar to the proposed project, the Develop the 2017 Proposed Land Use Plan Alternative would result in ground disturbance and development of residences, open spaces, and circulation improvements. While the land uses would be different from the proposed project, the overall open space under this alternative would increase, area dedicated to roadways and circulation would increase, and the number of dwelling units would be reduced as compared to the proposed project. Commercial and industrial uses would not occur under this alternative. Therefore, compared with the proposed project, air quality emissions would be reduced under the 2017 Proposed Land Use Plan Alternative. This decrease would be largely due to a reduction in mobile emissions reflecting the elimination of proposed commercial and industrial uses. The overall ground disturbance would be reduced as compared to the proposed project, but this ground disturbance would likely increase in criteria pollutant and TAC emissions, which would require mitigation. Additionally, because there would be a smaller number of housing units and reduced employment opportunities, this alternative is less likely to be inconsistent with the assumptions in the AQMP, as compared to the proposed project.

Under this alternative, inconsistencies with the AQMP may not need to be mitigated, but this alternative would require similar mitigation measures to reduce regional and localized emissions to the extent feasible. Overall, impacts would be lower than the proposed project and could potentially

be mitigated to a level of less than significant. Therefore, impacts would be reduced as compared to the proposed project.

Biological Resources

As noted in this Draft EIR, the proposed project's impacts related to biological resources would be less than significant without mitigation or less than significant with mitigation.

Although there would be more open space under this alternative, this alternative would still require ground-disturbing activities, tree removal, and clearing of vegetation, similar to that of the proposed project. Similar to the proposed project, biological resources such as Robinson's pepper grass, mesa horkelia, or other special-status plant species could be impacted by the proposed development; invasive species could be spread through ground disturbance. Wildlife species such as Delhi Sands flower-loving fly, coastal California gnatcatcher, burrowing owl, and special-status and nesting birds would have the potential to be impacted by the Develop the 2017 Proposed Land Use Plan Alternative, similar to the proposed project. Therefore, potential impacts to special-status plant and wildlife species such as burrowing owl, and nesting birds would be similar to the proposed project. Thus, the mitigation measures that would be implemented under the proposed project to reduce these impacts would also need to be implemented under this alternative. Therefore, similar to the proposed project, impacts would be less than significant with mitigation under this alternative.

Cultural Resources

As noted in this Draft EIR, should undiscovered human remains be encountered during construction, the proposed project's impacts on these resources would be less than significant with mitigation. The Draft EIR identified potential significant impacts to historic resources, archaeological resources, and cumulative impacts. These impacts could not be mitigated to a less than significant level and would remain significant and unavoidable.

Under the Develop the 2017 Proposed Land Use Plan Alternative, development would require ground-disturbing activities similar to those required for the proposed project. Therefore, potential impacts to historic resources, archaeological resources, and cumulative impacts would be similar to the potential impacts of the proposed project. The mitigation measures that would be implemented under the proposed project, including archaeological monitoring, would need to be implemented under this alternative as well. Therefore, similar to the proposed project, impacts would be significant and unavoidable even with mitigation under this alternative.

Energy

As noted in this Draft EIR, the proposed project's impacts related to energy would be less than significant without mitigation.

Under the Develop the 2017 Proposed Land Use Plan Alternative, construction would require energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment and the use of electricity for temporary buildings, lighting, and other sources, similar to the proposed project. Operation of this alternative would have a reduced energy usage during operation because of the reduced Light Industrial/Business Park uses and

reduced housing, but because this alternative would still consume natural gas and electricity, operational energy consumption impacts would still occur. Additionally, under this alternative, compliance with the 2019 California Energy Code, Title 24 energy efficiency standards, the CBC and other applicable plans, policies, and regulations would still be required. Similarly to the proposed project, compliance with these standards would ensure that this alternative would not result in wasteful or inefficient energy usage, or inconsistency with a State or local energy plan or policy. Therefore, similar to the proposed project, impacts from this alternative would be less than significant.

Geology and Soils

As noted in this Draft EIR, the proposed project's impacts related to geology and soils would be less than significant without mitigation or less than significant with mitigation.

The project site is subject to hazards posed by seismic ground shaking, seismically induced settlement, the potential for landslides and rockfall, compressible soils, and the possibility of discovering paleontological resources. The project site is not subject to fault rupture, liquefaction, or expansive soil. Development under the Develop the 2017 Proposed Land Use Plan Alternative could cause potential substantial adverse impacts associated with seismic ground shaking because of the project site's potential for seismic ground shaking, similar to the proposed project. However, the potential impacts would be reduced to less than significant by complying with the latest CBC requirements and the implementation of the mitigation measures, similar to the proposed project. Under this alternative, grading, construction, and building design would be subject to the same requirements and mitigation measures as the proposed project. Additionally, hazards posed by the potential for soil erosion would be addressed through erosion control measures, as set forth in the project's SWPPP and WQMP. The same mitigation measures that would be implemented under the proposed project would also be implemented under this alternative. Therefore, impacts related to geology and soils would be less than significant with mitigation under this alternative, similar to the proposed project.

Greenhouse Gas Emissions

As noted in this Draft EIR, the proposed project's impacts related to GHG emissions and to plan, policy, or regulation consistency would be significant and unavoidable, even after implementation of mitigation.

Similar to the proposed project, the Develop the 2017 Proposed Land Use Plan Alternative would generate temporary short-term GHG emissions from heavy-duty construction equipment, worker trips, and material delivery and hauling, and the operation of off-road construction equipment as well as on-site and off-site truck travel. Therefore, similar to the proposed project, this alternative would incorporate BMPs to reduce GHG emissions during construction and comply with the requirements of the City's General Plan policies and programs related to GHG emissions as well as applicable SCAQMD regulations. Furthermore, operation of this alternative would result in a net increase of GHG emissions as compared to the existing conditions, and would have the potential to exceed the SCAQMD's bright-line threshold of 3,000 MT CO₂e per year despite the lack of commercial and industrial uses and reduced residential units, which could reduce GHG emissions

and VMT from trucks compared to the proposed project. Furthermore, if the proposed project exceeded the SCAQMD thresholds of significance, this alternative could have a cumulatively considerable contribution to cumulative GHG emissions. Because of the reduction in commercial and industrial uses and residential uses, the overall GHG emissions would likely be reduced. However, the potential for GHG emissions would still need to be mitigated. Therefore, the same mitigation measures would be required to reduce emissions from construction equipment and to reduce GHG impacts from future project operations. Therefore, similar to the proposed project, impacts related to generating GHGs would likely be significant and unavoidable. Similar to the proposed project, exceeding the SCAQMD GHG emission thresholds would result in conflict with plans, policies and regulations, specifically with the State's ability to achieve GHG reduction targets and impacts under this alternative would be significant and unavoidable.

Hazards and Hazardous Material

As noted in this Draft EIR, the proposed project would have no hazards impacts with respect to proximity to public airport safety hazard. The Draft EIR noted that the all other proposed project's impacts related to hazards and hazardous materials would be less than significant without mitigation or less than significant with mitigation.

Similar to the proposed project, the Develop the 2017 Proposed Land Use Plan Alternative would involve the routine management of some hazardous materials that must be properly managed. Similar to the proposed project, the routine handling, transporting, use, or disposal of hazardous materials during construction and operation activities are addressed by applicable federal, State, and local laws, regulations, and programs set forth by various federal, State, and local agencies. Because the existing conditions of the project site are the same, there is one REC associated with oil debris on the project site. Similar ground disturbance would occur relative to the proposed project and, thus, there would be similar impacts related to hazards and hazardous materials during construction. During construction, this alternative would require mitigation to reduce potential impacts from contaminated soils encountered during excavation to less than significant.

Hazardous materials may be used in the light industrial uses of the proposed project. Under this alternative, use of these hazardous materials would not occur; therefore impacts would be reduced compared to the proposed project. However, small quantities of fertilizers, herbicides, pesticides, solvents, cleaning agents, and similar materials used for landscaping and maintenance activities would be used for the residential component of this alternative. This alternative would not increase any of the impacts associated with hazardous and hazardous materials as compared to the proposed project and would result in less use and handling of hazardous materials during operation because there would be no commercial or industrial components. However, the soil contamination would still require mitigation under this alternative. Therefore, similar to the proposed project, impacts would be less than significant with mitigation incorporated.

Hydrology and Water Quality

As noted in this Draft EIR, the proposed project would have no impacts related to hydrology and water quality with respect to risk of pollutant release due to inundation. The Draft EIR noted that the proposed project's hydrology and water quality impacts related to surface and groundwater quality,

groundwater supply and recharge, drainage concerns would be less than significant without mitigation.

The Develop the 2017 Proposed Land Use Plan Alternative would result in construction activities that could have the potential to contribute to pollutants in off-site surface waters. The area of ground disturbance would be reduced as compared to the proposed project; however, this alternative would still be required to implement a SWPPP conforming to the State Water Board NPDES permit, and would be required to implement similar BMPs and comply with the same policies and regulations, such as the Municipal Code Chapter 6.05, Stormwater/Urban Runoff Management and Discharge Controls.

Additionally, similar to the proposed project, this alternative would lead to an increased demand for water, potentially including groundwater, as compared to the existing conditions; however, the increase would be less than that of the proposed project due to the reduction in Light Industrial/Business Park uses. This alternative would also increase impervious surfaces on the project site, although to a lesser extent than the proposed project. Nonetheless, the increased impervious surfaces and water demand of this alternative would have similar impacts to groundwater, runoff, erosion, and flooding as compared to the proposed project.

Because this alternative would utilize the same project site, impacts related to the project's location would be the same as the proposed project. The project site is not located in a flood hazard zone, tsunami, or seiche zone. Furthermore, similar to the proposed project, implementation of this alternative would not conflict with or obstruct implementation of a sustainable groundwater management plan and impacts would be considered less than significant. Therefore, similar to the proposed project, impacts would be less than significant.

Land Use and Planning

As noted in this Draft EIR, the proposed project's impacts related to land use and planning would be less than significant without mitigation.

The 2017 Proposed Land Use Plan Alternative would result in the development of new residential uses, as well as public facility and open space uses. This alternative would result in a reduced number of dwelling units and would therefore provide fewer housing opportunities to meet the anticipated future housing demand. Furthermore, the 140.3 acres of proposed commercial and industrial uses would not be implemented under this alternative. As such, this alternative would not meet the project objectives of assisting the City in meeting its housing goals and would not reflect anticipated market needs and public demand to the same degree as the proposed project; providing for a mixture of residential, light industrial, and business park land uses that are marketable and financially feasible within the City's evolving economic profile; providing economic growth and employment opportunities with the City by authorizing the development of light industrial and business park land uses at a sufficient scale to attract financially stable, long-term tenants and fund the necessary proposed critical infrastructure improvements that will serve Rio Vista and the greater Jurupa Valley community; and allowing a range of industrial uses, research and development uses, business park and other nonresidential uses that would encourage private capital investment

sufficient to support the significant public infrastructure improvements proposed on the project site, as well as establishing a mixed-use master planned community. Therefore, impacts related to land use and planning would be less than significant, similar to the proposed project, but this alternative would not fully meet any of the project's objectives related to land use and planning.

Minerals

As noted in this Draft EIR, the proposed project's impacts related to minerals would be less than significant without mitigation with respect to loss of availability of a known mineral resource, and it would have no impact with respect to locally important mineral resource recovery site.

Similar to the proposed project, under the Develop the 2017 Proposed Land Use Plan Alternative, the project site is not designated OS-MIN, is not designated as a regionally significant PCC-grade resources and is are not designated for mineral extraction or held in reserve for future mining activities, implementation of the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State of California. Therefore, similar to the proposed project, impacts would be less than significant.

Noise

As noted in this Draft EIR, the proposed project's impacts related to noise would be less than significant with mitigation with respect to noise level increases and groundborne vibration impacts, and it would have no impact with respect to excessive noise levels from airport activity.

Under the Develop the 2017 Proposed Land Use Plan Alternative, construction noise impacts would be less than significant with mitigation—similar to the proposed project. This alternative would involve the development of approximately 324 acres, or about 73-fewer acres than the proposed project. This reduced development footprint likely means that construction of this alternative would be much shorter in duration than construction of the proposed project, which would decrease the duration that receptors are exposed to this alternative's construction noises. However, this would not necessarily translate to reduced impacts as measured against the City's construction noise thresholds of significance. The City's construction noise thresholds of significance concern whether construction activities in proximity of residential uses would be limited to less-sensitive weekday hours and whether construction activities would expose receptors to elevated noise levels. The criteria do not assess the duration of construction activities, and other than a potentially reduced duration of construction activities, impacts associated with this alternative would be similar to the proposed project because construction of the alternative would ultimately require similar types of construction equipment and activities as the proposed project. The adoption of MM NOI-1a would similarly ensure that the alternative's construction activities are limited to less-sensitive weekday hours pursuant to the City's General Plan policies and that construction noise levels in proximity of noise-sensitive uses are mitigated to below the quantitative thresholds of significance.

Despite this alternative's development of a maximum 1,799 dwelling units, 102 more than the proposed project, its overall traffic generation and therefore its operational traffic noise impacts are likely to be substantially less than the proposed project's impacts and also less than significant. This is due to the fact that this alternative does not propose any Light Industrial/Business Park uses,

whereas the proposed project would construct 140.3 acres of light industrial and business park uses. As there would be no traffic associated with these uses, the alternative's operational traffic noise impacts would be substantially reduced as compared to the proposed project. The adoption of MM NOI-1b would ensure that stationary sources associated with this alternative's land uses are reviewed and designed to be in compliance with the City's General Plan policies, which would result in less than significant impacts.

As noted earlier, construction of the alternative would ultimately require similar types of construction equipment and activities as the proposed project. Therefore, potential construction-related vibration impacts would also be similar. The adoption of MM NOI-2 would ensure that future projects in proximity of off-site structures are required to prepare "Construction Vibration Reduction Plans" that identify and commit to specific construction techniques capable of reducing vibration impacts to less than significant levels.

Regarding operational vibration impacts, this alternative does not propose the types of land uses that are associated with the generation of substantial, permanent sources of groundborne vibration. Therefore, operations of the alternative would also be expected to result in less than significant vibration impacts.

In summary, with the adoption of MM NOI-1 and NOI-2, the alternative's noise and vibration-related impacts would be similar to the proposed project and less than significant with mitigation incorporated.

Population and Housing

As noted in this Draft EIR, the proposed project's impacts related to population and housing would be less than significant without mitigation with respect to growth inducement, and it would have no impact with respect to housing displacement or replacement housing.

Under the Develop the 2017 Proposed Land Use Plan Alternative, the targeted number of housing units would be reduced from 1,697 to 1,299. Therefore, the potential for direct and indirect population growth under this alternative would be reduced as compared to the proposed project, and projected employment growth would also be lower than the proposed project. Similar to the proposed project, this alternative would not displace people or housing. However, because this alternative would not include Light Industrial/Business Park uses, this alternative would not meet the project objective of providing economic growth and employment opportunities with the City by authorizing the development of light industrial and business park land uses. Therefore, similar to the proposed project, impacts would be less than significant under this alternative.

Public Services

As noted in this Draft EIR, the proposed project's impacts related to public services would be less than significant without mitigation.

As compared to the proposed project, the 2017 Proposed Land Use Plan Alternative would result in fewer dwelling units and none of the Light Industrial/Business Park uses, the same number of school

facilities, fewer community/neighborhood parks and a reduction of community park acreage, over three additional acres of circulation improvements, and more open space. This alternative would result in lower targeted levels of population growth and would therefore result in fewer impacts to public services. Because of the lack of employment generating uses this alternative would not meet the project objective of funding the necessary proposed critical infrastructure improvements through providing economic growth and employment opportunities within the City by authorizing the development of Light Industrial/ Business Park land uses at a sufficient scale to attract financially stable, long-term tenants. Similar to the proposed project, this alternative would have less than significant impacts.

Recreation

As noted in this Draft EIR, the proposed project's impacts related to recreation would be less than significant without mitigation.

As compared to the proposed project, the 2017 Proposed Land Use Plan Alternative would result in fewer dwelling units and none of the Light Industrial/Business Park uses, the same number of school facilities, fewer community/neighborhood parks and a reduction of community park acreage, over three additional acres of circulation improvements, and more open space. This alternative would result in lower population growth (yet planned and accounted for in the General Plan) and would therefore result in reduced demands on recreational facilities. Because the population growth would be reduced as compared to proposed project, there would be a reduced need for constructing or expanding recreational facilities to meet the increased demand, which would result in fewer impacts to air quality and noise. Similar to the proposed project, this alternative would have less than significant impacts.

Transportation

As noted in this Draft EIR, the proposed project's impacts related to VMT would be significant and unavoidable. Even with project design features such as bike lanes and sidewalks, the proposed project would not meet the City's VMT threshold.

Similar to the proposed project, the Develop the 2017 Proposed Land Use Plan Alternative would not conflict with a program plan, ordinance, or policy of the circulation system, including transit, roadway, bicycle, and pedestrian facilities. This alternative would comply with the City's congestion management practices to reduce traffic impacts and with guidelines for emergency and fire vehicle access.

The 2017 Proposed Land Use Plan Alternative would develop fewer housing units than the proposed project and would have no Light Industrial/Business Park uses, and therefore would not provide jobs. As a result VMT impacts would be less than significant without mitigation required and would be less than the proposed project.

Tribal Cultural Resources

The Draft EIR identified potential significant impacts to TCRs and cumulative impacts. These impacts could not be mitigated to a less than significant level and would remain significant and unavoidable.

Under the Develop the 2017 Proposed Land Use Plan Alternative, development that occurs at the project site would require ground-disturbing activities, similar to what would be required for the proposed project. Therefore, potential impacts to tribal cultural resources would be similar to the proposed project. The mitigation measures that would be implemented under the proposed project, including archaeological monitoring, would need to be implemented under this alternative as well. Therefore, similar to the proposed project, impacts would be significant and unavoidable even with mitigation.

Utilities and Service Systems

As noted in this Draft EIR, the proposed project's impacts related to utilities and service systems would be less than significant with mitigation incorporated.

As compared to the proposed project, the Develop the 2017 Proposed Land Use Plan Alternative would result in a reduced number of dwelling units and no Light Industrial/Business Park uses. As such, there would be less demand for water and less wastewater generation relative to the proposed project. As such, demand for utilities and service systems would be less than under the proposed project. Therefore, this alternative would result in fewer impacts on utilities and service systems than the proposed project; however, similar to the proposed project, impacts would be less than significant with mitigation.

Wildfire

As noted in this Draft EIR, the proposed project's impacts related to wildfire would be less than significant without mitigation.

Under the 2017 Proposed Land Use Plan Alternative, wildfire conditions would be the same as those for the proposed project. The proposed project's less than significant impacts related to emergency response plans and emergency evacuation plans would be the same under this alternative. Additionally, the emergency access and adherence to the applicable General Plan policies and programs and the CBC and Uniform Fire Code requirements, as well as the proposed infrastructure improvements, would be applicable under this alternative. As such, project site conditions would remain the same under this alternative as compared to the proposed project conditions. Therefore, similar to the proposed project, impacts would be less than significant.

5.7.2 - Conclusion

The Develop the 2017 Proposed Land Use Plan Alternative would not increase the severity of any impacts. This alternative would have similar impacts to the proposed project's no impact or less than significant impacts with regard to aesthetics; agriculture and forestry resources; energy; hydrology and water quality; land use and planning; minerals; population and housing; recreation; public services; and wildfire. This alternative would have reduced impacts on air quality, noise and transportation. This alternative would require similar mitigation measures and could be mitigated to a less than significant level, similar to the proposed project's impacts on biological resources; hazards and hazardous materials; geology and soils; and utilities and service systems. Similar to the proposed project, this alternative would have significant and unavoidable impacts associated with cultural resources, greenhouse gas emissions, and tribal cultural resources.

The Develop the 2017 Proposed Land Use Plan Alternative does not meet all of the project objectives because it does not include the Light Industrial/Business Park uses. Therefore, this alternative would not meet the objectives of providing for a mixture of residential, light industrial, and business park land uses that are marketable and financially feasible within the City’s evolving economic profile; providing economic growth and employment opportunities with the City by authorizing the development of light industrial and business park land uses at a sufficient scale to attract financially stable, long-term tenants and fund the necessary proposed critical infrastructure improvements that will serve Rio Vista and the greater Jurupa Valley community; adopting a Specific Plan that allows for a range of industrial uses, research and development uses, business park and other nonresidential uses that would encourage private capital investment sufficient to support the significant public infrastructure improvements proposed on the project site; and providing for the establishment of a mixed-use master planned community that is sensitive to the environment and is aesthetically pleasing. Therefore, this alternative would be environmentally inferior to the proposed project.

5.8 - Environmentally Superior Alternative

CEQA Guidelines Section 15126(e)(2) requires identification of an environmentally superior alternative. If the No Project Alternative is environmentally superior, CEQA requires selection of the “environmentally superior alternative other than the No Project Alternative” from among the project and the alternatives evaluated.

The qualitative environmental effects of each alternative in relation to the proposed project are summarized in Table 5-2.

Table 5-2: Summary of Alternative Impacts

Environmental Topic Area	Proposed Project	Alternative 1—No Project, No Build	Alternative 2—No Project, Develop the Approved Specific Plan	Alternative 3—Develop the 2017 Proposed Land Use Plan
Aesthetics	LTS	NI (less)	LTS (similar)	LTS (similar)
Agricultural and Forestry Resources	LTS	NI (less)	LTS (similar)	LTS (similar)
Air Quality	SU	NI (less)	SU (less)	LTSM (less)
Biological Resources	LTSM	NI (less)	LTSM (similar)	LTSM (similar)
Cultural Resources	SU	NI (less)	SU (greater)	SU (similar)
Energy	LTS	NI (less)	LTS (similar)	LTS (similar)
Geology and Soils	LTSM	NI (less)	LTSM (similar)	LTSM (similar)
Greenhouse Gas Emissions	SU	NI (less)	SU (less)	SU (less)
Hazards and Hazardous Materials	LTSM	LTS (greater)	LTSM (similar)	LTSM (similar)

Environmental Topic Area	Proposed Project	Alternative 1—No Project, No Build	Alternative 2—No Project, Develop the Approved Specific Plan	Alternative 3—Develop the 2017 Proposed Land Use Plan
Hydrology and Water Quality	LTS	NI (less)	LTS (less)	LTS (less)
Land Use and Planning	LTS	NI (less)	LTS (similar)	LTS (similar)
Minerals	LTS	NI (less)	LTS (similar)	LTS (similar)
Noise	LTSM	NI (less)	LTSM (similar)	LTSM (similar)
Population and Housing	LTS	NI (less)	LTS (similar)	LTS (similar)
Public Services	LTS	NI (less)	LTS (similar)	LTS (similar)
Recreation	LTS	NI (less)	LTS (similar)	LTS (similar)
Transportation	SU	NI (less)	LTSM (similar)	LTS (less)
Tribal Cultural Resources	SU	NI (less)	SU (greater)	SU (similar)
Utilities and Service Systems	LTSM	NI (less)	LTSM (less)	LTSM (less)
Wildfire	LTS	NI (similar)	LTS (similar)	LTS (similar)
Total Less:		18	4	5
Total Similar:		1	14	15
Total Greater:		1	2	0
Notes: LTS = Less than significant impact LTSM = Less than significant with mitigation incorporated NI = No Impact SU = Significant and unavoidable impact Source: FirstCarbon Solutions (FCS) 2022.				

CEQA Guidelines Section 15126(e)(2) requires an EIR to identify an environmentally superior alternative. If the No Project Alternative is the environmentally superior alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives.

As shown in Table 5-2 above, Alternative 1, the No Project Alternative, is considered the overall environmentally superior alternative because the significant impacts associated with implementation of the proposed project would not occur with the No Project Alternative. However, if the No Project Alternative is found to be the environmentally superior alternative, CEQA requires selection of an “environmentally superior alternative other than the No Project Alternative” from among the other alternatives.

Alternative 1 (No Project, No Build Alternative) would have lesser impacts on 18 of the 20 impact areas. This alternative would result in similar impacts to the proposed project associated with one impact area (though it would still have no impact) and greater impacts than the proposed project associated with one impact area (though it would still be less than significant).

Additionally, Alternative 1 avoids all of the project's impacts, including the project's significant unavoidable impacts associated with air quality, cultural resources, GHG, and tribal cultural resources. Because the No Project, No Build Alternative is environmentally superior, pursuant to CEQA Guidelines Section 15126(e)(2), the analysis should identify an environmentally superior alternative among the other alternatives.

The proposed project's significant unavoidable impacts are generally caused by a large amount of ground disturbance. Alternative 3, Develop the 2017 Proposed Land Use Plan Alternative, would achieve the greatest reduction in air quality impacts, and thus would yield the greatest reduction in impacts. As such, Alternative 3 is the environmentally superior alternative.

However, Alternative 3 would not facilitate the project objectives. The only project objectives that would be fully met under Alternative 3 would be to protect valuable scenic resources within large expanses of open space, thereby preserving Rio Vista's character and identity and the surrounding region; provide a potential JUSD school site to serve the needs of Rio Vista and the surrounding area, if JUSD determines it is needed to serve projected demand; and provide a community park and neighborhood parks to meet the needs of Rio Vista residents and surrounding neighborhoods.

Table 5-3 presents a comparison of the alternatives' ability to meet project objectives. As shown in the table, only the proposed project would meet all the project objectives.

Table 5-3: Summary of Alternatives' Meeting of Project Objectives

Objective	Proposed Project	Alternative 1—No Project, No Build	Alternative 2—No Project, Develop the Approved Specific Plan	Alternative 3—Develop the 2017 Proposed Land Use Plan
1. Provide a long-range comprehensive planning approach to guide the development of Rio Vista.	Yes	No	Yes	Yes
2. Assist the City in meeting its housing goals and reflect anticipated market needs and public demand, by providing a diverse range of home types with the intent to blend into the City of Jurupa Valley's rural character.	Yes	No	Yes	Yes

Objective	Proposed Project	Alternative 1—No Project, No Build	Alternative 2—No Project, Develop the Approved Specific Plan	Alternative 3—Develop the 2017 Proposed Land Use Plan
3. Anticipate market demand by providing for a mixture of residential, light industrial, and business park land uses that are marketable and financially feasible within the City's evolving economic profile.	Yes	No	No	No
4. Provide economic growth and employment opportunities with the City by authorizing the development of light industrial and business park land uses at a sufficient scale to attract financially stable, long-term tenants and fund the necessary proposed critical infrastructure improvements that will serve Rio Vista and the greater Jurupa Valley community.	Yes	No	No	No
5. Adopt a Specific Plan that allows for a range of industrial uses, research and development uses, business park and other nonresidential uses that would encourage private capital investment sufficient to support the significant public infrastructure improvements proposed on the project site.	Yes	No	No	No
6. Provide for the establishment of a mixed-use master planned community that is sensitive to the environment and is aesthetically pleasing.	Yes	No	Yes	No
7. Create a community design that complements the land's topography by respecting and preserving the geology, rock formations, and basic landforms.	Yes	No	Yes	Yes

Objective	Proposed Project	Alternative 1—No Project, No Build	Alternative 2—No Project, Develop the Approved Specific Plan	Alternative 3—Develop the 2017 Proposed Land Use Plan
8. Protect valuable scenic resources within large expanses of open space, thereby preserving Rio Vista’s character and identity and the surrounding region.	Yes	Yes	Yes	Yes
9. Provide a potential JUSD school site to serve the needs of Rio Vista and the surrounding area, if JUSD determines it is needed to serve projected demand.	Yes	No	Yes	Yes
10. Provide a community park and neighborhood parks to meet the needs of Rio Vista residents and surrounding neighborhoods.	Yes	No	Yes	Yes
11. Establish a cohesive trail system that promotes active recreational uses and provides pedestrian links between the school site, parks, residential neighborhoods, and open space.	Yes	No	No	Yes
12. Provide guidelines for architecture, landscaping, entry treatments, walls, fencing, parks, and trails that reinforce this community’s identity and its relationship to the City of Jurupa Valley.	Yes	No	NA ¹	Yes
Objectives met:	12	1	7	8
Objectives not met:	0	11	4	5
Notes: ¹ The 1992 Rio Vista Specific Plan is not available to determine whether Alternative 2 meets this objective. Source: FirstCarbon Solutions (FCS) 2022.				

5.9 - Alternatives Rejected From Further Consideration

CEQA Guidelines 15126.6(c) requires an EIR to discuss alternatives that were initially considered but rejected from further consideration.

5.9.1 - Develop According to Existing Specific Plan by Different Applicant Alternative

A Develop According to Existing Specific Plan by Different Applicant Alternative, which would include a mixed-use development, including residential, commercial, educational, and recreational land uses, was considered. There is no current proponent for development of a large-scale, mixed-use project, and it is entirely speculative that any proponent would come forward. This alternative was rejected from further consideration because it would not avoid or substantially lessen the proposed project's significant effects as it would be very similar to the proposed project. This alternative would meet several of the project objectives, although in some cases to a lesser extent than the proposed project. Based on Section 15126.6 of the CEQA Guidelines, this alternative was rejected as infeasible (as there is no current proponent) and unable to meet the objectives of the proposed project.

5.9.2 - Alternative Location Alternative

CEQA Guidelines Section 15126.6(f)(2) sets forth considerations to be used in evaluating an alternative location. The section states that the "key question" is whether any of the significant effects of the project would be avoided or substantially lessened by relocating the project. The CEQA Guidelines identify the following factors that may be taken into account when addressing the feasibility of an alternative location:

- 1) Site suitability
- 2) Economic viability
- 3) Availability of infrastructure
- 4) General Plan consistency
- 5) Other plans or regulatory limitations
- 6) Jurisdictional boundaries
- 7) Whether the project applicant can reasonably acquire, control, or otherwise have access to the alternative site

The CEQA Guidelines establishes that only locations that would accomplish this objective should be considered as alternative locations for the project.

During the alternatives review process, the City conducted a review of available land within the City limits that could support a project similar in size and type as the proposed project, and that had an appropriate General Plan land use designation and zoning classification to allow for a mixed-use development in the size and scope as the proposed project. An appropriate alternative vacant site was not identified within the city limits. Furthermore, CEQA confirms that whether a proponent can reasonably acquire, control, or otherwise have access to an alternative site is a key factor in determining whether an off-site alternative is potentially feasible (State CEQA Guidelines § 15126.6(f)). The City, as lead agency, is therefore not required to select an alternative site for the proposed project. Based on CEQA Guidelines Section 15126.6, a potential alternative location was rejected as infeasible.

CHAPTER 6: PERSONS AND ORGANIZATIONS CONSULTED/LIST OF PREPARERS

6.1 - Lead Agency

6.1.1 - City of Jurupa Valley

Community Development Department

Principal Planner..... Jim Pechous
CEQA Administrator..... Ernest Perea

6.2 - Project Sponsor and Sponsor Consultants

6.2.1 - Richland Communities

Vice President – Land Entitlement Brian Hardy

6.2.2 - EPD Solutions, Inc. (Planning and Traffic Analysis)

President/CEO Jeremy Krout
Director of Technical Services..... Meghan Macias, TE
Traffic Analysis Alex Garber

6.2.3 - L&L Environmental, Inc. (Biological Resources Assessment, Cultural Resources Assessment, and Paleontological Resources Inventory)

Principal..... Leslie Irish
Senior Biologist..... Carla Wakeman
Principal Investigator, Cultural Resources John J. Eddy, MA, RPA
Co-principal Investigator, Cultural Resources Jennifer Sanka, MA, RPA
Principal Investigator, Paleontological Resources..... Hugh Wagner, PhD

6.2.4 - Leighton and Associates, Inc. (Geotechnical Grading Plan Review)

Senior Project Geologist Steven G. Okubo, CEG 2706
Principal Engineer Jason D. Hertzberg, GE 2711

6.2.5 - Hunsaker and Associates Irvine, Inc. (Preliminary Hydrology Study and Water Quality Management Plan)

Civil Engineer Mohammed Rowther, RCE 37127
Report preparation Naila Brown

6.2.6 - Hillmann Consulting (Phase I Environmental Site Assessment)

Vice President of Operations..... Christopher W. Baker
Environmental Technician Scott Alburn

6.2.7 - Krieger and Steward Engineering Consultants (Water Supply Assessment)

Registered Professional Engineer.....David F. Scriven

6.2.8 - Urban Crossroads, Inc. (Vehicle Miles Traveled Analysis)

VMT Analysis Alex So

6.3 - City Consultants

6.3.1 - FirstCarbon Solutions (Environmental Impact Report)

Project Director Jason Brandman
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6.3.2 - Byram Archaeological Consulting, LLC (Ground Penetrating Radar Study)

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