

Draft Environmental Impact Report
SCH No. 2020040325

Stoneridge Commerce Center

Riverside County, California



Lead Agency
Riverside County
Planning Department
4080 Lemon Street, 12th Floor
Riverside, CA 92501

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Lead Agency

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Lead Agency Discretionary Permits

General Plan Amendment (GPA 190008)
Amendment No. 1 to Specific Plan No. 239 (SP 239A1)
Change of Zone (CZ 1900024)



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ACRONYMS, ABBREVIATIONS, AND UNITS OF MEASURE

<u>Acronym</u>	<u>Definition</u>
§	Section
°F	Fahrenheit
µg/m ³	Micrograms per Cubic Meter
A-1	“Light Agriculture” Riverside County zoning designation
A-1-10	“Light Agriculture – 10 Acres” Riverside County zoning designation
A-2	“Heavy Agriculture” Riverside County zoning designation
A-D	“Agriculture-Dairy” Riverside County zoning designation
A-P	“Light Agriculture with Poultry” Riverside County zoning designation
A-P Act	Alquist-Priolo Earthquake Fault Zoning Act
AB	Assembly Bill
AB 16	Assembly Bill 16
AB 32	California Global Warming Solutions Act of (2006)
AB 52	Native Americans: California Environmental Quality Act
AB 341	Mandatory Commercial Recycling Program
AB 939	California Solid Waste Integrated Waste Management Act
AB 1327	Waste Reuse and Recycling Act
AB 1358	Complete Streets Act
AB 1493	Pavely Fuel Efficiency Standards
AB 2185	Assembly Bill 2185
AB 3030	Assembly Bill 3030
ABAU	Adjusted Business As Usual
ACM	Alternative Calculation Method
ACOE	Army Corps of Engineers
ACS	American Community Survey
ADOE	Archaeological Determinations of Eligibility
ADT	Average Daily Traffic
ADT	Average Daily Trips
af	Acre-feet
af/yr	Acre Feet per Year
AG	Agriculture
AIA	Airport Influence Area
AICP	American Institute of Certified Planners
AIRFA	American Indian Religious Freedom Act
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
AMSL	Above Mean Sea Level
APS	Alternative Planning Strategy



<u>Acronym</u>	<u>Definition</u>
APN	Assessor Parcel Number
AQA	Air Quality & Greenhouse Gas Assessment
AQIA	Air Quality Impact Analysis
AQMP	Air Quality Management Plan
ARB	Air Resources Board
ASTM	American Society of Testing and Materials
BAAQMD	Bay Area Air Quality Management District
BACM	Best Available Control Measure
BLM	Bureau of Land Management
BP	Business Park
BP	Before Present
BSC	Building Standards Code
BTU	British Thermal Unit
C/V	“Citrus/Vineyard” Riverside County zoning designation
CA MUTCD	California Manual on Uniform Traffic Control Devices
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAB	California Architects Board
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod™	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CalEnviroScreen	California Communities Environmental Health Screening Tool Version 3.0
CALGAPS	California LBNL GHG Analysis of Policies Spreadsheet
CALGreen	California Green Building Standards Code
CalSTA	California State Transportation Agency
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CASSA	Criteria Area Species Survey Area
CBSC	California Building Standards Code
CBSC	California Building Standards Commission
CC	Community Center
CCR	California Code of Regulations
CCAA	California Clear Air Act
C&D	Construction and Demolition
CDC	California Department of Conservation
CDE	California Department of Education
CDFW	California Department of Fish and Wildlife



<u>Acronym</u>	<u>Definition</u>
CDPR	California Department of Pesticide Regulation
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CETAP	Community Environmental Transportation Acceptability Process
CFCs	Chlorofluorocarbons
CFR	Code of Federal Regulations
CFS	Cubic Feet per Second
CGC	California Government Code
CH ₄	Methane
CDFW	California Department of Fish and Wildlife
CHL	California Historic Landmarks
CIWMB	California Integrated Waste Management Board
CIWMP	Riverside Countywide Integrated Waste Management Plan
CLCA	California Land Conservation Act
CMP	Congestion Management Program
CMUTD	California Manual on Uniform Traffic Control Devices
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide
COA	Conditions of Approval
COG	Council of Governments
CO ₂	Carbon Dioxide
CO _{2e}	Carbon Dioxide Equivalent
COP	Conference of the Parties
COP	Community Oriented Policing
COPPS	Community Oriented and Policing Problem Solving
CPEP	Clean Power and Electrification Pathway
CPHI	California Points of Historical Interest
CPUC	California Public Utilities Commission
CR	Commercial Retail
CRA	Cultural Resources Assessment
CRA	Colorado River Aqueduct
CRHR	California Register of Historic Places
CSA	Community Service Area
CTC	California Transportation Commission
CTR	California Toxic Rule
CUP	Conditional Use Permit
CWA	Clean Water Act
CWC	California Water Code
c.y.	cubic yards
CZ	Change of Zone



<u>Acronym</u>	<u>Definition</u>
CZ 1900024	Change of Zone 1900024
dB	Decibel
dBA	A-weighted Decibels
DBESP	Determination of Biological Equivalent or Superior Preservation
DBF	deposit-based fee
DC/TP	discovery clause/treatment plan
DEH	Department of Environmental Health
DIF	Development Impact Fee
DMA	Drainage Management Areas
DMV	Department of Motor Vehicles
DOE	Determination of Eligibility
DOF	California Department of Finance
DOSH	Division of Occupational Safety and Health
DPM	Diesel Particulate Matter
DTSC	Department of Toxic Substances Control
du/ac	Dwelling Units per Acre
DWR	Riverside County Department of Waste Resources
DWR	Riverside County Department of Water Resources
EA	Environmental Assessment
EAP	Existing Plus Ambient Plus Project
EAPC	Existing Plus Ambient Plus Cumulative Plus Project
e.g.	for example
EDR	Environmental Data Resources, Inc.
EIC	Eastern Information Center
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EMFAC	EMission FAcTtor model
EMWD	Eastern Municipal Water District
EO	Executive Order
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-To-Know Act
EPS	Emission Performance Standard
ESA	Environmental Site Assessment
ETW	Equivalent Test Weight
EV	Electric Vehicle
FAA	Federal Aviation Administration
FAR	floor area ratio



<u>Acronym</u>	<u>Definition</u>
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FHWA-RD-77-108	FHWA Highway Traffic Noise Prediction Model
FHWA	Federal Highway Administration
FIMA	Federal Insurance and Mitigation Administration
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FMZ	Fuel Modification Zone
FPP	Fire Protection Plan
FPEIR	Final Program Environmental Impact Report
FRAP	Resource Assessment Program
FTA	Federal Transit Administration
FYI	for your information
GBN	Ground-Based Noise
GBV	Ground-Based Vibration
GHG	Greenhouse Gas
GLO	General Land Office
GMP	Groundwater Basin
GMZ	Groundwater Management Zone
GOBiz	Governor’s Office of Business and Economic Development
gpd	Gallons per Day
GPA	General Plan Amendment
GPA 190008	General Plan Amendment No. 190008
GPCD	Gallons per Capita per Day
GSA	Groundwater Sustainability Agencies
GSP	Groundwater Sustainability Plans
GVWR	Gross Vehicle Weight Rating
GWH	Gigawatt Hours
Ha	High Sensitivity A
Hb	High Sensitivity B
HAPs	Hazardous Air Pollutants
HBW	Home Based Work
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HD	heavy-duty
HHD	Heavy-Heavy Duty Trucks
HI	Hazard Index
HMBEP	Hazardous Materials Business Emergency Plan
HMTA	Hazardous Materials Transportation Act



<u>Acronym</u>	<u>Definition</u>
HMTAUSA	Hazardous Materials Transportation Uniform Safety Act
HOV	High-Occupancy Vehicle
HPDF	Historic Property Data File
HPS	High Pressure Sodium
HRA	Health Risk Assessment
HSC	Health and Safety Code
HSWA	Federal Hazardous and Solid Waste Amendments
HUD	Department of Housing and Urban Development
HWCL	Hazardous Waste Control Law
I	Interstate
I-215	Interstate 215
I-15	Interstate 15
i.e.	that is
IA	Implementing Agreement
ICAO	International Civil Aviation Organization
IEPR	Integrative Energy Policy Report
In/sec	Inches Per Second
IRP	Integrated Resource Planning
ISO	Independent Service Operator
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ITE	Institute of Transportation Engineers
ITIP	Interregional Transportation Improvement Plan
IWMA	Integrated Waste Management Act
IWMP	Integrated Waste Management Plan
JPA	Joint Powers Authority
LACM	Museum of Los Angeles County
LBNL	Lawrence Berkeley National Laboratory
LDA	light-duty auto
LCFS	low carbon fuel standard
LDT1	Light-Duty Trucks with an ETW of less than or equal to 3,750 pounds
LDT2	Light-Duty Trucks with an ETW between 3,751 and 5,750 pounds
LEA	Lead Enforcement Agency
Leq	equivalent continuous sound level
LI	“Light Industrial” SP 293 land use designation
Lmax	maximum noise level
LNAP	Lakeview/Nuevo Area Plan
LOS	Level of Service
LRA	Local Responsibility Areas



<u>Acronym</u>	<u>Definition</u>
LSEs	Load-Serving Entities
LSTs	Localized Significance Thresholds
LTF	Local Transportation Fund
LTOs	Licensed Timber Operators
LUST	Leaking Underground Storage Tank
MARB	March Air Reserve Base
MCY	Motorcycles
MCP	Mid-County Parkway
MD	medium-duty
MDP	Master Drainage Plan
MDR	“Medium Density Residential” SP 293 land use designation
MDV	Medium-Duty Trucks
MGD	million gallons per day
MHDR	“Medium High Density Residential” SP 293 land use designation
MHDT	Medium-Heavy Duty Trucks
MICR	Maximum Individual Cancer Risk
MLD	Most Likely Descendent
MMTs	million metric tons
MMTCO _{2e}	million metric tons of carbon dioxide equivalent
MMTCO _{2e} /yr	million metric tons of carbon dioxide equivalent per year
Mph	Miles Per Hour
MPO	Metropolitan Planning Organization
MRZ-3	Mineral Resource Zone 3
MS4	Municipal Separate Storm Sewer System
MSHCP	Multiple Species Habitat Conservation Plan
MSR	million solar roofs
MVTS	Moreno Valley Transfer Station
MWD	Metropolitan Water District
NAHC	Native American Heritage Commission
NAGPRA	National American Graves Protection and Reparation Act
NAAQS	National Ambient Air Quality Standards
NDA	No Development Alternative
NDC	nationally determined contributions
NEPSSA	Narrow Endemic Plant Species Survey Area
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFIP	National Flood Insurance Program
NHLs	National Historic Landmarks
NHPA	National Historic Preservation Act
NIOSH	National Institute for Occupational Safety and Health



<u>Acronym</u>	<u>Definition</u>
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
N ₂ O	Nitrous Oxide
NOAA	National Oceanic and Atmospheric Administration
NOP	Notice of Preparation
NPA	No Project Alternative
NPDES	National Pollutant Discharge Elimination System
NPRM	Notice of Proposed Rule Making
NPS	National Park Service
NPS	non-point source
NRHP	National Register of Historic Places
NTR	National Toxic Rule
NUSD	Nuview Union School District
NVIA	Noise and Vibration Impact Assessment
O ₃	Ozone
OAG	Office of Attorney General
OAL	Office of Administrative Law
OBUS	Other Buses
OEHHA	Office of Environmental Health Hazard Assessment
Off-Site CRA	Off-site impact areas
OHP	Office of Historic Preservation
OIH	Office of Industrial Hygiene
OPR	Office of Planning and Research
OS-C	“Open-Space Conservation” SP-293 land use designation
OS-CH	Open Space – Conservation Habitat
OS-R	“Open-Space Recreation” SP 293 land use designation
OS-W	“Open-Space Water” SP 293 land use designation
OSHA	Occupational Safety and Health Assessment
PA	Public Address
PCBs	Polychlorinated biphenyls
PCEs	Passenger Car Equivalents
PeMS	Caltrans’ Performance System Website
PF	“Public Facilities” SP 293 land use designation
PG&E	Pacific Gas and Electric
PHF	peak hour factor
p.m.	Post Meridiem (between the hours of noon and midnight)
PM	Particulate Matter
PM _{2.5}	Fine Particulate Matter (2.5 microns or smaller)
PM ₁₀	Fine Particulate Matter (10 microns or smaller)



<u>Acronym</u>	<u>Definition</u>
POUs	Publicly-Owned Electric Utilities
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
PRIMP	Paleontological Resources Impact Mitigation Program
PRPA	Paleontological Resources Preservation Act
PUC	Public Utilities Code
PUHSD	Perris Union High School District
PVRWRF	Perris Valley Regional Water Reclamation Facility
PWQMP	Preliminary Water Quality Management Plan
Qvof	Quaternary Very Old Fan Deposits
R-A-5	Residential Agricultural, 5-acre Minimum Lot Size
R-R	“Rural Residential” Riverside County Zoning Designation
RC-LDR	Rural Community – Low Density Residential
RCA	Western Riverside County Regional Conservation Authority
RCALUC	Riverside County Airport Land Use Commission
RCCDR	Riverside County Center for Demographic Research
RCDWR	Riverside County Department of Waste Resources
RCFCWCD	Riverside County Flood Control and Water Conservation District
RCFD	Riverside County Fire Department
RCHCA	Riverside County Habitat Conservation Agency
RCSD	Riverside County Sheriff’s Department
RCIT	Riverside County Information Technology
RCPG	Regional Comprehensive Plan and Guide
RCPLS	Riverside County Public Library System
RCRA	Resource Conservation and Recovery Act
RCTC	Riverside County Transportation Commission
RCWD	Rancho California Water District
REC	Recognized environmental Concerns
REL	Reference Exposure Level
RHNA	Regional Housing Needs Assessment
RivTAM	Riverside Transportation Analysis Model
RMM	Riverside Municipal Museum
RMS	root mean square
ROGs	Reactive Organic Gasses
ROW	Right-of-Way
RPFs	Registered Professional Foresters
RPS	Renewable Portfolio Standards



<u>Acronym</u>	<u>Definition</u>
RSHA	Regional System of Highways and Arterials
RTA	Riverside Transit Agency
RTIP	Regional Transportation Improvement Plan
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
RWRF	Regional Water Reclamation Facility
SF/s.f.	square foot or square feet
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SB 18	Senate Bill 18
SB 1	Road Repair and Accountability Act of 2017
SB 32	Statewide for California to reduce GHG emissions
SB 50	Senate Bill 50
SB 221	Senate Bill 221
SB 325	Transportation Development Act (Mills-Alquist-Deddeh Act)
SB 375	Senate Bill 375
SB 350	Clean Energy and Pollution Reduction Act of 2015
SB 610	Senate Bill 610
SB 743	Senate Bill 743, Transportation Impacts
SB 1000	Senate Bill 1000
SB 1368	CPUC adopt a GHG emission performance standard
SB 1078	California Renewables Portfolio Standard Program
SBCM	San Bernardino County Museum
SCAB	South Coast Air Basin
SCAG	Sothern California Association of Governments
SCAQMD	Southern Coast Air Quality Management District
SCE	Southern California Edison
SCH	California State Clearinghouse (Office of Planning and Research)
SCS	Sustainable Communities Strategy
SDG&E	San Diego Gas and Electric
SDNHM	San Diego Natural History Museum
SDWA	Safe Drinking Water Act
SED	Socio-Economic Data
SFP	School Facilities Program
SGC	Strategic Growth Council
SGMA	Sustainable groundwater management act
SHMA	Seismic Hazards Mapping Act
SHPO	State Historic Preservation Officers



<u>Acronym</u>	<u>Definition</u>
SHRC	State Historical Resources Commission
SHS	State Highway System
SHWS	State Hazardous Waste Sites
SIPs	State Implementation Plans
SJVAPCD	San Joaquin Valley Air Pollution Control District
SKR HCP	Stephens' Kangaroo Rat Habitat Conservation Plan
SLPS	short-lived climate pollutant strategy
SMARA	Surface Mining and Reclamation Act of 1975
SNUR	Significant New Use Rule
SoCalGas	Southern California Gas
SOC	Statement of Overriding Conditions
SoCAB	South Coast Air Basin
SO ₂	Sulfur Dioxide
SO _x	Sulfur Oxide
SP	Specific Plan
SP Zone	Specific Plan Zone
SP 239	Stoneridge Specific Plan No. 239
SP 239A1	Stoneridge Specific Plan No. 239 Amendment No. 1
SP 246	McCanna Hills Specific Plan No. 246
SP 293	Winchester Hills Specific Plan No. 293
SR	State Route
SR-74	State Route 74
SR-79	State Route 79
SRA	Source Receptor Area
SRA	State Responsibility Areas
SRRE	Source Reduction and Recycling Elements
STA	State Transit Assistance
STC	Sound Transmission Class
STIP	Statewide Transportation Improvement Program
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Regional Control Board
TAC	Toxic Air Contaminants
TAZ	traffic analysis zones
TCL	Traditional Cultural Landscape
TDA	Transportation Development Act
TDM	Transportation Demand Management
THP	Timber Harvesting Plan
TIA	Traffic Impact Analysis
TPA	Transit Priority Area



<u>Acronym</u>	<u>Definition</u>
TPD	Tons per Day
TPY	Tons per Year
TTM	Tentative Tract Map
TUMF	Transportation Uniform Mitigation Fee
UCR	University of California, Riverside
UNFCCC	United Nations Framework Convention on Climate Change
U.S.	United States
USDA	United States Department of Agriculture
USEPA	United States of Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UWMP	Urban Water Management Plan
UWMP Act	Urban Water Management Planning Act
UWMP-MWD	MWD’s 2015 Urban Water Management Plan
VHDR	“Very High Density Residential” SP 293 land use designation
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	Vehicle Miles Traveled
VOCs	Volatile Organic Compounds
VVUSD	Val Verde Unified School District
W-1	Watercourse, Watershed & Conservation Areas
W-2	Controlled Development Areas
WDR	Water discharge report/ requirements
WMI	Watershed Management Initiative
WMIE	Waste Management Inc. of the Inland Empire
WQMP	Water Quality Management Plan
WRP	Waste Recycling Plan
WRRRA	Waste Reuse and Recycling Act
WRCOG	Western Riverside Council of Governments
WSA	Water Supply Assessment
WSC	Western Science Center
WSCP	Water Shortage Contingency Plan
WSP	High-cube Warehouse Trip Generation Study
WUI	Wildland-Urban Interface
ZE/NZE	zero- and near-zero emission
ZORI	Zones of Required Investigation



S.0 EXECUTIVE SUMMARY

S.1 INTRODUCTION

The California Environmental Quality Act (CEQA), Public Resources Code Section 21000, *et seq.* requires that before a public agency makes a decision to approve a project that could have one or more adverse effects on the physical environment, the agency must inform itself about the project’s potential environmental impacts, give the public an opportunity to comment on the environmental issues, and take feasible measures to avoid or reduce potential harm to the physical environment.

This Draft Program Environmental Impact Report (EIR), having California State Clearinghouse (SCH) No. 2020040325, was prepared in accordance with State CEQA Guidelines Article 9, Sections 15120-15132 to evaluate the potential environmental impacts associated with planning, constructing, and operating the proposed Project, which consists of General Plan Amendment No. 190008 (GPA 190008), Amendment No. 1 to Specific Plan No. 239 (SP 239A1), and Change of Zone No. 1900024 (CZ 1900024), which are collectively referred to herein as the “Project” or “proposed Project.” This Program EIR does not recommend approval or denial of the proposed Project; rather, this Program EIR is a source of factual information regarding potential impacts that the Project may cause to the physical environment. The Draft Program EIR will be available for public review for a minimum period of 45 days. After consideration of public comment, the County of Riverside will consider certifying the Final EIR and adopting required findings.

This Executive Summary complies with State CEQA Guidelines Section 15123, “Summary.” This Program EIR includes a description of the proposed Project and evaluates the physical environmental effects that could result from Project implementation. The County of Riverside determined that the scope of this EIR should cover 21 subject areas. The scope includes all of the subject areas listed in Appendix G to the State CEQA Guidelines and in consideration of public comment received by the County in response to this EIR’s Notice of Preparation (NOP). The NOP, and written comments received by the County in response to the NOP, are attached to this EIR as *Technical Appendix A*. In consideration of public comment on the NOP, the 21 environmental subject areas that could be reasonably and significantly affected by planning, constructing, and/or operating the proposed Project are analyzed herein, including:

- | | |
|---------------------------------------|-----------------------------------|
| 1. Aesthetics | 12. Mineral Resources |
| 2. Agriculture and Forestry Resources | 13. Noise |
| 3. Air Quality | 14. Paleontological Resources |
| 4. Biological Resources | 15. Population and Housing |
| 5. Cultural Resources | 16. Public Services |
| 6. Energy | 17. Recreation |
| 7. Geology and Soils | 18. Transportation |
| 8. Greenhouse Gas Emissions | 19. Tribal Cultural Resources |
| 9. Hazards and Hazardous Materials | 20. Utilities and Service Systems |
| 10. Hydrology and Water Quality | 21. Wildfire |
| 11. Land Use and Planning | |



Refer to EIR Section 4.0, *Environmental Analysis*, for a full account and analysis of the subject matters listed above. For each of the aforementioned subject areas, this EIR describes: 1) the physical conditions that existed at the approximate time this EIR's NOP was filed with the California State Clearinghouse (April 27, 2020); 2) discloses the type and magnitude of potential environmental impacts resulting from Project planning, construction, and operation; and 3) if warranted, recommends feasible mitigation measures that would reduce or avoid significant adverse environmental impacts that the proposed Project may cause. A summary of the proposed Project's significant environmental impacts and the mitigation measures imposed by the County of Riverside on the Project to lessen or avoid those impacts is included in this Executive Summary as Table S-1, *Summary of Impacts, Mitigation Measures, and Conclusions*. The County of Riverside applies mitigation measures that it determines: 1) are feasible and practical for project applicants to implement; 2) are feasible and practical for the County of Riverside to monitor and enforce; 3) are legal for the County to impose; 4) have an essential nexus to the Project's impacts; and 5) would result in a benefit to the physical environment. CEQA does not require the Lead Agency to impose mitigation measures that are duplicative of mandatory regulatory requirements.

This EIR also discusses alternatives to the proposed Project. Alternatives are described that would attain most of the Project's objectives while avoiding or substantially lessening the proposed Project's significant adverse environmental effects. A full discussion of Project alternatives is found in Section 6.0, *Alternatives*.

S.2 PROJECT SYNOPSIS

S.2.1 LOCATION AND REGIONAL SETTING

The 582.6-acre Project site is located within the western portion of unincorporated Riverside County, California. EIR Figure 2-1, *Regional Map*, depicts the Project site's location within the regional vicinity. As shown, Riverside County abuts San Bernardino County to the north; Orange County to the west; and San Diego and Imperial Counties to the south. The Project site is located within the western region of unincorporated Riverside County, California. As depicted on EIR Figure 2-2, *Vicinity Map*, the Project site is located in the Nuevo community, south of Lake Perris, east of the City of Perris, and north of the City of Menifee. More specifically, and as depicted on Figure 2-2, the 582.6-acre Project site is located south of the Ramona Expressway, north of Nuevo Road, east of Foothill Drive, and west of the future extension of Menifee Road. Access to the Project site is currently available from the Ramona Expressway and Nuevo Road. Interstate 215 (I-215) is located approximately 2.6 miles southwest of the Project site, State Route 74/Ethanac Road occurs approximately 4.0 miles to the south, while State Route 79 (SR 79) occurs approximately 8.8 miles east of the Project site. (Google Earth, 2018) The Project site includes Assessor Parcel Numbers (APNs) 307-070-003, 307-080-(005, 006, 008), 307-090-(001, 002, 004, 005, 006), 307-100-(001, 003, 004, 005), 307-110-(003, 007, 008), 307-220-001, and 307-230-(019, 020). The 582.6-acre Project site occurs within Sections 14 and 23, Township 4 South, Range 3 West, San Bernardino Baseline and Meridian.

S.2.2 PROJECT OBJECTIVES

The fundamental purpose and goal of the Stoneridge Commerce Center Project is to accomplish the orderly development of light industrial, business park, and commercial retail land uses to increase employment opportunities in a housing rich portion of unincorporated Riverside County. This underlying purpose aligns



with various aspects of the Southern California Association of Governments' (SCAG's) draft 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) primarily related to accommodating goods movement industries and balancing job and housing opportunities in local areas to reduce long commutes from home to work, while also complying with the SCAG's adopted 2016 RTP/SCS and the SCAG draft Connect SoCal (2020-2045 RTP/SCS). SCAG identifies the Inland Empire as a housing rich area and coastal communities as job rich areas and is striving in their policies to achieve more equal balances locally. The Project would achieve its underlying purpose and goal through the following objectives:

- A. To efficiently develop an underutilized property with a complementary mix of employment-generating land uses, including light industrial, business park, and commercial retail land uses in an area predominately composed of housing.
- B. To assist the SCAG region in achieving jobs/housing balance region-wide and the local area by providing additional job opportunities in a housing rich area of the Inland Empire.
- C. To attract new businesses to Riverside County and thereby provide a more equal jobs-housing balance in the Inland Empire region that will reduce the need for members of the local workforce to commute outside the area for employment.
- D. To establish development standards and design guidelines to ensure future development on site complements other existing and planned uses in the immediate vicinity and minimizes conflicts with other nearby land uses.
- E. To establish a unified thematic concept for future development through design elements such as architecture, monumentation, theme walls, and landscaping using a long-range comprehensive planning approach that cannot be accomplished on a parcel-by-parcel basis.
- F. To anticipate market demand by providing a mixture of light industrial, business park, and commercial retail land uses in a master-planned commerce center that would be marketable within the evolving economic profile of western Riverside County.
- G. To develop a mix of light industrial, business park, and commercial retail uses in unincorporated Riverside County that are designed to meet contemporary industry standards, can accommodate a wide variety of users, and are economically competitive with similar uses in the local area and region.
- H. To develop a property that has access to available infrastructure, including roads and utilities.

S.2.3 PROJECT SUMMARY DESCRIPTION

The County of Riverside is the Lead Agency for the proposed Project, under whose authority this Program EIR has been prepared. For purposes of this Program EIR, the term "Project" refers to the Project's discretionary applications for the first amendment to the Stoneridge Specific Plan No. 239 (SP 239A1), a General Plan Amendment (GPA 190008), and Change of Zone (CZ 1900024); future implementing



discretionary actions required to implement the Project (e.g., tentative tract maps, plot plans, etc.); and all of the activities associated with Project implementation including planning, construction, and long-term operations.

The Project as evaluated herein consists of two separate land use alternatives for the 582.6-acre site, both of which are evaluated herein at an equal level of detail. Two alternatives are considered because the Riverside County Transportation Commission (RCTC) is currently planning for construction of a regional transportation facility, the “Mid-County Parkway” (MCP). A portion of the MCP is currently planned to traverse the northwestern portions of the Project site. It is currently not known when or if the MCP would be constructed by RCTC; thus, for purposes of evaluation in this EIR, the “Primary Land Use Plan” anticipates that the MCP would not be constructed through the property, in which case the site would be developed with up to 388.5 acres of Light Industrial land uses, 49.1 acres of Business Park land uses, 8.0 acres of Commercial Retail, Open Space – Conservation on 18.1 acres, Open Space – Conservation Habitat on 81.6 acres, and major roadways on 37.3 acres. The “Alternative Land Use Plan” anticipates that the MCP would be constructed through the northwest portions of the site, in which case the site would be developed with 388.5 acres of Light Industrial land uses, 51.5 acres of Business Park land uses, 8.5 acres of Commercial Retail land uses, 18.1 acres of Open Space – Conservation, 81.6 acres of Open Space – Conservation Habitat, and 34.4 acres of major roadways. However, the “Primary Land Use Plan” is the preferred and primary land use plan for the proposed Project. The “Alternative Land Use Plan” only would be implemented in the event that the RCTC constructs the MCP through the northernmost portions of the Project site.

Specifically, the Project Applicant is requesting the following governmental approvals from the County of Riverside to implement the Project (refer to Chapter 3.0, *Project Description*, for a complete description of the Project’s construction and operational characteristics):

- **General Plan Amendment No. 190008 (GPA 190008)** is proposed to modify the approved land uses for the Project site in order to reflect changes proposed as part of proposed Amendment No. 1 to the Stoneridge Commerce Center Specific Plan No. 239 (SP 239A1), which is discussed below. The adopted General Plan designates the Project site for “Community Center (CC),” “Commercial Retail (CR),” “Medium Density Residential (MDR),” “Medium-High Density Residential (MHDR),” “Very High Density Residential (VHDR),” “Open Space-Recreation,” “Open Space – Conservation (OS-C),” “Open Space – Conservation Habitat (OS-CH),” and “Open Space – Water (OS-W)” land uses. With approval of GPA 190008, the Project site would be designated for “Light Industrial (LI),” “Business Park (BP),” CR, OS-C and OS-CH land uses in a manner that corresponds to the land use designations proposed for the site as part of SP 239A1 (as discussed below).
- **Amendment No. 1 to Specific Plan No. 239 (SP 239A1)** is proposed to modify the allowed land uses and planning area boundaries within the Stoneridge Specific Plan (SP 239). Under the Primary Land Use Plan, the 582.6-acre site would be designated for “Light Industrial” land uses on 388.5 acres, “Business Park” land uses on 49.1 acres, “Commercial Retail” on 8.0 acres, “Open Space – Conservation” on 18.1 acres, “Open Space – Conservation Habitat” on 81.6 acres, and major roadways on 37.3 acres. As proposed by SP 239A1, areas designated for “Light Industrial” and “Business Park”



uses may be developed with a Floor Area Ratio (FAR) up to 0.50, while areas designated for “Commercial Retail” uses may be developed with a FAR up to 0.35. Accordingly, implementation of the Primary Land Use Plan would allow for up to 8,461,530 square feet (s.f.) of light industrial building area, up to 1,069,398 s.f. of business park building area, and up to 121,968 s.f. of commercial retail building area; however, for purposes of analysis throughout this EIR, it is assumed that the Primary Land Use Plan would result in up to 8,476,776 s.f. of light industrial building area. Under the Alternative Land Use Plan, the 582.6-acre site would be designated for “Light Industrial” land uses on 389.2 acres, “Business Park” land uses on 51.5 acres, “Commercial Retail” on 8.5 acres, “Open Space – Conservation” on 18.1 acres, “Open Space – Conservation Habitat” on 81.6 acres, and major roadways on 34.4 acres. It should be noted that approximately 8.5 acres of areas proposed for “Business Park” land uses and approximately 0.2 acre of areas proposed for “Commercial Retail” land uses would occur within the right-of-way of the Mid-County Parkway (MCP), and thus would not be developed with any buildings under the Alternative Land Use Plan. Based on the proposed allowable FAR of 0.5 for the proposed “Light Industrial” and “Business Park” land uses and allowable FAR of 0.35 for “Commercial Retail” land uses, and excluding areas within the planned alignment of the MCP, the Alternative Land Use Plan would allow for up to 8,461,530 s.f. of light industrial building area, up to 936,540 s.f. of business park building area, and up to 126,542 s.f. of commercial retail building area; however, for purposes of analysis throughout this EIR, it is assumed that the Alternative Land Use Plan would result in up to 8,476,776 s.f. of light industrial building area.

- **Change of Zone No. 1900024 (CZ 1900024)** is proposed to modify the Planning Area boundaries, permitted uses, and development standards throughout the 582.6-acre site in order to reflect the land uses proposed as part of SP 239A1, as described above.

S.3 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

State CEQA Guidelines § 15123(b)(2) requires that areas of controversy known to the Lead Agency (Riverside County) be identified in the Executive Summary. Substantive issues raised in response to the NOP are summarized in Table 1-1 in EIR Section 1.0. The purpose of this table is to present the primary environmental issues of concern raised by public agencies and the general public during the NOP review period. The table is not intended to list every comment received by the County during the NOP review period. Regardless of whether or not a comment is listed in the table, all applicable comments received in responses to the NOP are addressed in this Program EIR. Based on comments received during the NOP review period, the issue of land use consistency was raised by the City of Perris and is addressed in EIR Subsection 4.11, *Land Use and Planning*. No other areas of controversy were identified as part of the NOP process, beyond comments regarding the Project’s potential environmental effects.

S.4 PROJECT ALTERNATIVES

S.4.1 NO DEVELOPMENT ALTERNATIVE

The NDA considers no development/disturbance on the Project site beyond that which occurs under existing conditions. As such, the Project site would continue to consist of 582.6 acres of vacant and undeveloped land.



Under the NDA, no improvements would be made to the Project site and none of the Project’s roadway, utility, or other infrastructure improvements would occur. This Alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would leave the Project site in its existing condition.

S.4.2 NO PROJECT (EXISTING GENERAL PLAN) ALTERNATIVE

The No Project (Existing General Plan) Alternative, herein referred to as the “No Project Alternative (NPA),” assumes development of the 582.6-acre property in accordance with the site’s existing General Plan and Specific Plan land uses. Thus, under this alternative, and consistent with the adopted Stoneridge Specific Plan No. 239 (SP 239) for the portions of the adopted SP 239 that occur within the Project site, the Project site would be developed with approximately 671 “Medium Residential (2-5 du/ac)” dwelling units on approximately 172.9 acres; approximately 903 “Medium-High Residential (5-8 du/ac)” dwelling units on approximately 185.0 acres; approximately 446 “Very High Residential (14-20 du/ac)” dwelling units on approximately 30.0 acres; “Commercial” uses on approximately 68.1 acres, which also would allow for up to 153 dwelling units in Planning Area 1; “Parks” on approximately 33.7 acres; “Open Space – Natural” on approximately 20.8 acres; “Open Space – Recreational” on approximately 8.6 acres; three planning areas designated for “Schools” on approximately 27.0 acres; and approximately 36.5 acres of major circulation facilities. This Alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would allow for buildout of the Project site in accordance with the site’s existing General Plan and SP 239 land use designations.

S.4.3 REDUCED PROJECT ALTERNATIVE

The Reduced Project Alternative (RPA) considers development of the Project site with similar uses as the proposed Project, but at a much lower intensity. Specifically, under the proposed Project, Light Industrial and Business Park land uses may be developed at a Floor Area Ratio (FAR) up to 0.50, while Commercial Retail land uses can be developed at a FAR up to 0.35. Under the RPA, development of Light Industrial and Business Park land uses would be restricted to a maximum FAR of 0.35, while development in the Commercial Retail portions of the site would be limited to a maximum FAR of 0.25. For purposes of evaluation of the RPA, it is assumed that the MCP would not be in place under long-term conditions, thereby allowing for more development on site than would occur if the MCP were to be implemented through the northern portions of the Project site. The RPA would allow for a maximum of 5,923,071 s.f. of light industrial building area, 748,579 s.f. of business park building area, and 87,120 s.f. of commercial retail building area. Thus, implementation of the RPA would result in a reduction of building area allowed on site by approximately 30% as compared to the proposed Project. Under the RPA, it is assumed that all areas proposed for grading and development both on and off site would be the same as for the proposed Project. This alternative was selected by the Lead Agency in order to evaluate an alternative that would reduce the Project’s significant and unavoidable impacts to aesthetics, air quality, noise, and transportation.

S.5 EIR PROCESS

As a first step in the CEQA compliance process, Riverside County determined that the proposed Project likely would result in significant environmental effects, and distributed a Notice of Preparation (NOP) for public



review on April 27, 2020. An Initial Study was not prepared for the Project, and thus this EIR evaluates all of the environmental subjects listed in Appendix G to the State CEQA Guidelines, as set forth in the County’s standard Environmental Assessment Checklist form. Because the Project would require future discretionary approvals (e.g., tentative tract maps, plot plans, etc.), this EIR has been prepared as a Program EIR pursuant to State CEQA Guidelines § 15168. As described by State CEQA Guidelines § 15168(a), a Program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either: 1) geographically; 2) are logical parts [*sic*] in the chain of contemplated actions; 3) in connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or 4) as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways. For purposes of discussion herein, the terms “EIR” and “Program EIR” are used interchangeably.

This Program EIR represents the independent judgment of Riverside County (as the Lead Agency) and evaluates the physical environmental effects that could result from constructing and operating the proposed Project. Acting as Lead Agency, the County of Riverside will consider the following issues regarding the proposed Project: a) evaluation of this Program EIR to determine if the physical environmental impacts are adequately disclosed; b) assessment of the adequacy and feasibility of identified mitigation measures and the potential addition, modification to, or deletion of mitigation measures, standard conditions of approval, or Project design features; c) consideration of alternatives to the Project that would reduce or eliminate significant environmental effects of the Project; and, if necessary, d) consideration of Project benefits that override the Project’s unavoidable and unmitigable significant effects on the environment.

Before taking action to approve the Project, the County of Riverside (serving as the Lead Agency) has the obligation to: (1) ensure this Program EIR has been completed in accordance with CEQA; (2) review and consider the information contained in this Program EIR as part of its decision making process; (3) make a statement that this Program EIR reflects Riverside County’s independent judgment; (4) ensure that all significant effects on the environment are avoided or substantially lessened where feasible; and, if necessary (5) make written findings for each unavoidable significant environmental effect stating the reasons why mitigation measures or project alternatives identified in this Program EIR are infeasible and citing the specific benefits of the proposed Project that outweigh its unavoidable adverse effects (State CEQA Guidelines §§ 15090-15093).

S.6 SUMMARY OF IMPACTS, MITIGATION MEASURES AND CONCLUSIONS

S.6.1 EFFECTS FOUND NOT TO BE SIGNIFICANT

An Initial Study was not prepared for the proposed Project, and thus this EIR evaluates all of the environmental subjects listed in Appendix G to the State CEQA Guidelines, as set forth in the County’s standard Environmental Assessment Checklist form. There were no issues found to be not significant as a result of the Project’s NOP process. Refer to EIR *Technical Appendix A* for a copy of the Project’s NOP.



S.6.2 IMPACTS OF THE PROPOSED PROJECT

Table S-1, *Summary of Impacts, Mitigation Measures, and Conclusions*, provides a summary of the proposed Project's environmental impacts, as required by State CEQA Guidelines § 15123(a). Also presented are the mitigation measures recommended by Riverside County to further avoid adverse environmental impacts or to reduce their level of significance. After the application of all feasible mitigation measures, the Project would result in significant and unavoidable environmental effects, as summarized below. It should be noted that the Project's significant and unavoidable environmental effects would occur with implementation of either the Primary Land Use Plan or Alternative Land Use Plan, except as otherwise noted below.

- Aesthetics: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. The Project vicinity exhibits a rural and agricultural character, and the development of the Project site with light industrial, business park, and commercial retail land uses would represent a substantial change to the existing visual character and quality of public views of the site and its surroundings. Although the Project would be required to comply with the design guidelines and development standards of proposed SP 239A1, the SP 239A1 zoning ordinance, and all other applicable requirements of the Riverside County Municipal Code, which would serve to ensure that the Project site is developed in a manner that is not visually offensive, mitigation measures are not available to address the Project's significant impacts due to substantial changes to the existing visual character and quality of public views of the site and its surroundings. Impacts would be significant and unavoidable on both a direct and cumulatively-considerable basis.
- Agriculture and Forestry Resources: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. Implementation of the proposed Project would result in direct and indirect permanent impacts due to the conversion of approximately 297.8 acres of "Prime Farmland," approximately 24.6 acres of "Farmland of Statewide Importance," approximately 4.0 acres of "Unique Farmland," and approximately 180.3 acres of "Farmland of Local Importance" to non-agricultural use. Feasible mitigation is not available to reduce these impacts to below a level of significance; thus, Project impacts to Farmland located on site would be significant and unavoidable on both a direct and cumulatively-considerable basis.
- Air Quality: Significant and Unavoidable Direct and Cumulatively-Considerable Impacts. Long-term operations of the proposed Project would result in daily emissions of NO_x and ROG_s that exceed the SCAQMD Regional Thresholds. Although mitigation measures are identified to reduce impacts to the maximum feasible extent, a majority of emissions associated with Project operations would result from vehicular traffic, and in particular truck traffic. Mobile source emissions are regulated by standards imposed by federal and State agencies, not local governments; thus, feasible mitigation is not available to reduce the Project's emissions of NO_x and ROG to below a level of significance. Impacts would be significant and unavoidable on both a direct and cumulatively-considerable basis. Additionally, because Project operational-related emissions would exceed the SCAQMD Regional Thresholds and because the Project's proposed land uses are not consistent with the growth forecasts included in the 2016 SCAQMD AQMP, the Project also would result in a significant and unavoidable direct and cumulatively-considerable impact due to a conflict with the 2016 SCAQMD AQMP.



- Noise: Significant and Unavoidable Direct Impact. Implementation of the Project would result in significant and unavoidable traffic-related noise impacts affecting existing residential uses along the segment of Nuevo Road between the southern Project entrance and Dunlap Drive under Existing plus Ambient plus Project (EAP) 2030 conditions. Due to existing driveway access points along this roadway segment, feasible mitigation measures are not available to reduce the Project's traffic-related noise impacts to this segment of Nuevo Road to below a level of significance, as it would not be feasible to fully obstruct the line-of-sight between these existing residences and Project-related traffic along Nuevo Road. Accordingly, Project traffic-related noise impacts along the segment of Nuevo Drive between Antelope Road and Dunlap Drive would be significant and unavoidable under EAP 2030 conditions.
- Transportation: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. Project-generated VMT per employee for the Project's proposed light industrial and business park uses would exceed the existing county-wide average VMT per employee threshold by 26.22%, while near-term operation of the Project's retail component was found to result in a net increase in the County's total VMT. VMT reduction measures in areas that are characteristically suburban in context are limited to a maximum VMT reduction of 15%. This maximum reduction for cross-category transportation-related mitigation measures of 15% for suburban settings is also noted in the County Guidelines. Therefore, even with the implementation of all feasible VMT reduction measures, Project-generated VMT cannot be reduced to a level of less than significant.



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

Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
4.1 Aesthetics				
<p>Threshold a.: The Project site is not located within the viewshed of any officially designated State or County scenic highways or State-Eligible scenic highways. While the Project would be visible from Ramona Expressway, which is designated as a County-Eligible scenic highway, development on site would be required to comply with the development standards and design guidelines included as part of proposed SP 239A1, which have been designed to ensure that the property is developed in a manner that is not aesthetically offensive. As such, Project impacts to scenic highways would be less than significant.</p> <p>Thresholds b. and c.: The Project vicinity exhibits a rural and agricultural character, and the development of the Project site with light industrial, business park, and commercial retail land uses would represent a substantial change to the existing visual character and quality of public views of the site and its surroundings. Although the Project would be required to comply with the design guidelines and development standards of proposed SP 239A1, the SP 239A1 zoning ordinance, and all other applicable requirements of the Riverside County Municipal Code, which would serve to ensure that the Project site is developed in a manner that is not visually offensive, mitigation measures are not available to address the Project's significant impacts due to substantial changes to the existing visual character and quality of public views of the site and its surroundings. Impacts would be significant and unavoidable.</p> <p>Threshold d.: Project compliance with the provisions of County Ordinance No. 655 would be assured through future County review of building permits. Impacts due to a conflict with Ordinance No. 655 would be less than significant.</p>	<p>Less than Significant</p> <p>Significant and Unavoidable</p> <p>Less than Significant</p>	<p>CRDR 4.1-1 The Project is required to comply with Riverside County Ordinance No. 655, which is intended to restrict the permitted use of certain light fixtures emitting light into the night sky which could have a detrimental effect on astronomical observation and research. Ordinance No. 655 sets forth requirements for lamp source and shielding of light emissions for outdoor fixtures to reduce "skyglow" or light pollution that affects day or nighttime views from the Mount Palomar Observatory (located approximately 35.2 miles south of the Project site in northern San Diego County). Pursuant to the requirements of Ordinance No. 655, all lighting shall consist of low-pressure sodium lighting, or other lamp types that emit 4050 lumens or less. If light fixtures are proposed above 4050 lumens, then the lighting shall be fully shielded in conformance with the requirements of Ordinance No. 655.</p> <p>CRDR 4.1-2 The Project is required to comply with Riverside County Ordinance No. 915, which is intended to provide minimum requirements for outdoor lighting in order to reduce light trespass. Ordinance No. 915 provides regulations on adequate lighting shielding, glare, and light trespass in order to ensure all development in Riverside County installs lighting in a way that does not jeopardize the health, safety, or general welfare of Riverside County residents and degrade their quality of life.</p> <p>CRDR 4.1-3 The Project is required to comply with the Development Standards and Design Guidelines of SP 239A1, including standards related to lighting. Compliance with these Design Guidelines would be assured by the County's future review of implementing building permit applications for compliance with the Specific Plan's design features that would serve to reduce and/or avoid impacts relating to aesthetics.</p>	<p>Project Applicant/ Building and Safety Department</p> <p>Project Applicant/ Building and Safety Department</p> <p>Project Applicant/ Planning Department</p>	<p>Prior to issuance of building permits</p> <p>Prior to issuance of building permits</p> <p>Prior to approval of implementing developments (i.e., plot plans, conditional use permits, etc.) and prior to issuance of</p>



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
<p>cumulatively-considerable impacts due to a conflict with or obstruction of the SCAQMD 2016 AQMP would be significant and unavoidable.</p> <p>Threshold b.: Implementation of Mitigation Measures MM 4.3-1 and MM 4.3-2 would ensure that daily blasting activities are limited to a maximum of 1.72 tons of explosives and that other measures are implemented to reduce NO_x and CO emissions during construction activities to below the SCAQMD Regional Thresholds for these pollutants. With implementation of mitigation, Project construction-related emissions would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or State ambient air quality standard, and impacts would be reduced to less-than-significant levels.</p> <p>Implementation of Mitigation Measures MM 4.3-3 through MM 4.3-7 would reduce the Project’s anticipated operational emissions of ROG and NO_x, but would not reduce emissions of these pollutants to below the SCAQMD Regional Thresholds. the majority of emissions associated with Project operations would result from vehicular traffic, and in particular truck traffic. Mobile source emissions are regulated by standards imposed by federal and State agencies, not local governments. No other mitigation measures related to vehicle tailpipe emissions are available that are within Riverside County’s jurisdictional authority and that are feasible for Riverside County to enforce and have a proportional nexus to the Project’s level of impact. As such, it is concluded that operation of the Project would generate ROG and NO_x emissions that would exceed the applicable SCAQMD regional air quality threshold on a daily basis. The Project’s operational-related NO_x and ROG emissions would cumulatively contribute to an existing air quality violation in</p>	<p>Significant and Unavoidable</p>	<ul style="list-style-type: none"> ▪ Daily blasting activity shall be limited to the use of 1.72 tons of explosives daily. <p>Contract specifications shall be included in project construction documents, which shall be reviewed by the County of Riverside prior to the issuance of a blasting permit. The blasting contractor shall maintain records demonstrating compliance with these requirements, which shall be made available to Riverside County upon request.</p> <p>MM 4.3-2 All future construction activities associated with the Project shall be subject to adherence with the Riverside County Board of Supervisors Policy F-3 (“Good Neighbor Policy” for Logistics and Warehouse/Distribution Uses), regardless as to the size of proposed buildings. The following provisions shall apply to all future construction activities on site:</p> <ul style="list-style-type: none"> ▪ During all construction activities, all heavy-duty haul trucks accessing the site shall have CARB-approved 2010 engines or newer approved CARB engine standards. ▪ All excavators, graders, rubber-tired dozers, and similar “off-road” construction equipment shall be CARB Tier 3 Certified engines or better. ▪ The maximum daily disturbance area (actively graded area) shall not exceed 10 acres per day. ▪ Construction contractors shall utilize construction equipment, with properly operating and maintained mufflers, consistent with manufacturers’ standards. 	<p>Project Applicant, Construction Contractors/ Planning Department</p>	<p>Prior to issuance of grading or building permits</p>



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
<p>the SoCAB (i.e., ozone concentrations), as well as cumulatively contribute to the net increase of a criteria pollutant for which the SCAB is non-attainment (i.e., federal and State ozone concentrations). Accordingly, the Project’s long-term operational-related emissions of ROG and NOx are concluded to result in a significant and unavoidable impact on both a direct and cumulatively-considerable basis under both the Primary Land Use Plan and Alternative Land Use Plan.</p> <p>Threshold c.: The Project would not expose sensitive receptors to cancer risks exceeding 10 per one million or non-carcinogenic hazards exceeding a chronic hazard index of 1.0 during either construction or long-term operation. Additionally, the Project would not cause or contribute to any CO “hot spots.” Accordingly, the Project would not expose sensitive receptors, which are located within one (1) mile of the Project site, to substantial pollutant concentrations, and impacts would be less than significant.</p> <p>Threshold d.: The Project does not propose land uses typically associated with emitting objectionable odors. Standard construction requirements would minimize odor impacts from construction. The 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. Additionally, it is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the County’s solid waste regulations. The proposed Project also would be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors associated with the proposed Project construction and operations would be less than significant and no mitigation is required.</p>	<p>Less than Significant</p> <p>Less than Significant</p>	<ul style="list-style-type: none"> ▪ The surrounding streets shall be swept on a regular basis to remove any construction related debris and dirt. ▪ Appropriate dust control measures that meet the SCAQMD standards shall be implemented for grading and construction activity. ▪ Construction Contractors shall prohibit truck drivers from idling more than five (5) minutes and require operators to turn off engines when not in use, in compliance with the California Air Resources Board regulations. <p>Project contractors shall be required to ensure compliance with these requirements and permit periodic inspection of the construction site by County of Riverside staff or its designee to confirm compliance. These requirements also shall be specified in bid documents issued to prospective construction contractors.</p> <p>MM 4.3-3 Prior to issuance of building permits for Tenant Improvements involving cold storage warehouse uses, Riverside County shall review the plans to ensure that electrical hookups are provided to eliminate idling of main and auxiliary engines during the loading and unloading process and provide for transport refrigeration units. Riverside County shall verify the installation of electrical hookups prior to final building inspection.</p> <p>MM 4.3-4 The minimum number of automobile electric vehicle (EV) charging stations required by the California Code of Regulations Title 24 shall be provided. In addition, and to facilitate the possible future installation of infrastructure that would charge the batteries that power the motors of electric-powered trucks, the following shall be installed:</p>	<p>Project Applicant/ Building and Safety Department</p> <p>Project Applicant/ Building and Safety Department</p>	<p>Prior to issuance of building permits for Tenant Improvements</p> <p>Prior to final building inspection and prior to issuance of Shell and Tenant Improvement building permits</p>



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
		<ul style="list-style-type: none"> ▪ At Shell building permit, an electrical room(s) and/or exterior area(s) of the site shall be designated where future electrical panels would be located for the purpose of supplying power to on-site charging facilities for electric powered trucks. Conduit shall be installed from this designated area where the panel would be located to the on-site location where the charging facilities would be located where electric-powered trucks would park and connect to charging facilities to charge the batteries that power the motors of the electric-powered trucks. ▪ At issuance of a building permit for Tenant Improvements, if the tenant is served by electric trucks, the electrical panel and charging units shall be installed, and the electrical wiring connections shall be made from the electrical panel to the charging units. If the tenant is not served by electric trucks, this requirement shall not apply. <p>MM 4.3-5 All on-site outdoor cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) shall be required to be powered by electricity, compressed natural gas, propane, or diesel-fueled engines that comply with the CARB/USEPA Tier 4 Engine standards for off-road vehicles or better (defined as emitting less than or equal to 0.015 grams per brake horsepower-hour [g/bhp-hr] for PM₁₀) and all indoor cargo handling equipment shall be required to be powered by electricity, compressed natural gas, or propane. Use of indoor diesel-fueled equipment shall be prohibited. Developer and all successors also shall include these obligations in all building leases. The building owner and occupant shall allow periodic inspection of the site by the County of Riverside or its designee to confirm compliance. Electrical panels should be appropriately sized to allow for future expanded use.</p>	<p>Project Applicant, Successors in Interest/ Building and Safety Department, Code Enforcement Department</p>	<p>During long-term site operations</p>



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
		<p>MM 4.3-6 In order to promote alternative fuels, and help support “clean” truck fleets, as part of future lease agreements the developer/successor-in-interest shall be required to provide building occupants with information related to SCAQMD’s Carl Moyer Program, or other such programs that promote truck retrofits or “clean” vehicles and information including, but not limited to, the health effect of diesel particulates, benefits of reduced idling time, CARB regulations, and importance of not parking in residential areas. Tenants shall be notified about the availability of: 1) alternatively fueled cargo handling equipment; 2) grant programs for diesel-fueled vehicle engine retrofit and/or replacement; 3) designated truck parking locations in the project vicinity; 4) access to alternative fueling stations proximate to the site that supply compressed natural gas; and 5) the United States Environmental Protection Agency’s SmartWay program.</p> <p>MM 4.3-7 All future operations on site shall adhere to the germane policy provisions in the Riverside County Board of Supervisors Policy F-3 (“Good Neighbor Policy” for Logistics and Warehouse/Distribution Uses). Applicable requirements of Policy F-3 shall be specified in future lease agreements with all future tenants, and future tenants shall be required to permit periodic inspection by Riverside County to ensure compliance. In addition, buildings smaller than 250,000 square feet shall comply with applicable policy provisions of the Good Neighbor Policy except as indicated below. Applicable feasible provisions of the Good Neighbor Policy that would serve to measurably reduce Project-related operational emissions include, but are not limited to, the following:</p> <ul style="list-style-type: none"> ▪ Warehouse/distribution facilities greater than 250,000 square feet shall be designed to provide adequate on-site parking for commercial trucks and passenger vehicles and on-site queuing for trucks that is away from 	<p>Project Applicant, Future Site Occupants/ Planning Department</p> <p>Project Applicant, Future Occupants/ Planning Department</p>	<p>During long-term site operations</p> <p>During long-term site operations</p>



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
		<p>sensitive receptors. The general queuing and spill-over of trucks onto surrounding public streets shall be prevented. Commercial trucks shall not be parked in the public road right-of-way or nearby residential areas.</p> <ul style="list-style-type: none"> ▪ Facility operators shall maintain records of their fleet equipment and ensure that all diesel-fueled Medium-Heavy Duty Trucks (“MHDT”) and Heavy-Heavy Duty Trucks (“HHD”) accessing the site use year CARB 2010 or newer engines. The records shall be maintained on-site and be made available for inspection by the County. ▪ Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel trucks to restrict idling to no more than five minutes; and 3) telephone numbers of the building facilities manager and CARB to report violations. ▪ Facility operators shall train their managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks. ▪ Signs shall be posted in the appropriate locations and/or handouts should be provided that show the locations of nearest food options, fueling, truck maintenance services, and other similar convenience services. ▪ Each Facility shall designate a Compliance Officer responsible for implementing the measures described herein and/or in the project conditions of approval and mitigation measures. Contact information shall be 		



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
		<p>provided to the County and updated annually, and signs shall be posted in visible locations providing the contact information for the Compliance Officer to the surrounding community.</p> <ul style="list-style-type: none"> The future applicants for any new facility larger than 250,000 square feet shall be required to enter into agreement with the County of Riverside to provide a supplemental funding contribution, which would be applied to further off set potential air quality impacts to the community and provide a community benefit. Said financial contribution will be determined by the Transportation and Land Management Agency based on the level of NO_x emissions estimated to generated. Said supplemental funding contribution will be collected on a one-time basis. Funds collected under said supplemental funding program will be subject to designation for use by the Board of Supervisors and will generally be used for projects that directly benefit the impacted community wherein the project is located. The types of projects that the Board of Supervisors may designate for use of these funds include, but are not limited to (1) projects that directly offset NO_x reductions above and beyond what is required by existing air quality regulations, (2) projects that generally improve air quality such as paving of dirt roads, installation of additional trees and landscaping, (3) projects that provide an enhanced buffer between the new facility and sensitive receptors, and (4) Projects that lead to reduced emissions by promoting alternate forms of transportation such as bicycle lanes, new sidewalks, bus turnouts, or other transit-related uses. <p>CRDR 4.3-1 The Project is required to comply with the provisions of South Coast Air Quality Management District Rule</p>	Project Applicant, Construction	During construction



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
		<p>CRDR 4.3-3 The Project is required to comply with applicable SCAQMD rules for construction activities on the Project site. In addition to the SCAQMD requirements listed above, additional SCAQMD Rules that are currently applicable during construction activity for this Project include but are not limited to: Rule 1403 (Asbestos); Rule 431.2 (Low Sulfur Fuel); and Rule 1186 / 1186.1 (Street Sweepers).</p> <p>CRDR 4.3-4 The Project is required to comply with the provisions of SCAQMD Rule 402, “Nuisance” which requires that a person shall not discharge air contaminants or other materials that would cause health or safety hazards to any considerable number of persons or the public.</p>	Project Applicant, Construction Contractors, Future Occupants/ SCAQMD	During construction activities and long-term operations
4.4 Biological Resources				
<p>Threshold a.: Implementation of Mitigation Measure MM 4.4-1 would require the preparation of a DBESP and compensatory mitigation for Project impacts to 1.691 acres of MSCHP riparian/riverine habitat (1.701 acre of riparian/riverine habitat with implementation of the Southern Truck Route) at a minimum 3:1 ratio, which would ensure Project consistency with Section 6.1.2 of the MSHCP. Implementation of Mitigation Measure MM 4.4-2 would ensure that measures are incorporated into the Project’s construction phase to preclude significant construction-related nighttime lighting impacts affecting the proposed on-site MSHCP Conservation Area, while Mitigation Measure MM 4.4-3 would ensure that measures are incorporated into future development plans for the site, if necessary, to ensure that future on-site operations do not expose the proposed on-site MSHCP Conservation Area to noise levels exceeding 65 dBA CNEL. Thus, with implementation of Mitigation Measures MM 4.4-2 and MM 4.4-3, the Project would be fully consistent with Section 6.1.4 of the MSHCP. In addition, implementation of Mitigation Measure MM 4.4-4 would</p>	Less than Significant with Mitigation	<p>MM 4.4-1 Prior to approval of any implementing developments within the Project site (e.g., plot plans, conditional use permits), the Project Applicant shall contract with a qualified biologist to prepare a Determination of Biologically Equivalent or Superior Preservation (DBESP), in accordance with Section 6.1.2 of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The required DBESP shall address Project impacts to 1.691 acres of riverine riparian/jurisdictional features (including impacts to 0.29 acre of Southern Riparian Scrub habitat) that comprise MSCHP riparian/riverine habitat, California Department of Fish and Wildlife (CDFW) jurisdiction, Regional Water Quality Control Board (RWQCB) jurisdiction, and/or U.S. Army Corps of Engineers jurisdiction. In the event that the Southern Truck Route is implemented (as described in EIR subsection 3.6.2), then the required DBESP also shall address impacts to an additional 0.01 acre of MSHCP riparian/riverine habitat, CDFW jurisdiction, and RWQCB jurisdiction. The required DBESP shall identify compensatory mitigation for the loss of up to 1.691 acres of riparian/riverine resources (1.701 acre of riparian resources if the Southern Truck Route is implemented)</p>	Project Applicant/ Planning Department, Environmental Programs Department, CDFW, RWQCB	Prior to approval of implementing developments and prior to issuance of grading permits



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
<p>ensure that appropriate pre-construction surveys are conducted prior to ground disturbing activities, in accordance with MSHCP Objective 6 for the burrowing owl. With implementation of the required mitigation, the Project would be fully consistent with all applicable MSHCP requirements, and impacts would be reduced to below a level of significance. Implementation of Mitigation Measure MM 4.4-6 would ensure that required improvements associated with the Southern Truck Route, if implemented, would be subject to a HANS and JPR process, if required by the RCA.</p> <p>Thresholds b. and c.: Special-status plant species observed on site would be preserved in areas planned for long-term conservation as open space as part of the Project; thus, Project impacts to special status plants would be less than significant. In the event that Project construction activities occur during the nesting season for birds (February 1 to August 31), Mitigation Measure MM 4.4-5 would ensure pre-construction nesting surveys are conducted prior to commencement of construction activities, and further requires appropriate avoidance of any active nests that may be identified. Implementation of the required mitigation would reduce Project impacts to nesting birds to below a level of significance.</p> <p>Threshold d.: The Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites, and impacts would be less than significant.</p> <p>Threshold e.: Implementation of Mitigation Measure MM 4.4-1 would require compensatory mitigation for Project impacts to 0.29 acre of Southern Riparian Scrub at a minimum</p>	<p>Less than Significant with Mitigation</p> <p>Less than Significant</p> <p>Less than Significant with Mitigation</p>	<p>at a minimum 3:1 ratio, and the required mitigation shall consist of the following:</p> <ul style="list-style-type: none"> ▪ Purchase of 2.536 acres of rehabilitation credits at the Riverpark Mitigation Bank (2.551 acres of rehabilitation credits are required if the Southern Truck Route is implemented); and ▪ Purchase of 2.537 acres of re-establishment credits at the Riverpark Mitigation Bank (2.552 acres of rehabilitation credits are required if the Southern Truck Route is implemented). <p>Prior to approval of the implementing development(s), the required DBESP shall be subject to review and approval by the Riverside County Environmental Programs Department (EPD), and also shall be subject to a 60-day review period by the Wildlife Agencies as required by the MSHCP. Following approval of the DBESP by County EPD and the Wildlife Agencies, and prior to issuance of grading permits, the Project Applicant shall provide evidence to Riverside County that the required compensatory mitigation has been achieved in accordance with the approved DBESP. Should compensatory mitigation credits be unavailable at the Riverpark Mitigation Bank, the Project Applicant shall coordinate with the regulatory agencies, Riverside County, and MSHCP Wildlife Agencies to secure alternate mitigation totaling a minimum of 5.073 acres (5.103 acres if the Southern Truck Route is implemented) at another approved mitigation bank or in-lieu fee program.</p> <p>MM 4.4-2 In the event that nighttime construction is proposed as part of future building permits, Riverside County shall review the plans to ensure the following note is included on the plans. This note also shall be specified in bid documents issued to prospective construction contractors.</p>	<p>Project Applicant, Construction Contractors/ Building and Safety</p>	<p>Prior to issuance of building permits involving nighttime construction and</p>



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
		<p>MM 4.4-4 In accordance with MSHCP Objective 6, prior to issuance of grading permits or other permits authorizing ground disturbance or discing, the Project Applicant shall retain a qualified biologist to perform a burrowing owl survey at all potentially suitable habitat sites within the Project’s limits of disturbance within 30 days of the commencement of any ground-disturbing activities at the Project site, as discussed below.</p> <ul style="list-style-type: none"> ▪ Pre-Construction Survey: The pre-construction survey shall be performed by a qualified biologist that will survey the site for the presence/absence of burrowing owls within 30 days prior to commencement of ground-disturbing activities at the Project site. If burrowing owls are detected on-site during the pre-construction survey, the owls shall be relocated/excluded from the site outside of the breeding season following accepted protocols, and subject to the approval of the RCA and Wildlife Agencies (i.e., CDFW and/or USFWS). ▪ Burrowing Owl Management Plan: In the event that burrowing owl is determined to be present, or in the event that an assumption is made that the burrowing owl occurs on-site, a burrowing owl management plan shall be prepared and implemented in coordination with the Western Riverside County Regional Conservation Authority (RCA) and CDFW that shall detail the relocation of owls from the Project site, passively and/or actively. If additional site visits determine the species is absent, then the pre-construction survey (as discussed above) shall instead be implemented. <p>A copy of the results of the pre-construction survey (and all additional surveys), as well as copies of the Burrowing Owl Management Plan, if required, shall be provided to the County of</p>	<p>Project Applicant, Project Biologist/ Planning Department</p>	<p>Prior to issuance of grading permits or other permits authorizing ground disturbance or discing and prior to ground disturbance and discing</p>



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
		<p>Riverside Planning Department for review and approval (in the case of the Burrowing Owl Management Plan) prior to any vegetation clearing and ground disturbance activities.</p> <p>MM 4.4-5 Prior to the issuance of grading permits, Riverside County shall ensure that the following note is included on the Project’s grading plans. Project contractors shall be required to ensure compliance with this note and permit periodic inspection of the construction site by Riverside County staff or its designee to confirm compliance. This note also shall be specified in bid documents issued to prospective construction contractors.</p> <p><i>“Vegetation clearing shall be conducted outside of the bird nesting season (February 1 to August 31) to the extent feasible. If avoidance of the nesting season is not feasible, a nesting bird survey shall be conducted by a qualified biologist within no more than 72 hours of such scheduled disturbance, to determine the presence of nests or nesting birds. If active nests are identified, the biologist shall establish appropriate buffers around the vegetation (typically 500 feet for raptors and sensitive species, 200 feet for non-raptors/non-sensitive species). All work within these buffers shall be halted until the nesting effort is finished (i.e., the juveniles are surviving independent from the nest). The biologist shall review and verify compliance with these nesting boundaries and shall verify the nesting effort has finished. Work may resume within the buffer area when no other active nests are found. Alternatively, a qualified biologist may determine that construction can be permitted within the buffer areas and would develop a monitoring plan to prevent any impacts while the nest continues to be active (eggs, chicks, etc.). Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to Riverside County for mitigation monitoring compliance record keeping. If vegetation</i></p>	<p>Project Applicant, Construction Contractors/ Building and Safety Department</p>	<p>Prior to issuance of grading permits and during vegetation clearing activities</p>



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
		<p><i>removal is not completed within 72 hours of a negative survey during nesting season, the nesting survey must be repeated to confirm the absence of nesting birds.”</i></p> <p>MM 4.4-6 Prior to approval of grading permits or improvement plans for the Southern Truck Route, and if required by the Regional Conservation Authority (RCA), the Project Applicant shall prepare a HANS application to amend the previously-approved HANS 269 determination to include required improvements to Dunlap Drive and San Jacinto Avenue, which traverse MSHCP Criteria Cells 2969 and 3069 in Cell Group G. The HANS application shall be submitted to the RCA and shall be subject to the Western Multiple Species Habitat Conservation Plan (MSHCP) Joint Project Review (JPR) process. Prior to issuance of grading permits or improvement plans for the Southern Truck Route, the Project Applicant shall provide a copy of the approved amended HANS 269 determination. These requirements shall not apply in the event that the RCA does not require an amendment to HANS 269 for the Southern Truck Route, or in the event that the Southern Truck Route is not implemented.</p> <p>CRDR 4.4-1 Prior to issuance of grading permits, the Project Applicant shall make payment of Western Riverside County MSHCP fees pursuant to Riverside County Ordinance No. 810, Establishing an Interim Open Space Mitigation Fee.</p> <p>CRDR 4.4-2 Prior to issuance of grading permits, the Project Applicant shall make payment of fees pursuant to the Stephen’s Kangaroo Rat Habitat Conservation plan and Riverside County Ordinance No. 663, Establishing the Riverside County Stephens’ Kangaroo Rat Habitat Conservation Plan and Setting Mitigation Fees.</p> <p>CRDR 4.4-3 As a condition of approval for future grading and building permits, the County of Riverside shall require that</p>	<p>Project Applicant/ Planning Department, Regional Conservation Authority, Wildlife Agencies</p> <p>Project Applicant/ Planning Department</p> <p>Project Applicant/ Planning Department</p> <p>Project Applicant, Construction</p>	<p>Prior to approval of grading permits or improvements plans for the Southern Truck Route</p> <p>Prior to issuance of grading permits</p> <p>Prior to issuance of grading permits</p> <p>As a condition of grading and</p>



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
		the Project Applicant must delineate areas planned for long-term conservation as open space (i.e., open space within Planning Areas 10 and 11 of the Stoneridge Commerce Center Specific Plan No. 239, Amendment No. 1) with construction fencing in order to preclude direct and indirect impacts to sensitive biological resources within the open space areas.	Contractors/ Building and Safety Department	building permits and during construction activities
4.5 Cultural Resources				
<p>Thresholds a. and b.: Implementation of the Project has the potential to uncover previously-unknown historical resources both on site and within the off-site improvement areas. Implementation of Mitigation Measure MM 4.5-1 would ensure that a Project Archaeologist would be present during ground-disturbing activities, and would ensure that any significant historical resources that may be uncovered are appropriately treated as recommended by the Project Archaeologist. With implementation of the required mitigation, impacts would be reduced to less-than-significant levels.</p> <p>Thresholds c. and d.: Based on the Project’s conceptual grading plan (previously depicted on EIR Figure 3-10), Sites P-33-003743, P-33-003744, Temp-1, and Temp-2 occur within areas planned for long-term conservation as open space as part of the Project, and Project-related grading activities would not impact these sites. Although Sites SR-001 and SR-002 occur within or immediately adjacent to areas planned for grading and development as part of the Project, the results of the Project’s Phase II CRA determined that these sites do not comprise significant archaeological resources based on the criteria listed in Section 15064.5 of the State CEQA Guidelines. Furthermore, although impacts to Site SR-001 would be less than significant, the Project Applicant has agreed to a requirement to design future grading plans so as to completely avoid disturbance to Site SR-001 (refer to Mitigation Measure MM 4.5-1). Additionally, Mitigation</p>	<p>Less than Significant with Mitigation</p> <p>Less than Significant with Mitigation</p>	<p>MM 4.5-1 Prior to the issuance of a grading permit, the Project Applicant shall retain a qualified Project Archaeologist prepare and implement a Cultural Resource Monitoring Program (CRMP). The CRMP shall be developed in coordination with the consulting Tribe(s) that addresses the details of all activities and provides procedures that must be followed in order to reduce any impacts to cultural and historic resources to a level that is less than significant as well as address potential impacts to undiscovered buried archaeological resources associated with this Project. This document shall be provided to the County Archaeologist for review and approval prior to issuance of the grading permit. The Archaeological Monitor and the Native American Monitor shall be provided with the CRMP to be used as reference in the field. The CRMP shall contain at a minimum the following:</p> <p>a) <u>Archaeological Monitor</u>. An adequate number of qualified archaeological monitors shall be onsite to ensure all earth moving activities are observed for areas being monitored. This includes all grubbing, grading, and trenching onsite and for all offsite improvements. Inspections will vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The Project Archaeologist in conjunction with the Native American Monitor(s) have the authority to temporarily divert, redirect, or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources. The CRMP shall require the Project Applicant to provide written verification that a Riverside County-certified archaeologist has been retained. This verification</p>	<p>Project Applicant, Project Archaeologist/ County Archaeologist, Planning Department, Native American Monitor</p>	<p>Prior to issuance of grading permits and during grading activities</p>



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
<p>Measure MM 4.5-1 requires controlled grading at Site SR-002 and the relocation of features associated with Site SR-002 to on-site open space areas. Mitigation Measure MM 4.5-1 also would ensure that any previously-undiscovered archaeological sites or resources identified on site or within the off-site improvement areas during ground-disturbing activities are appropriately treated as directed by the Project Archaeologist, County Archaeologist, and Native American Monitor(s). Implementation of the required mitigation would reduce the Project’s potential impacts to subsurface archaeological sites or resources to below a level of significance.</p> <p>Threshold e.: In the event that human remains are discovered during construction activities, Mitigation Measure MM 4.5-9 would require the Project Applicant to comply with the applicable provisions of California Health and Safety Code § 7050.5 and California Public Resources Code § 5097 et. seq. Mandatory compliance with Mitigation Measure MM 4.5-9, State law, and applicable regulatory requirements would reduce the Project’s potential impacts to buried human remains to less-than-significant-levels.</p>	<p>Less than Significant with Mitigation</p>	<p>shall be presented in a letter from the Archaeologist to the Riverside County Planning Department.</p> <p>b) <u>Native American Monitoring.</u> The CRMP shall require that prior to the issuance of a grading permit, the Project Applicant shall enter into a monitoring agreement with a Native American Monitor. In conjunction with the Project Archaeologist, the CRMP shall require the Native American Monitor to attend the pre-grading meeting with the contractors to provide Cultural Sensitivity Training for all construction personnel. In addition, the CRMP shall require that an adequate number of Native American Monitor(s) must be on-site during all initial ground disturbing activities and excavation of each portion of the Project site including clearing, grubbing, tree removals, grading and trenching. The CRMP shall require the Project Applicant to submit a fully executed copy of the agreement to the Riverside County Planning Department to ensure compliance.</p> <p>c) <u>Cultural Sensitivity Training.</u> The Project Archaeologist and a representative designated by the consulting Tribe(s) shall attend the pre-grading meeting with the contractors to provide Cultural Sensitivity Training for all construction personnel. Training shall include a brief review of the cultural sensitivity of the Project and the surrounding area; the areas to be avoided during grading activities; what resources could potentially be identified during earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event unanticipated cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. This is a mandatory training and all construction personnel must attend prior to beginning work on the Project site. A sign in sheet for attendees of this training shall be included in a Phase IV Monitoring Report.</p> <p>d) <u>Temporary Construction Fencing.</u> The CRMP shall require</p>		



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
		<p>that prior to issuance of grading permits, the County shall review the proposed grading plans to ensure that a note is included on the plans requiring the provision of temporary fencing for the protection of cultural Sites P-33-003743, P-33-003744, SR-001, Temp-1, and Temp- 2 during grading activities. In addition, the CRMP shall require that sites located adjacent to the Project boundaries shall have temporary fencing placed to protect them during construction activities. These include Sites P-33-019862 (CA-RIV-10108); P-33-016072 and P-33-016036. Prior to commencement of grading or brushing, the CRMP shall require the Project Archaeologist to confirm the site boundaries and determine an adequate buffer for protection of the site(s). The CRMP shall further require the Project Applicant to direct the installation of fencing under the supervision of the archaeologist and Native American Monitor(s). The CRMP shall require that the fencing can be removed only after grading operations have been completed.</p> <p>e) <u>Site SR-001 Avoidance</u>. The CRMP shall require complete avoidance of disturbance to Site SR-001, and Riverside County shall require that the site be appropriately treated so as to discourage human intrusion (i.e., through fencing or landscape treatments, such as the planting of cactus). Prior to final grading inspection, Riverside County shall ensure that this measure has been implemented to the satisfaction of the County Archaeologist.</p> <p>f) <u>Site SR-002 Relocation</u>. The CRMP shall require that prior to commencement of grading activities, the feature associated with Site SR-002 must be relocated to the planned open space area identified as Planning Area 9 of Specific Plan No. 239, Amendment No. 1. As a component of the relocation and prior to commencement of construction activities in the affected area, any visible artifacts shall be recovered and recorded and the features recorded using professional archeological methods. The current Department of Parks and Recreation forms for the sites shall be updated, detailing which feature was relocated, the process taken,</p>		



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		<p>and updated maps using sub-meter GIS technology to document the new location of the feature. The CRMP shall require the preparation of a Phase IV Monitoring Report, which shall document the relocation of Site SR-002 and shall clearly indicate that the feature is not in the original location and why it was relocated.</p> <p>g) <u>Controlled Grading</u>. A controlled grading plan for areas surrounding Site SR-002 shall be developed in coordination with the consulting Tribes and included in the CRMP by the Project Archaeologist. The controlled grading plan shall require, without limitation, the systematic, slow, and deliberate removal of the ground surface to allow for the identification, documentation, and recovery of any subsurface cultural deposits using light scrapers (for example, Caterpillar 623 or 627), dozers (for example D6, D8), and/or front-end loaders. Results of the controlled grading program shall be included in a Phase IV monitoring report.</p> <p>h) <u>Preservation Plan</u>. The Project Archaeologist, with input from the consulting Tribes, shall develop a Preservation Plan for the long-term care and maintenance of Sites P-33-003743, P-33-003744, SR-001, Temp-1, and Temp-2. The plan shall indicate at a minimum, access rights for the Consulting Tribe(s) for educational, cultural, and ceremonial practices, and for the gathering of native plant species, the specific areas to be included in and excluded from long-term maintenance, prohibited activities, methods of preservation to be employed, the party responsible for the long-term maintenance, appropriate protocols, monitoring and necessary emergency protocols. Specifically, the Consulting Tribes shall have access to the Preservation Area, identified as Planning Area 9 of Specific Plan No. 239, Amendment No. 1, for ongoing educational, cultural, and religious practices and gathering of native plant species as defined by the Consulting Tribes. The preservation and maintenance plan shall describe the process for access, including notification timelines, for all such practices and activities. In the event the Project requires creation of a Property Owner's</p>		



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		<p>Association, the Association shall include within its Covenants, Conditions, and Restrictions (CC&Rs) the right of the Consulting Tribe to access the Preservation Area for the intended practices and gathering of plant resources. The Project Applicant shall provide the approved CC&R language if required, developed in consultation with the Consulting Tribe(s). The preservation and maintenance plan shall be binding on and inure to the benefit of successor owners and assignees. The preservation and maintenance plan shall be included as an appendix to the CRMP.</p> <p>i) <u>Previously-Undiscovered Resources</u>. In the event that previously unidentified archaeological or historical resources are discovered, the CRMP shall require the Project Archaeologist to contact the Lead Agency (Riverside County) at the time of discovery. The CRMP shall require that the Project Archaeologist, in consultation with the County Archaeologist and Tribal Monitors, shall determine the significance of the discovered resources. The CRMP shall indicate that the Lead Agency must concur with the evaluation before construction activities will be allowed to resume in the affected area. For significant cultural resources, the CRMP shall require a Research Design and Data Recovery Program to mitigate impacts shall be prepared by the Project Archaeologist and approved by the County Archaeologist before being carried out using professional archaeological methods. Before construction activities are allowed to resume in the affected area, the CRMP shall require that the artifacts shall be recovered and features recorded using professional archaeological methods, and shall require that the Project Archaeologist determine the amount of material to be recovered for an adequate artifact sample for analysis. Isolates and clearly non-significant deposits will be minimally documented in the field so the monitored grading can proceed. The CRMP shall require that evidence of compliance with the Research Design and Data Recovery Program, if a significant archaeological resource is found, shall be provided to Riverside County upon the completion of a treatment plan as part of a Phase IV Monitoring Report</p>		



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		<p>detailing the significance and treatment finding.</p> <p>j) <u>Artifact Disposition</u>. The landowner(s) shall relinquish ownership of all cultural resources that are unearthed on the Project site during any ground disturbing activities, including previous investigations and/or Phase III data recovery.</p> <p>k) <u>Phase IV Monitoring Report</u>. The CRMP shall require that prior to final grading inspection, in the event any resources are found on-site during construction activities, a final report documenting the field and analysis results, and interpreting the artifact and research data within the research context, shall be completed and submitted to the satisfaction of Riverside County. The report shall include (at a minimum) the following: a discussion of the monitoring methods and techniques used; the results of the monitoring program including any artifacts recovered; an inventory of any resources recovered; updated Department of Parks and Recreation Primary and Archaeological Site Forms for any new resources identified, and all sites affected by the development; final disposition of the resources including GPS data; artifact catalog; and any additional recommendations as may be determined by Riverside County. A final copy shall be submitted to the Riverside County Planning Department, the Project Applicant, the Eastern Information Center, and the affected Tribe (if Native American resources are uncovered).</p> <p>l) <u>Reduced Monitoring</u>. The Project Archaeologist may submit a detailed letter to the County of Riverside during grading requesting a modification to the monitoring program if circumstances are encountered that reduce the need for archaeological and tribal monitoring. The County shall consult with the consulting tribe(s) prior to determining the need for reduced archeological and tribal monitoring.</p> <p>MM 4.5-2 In the event that human remains are discovered,</p>	Project Applicant,	In the event that



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		<p>pursuant to California Health and Safety Code § 7050.5, as well as the Public Resources Code § 5097 et. seq., the Project Archaeologist shall have the authority to divert or temporarily halt ground disturbance operation within 100 feet the area of discovery to allow for the evaluation of the human remains and the surrounding vicinity. If any human remains are discovered, the County Coroner and lead agency shall be contacted. The County Coroner shall determine that no investigation of the cause of death is required, and determine if the remains are of Native American origin. In the event that the remains are determined to be of Native American origin, the NAHC shall be contacted within 24 hours of the discovery. The Most Likely Descendant, as identified by the NAHC, shall be contacted in order to determine proper treatment and disposition of the remains. If the NAHC is unable to identify a Most Likely Descendant, or if the Most Likely Descendant failed to make a recommendation within 48 hours after being notified by the NAHC, or the Project Applicant rejects the recommendation of the Most Likely Descendant; the Project Applicant shall rebury the Native American human remains and associated grave goods on the property in a location not subject to further ground disturbance. Evidence of compliance with this mitigation measure, if human remains are found, shall be provided to Riverside County upon the completion of a treatment plan and final report detailing the significance and treatment finding.</p> <p>CRDR 4.5-1 Unless otherwise required by law, the site of any reburial of Native American human remains or associated grave goods shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, pursuant to the specific exemption set forth in California Government Code Section 6254 I, parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code 6254 I.</p>	<p>Project Archaeologist/ County Archaeologist, Planning Department, NAHC, County Coroner</p> <p>Project Applicant, Project Archaeologist/ County Archaeologist, Planning Department</p>	<p>human remains are discovered during grading activities</p> <p>In the event Native American human remains or associated grave goods are discovered on site</p>



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<p>Thresholds g. and h.: The Project would not substantially change topography or ground surface relief features, and impacts would be less than significant. Implementation of Mitigation Measure MM 4.7-1 would ensure that appropriate measures are incorporated into future grading and/or building permit applications to ensure that any slopes higher than 10 feet or at a gradient steeper than 2:1 would be grossly stable. With implementation of the required mitigation, impacts associated with unstable slopes would be reduced to less-than-significant levels.</p>	<p>Less than Significant with Mitigation</p>			
<p>Thresholds i. and l.: There are no subsurface sewage disposal systems on site under existing conditions, and the Project does not propose any septic tanks or alternative waste water disposal systems. As such, no impact would occur.</p>	<p>No Impact</p>			
<p>Thresholds j. and m.: The Project would not result in substantial soil erosion or loss of topsoil. The Project Applicant would be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for construction activities and adhere to a Storm Water Pollution Prevention Plan (SWPPP) as well as SCAQMD Rule 403 and Riverside County Ordinance Nos. 457, and 460. With mandatory compliance to these regulatory requirements, the potential for water and wind erosion impacts during construction would be less than significant. Following development, 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 and drainage would be controlled through a storm drain system. Furthermore, the Project is required by law to implement a WQMP during operation, which would preclude substantial erosion impacts in the long-term.</p>	<p>Less than Significant</p>			
<p>Threshold k.: Implementation of Mitigation Measure MM</p>	<p>Less than</p>			



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Update would be reduced to less-than-significant levels.				
4.9 Hazards and Hazardous Materials				
<p>Thresholds a. and b.: Implementation of Mitigation Measure MM 4.9-1 would ensure that appropriate remedial measures are undertaken as part of future site grading activities to address soils on site that may be contaminated with pesticides that exceed regulatory limits. With implementation of the required mitigation, Project hazardous materials impacts due to existing site conditions would be reduced to less-than-significant levels.</p> <p>Threshold c.: The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route. Additionally, there are no emergency response plans or emergency evacuation plans in effect in the local area. Improvements planned as part of the Project are not anticipated to adversely affect traffic operations in the local area, including along nearby segments of the Ramona Expressway and Nuevo Road. Moreover, the Project would construct several major new roadways on site (i.e., Antelope Road and Orange Avenue), which would serve to improve emergency access in the local area. Accordingly, implementation of the proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan, and no impact would occur.</p> <p>Threshold d.: The Project has the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, and/or wastes within close proximity to two existing schools (Lakeside Middle School and Sierra Vista Elementary School), although both schools are located more than 0.25 mile from the Project site. However, impacts would be less than significant with compliance to applicable federal, State, and local regulations. Although impacts would be less</p>	<p>Less than Significant with Mitigation</p> <p>Less than Significant</p> <p>Less than Significant</p>	<p>MM 4.9-1 Prior to issuance of any grading permits, the Project Applicant shall have prepared, and the Riverside County Planning Department shall review and approve, a Phase II Environmental Site Assessment (ESA). The Phase II ESA shall be prepared for all areas proposed for development with commercial retail, business park, and/or light industrial land uses. The purpose of the Phase II ESA is to evaluate the near-surface soils on site for evidence of contamination with pesticides. In the event that the results of the Phase II ESA determine that pesticide levels in site soils are below regulatory limits, then no further action is required. In the event that the Phase II ESA identifies levels of pesticide contamination that exceeds regulatory limits, then the Phase II ESA shall identify appropriate remediation measures, which may include, but may not be limited to, the removal of surficial soils and mixing with other on site soils, or disposal at a facility that is approved to handle contaminated soils. Future grading permits shall be conditioned to implement the attenuation measures identified by the Phase II ESA, as appropriate. Prior to final grading inspection, the Project Applicant shall provide evidence that the remediation measures identified by the Phase II ESA have been completed as part of site grading activities to the satisfaction of Riverside County.</p> <p>CRDR 4.9-1 All future businesses operating on site would be subject to compliance with Riverside County Ordinance No. 651.1, which sets forth requirements for handling hazardous materials, requires a permit for handling certain types and quantities of hazardous materials, requires businesses to report their hazardous materials inventory, identifies different classifications of hazardous materials handlers, and requires reporting of spills or releases or threatened releases of a hazardous material to the Riverside County Department of Environmental Health (DEH) and to the Governor’s Office of Emergency</p>	<p>Project Applicant, Project Hazardous Materials Consultant/ Planning Department</p> <p>As set forth by Ordinance No. 651.1</p>	<p>Prior to issuance of grading permits and as a component of grading operations, if required</p> <p>As set forth by Ordinance No. 651.1</p>



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
<p>than significant, mitigation has been identified herein to require preparation of a Hazardous Materials Business Emergency Plan (HMBEP) for future implementing uses, if required by law (refer to Mitigation Measure MM 4.9-2).</p> <p>Threshold e.: Based on the results of the Project’s Phase I ESA (Technical Appendix G), the Project site is not located on any list of hazardous materials sites complied pursuant to Government Code Section 65962.5. Accordingly, no impact would occur.</p> <p>Threshold f., g., and h.: The Project would not result in an inconsistency with an Airport Master Plan, and impacts would be less than significant. The ALUC reviewed the Project on May 5, 2021, which found that the Project would not conflict with the March ARB ALUCP. Therefore, impacts would be less than significant. Moreover, according to the MARB ALUCP, the “Risk Level” for land uses within Compatibility Zone “E” is considered “Low,” and indicates that these areas are within outer or occasionally used portions of flight corridors. Thus, the Project would not result in a safety hazard for people residing or working in the Project area, and impacts would be less than significant.</p> <p>Threshold i.: There are no private airstrips or heliports within two miles of the Project site, and no such facilities are proposed as part of the Project. No impact would occur.</p>	<p>No Impact</p> <p>Less than Significant</p> <p>No Impact</p>	<p>Services.</p> <p>CRDR 4.9-2 The Project shall comply with Title 22, Division 4.5 of the California Code of Regulations, which requires residents and employees to dispose of household hazardous waste, including pesticides, batteries, old paint, solvents, used oil, antifreeze, and other chemicals, at a Household Hazardous Waste Collection Facility.</p> <p>CRDR 4.9-3 The Project shall comply with Title 22, Division 4.5, Chapter 11 of the California Code of Regulations which requires fluorescent lamps, batteries, and mercury thermostats be recycled or taken to a Household Hazardous Waste Collection Facility.</p>	<p>As set forth by Title 22, Division 4.5 of the California Code of Regulations</p> <p>As set forth by Title 22, Division 4.5, Chapter 11 of the California Code of Regulations</p>	<p>As set forth by Title 22, Division 4.5 of the California Code of Regulations</p> <p>As set forth by Title 22, Division 4.5, Chapter 11 of the California Code of Regulations</p>
<p>4.10 Hydrology and Water Quality</p>				
<p>Thresholds a., b., and i.: The Project would be served potable water by the EMWD, and does not propose any groundwater wells on site; thus, Project impacts to groundwater supplies would be less than significant. Additionally, the total amount of runoff from the site would not change with Project</p>	<p>Less than Significant with Mitigation</p>	<p>MM 4.10-1 Prior to approval of any future implementing developments on site (i.e., tentative tract maps, plot plans, etc.), the Project Applicant or implementing developer shall prepare site-specific hydrology studies. The hydrology studies required for implementing developments shall be prepared in accordance</p>	<p>Project Applicant, Project Engineer/RCFCWCD</p>	<p>Prior to approval of any future implementing developments on site (i.e., tentative</p>



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<p>development, and as such Project-related runoff would be conveyed to downstream facilities where groundwater recharge would continue to occur. Additionally, water quality impacts during construction, including potential impacts due to a conflict with the Basin Plan and the West San Jacinto GMP, would be less than significant. Implementation of Mitigation Measures MM 4.10-1 and MM 4.10-2 would ensure that hydrology studies and PWQMPs are prepared as part of future implementing developments (i.e., tentative tract maps, plot plans, etc.). The required PWQMPs would ensure that runoff from the Project site does not violate any water quality standards or waste discharge requirements, and that implementing developments do not otherwise substantially degrade surface or groundwater quality. Additionally, the future-required hydrology studies would ensure that runoff from the Project site is properly detained in order to avoid substantial increases in runoff that could cause erosion or flooding hazards downstream. Compliance with the required mitigation also would ensure that future implementing developments do not conflict with the Basin Plan or the West San Jacinto GMP. With implementation of the required mitigation, impacts would be reduced to less-than-significant levels.</p> <p>Thresholds c. and f.: Implementation of Mitigation Measures MM 4.10-1 and MM 4.10-2 would ensure that hydrology studies and PWQMPs are prepared as part of future implementing developments (i.e., tentative tract maps, plot plans, etc.). The future-required hydrology studies would be required to demonstrate that measures have been incorporated (e.g., bioswales, bioretention basins, etc.) to reduce the rate of runoff from the developed portions of the property in a manner consistent with RCFCWCD requirements, thereby ensuring runoff from the Project site does not exceed the capacity of existing or planned drainage systems or adversely</p>	<p>Less than Significant with Mitigation</p>	<p>with the Riverside County Flood Control and Water Conservation District (RCFCWCD) “Hydrology Manual,” and shall demonstrate that measures have been incorporated, such as bioretention basins, landscape detention areas, and bioswales, to attenuate runoff from the Project site in a manner consistent with RCFCWCD requirements. The future-required hydrology studies also shall demonstrate that runoff from the developed portions of the Project site would not exceed the capacity of existing or planned downstream drainage infrastructure. Measures identified by the hydrology studies shall be depicted on the development plans associated with future development applications (i.e., tentative tract maps, plot plans, etc.), and also shall be depicted on all future construction plans (e.g., grading permits). The hydrology studies for implementing developments shall be reviewed and approved by the RCFCWCD prior to approval of implementing developments within the Project site, and the future implementing developments shall be conditioned to implement the measures identified in the hydrology studies as necessary to attenuate the rate of runoff from the Project site as required by the RCFCWCD.</p> <p>MM 4.10-2 Prior to approval of any future implementing developments on site (i.e., tentative tract maps, plot plans, etc.), the Project Applicant shall prepare site-specific Preliminary Water Quality Management Plans (PWQMPs). The implementing Preliminary PWQMPs shall be prepared in accordance with the Santa Ana Regional Water Quality Control Board (RWQCB) requirements as set forth in the RWQCB’s “Water Quality Management Plan for the Santa Ana Region of Riverside County,” and shall identify appropriate Best Management Practices (BMPs) as necessary to address the Project’s identified pollutants of concern. Measures identified by the PWQMPs shall be depicted on the development plans associated with future development applications (i.e., tentative tract maps, plot plans, etc.), and also shall be depicted on all future construction plans (e.g., grading permits). The PWQMPs for implementing developments shall be</p>	<p>Project Applicant/ Building and Safety Department, RWQCB</p>	<p>tract maps, plot plans, etc.) and during construction activities</p> <p>Prior to approval of any future implementing developments on site (i.e., tentative tract maps, plot plans, etc.) and during construction activities</p>



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
<p>FEMA to remove the portions of the Project site proposed for development with light industrial uses from mapped floodplains occurring on site. As part of the CLOMR and LOMR process, FEMA will evaluate the proposed changes to the floodplain to ensure that the planned improvements do not result in changes to mapped floodplains downstream. With approval of a CLOMR and LOMR, the Project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site, and would not impede or redirect flood flows in a manner that could adversely affect downstream properties. Additionally, implementation of Mitigation Measures MM 4.10-1 and MM 4.10-2 would ensure that hydrology studies and PWQMPs are prepared as part of future implementing developments (i.e., tentative tract maps, plot plans, etc.). The future-required hydrology studies would be required to demonstrate that measures have been incorporated (e.g., bioswales, bioretention basins, etc.) to reduce the rate of runoff from the developed portions of the property in a manner consistent with RCFCWCD requirements, thereby ensuring runoff from the Project site does not cause or contribute to flood hazards downstream. Impacts would be reduced to less-than-significant levels.</p> <p>Threshold h.: The Project site is not subject to inundation due to tsunamis. Although a portion of the areas proposed for development with light industrial uses as part of the Project occur within the mapped inundation area for the Lake Perris dam, the DWR is planning to complete improvements to the dam in 2023, which would attenuate the risk of dam failure. As such, the Project site would not be subject to inundation hazards associated with the failure of the Perris Dam. Because the Project site would not be subject to inundation due to a failure of the Perris Dam, it also can be concluded that the Project site would not be subject to inundation due to seiches</p>	<p>Less than Significant with Mitigation</p>			



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
<p>within Lake Perris. The portions of the Project site that are located within mapped floodplains and dam inundation areas associated with the Lake Perris dam primarily are proposed to be conserved as open space as part of SP 239A1, with no development occurring in these areas. However, a small portion of proposed Planning Area 4 of SP 239A1 occurs within the San Jacinto River floodplain. Implementation of Mitigation Measure MM 4.10-3 would ensure that the areas of the Project site that are proposed for development with light industrial uses are removed from the mapped floodplains and would ensure that future development is not subject to inundation during flood events. With implementation of the required mitigation, the Project would not risk the release of pollutants due to Project inundation, and impacts would be reduced to less-than-significant levels.</p>				
<p>4.11 Land Use and Planning</p>				
<p>Threshold a.: The Project would not conflict with the General Plan, LNAP, the SCAG draft 2020-2045 RTP/SCS, or any other land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Additionally, there are no impacts due to land use incompatibility that have not already been evaluated and mitigated to the maximum feasible extent in relevant sections of this EIR; therefore, and with exception of the significant and unavoidable impacts to surrounding land uses identified in the relevant sections of this EIR, Project impacts due to land use incompatibility would be less than significant.</p>	<p>Less than Significant</p>	<p>Impacts would be less than significant; therefore, mitigation measures are not required.</p>	<p>N/A</p>	<p>N/A</p>
<p>Threshold b.: The Project would not disrupt or divide the physical arrangement of an established community (including a low-income or minority community), and impacts would be less than significant.</p>	<p>Less than Significant</p>			
<p>4.12 Mineral Resources</p>				
<p>Threshold a.: The Project site does not contain any known</p>	<p>No Impact</p>	<p>Impacts would be less than significant; therefore, mitigation</p>	<p>N/A</p>	<p>N/A</p>



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
<p>mineral resources that would be of value to the region or the residents of the State. Accordingly, with implementation of the proposed Project there would be no impact to known mineral resources.</p> <p>Threshold b.: The Project would not 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, and no impact would occur.</p> <p>Threshold c.: The Project would not be an incompatible land use located adjacent to a State classified or designated area or existing surface mine, and no impact would occur.</p> <p>Threshold d.: The Project would not expose people or property to hazards from proposed, existing, or abandoned quarries or mines, and no impact would occur.</p>	<p>No Impact</p> <p>No Impact</p> <p>No Impact</p>	<p>measures are not required.</p>		
4.13 Noise				
<p>Thresholds a. and b.: The Project does not involve an airport-related component, and would not create or exacerbate aircraft-related noise in the local area. The Project site also occurs outside of the 55 I CNEL contours for both the MARB Airport and Perris Valley Airport. As such, the Project would not expose people residing or working in the Project area to excessive airport-related noise levels, and impacts would be less than significant.</p> <p>Threshold c.: Implementation of Mitigation Measure MM 4.13-1 would ensure that temporary noise barriers are utilized to shield Project-related construction equipment from nearby sensitive receptors (i.e., residences and schools) during the construction of the off-site water main within Walnut Street, and would reduce Project-related construction noise impacts to less-than-significant levels.</p>	<p>Less than Significant</p> <p>Significant and Unavoidable</p>	<p>MM 4.13-1 Prior to issuance of grading permits or improvement plans for the construction of the off-site water line within Walnut Street, and in order to reduce construction noise during its installation, the Riverside County Building and Safety Department shall review to ensure that the following note is included on the plans:</p> <p><i>“During the construction of the proposed water main within Walnut Street, all stationary construction equipment shall be surrounded by a temporary noise barrier such as a flexible sound curtain, an 18-ounce tarp, or a two-inch-thick fiberglass blanket. The height of noise control barrier shrouds shall be adequate to obstruct the line-of-site between the construction equipment and nearby sensitive receptors (i.e., residential and school uses).”</i></p> <p>The Project construction contractor shall be responsible for</p>	<p>Project Applicant, Construction Contractors/ Building and Safety Department</p>	<p>Prior to issuance of grading permits or improvement plans for the construction of the off-site water line within Walnut Street and during construction of the off-site water line</p>



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
<p>Implementation of Mitigation Measure MM 4.13-5 would ensure that site-specific noise impact analyses are prepared in conjunction with future plot plans for light industrial, business park, and commercial retail uses within SP 239A1 Planning Areas 1, 2, 3, 4, 5, 6, 8A, or 8B. The required noise impact analyses would evaluate site-specific development components based on the plot plan application materials, and would identify measures, such as screen walls or other barriers (such as berms), to preclude significant operational-related noise impacts affecting existing or planned residential uses within the adjacent McCanna Hills Specific Plan or on lands located east of the Project site and that are designated by the County’s General Plan for residential development. With implementation of the required mitigation, Project impacts due to operational noise increases affecting residential sensitive receptors would be reduced to less-than-significant levels.</p> <p>In addition, implementation of the Project would result in significant and unavoidable traffic-related noise impacts affecting existing residential uses along the segment of Nuevo Road between the southern Project entrance and Dunlap Drive under Existing plus Ambient plus Project (EAP) 2030 conditions. Due to existing driveway access points along this roadway segment, feasible mitigation measures are not available to reduce the Project’s traffic-related noise impacts to this segment of Nuevo Road to below a level of significance, as it would not be feasible to fully obstruct the line-of-sight between these existing residences and Project-related traffic along Nuevo Road. Accordingly, Project traffic-related noise impacts along the segment of Nuevo Drive between Antelope Road and Dunlap Drive would be significant and unavoidable under EAP 2030 conditions.</p> <p>Threshold d.: Implementation of Mitigation Measure MM 4.13-2 would ensure that measures are incorporated, if</p>	<p>Less than Significant with</p>	<p>enforcing this requirement, which also shall be specified in bid documents issued to prospective construction contractors. The Project construction contractor shall permit inspections by Riverside County to verify compliance with this measure.</p> <p>MM 4.13-2 Prior to the issuance of grading permits, and in the event that residential uses have been constructed adjacent to the western or eastern Project boundary, the Project Applicant shall prepare and Riverside County shall review and approve a construction-related vibration impact assessment. The required study shall evaluate whether construction activities on the Project site would expose any existing residential structures to the east or west of the Project site to vibration levels exceeding the County’s standard of 0.01 inches/second Route Mean Square (RMS). In the event that the vibration analysis determines that any structures would be exposed to excessive vibration levels, then the grading permits shall be conditioned to incorporate measures as necessary to reduce vibration levels to below 0.01 inches/second RMS at the nearest structures. Measures to reduce the anticipated vibration levels may include, but are not limited to, the prohibition of the use of drilling equipment, large bulldozers, or loaded heavy duty trucks within close proximity to the existing structures. The Project construction contractor shall be responsible for enforcing any of the vibration-attenuation measures identified in the assessment, which also shall be specified in bid documents issued to prospective construction contractors. The Project construction contractor shall permit inspections by Riverside County to verify compliance with the applicable requirements.</p> <p>MM 4.13-3 Prior to issuance of grading permits or improvement plans for the construction of the off-site water main within the existing alignment of Walnut Street, the Riverside County Building and Safety Department shall review the improvement plans to ensure that a note is included prohibiting the use of drilling equipment, large bulldozers, or loaded heavy duty</p>	<p>Project Applicant, Construction Contractors/ Planning Department</p> <p>Project Applicant, Construction Contractors/ Building and Safety Department</p>	<p>Prior to the issuance of grading permits and during grading activities, in the event that residential uses have been constructed adjacent to the western or eastern Project boundary</p> <p>Prior to issuance of grading permits or improvement plans for the construction of the off-site water line</p>



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
<p>necessary, to preclude the exposure of existing structures to on-site construction-related vibration levels exceeding 0.01 inches/second RMS. Implementation of the required mitigation would reduce the Project's on-site construction-related vibration impacts to below a level of significance.</p> <p>Implementation of Mitigation Measure MM 4.13-3 would prohibit drilling equipment, large bulldozers, and loaded heavy duty trucks from operating within 65 feet of any existing structure during the construction of the proposed water main within Walnut Street. Implementation of the required mitigation would reduce Project vibration-related impacts along this roadway segment to below the County's threshold of 0.01 inches/second RMS, and would reduce Project impacts to less-than-significant levels.</p> <p>Implementation of Mitigation Measure MM 4.13-4 would ensure that a blasting plan is prepared for the off-site construction of the proposed water tanks, and that the blasting plan is evaluated by a qualified acoustical consultant. The mitigation would require that conditions of approval be imposed on the blasting permit, if necessary, to preclude blasting-related vibration levels exceeding the County's standard of 0.01 inches/second RMS peak particle velocity. Implementation of the required mitigation and implementation of the measures identified by the acoustical consultant would reduce the Project's potential blasting-related vibration impacts to below a level of significance.</p>	<p>Mitigation</p>	<p>trucks within 65 feet of any existing structure. The Project construction contractor shall be responsible for enforcing this requirement, which also shall be specified in bid documents issued to prospective construction contractors. The Project construction contractor shall permit inspections by Riverside County to verify compliance with this measure.</p> <p>MM 4.13-4 Prior to the issuance of any blasting permits for the construction of the off-site water tanks, the Project Applicant shall prepare and Riverside County shall review and approve a proposed blasting plan. The blasting plan shall be accompanied by an analysis prepared by a qualified acoustical consultant that demonstrates that Project-related blasting activities would not expose nearby sensitive receptors (i.e., residential and school uses) to groundborne vibration levels exceeding 0.01 inches/second RMS. Riverside County shall condition any required blasting permits to require compliance with the noise analysis recommendations, including recommendations related to the size of the blast charge.</p> <p>MM 4.13-5 Prior to approval of any plot plans for proposed light industrial, business park, or commercial retail uses within Planning Areas 1, 2, 3, 4, 5, 6, 8A, or 8B of Specific Plan No. 239, Amendment No. 1, the Project Applicant shall prepare and Riverside County shall review and approve a site-specific noise impact analysis. The analysis shall evaluate the proposed plot plan application materials to determine whether future operations on-site would expose nearby planned sensitive receptors (i.e., residential units), including sensitive receptors within the McCanna Hills Specific Plan or in areas designated for residential uses by the General Plan to the east of the Project site, to noise levels exceeding the County's residential standard of 55 I Leq during daytime hours (i.e., between 7:00 a.m. and 10:00 p.m.) and 45 I Leq during nighttime hours (i.e., between 10:00 p.m. and 7:00 a.m.). If significant operational-related noise impacts are</p>	<p>Project Applicant, Blasting Contractor/ Planning Department, Sheriff's Department</p> <p>Project Applicant, Project Acoustical Consultant/ Planning Department</p>	<p>within Walnut Street and during construction of the off-site water line</p> <p>Prior to the issuance of any blasting permits for the construction of the off-site water tanks</p> <p>Prior to approval of any plot plans for proposed light industrial, business park, or commercial retail uses within Planning Areas 1, 2, 3, 4, 5, 6, 8A, or 8B of Specific Plan No. 239, Amendment No. 1</p>



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
		<p>anticipated, the County shall ensure that the noise impact analysis identifies and that the plot plans incorporate any noise attenuation measures that may be necessary to reduce operational-related noise impacts affecting off-site residential uses to below the County’s residential standard during both daytime and nighttime hours. Noise attenuation measures may include, but are not necessarily limited to, the incorporation of screen walls or other barriers (such as berms). Prior to issuance of building permits, the Riverside County Building and Safety Department shall ensure that any required noise attenuation measures have been incorporated into the plans, and shall verify that the noise attenuation measures have been implemented prior to final building inspection.</p> <p>CRDR 4.13-1 All construction activities and haul truck deliveries shall adhere to Section 2.i of Riverside County Ordinance No. 847, which prohibits construction activities that make loud noise from occurring between 6:00 p.m. and 6:00 a.m. during the months of June through September, and between 6:00 p.m. and 7:00 a.m. during the months of October through May, and on Sundays and Federal holidays.</p> <p>CRDR 4.13-2 Construction and operation of logistics and/or warehouse/distribution uses on site for buildings that exceed 250,000 s.f. in size shall be subject to compliance with the Riverside County Board of Supervisors’ Policy F-3 (“Good Neighbor Policy” for Logistics and Warehouse/Distribution Uses).</p>	<p>As set forth by Section 2.i of Riverside County Ordinance No. 847</p> <p>As set forth by Policy F-3</p>	<p>As set forth by Section 2.i of Riverside County Ordinance No. 847</p> <p>As set forth by Policy F-3</p>
4.14 Paleontological Resources				
Threshold a.: The Project would not impact any known paleontological resources or unique geological features. Implementation of Mitigation Measure MM 4.14-1 would ensure that a PRIMP is prepared prior to issuance of any grading permits that have the potential to affect subsurface paleontological resources. Implementation of a PRIMP would ensure that paleontological resources, if uncovered during site	Less than Significant with Mitigation	MM 4.14-1 Prior to the issuance of grading permits, the Project Applicant shall retain a qualified paleontologist approved by the County to create and implement a Project-specific plan for monitoring site grading/earthmoving activities (Project paleontologist). The Project paleontologist retained shall review the approved development plan and grading plan and conduct any pre-construction work necessary to render appropriate monitoring	Project Applicant, Project Paleontologist/ County Geologist, Planning Department	Prior to the issuance of grading permits and during grading and ground-disturbing activities



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
<p>grading activities, are appropriately treated, and would reduce the Project’s direct and cumulatively-considerable impacts to paleontological resources to less-than-significant levels.</p>		<p>and mitigation requirements as appropriate. These requirements shall be documented by the project paleontologist in a Paleontological Resource Impact Mitigation Program (PRIMP). This PRIMP shall be submitted to the County Geologist for approval prior to issuance of a Grading Permit. Information to be contained in the PRIMP, at a minimum and in addition to other industry standards and Society of Vertebrate Paleontology standards, are as follows:</p> <ul style="list-style-type: none"> ▪ Prior to issuance of grading permits, a qualified vertebrate paleontologist (“Project Paleontologist”) shall review the Project grading plans and geotechnical report data, with particular regard to location and depth of earth moving and the rock unit(s) being encountered. The review is for the purpose of assessing potential for fossil remains being encountered by earth moving. If previously undisturbed strata with potential for containing fossil remains will be encountered by earth moving, the following measures shall be implemented. ▪ Museum Storage Agreement. The Western Science Center (WSC), Natural History Museum of Los Angeles County (LACM), San Diego Natural History Museum (SDNHM), San Bernardino County Museum (SBCM), or Riverside Municipal Museum (RMM) shall be the designated museum repository for any vertebrate, invertebrate, and plant fossil remains and associated specimen data and corresponding geologic and geographic site data that might be recovered from the site as a result of the PRIMP. Prior to any earth moving at the Project site, the paleontologist shall develop a formal agreement with the museum regarding final disposition and permanent storage and maintenance of the fossil collection and associated data. The 		



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
		<p>agreement shall cover, but not necessarily be limited to, museum requirements regarding: 1) level of treatment of the collection; 2) storage and maintenance fees, if any; 3) purchase of specimen storage cabinets and drawers, as well as specimen trays, vials, specimen data cards, and other curatorial supplies, if required.</p> <ul style="list-style-type: none"> ▪ Discovery Clause/Treatment Plan. As part of the PRIMP, the Project Paleontologist shall develop a discovery clause/treatment plan (DC/TP) to allow for the additional tasks (recovery, geologic mapping, fossiliferous rock sample processing, specimen preparation, identification, curation, cataloguing, data entry, specimen storage, and maintenance by museum) and manpower required to treat a large or productive fossil occurrence that cannot be treated without diverting the monitor from routine monitoring. The DC/TP shall also include approved procedures and lines of communication to be followed by specific individuals if fossil remains are uncovered by earth moving, particularly when a paleontologic monitor is not present at the site. Names and telephone numbers of contact personnel shall be included in the lines of communication. The preparation of the required PRIMPs for future grading permits would ensure compliance with these requirements. ▪ Pre-Construction Meeting. The Project Paleontologist or field supervisor, as well as a paleontologic construction monitor, shall attend a preconstruction meeting to explain the PRIMP to construction contractor and the developer's construction workers. The presentation shall 		



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		<p>summarize mitigation procedures to be employed by PRIMP personnel and shall detail procedures and lines of communication to be followed by specific Project personnel when fossil remains are found at the site.</p> <p>The Project Paleontologist or field supervisor shall inform the construction contractor and the developer’s construction workers of the following items:</p> <ol style="list-style-type: none"> 1) Routine mitigation measures (primarily monitoring and test screening) to be employed by a monitor during earth moving. 2) The potential for fossil remains being uncovered by earth moving in particular areas of the site and the need to implement specific actions and additional mitigation measures when a fossil occurrence is uncovered by earth moving. 3) Functions and responsibilities of the monitor when fossil remains are uncovered by earth moving and can be recovered without diverting the monitor from monitoring (temporarily divert earth moving around fossil site until remains evaluated, recovered, and earth moving allowed to proceed through site by monitor; if approved by construction contractor, enlist assistance of earth-moving equipment and operator to expedite recovery of remains, obviate need for additional personnel, and reduce any potential construction delay). 4) Functions and responsibilities of the monitor 		



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
		<p>when a fossil occurrence is uncovered by earth moving and is sufficiently large or productive that it cannot be recovered without diverting the monitor from monitoring.</p> <p>4a) Flag the site.</p> <p>4b) Advise construction contractor to avoid fossil site until further notice.</p> <p>4c) Call the Project Paleontologist or field supervisor to site.</p> <p>5) Functions and responsibilities of the Project Paleontologist or field supervisor when notified by the monitor that a large or productive fossil occurrence has been uncovered by earth moving and cannot be recovered without diverting the monitor from monitoring. Evaluate occurrence to determine if recovery is warranted.</p> <p>5a) If recovery is warranted, notify construction contractor and the Project developer of necessity for implementing additional mitigation measures specified in DC/TP initiating increased level of monitoring, if not already in effect, in immediate vicinity of fossil site and assigning additional personnel to PRIMP.</p> <p>5b) Within 24 hours, mobilize recovery crew to recover occurrence; supervise recovery of occurrence and its transport to laboratory facility or to location elsewhere at site approved by construction contractor for initial/field processing of a fossiliferous rock sample or to laboratory facility for preparation of a fossil specimen.</p> <p>5c) If warranted and approved by construction contractor, enlist assistance of the earth-moving</p>		



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		<p>equipment and operator to expedite recovery of occurrence.</p> <p>5d) To obviate need for additional personnel and reduce any potential construction delay, after recovery of occurrence, have construction contractor allow earth moving to proceed through fossil site.</p> <p>5e) Notify Project developer of recovery (or of decision not to recover fossil occurrence, if appropriate) and of authorization for earth moving to proceed through fossil site.</p> <p>6) Responsibilities of the construction contractor and earth-moving equipment operators if fossil remains are uncovered by earth moving, particularly if a monitor is not present at the site when the remains are encountered.</p> <p>6a) Avoid disturbance of fossil site by earth moving.</p> <p>6b) Notify monitor, the Project Paleontologist or the field supervisor and Project developer of the fossil occurrence.</p> <p>6c) Avoidance of fossil site by earth-moving activities.</p> <p>6d) Assist with equipment and operator to expedite recovery of occurrence.</p> <p>If warranted, the Project Paleontologist or field supervisor and a monitor shall give a similar presentation to the earth-moving equipment operators at one of their earliest safety meetings. The operators shall be instructed on recognizing fossil remains in the field, informed of their responsibilities if they observe fossil remains when the monitor is not present at the site (avoid</p>		



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		<p>disturbance of occurrence by earth moving; have construction contractor call monitor to fossil site; expedite recovery of occurrence, if requested), and advised that unauthorized collecting of fossil remains is illegal.</p> <ul style="list-style-type: none"> ▪ Monitoring Earth Moving. Earth moving shall be monitored by a paleontologic monitor only in those areas of the site where earth moving will disturb soils greater than 5 feet deep (monitoring will not be conducted in areas in which soils will be buried, but not disturbed). Monitoring shall not be implemented until earth moving has reached a depth of 5 feet below current grade. Monitoring shall consist of visually inspecting freshly exposed rock and debris for larger fossil remains and periodically dry test screening a small (25 pound) sample of rock and debris with a 20-mesh box screen for smaller vertebrate fossil remains. Monitoring shall be conducted on a full-time basis. However, if too few or no fossil remains are uncovered by earth moving in areas underlain by a particular rock unit, monitoring can be reduced, generally, to half or quarter time or suspended once 50% of earth moving in the area underlain by the rock unit has been completed. Alternatively, if sufficient fossil remains are uncovered by earth moving, monitoring may be increased in areas underlain by the fossil-bearing rock unit, at least in the immediate vicinity of the fossil site. ▪ Large-Specimen Evaluation and Recovery Option. <ol style="list-style-type: none"> 1) If a large fossil specimen is found as a result of monitoring earth moving and the specimen can 		



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		<p>be recovered without significantly diverting the monitor from monitoring, earth moving shall be temporarily diverted around the fossil site and the specimen shall be evaluated, and, if warranted, excavated, covered with a protective plaster-impregnated burlap jacket, if required, and recovered.</p> <p>If necessary, earth-moving equipment and an operator shall be enlisted to expedite recovery of the specimen and obviate the need for additional personnel, and the construction contractor shall be allowed to have earth moving proceed through the fossil site immediately after recovery of the specimen. A temporary field number shall be assigned to the specimen; the field number, a preliminary field identification, and pertinent specimen (field number, identification by taxon and element) and geologic (particularly stratigraphic level within rock unit) and geographic site data (location, elevation) recorded in the monitor's daily monitoring log; and the field number recorded and the fossil site location plotted on a map of the site.</p> <p>At the end of the day the monitor or (following his next site inspection) the field supervisor shall transport the fossil remains and associated data to a laboratory facility for further treatment. If appropriate, samples of fossil wood will be submitted for carbon-14 dating analysis.</p> <ul style="list-style-type: none"> ▪ 2) If a fossil specimen is found and is sufficiently large that it cannot be recovered without significantly diverting the monitor from monitoring, the fossil site shall be flagged with colored survey ribbon to 		



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		<p>temporarily divert earth moving around the site, the construction contractor shall be advised to avoid the site until further notice, and the Project Paleontologist or field supervisor shall be called to the site. The grading contractor will notify the Project developer and Project Paleontologist of the occurrence and of the avoidance of the site. The Project Paleontologist or field supervisor in turn shall evaluate the specimen to determine if recovery is warranted.</p> <p>2a) If specimen recovery is not warranted, no further action will be taken to preserve the fossil site or remains, and the construction contractor will be allowed to have earth moving proceed through the site immediately.</p> <p>2b) If specimen recovery is warranted, the Project Paleontologist or field supervisor shall notify the construction contractor and Project developer of the necessity for implementing additional mitigation measures specified in the DC/TP, initiating full-time monitoring, if not already in effect, at least in the immediate vicinity of the site in areas underlain by the fossil-bearing rock unit, and assigning additional personnel to the PRIMP. Within 24 hours a recovery crew shall be mobilized to recover the specimen. The size of the crew shall reflect the size of the specimen and the need to recover the specimen as quickly as possible.</p> <p>The specimen shall be excavated with hand tools, covered with a protective plaster-impregnated burlap jacket, and recovered. If necessary and approved by the construction contractor, earth-</p>		



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		<p>moving equipment and an operator shall be enlisted to expedite recovery of the specimen, reduce any potential construction delay, and obviate the need for additional personnel. The construction contractor shall be allowed to have earth moving proceed through the fossil site immediately after recovery of the specimen.</p> <p>A temporary field number shall be assigned to the specimen; the field number, a preliminary field identification, and pertinent specimen (field number, identification by taxon and element) and geologic (particularly stratigraphic level within rock unit) and geographic site data (location, elevation) recorded in the monitor’s daily monitoring log; and the field number recorded and the fossil site location plotted on a map of the site. The field supervisor and, if necessary, a crew member shall transport the fossil specimen and associated site data to a laboratory facility for further treatment.</p> <ul style="list-style-type: none"> Small-Specimen Sample Evaluation, Recovery, and Processing. If a sufficient number of smaller vertebrate fossil remains are found at one (1) site as a result of test screening by the paleontological monitor, the fossil site shall be flagged with colored survey ribbon to temporarily divert earth moving around the site. The construction contractor shall be advised to avoid the site until further notice, and if requested by the monitor to expedite recovery of a fossiliferous rock sample reduce any potential construction delay and obviate the need for additional personnel, the construction contractor shall have earth-moving equipment and an operator 		



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
		<p>acquire a rock sample from the fossil site and transport the sample, if possible, to a nearby temporary location at the site approved by the construction contractor.</p> <p>If a sample is recovered, the construction contractor shall be allowed to have earth moving proceed through the fossil site immediately after recovery of the sample. The Project Paleontologist or field supervisor shall be called to the fossil/storage site to determine if the fossil site/sample is sufficiently productive to warrant recovery of a large sample of fossiliferous rock to process for additional small remains.</p> <p>1) If the site/sample is determined too unproductive or the remains too poorly preserved or insufficiently diagnostic, no further action will be taken to preserve the fossil site/sample or remains, and the construction contractor will be allowed to have earth moving proceed through the fossil/storage site immediately.</p> <p>2) If sample recovery is warranted, the Project Paleontologist or field supervisor shall notify the construction contractor and Project developer of the necessity for implementing additional mitigation measures specified in the DC/TP and assigning additional personnel to the PRIMP.</p> <p>2a) Within 24 hours, a recovery crew shall be mobilized to recover the sample. The size of the crew shall reflect the need to recover the sample as quickly as possible. The field supervisor shall record the size and supervise recovery of the</p>		



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		<p>sample. Up to 3 tons of fossiliferous rock shall be recovered. The sample shall be excavated with hand tools for recovery. If necessary and if approved by the construction contractor, earth-moving equipment and an operator shall be enlisted to expedite transportation of the sample to the processing facility site, obviate the need for additional personnel, and reduce any potential construction delay and the construction contractor will be allowed to have earth moving proceed through the fossil site immediately after recovery of the sample.</p> <p>2b) A temporary field number shall be assigned to the sample; the field number and pertinent specimen (field number, identification by taxon and element) and geologic (particularly stratigraphic level within rock unit) and geographic site data (location, elevation) recorded in the monitor’s daily monitoring log; and the field number recorded and the fossil site location plotted on a map of the site. The field supervisor and, if necessary, a crew member will transport the sample to a location elsewhere at the site approved by the construction contractor or to an offsite location for initial/field processing (wet screening) of the sample. The total weight of all samples from each fossil-bearing rock unit at the site shall not exceed 3 tons.</p> <p>2c) If warranted, the field supervisor shall setup a field processing facility for wet screening the sample at a site location approved by the construction contractor. Wet screening shall</p>		



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		<p>consist of sieving rock through a 20- (and/or finer) mesh box screen immersed in a tub of water to remove the smaller (clay and silt) particles from the larger (sand and rock) particles and small fossil remains, and could result in a reduction in sample weight/volume in excess of 90%. If necessary, rock shall be soaked in an environmentally safe dispersant (citrus oil) prior to screening to improve the separation of the clay particles from the rest of the sample during screening. The monitor shall conduct wet screening if screening can be accomplished without diverting the monitor from monitoring. If it is not possible to have the monitor perform the wet screening, a field technician shall be assigned to the task. Following the next site inspection, the field supervisor will transport the concentrate (larger particles and small fossil remains) generated by initial processing to a laboratory facility for final/laboratory processing.</p> <p>2d) If the fossil remains in the concentrate are sufficiently fossilized (dense), an environmentally safe heavy liquid (sodium polytungstate), if appropriate, shall be used by the senior vertebrate paleontologist to separate the remains from the remaining sand and rock particles. When added to a beaker filled with heavy liquid, the concentrate will separate, the particles floating to the surface, and the remains sinking to the bottom, from where they are retrieved. This technique can result in a further sample weight/volume reduction in excess of 90% (less than 1% of original sample size). The final concentrate shall be examined under a</p>		



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		<p>microscope and fossil specimens recovered from any remaining sand and rock particles. If the fossil bone in the original concentrate is not sufficiently dense for use of the heavy-liquid separation technique, the entire sample of concentrate shall be sorted under a microscope for fossil remains. Recovered fossil remains shall then be treated as outlined herein.</p> <p>2e) During the final processing of a sample, the senior vertebrate paleontologist shall continually evaluate the results of field and laboratory processing. If the sample is insufficiently productive or the fossil remains, too poorly preserved, the senior vertebrate paleontologist shall have the option of discontinuing further laboratory processing of the sample, having field processing of the remainder of the sample suspended, and disposing of the remainder of the sample and unprocessed concentrate. Similarly, processing shall be discontinued if, after preliminary identification of some specimens, the remains are determined insufficiently diagnostic or diverse taxonomically, or the species represented are the same as those in another sample from the fossil-bearing rock unit. If appropriate, small splits from one or more samples shall be submitted for palynological analysis.</p> <ul style="list-style-type: none"> ▪ Fossil Treatment. Final treatment of all fossil specimens recovered from the site as a result of the PRIMP shall be conducted at a laboratory facility. Larger vertebrate fossil specimens shall be removed from their protective jackets, prepared to the point 		



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		<p>of identification using hand tools, and hardened or stabilized with a penetrating solution by a preparator. All recovered fossil specimens shall be identified to the lowest taxonomic level possible by knowledgeable vertebrate and invertebrate paleontologists and, if required, other knowledgeable paleontologists (i.e., paleobotanists, micropaleontologists, palynologists). The specimens shall then be curated (assigned and labeled with museum specimen data and corresponding site numbers, placed in specimen trays and, if appropriate, vials with completed specimen data cards), catalogued (specimen and site numbers and specimen data and corresponding geologic and geographic site data, respectively, archived [entered into appropriate catalogs and computerized databases]), and accessioned into the museum fossil collection, where they will be permanently stored, maintained, and, along with associated data, made available for future study by qualified investigators. With the possible exception of those tasks (curation, cataloging) that might be conducted by museum staff, all treatment of the fossil specimens shall be conducted by a laboratory technician. Fossil specimen preparation, identification, curation, and cataloging are now required before a fossil collection will be accepted by most museum repositories, including the WSC, LACM, SDNHM, SBCM, and RMM. Moreover, the scientific importance of a fossil specimen cannot be evaluated until the specimen has been identified to the lowest taxonomic level possible, and specimen identification often is not possible without prior preparation.</p>		



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
		<ul style="list-style-type: none"> ▪ Final Report. A final technical report of findings shall be prepared by the Project Paleontologist and shall describe the site’s stratigraphy, summarize field and laboratory methods employed during the PRIMP, include a taxonomic list and an inventory of catalogued fossil specimens recovered as a result of the PRIMP, evaluate the scientific importance of the specimens, and discuss the relationship of the fossil assemblage from any newly recorded fossil site at the project site to relevant fossil assemblages from fossil sites in other areas. The report shall be submitted to the contractor and County Geologist. Submission of the final report will signify completion of the PRIMP and will ensure Project compliance with Public Resources Code Section 21081.6 (mitigation monitoring, reporting, and compliance). <p>All reports shall be signed by the Project paleontologist and all other professionals responsible for the report’s content (e.g. Project Geologist), as appropriate. One original signed copy of the report(s) shall be submitted to the County Geologist along with a copy of this condition and the grading plan for appropriate case processing and tracking. These documents should not be submitted to the Project Planner, Plan Check staff, Land Use Counter or any other County office. In addition, the Project Applicant shall submit proof of hiring (i.e. copy of executed contract, retainer agreement, etc.) a Project paleontologist for the in-grading implementation of the PRIMP.</p>		
4.15 Population and Housing				
Threshold a.: The Project site does not contain any existing residences or housing, and the Project would not displace substantial numbers of existing people or housing,	No Impact	Impacts would be less than significant; therefore, mitigation measures are not required.	N/A	N/A



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
<p>until a specific proposal and design for such facilities are prepared by the RCFD. Accordingly, impacts due to the construction of new or expanded fire protection facilities are too speculative for evaluation in this EIR (State CEQA Guidelines § 15145). Environmental effects of such fire protection facilities and associated mitigation would be identified through a future CEQA process required in association with any future proposals for new or expanded fire protection facilities. Additionally, with payment of mandatory DIF fees, the proposed Project’s potential direct and cumulatively-considerable impacts to the Riverside County Fire Department would be reduced to less-than-significant levels.</p> <p>Threshold b.: With payment of mandatory DIF fees, the proposed Project’s potential direct and cumulatively-considerable impacts to the Riverside County Sheriff’s Department would be reduced to less-than-significant levels, and the Project would not result in or require the construction of new police protection facilities that could result in a significant impact to the environment.</p> <p>Threshold c.: The Project would not directly generate a resident population, and thus would not directly impact school services in the local area. Although the Project may indirectly result in new residents within the service area of the VVUSD, NUSD, and/or PUHSD, and thus may indirectly result in an incremental increase in demand for new school facilities, there are no current publicly-available plans detailing where such facilities would be built. As such, it is not possible to identify environmental impacts that may be associated with the construction of new or expanded school facilities until a specific proposal and design for the facility is prepared by the VVUSD, NUSD, and/or PUHSD, and an analysis of potential physical environmental impacts resulting from the</p>	<p>Less than Significant</p> <p>Less than Significant</p>	<ul style="list-style-type: none"> ▪ EIR No. 441 Mitigation Measure 4.15.2A: The County shall require as a part of the development review process, proponents of new businesses, recreational, and commercial land uses such as shopping centers, health clubs, large hotels over 200 rooms, convention centers, and commercial recreational activities be required to provide on-site security. ▪ EIR No. 441 Mitigation Measure 4.15.2D: The County shall require the development applicant to pay the County Sheriff’s established development mitigation fee prior to issuance of a certificate of occupancy on any structure as they are developed. The fees are for the acquisition and construction of public facilities. ▪ EIR No. 441 Mitigation Measure 4.15.3E: The County shall require all future commercial, industrial and multifamily residential development to provide for adequate areas for the collection and loading of recyclable materials (i.e., paper products, glass, and other recyclables) in compliance with the State Model Ordinance, implemented on September 1, 1994, in accordance with AB 1327, Chapter 18, California Solid Waste Reuse and Recycling Access Act of 1991. ▪ EIR No. 441 Mitigation Measure 4.15.3F: The County shall require all development projects to coordinate with appropriate County departments and/or agencies to ensure that there is adequate waste disposal capacity to meet the waste disposal requirements of the project, and the County shall recommend that all development projects incorporate measures to promote waste reduction, reuse, recycling, and composting. <p>CRDR 4.16-2 As a condition of Project approval, the</p>	<p>Safety Department</p> <p>Project</p>	<p>Prior to issuance</p>



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
<p>construction and operation of new or expanded school facilities would be speculative in nature (see State CEQA Guidelines § 15145). Environmental effects of such school facilities and any associated mitigation would be identified through a future CEQA process required in association with any future proposals for new or expanded school facilities. Any mitigation measures required for new or expanded school facilities could be funded, in part, from property taxes and/or through payment of school impact fees. Furthermore, the payment of mandatory school impact fees would ensure that the Project would result in less-than-significant direct or cumulatively-considerable impacts to the ability of the VVUSD, NUSD, and/or PUHSD to provide for school services.</p> <p>Threshold d.: The Project would not directly generate a resident population, and thus would not directly impact library services in the local area. Although the Project may indirectly result in new residents within the local area, and thus could result in an incremental demand for increased library facilities, it is not possible to identify environmental impacts that may be associated with such new or expanded library facilities until a specific proposal and design for such facilities are prepared by Riverside County. Accordingly, impacts due to the construction of new or expanded library facilities are too speculative for evaluation in this EIR (State CEQA Guidelines § 15145). Environmental effects of such library facilities and associated mitigation would be identified through a future CEQA process required in association with any future proposals for new or expanded library facilities. However, the Project would be required to contribute DIF fees, which would be used in part to provide for library space and/or new book volumes. Accordingly, with payment of DIF fees, Project impacts to library services and facilities are evaluated as less than significant on both a direct and cumulatively-</p>	<p>Less than Significant</p>	<p>proposed Project would be required to conform to all mandatory local, State, and federal laws, ordinances, and standards relating to fire safety.</p> <p>CRDR 4.16-3 The Project would be required to adhere to Riverside County Ordinance No. 659, which requires payment of a development impact fee (DIF) to assist the County in providing for fire protection facilities, including fire stations. Payment of the DIF fee would ensure that funds are available for capital improvements, such as land/equipment purchases and fire station construction.</p> <p>CRDR 4.16-4 The Project would be required to adhere to Riverside County Ordinance No. 659, which requires payment of a development impact fee (DIF) to assist the County in providing for sheriff protection facilities, including sheriff stations. Payment of the DIF fee would ensure that funds are available for additional sheriff personnel as well as capital improvements, such as land/equipment purchases and sheriff station construction.</p> <p>CRDR 4.16-5 The Project is required to comply with Riverside County Ordinance No. 575, which requires mandatory payment of school impact fees pursuant to Public Education Code § 17072.10-18.</p> <p>CRDR 4.16-6 The Project would be required to adhere to Riverside County Ordinance No. 659, which requires payment of a development impact fee (DIF) to assist the County in providing for library facilities. Payment of the DIF fee would ensure that funds are available for capital improvements, such as land/equipment purchases and library construction or expansion.</p> <p>CRDR 4.16-7 The Project would be required to adhere to</p>	<p>Applicant/ Building and Safety Department</p> <p>As set forth by Ordinance No. 659</p> <p>As set forth by Ordinance No. 659</p> <p>As set forth by Ordinance No. 575</p> <p>As set forth by Ordinance No. 659</p>	<p>of building permits</p> <p>As set forth by Ordinance No. 659</p> <p>As set forth by Ordinance No. 659</p> <p>As set forth by Ordinance No. 575</p> <p>As set forth by Ordinance No. 659</p>



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
<p>considerable basis.</p> <p>Threshold e.: With payment of mandatory DIF fees, the Project would result in less-than-significant direct and cumulatively-considerable impacts to health services facilities, and the Project would not result in or require the construction of new health services facilities that could result in a significant impact to the environment.</p>	Less than Significant	Riverside County Ordinance No. 659, which requires payment of a development impact fee (DIF) to assist the County in providing for health facilities. Payment of the DIF fee would ensure that funds are available for capital improvements, such as land/equipment purchases and health facility construction.	As set forth by Ordinance No. 659	As set forth by Ordinance No. 659
4.17 Recreation				
<p>Thresholds a. and d.: The physical construction of the on-site trails and pedestrian facilities has been addressed under the relevant issue areas identified throughout this EIR (e.g., air quality, biological resources, cultural resources, etc.). Under each of these topics, the Project impacts are determined to be less than significant, or mitigation measures have been identified to reduce impacts to the maximum feasible extent. There are no components of the planned trails or pedestrian facilities on site that have not already been addressed and accounted for throughout this EIR. Accordingly, Project impacts due to parkland development on site would be less than significant, requiring no mitigation beyond that which is identified in other portions of this EIR.</p> <p>Threshold b.: The Project does not propose any residential uses or other land use that may generate a population that would directly increase the use of existing neighborhood and regional parks or other recreational facilities. Accordingly, implementation of the proposed Project would not result in the increased use or substantial physical deterioration of an existing neighborhood or regional park, and impacts would be less than significant.</p> <p>Threshold c.: The Project site is not located within a CSA that was established for recreational facilities, the Project site is not located within a Community Parks and Recreation Plan,</p>	Less than Significant	Impacts would be less than significant; therefore, mitigation measures are not required.	N/A	N/A



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
and the Project is not subject to payment of in-lieu fees (Quimby fees) for recreational facilities pursuant to Section 10.35 of Riverside County Ordinance No. 460. Accordingly, impacts due to a conflict with a Community Parks and Recreation Plan and due to the need for payment of in-lieu fees for parkland acquisition and construction would be less than significant.				
4.18 Transportation				
<p>Threshold a.: The proposed Future development on site would be required to comply with all applicable Riverside County ordinances related to the circulation system. In addition, EIR <i>Technical Appendix I</i> includes a detailed analysis of the proposed Project’s consistency with the Riverside County General Plan and LNAP policies. As demonstrated in the analysis therein, with approval of the Project’s proposed General Plan Amendment No. 190008, the proposed Project would not conflict with any applicable policies of the General Plan or LNAP, including policies within the General Plan Circulation Element and LNAP that relate to the circulation system, transit, roadway, bicycle, and/or pedestrian facilities. With respect to the LOS standards, the Project would be conditioned to require construction of improvements, payment of DIF and TUMF fees, and payment of fair-share contributions towards improvements not included in any existing fee programs. With exception of facilities under the jurisdiction of Caltrans, the improvements to be constructed as part of the Project, as part of the DIF or TUMF programs, or as the result of Project fair-share contributions would provide for an acceptable LOS at all Study Area facilities. Although it is expected that segments of I-215 and associated merge/diverge junctions would not achieve Caltrans’ LOS standards under near- or long-term conditions, Caltrans does not have any fee programs in place to address impacts to freeways or ramp junctions. Furthermore, pursuant to SB 743 and State CEQA Guidelines</p>	Less than Significant	<p>MM 4.18-1 Prior to approval of future implementing projects (i.e., plot plans, conditional use permits, etc.), the Project Applicant shall prepare a project-level Vehicle Miles Travelled (VMT) analysis to identify site-specific Transportation Demand Management (TDM) measures to reduce VMTs associated with the Project’s proposed uses to the maximum feasible extent. TDM strategies that may be applicable at the implementing project level may include:</p> <ul style="list-style-type: none"> ▪ Reduced parking supply. ▪ Transit Rerouting and Transit Stops. ▪ Commute trip reduction (CTR) programs offered by individual building tenants that would encourage the use of vanpools, carpooling, public transit, and biking. ▪ CTR programs may also provide for alternative work or compressed work schedules to reduce the number of days an employee commutes to work. ▪ Provision of on-site facilities to provide end of trip services for bicycling such as secure bike parking, storage lockers and showering facilities. <p>Riverside County shall condition the future implementing projects to implement the TDM strategies identified as part of the future-required VMT analyses.</p> <p>MM 4.18-2 Prior to the issuance of grading permits or improvement plans affecting Ramona Expressway, Nuevo Road,</p>	Project Applicant, Project Traffic Engineer/ Transportation Department, Planning Department	Prior to approval of future implementing projects (i.e., plot plans, conditional use permits, etc.)
			Project Applicant/	Prior to the issuance of



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
<p>§ 15064.3(a), "...a project's effect on automobile delay shall not constitute an environmental impact." As such, for purposes of CEQA, the Project's contribution to the projected LOS deficiencies at freeway mainlines and merge/diverge locations would be less than significant.</p> <p>Threshold b.: For the Project's light industrial and business park uses, the Project-generated Work VMT per employee would exceed the County's adopted threshold of 14.24 VMT per employee by 26.22 percent; thus, VMT associated with the Project's proposed light industrial and business park uses represent a significant impact of the proposed Project. The Project's retail component under near-term conditions would result in a net increase in VMT within the County, although under long-term conditions the Project's retail component would result in a net decrease in VMT within the County. Project-generated VMT per employee for the Project's proposed light industrial and business park uses was found to exceed the existing county-wide average VMT per employee threshold by 26.22%, while near-term operation of the Project's retail component was found to result in a net increase in the County's total VMT. Mitigation Measure MM 4.18-1 requires that a VMT assessment be prepared for future implementing developments (i.e., plot plans, conditional use permits, etc.) in order to identify feasible site-specific TDM strategies that would serve to reduce VMT. However, inclusion of such VMT reduction measures in areas that are characteristically suburban in context are limited to a maximum VMT reduction of 15%. This maximum reduction for cross-category transportation-related mitigation measures of 15% for suburban settings is also noted in the County Guidelines. Therefore, even with the implementation of all feasible VMT reduction measures, Project-generated VMT cannot be reduced to a level of less than significant.</p>	<p>Significant and Unavoidable</p>	<p>or any other roadways within the Project site that have been improved, the Project Applicant shall prepare and the County of Riverside shall approve a temporary traffic control plan. The temporary traffic control plan shall comply with the applicable requirements of the California Manual on Uniform Traffic Control Devices (CA MUTCD). A requirement to comply with the temporary traffic control plan shall be noted on all grading and building plans and also shall be specified in bid documents issued to prospective construction contractors.</p> <p>MM 4.18-3 All owner users and future tenants shall participate in Riverside County's Rideshare Program. The purpose of this program is to encourage 2+ person occupancy vehicle trips and encourage other alternative modes of transportation. Carpooling opportunities and public transportation information shall be advertised to employees of the building tenant. Developer and all successors shall include the provisions of this obligation in all leases of the Project so that all tenants shall fulfill the terms and conditions of this mitigation measure.</p> <p>CRDR 4.18-1 Prior to issuance of building permits, the Project Applicant shall pay appropriate Development Impact Fee Program (DIF) fees at the rates then in effect in accordance with Riverside County Ordinance No. 659.</p> <p>CRDR 4.18-2 Prior to final building inspection, the Project Applicant shall pay appropriate Western Riverside County Transportation Uniform Mitigation Fee Program Ordinance (TUMF) fees at the rates then in effect in accordance with Riverside County Ordinance No. 824.</p> <p>CRDR 4.18-3 Prior to approval of any implementing developments (i.e., tentative tract maps, plot plans, conditional use permits, etc.), the Project Applicant or implementing developer</p>	<p>Building and Safety Department</p> <p>Project Applicant, Future Occupants/ Planning Department</p> <p>Project Applicant/ Planning Department</p> <p>Project Applicant, Project Traffic Engineer/</p>	<p>grading permits or improvement plans affecting Ramona Expressway, Nuevo Road, or any other roadways within the Project site that have been improved</p> <p>During long-term operations</p> <p>Prior to issuance of building permits</p> <p>Prior to final building inspection</p> <p>Prior to approval of any implementing</p>



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
<p>Threshold c.: Improvements planned as part of the Project would be constructed to County standards, and would not increase hazards due to a geometric design feature. Although the Project’s light industrial and business park land uses have the potential to result in conflicts with traffic from surrounding rural residential and master-planned residential communities, the majority of Project-related truck traffic would be directed to the Ramona Expressway and/or the Mid-County Parkway, and would be directed away from residential streets. As such, the Project would not result in increased hazards to transportation as a result of incompatible uses, and impacts due to incompatible uses would be less than significant.</p>	Less than Significant	<p>shall prepare a Traffic Impact Analysis (TIA) in compliance with the Riverside County Transportation Department’s “Transportation Analysis Guidelines for Level of Service and Vehicle Miles Traveled” (December 2020). Appropriate conditions of approval shall be imposed on future implementing developments based on the results of the future-required TIA(s) to address projected Level of Service (LOS) deficiencies along the transportation network. Anticipated Project-related responsibilities for improvements, fee payments, and fair-share contributions associated with the Primary Land Use Plan, without the construction of the Mid-County Parkway (MCP), and with implementation of the Primary Truck Route (as described subsection 3.6.2.B.2 of the Project’s EIR) are summarized in Table 1-4 of the Project’s Traffic Impact Analysis (<i>Technical Appendix L1</i> to the Project’s EIR). Anticipated Project-related responsibilities for improvements, fee payments, and fair-share contributions with implementation of the Primary Land Use Plan, without the construction of the MCP, and with implementation of the Southern Truck Route (as described subsection 3.6.2.B.2 of the Project’s EIR) are summarized in Table 14 of the Project’s Southern Truck Route Analysis (<i>Technical Appendix L4</i> to this EIR). Estimated Project-related responsibilities for improvements, fee payments, and fair-share contributions with implementation of the Alternative Land Use Plan and with the construction of the MCP are summarized in Table 1-5 of the Project’s Traffic Impact Analysis (<i>Technical Appendix L1</i> to the Project’s EIR). The actual improvements, fee payments, and fair-share contributions shall be based on the results of the TIA(s) required for each implementing development, and may vary from the list of improvements, fee payments, and/or fair-share contributions listed in the Project’s Traffic Impact Analysis and Southern Truck Route Analysis.</p>	Transportation Department, Planning Department	developments
<p>Threshold d.: There are no components of the proposed Project that would result in or require a substantial increase in expenditures by Riverside County for public road maintenance such that environmental impacts would result. As such, Project impacts would be less than significant.</p>	Less than Significant			
<p>Threshold e.: Mitigation Measure MM 4.17-1 requires the Project Applicant to prepare and obtain Riverside County approval of a temporary traffic control plan prior to issuance of grading permits. Implementation of the required mitigation would ensure that Project-related construction activities would not substantially affect circulation during the Project’s construction. With implementation of the required mitigation, impacts would be reduced to less-than-significant levels.</p>	Less than Significant with Mitigation			
<p>Threshold f.: Mitigation Measure MM 4.17-1 requires the Project Applicant to prepare and obtain Riverside County approval of a temporary traffic control plan prior to issuance of grading permits. With implementation of the required mitigation, the Project would not result in inadequate emergency access or access to nearby uses during the Project’s construction phase. Accordingly, with implementation of the</p>	Less than Significant with Mitigation			



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
<p>required mitigation, impacts would be reduced to less-than-significant levels.</p> <p>Threshold g.: Impacts associated with the construction of on-site trails and bicycle facilities are inherent to the Project’s construction phase, and such impacts have been evaluated throughout this EIR. Where significant impacts have been identified, feasible mitigation measures have been identified to reduce impacts to the maximum feasible extent. There are no impacts associated with the construction of bike systems or bike lanes that have not already been addressed herein. As such, impacts would be less than significant.</p>	Less than Significant			
4.19 Tribal Cultural Resources				
<p>Threshold a.: The Project has the potential to result in significant impacts to previously-undiscovered Tribal Cultural Resources, and could result in significant impacts to previously-identified Tribal Cultural Resources within the Project site in the absence of protective measures. Implementation of EIR Mitigation Measures MM 4.5-1 and MM 4.5-2 would ensure appropriate treatment of any Tribal Cultural Resources that may be identified during Project-related ground-disturbing activities, including human remains. Implementation of the required mitigation would reduce Project impacts to Tribal Cultural Resources to below a level of significance.</p>	Less than Significant with Mitigation	Mitigation Measures MM 4.5-1 and MM 4.5-2 shall apply, which have been drafted to include all of the mitigation requirements requested during the Project’s Tribal Consultation process. No additional mitigation measures are required.	As specified above for Mitigation Measures MM 4.5-1 and MM 4.5-2	As specified above for Mitigation Measures MM 4.5-1 and MM 4.5-2
4.20 Utilities and Service Systems				
<p>Threshold a.: Although the Project would require construction of new or expanded water, wastewater conveyance, and storm water drainage systems, impacts associated with the construction of such facilities have been evaluated throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). Where significant direct or cumulative impacts are identified,</p>	Less than Significant	<p>CRDR 4.20-1 The Project is required to comply with the provisions of the California Solid Waste Integrated Waste Management Act, (AB 939, 1989) which mandates a reduction of disposed waste throughout California.</p> <p>CRDR 4.20-2 The Project is required to comply with the provisions of the California Solid Waste Reuse and Recycling Act</p>	<p>As set forth by AB 939</p> <p>As set forth by AB 1327</p>	<p>As set forth by AB 939</p> <p>As set forth by AB 1327</p>



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
<p>mitigation measures have been imposed to reduce the Project’s impacts to the maximum feasible extent. There are no environmental impacts that would occur specifically related to the Project’s proposed water, sewer, and drainage improvements that have not already been addressed. As such, with the mitigation measures specified in this EIR, Project impacts due to water, sewer, and drainage improvements would be less than significant. Additionally, the Project’s wastewater generation would represent approximately between approximately 8.0% and 8.1% of the PVRWRF’s current excess capacity (under the Alternative Land Use Plan and Primary Land Use Plan, respectively), and would represent approximately 0.7% of the ultimate planned capacity at the PVRWRF of 100 million gpd. Accordingly, the Project would not result in or require the expansion of the existing facilities at the PVRWRF, and impacts would therefore be less than significant.</p> <p>Threshold b.: Based on present information and the assurance that MWD is engaged in identifying solutions that, when combined with the rest of its supply portfolio, will ensure a reliable long-term water supply for its member agencies, EMWD has determined that it will be able to provide adequate water supplies to meet the potable water demand for the proposed Project as part of its existing and future demands. Accordingly, sufficient water supplies are available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. Furthermore, the use of recycled water on-site would serve to further reduce the Project’s water demand. The Project’s effect on EMWD’s regional water network would be less than significant.</p> <p>Thresholds c. and d.: Impacts associated with proposed wastewater conveyance facilities are inherent to the Project’s construction phase, and impacts have been evaluated</p>	<p>Less than Significant</p> <p>Less than Significant</p>	<p>(AB 1327) which developed a model ordinance for adoption of recyclable materials in development projects. This Act requires all development projects that are commercial, industrial, institutional, or marina in nature and where solid waste is collected and loaded, to provide an adequate area for collecting and loading recyclable materials over the lifetime of the project. The area is required to be provided before building permits are issued.</p> <p>CRDR 4.20-3 The Project is required to comply with the provisions of the Mandatory Commercial Recycling Program (AB 341): AB 341 made a legislative declaration that it is the policy goal of the state that not less than 75% of solid waste generated be source reduced, recycled, or composted by the year 2020, and required the Department of Resources Recycling and Recovery, by January 1, 2014, to provide a report to the Legislature that provides strategies to achieve that policy goal and also includes other specified information and recommendations.</p> <p>CRDR 4.20-4 The Project would be subject to the following applicable standard conditions of approval imposed on the Project by the RCDWR:</p> <ul style="list-style-type: none"> ▪ Prior to issuance of a building permit, a Waste Recycling Plan (WRP) shall be submitted to the Riverside County Department of Waste Resources for approval. At a minimum, the WRP must identify the materials (i.e., cardboard, concrete, asphalt, wood, etc.) that will be generated by construction and development, the projected amounts; the measures/methods that will be taken to recycle, reuse, and/or reduce the amount of materials; the facilities and/or haulers that will be utilized; and the targeted recycling or reduction rate. During Project construction, the Project site shall have, at a minimum, two (2) bins: one for waste disposal and the other for the recycling of Construction and 	<p>As set forth by AB 341</p> <p>Project Applicant/ RCDWR</p>	<p>As set forth by AB 341</p> <p>Prior to issuance of a building permit, prior to final building inspection, and during the life of the proposed Project</p>



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
<p>throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). Where significant direct or cumulative impacts are identified, mitigation measures have been imposed to reduce the Project’s impacts to the maximum feasible extent. There are no environmental impacts that would occur specifically related to the Project’s proposed sewer/wastewater improvements. As such, with the mitigation measures specified in this EIR, Project impacts due to proposed sewer improvements would be less than significant. Additionally, the Project’s wastewater generation would represent between approximately 8.0% and 8.1% of the PVRWRF’s current excess capacity (under the Alternative Land Use Plan and Primary Land Use Plan, respectively), and would represent approximately 0.7% of the ultimate planned capacity at the PVRWRF of 100 million gpd (for both land use plans). Accordingly, the Project would not result in or require the expansion of the existing facilities at the PVRWRF, and impacts would therefore be less than significant.</p> <p>Threshold e.: Regional solid waste facilities would have adequate capacity to handle solid waste generated by the Project’s construction and operational phases. The Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Accordingly, impacts would be less than significant.</p> <p>Threshold f.: With mandatory compliance to AB 939, AB 341, and RCDWR’s programs and policies, the Project would not result in a significant impact due to noncompliance with regulations related to solid waste. A less-than-significant impact would occur.</p> <p>Threshold g.: Impacts associated with the construction or expansion of utility facilities would be less than significant or</p>	<p>Less than Significant</p> <p>Less than Significant</p> <p>Less than Significant</p>	<p>Demolition (C&D) materials. Additional bins are encouraged to be used for further source separation of C&D recyclable materials. Accurate record keeping (receipts) for recycling of C&D recyclable materials and solid waste disposal must be kept. Arrangements can be made through the franchise hauler.</p> <ul style="list-style-type: none"> ▪ Prior to final building inspection, evidence (i.e., receipts or other type of verification) to demonstrate project compliance with the approved WRP shall be presented by the project proponent to the Planning Division of the Riverside County Department of Waste Resources in order to clear the project for occupancy permits. Receipts must clearly identify the amount of waste disposed and Construction and Demolition (C&D) materials recycled. ▪ Hazardous materials are not accepted at Riverside County landfills. In compliance with federal, state, and local regulations and ordinances, any hazardous waste generated in association with the Project shall be disposed of at a permitted Hazardous Waste disposal facility. Hazardous waste materials include, but are not limited to, paint, batteries, oil, asbestos, and solvents. 		



Potential Environmental Impact	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible/Monitoring Parties	Implementation Stage
<p>etc.), and where impacts are identified mitigation measures are identified to reduce impacts to the extent feasible. There are no components of the proposed FMZs that would result in impacts not already addressed by this EIR. Accordingly, the Project would not exacerbate fire risk, and would not result in temporary or ongoing impacts to the environment beyond what is already evaluated and disclosed by this EIR. Impacts would be less than significant.</p> <p>Threshold d.: Although during extreme fire conditions there still would remain a potential for wildland fires to affect future buildings on site, implementation of the required enhanced construction features provided by the applicable codes and the fuel modification requirements required by SP 239A1 would reduce the site's vulnerability to wildfire to less-than-significant levels. Additionally, with development of the site runoff on the site would be controlled by the Project's proposed drainage system, thereby precluding fire-related flooding impacts downstream. In addition, the Project site would not cause or be affected by fire-induced landslides. Therefore, the Project would not 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, and impacts would be less than significant.</p>	<p>Less than Significant</p>			



1.0 INTRODUCTION

1.1 PURPOSES OF CEQA AND LEGAL AUTHORITY FOR THIS PROGRAM EIR

This Program Environmental Impact Report (EIR) has been prepared in compliance with the California Environmental Quality Act (Public Resources Code § 2100 et. seq. (CEQA), as amended, and the State CEQA Guidelines (Title 14 California Code of Regulations § 15000 et. seq.) (State CEQA Guidelines), as amended. As stated by State CEQA Guidelines § 15002(a), the basic purposes of CEQA are to:

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

The public agency with the principal responsibility for carrying out or approving a project or the first public agency to make a discretionary decision to proceed with a proposed project should ordinarily act as the “Lead Agency” pursuant to State CEQA Guidelines §§ 15050-15051. The County of Riverside is the Lead Agency for the proposed Project evaluated in this Program EIR.

Under CEQA, if a Lead Agency determines that there is substantial evidence in light of the whole record that a project may have a significant effect on the environment, the agency must prepare an Environmental Impact Report (EIR) (State CEQA Guidelines § 15064(a)(1)). The purpose of an EIR is to inform public agency decision-makers and the public of the potentially significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project (State CEQA Guidelines § 15121(a)).

This Program EIR is an informational document that represents the independent judgment of the County of Riverside (as the Lead Agency) for use by the Riverside County decision-makers, responsible and trustee agencies, and members of the general public to evaluate the physical environmental effects that could result from constructing and operating the proposed Project. The County of Riverside has reviewed and, as necessary, directed revisions to all submitted drafts, technical studies, and reports supporting this Program EIR for consistency with County policies and requirements to ensure that this Program EIR reflects its own independent judgment. Governmental approvals requested from the County of Riverside by the Project Applicant include:

1. Adoption by resolution of General Plan Amendment No. 190008 (GPA 190008);



2. Adoption of Amendment No. 1 to Specific Plan No. 239 (SP 239A1); and
3. Adoption by ordinance of Change of Zone No. 1900024 (CZ 1900024).

Other related discretionary and administrative actions that are required to construct and operate the Project described in this Program EIR are listed in Section 3.0, *Project Description*. This document complies with all criteria, standards, and procedures of CEQA §§ 21000 *et seq.* and State CEQA Guidelines §§ 15000 *et seq.*

As a first step in the CEQA compliance process, Riverside County determined that implementation of the Project has the potential to result in significant environmental effects and directed preparation of this Program EIR. Because the Project would require future discretionary approvals (e.g., tentative tract maps, plot plans, etc.), this EIR has been prepared as a Program EIR pursuant to State CEQA Guidelines § 15168. As defined by State CEQA Guidelines § 15168(a), a Program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either: 1) geographically; 2) are logical parts in the chain of contemplated actions; 3) in connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or 4) as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways. For purposes of discussion herein, the terms “EIR” and “Program EIR” are used interchangeably.

This Program EIR represents the independent judgment of Riverside County (as the Lead Agency) and evaluates the physical environmental effects that could result from constructing and operating the proposed Project. Acting as Lead Agency, the County of Riverside will consider the following issues regarding the proposed Project: a) evaluation of this Program EIR to determine if the physical environmental impacts are adequately disclosed; b) assessment of the adequacy and feasibility of identified mitigation measures and the potential addition, modification to, or deletion of mitigation measures, standard conditions of approval, or Project design features; c) consideration of alternatives to the Project that would reduce or eliminate significant environmental effects of the Project; and, if necessary, d) consideration of Project benefits that override the Project’s unavoidable and unmitigable significant effects on the environment.

Accordingly, and in conformance with State CEQA Guidelines § 15121(a), the purposes of this EIR are to: (1) disclose information by informing public agency decision makers and the public generally of the significant environmental effects associated with all phases of the Project, (2) identify possible ways to minimize or avoid those significant effects, and (3) to describe a reasonable range of alternatives to the Project that would feasibly attain most of the basic Project objectives but would avoid or substantially lessen its significant environmental effects.

Before taking action to approve the Project, the County of Riverside (serving as the Lead Agency) has the obligation to: (1) ensure this Program EIR has been completed in accordance with CEQA; (2) review and consider the information contained in this Program EIR as part of its decision making process; (3) make a statement that this Program EIR reflects Riverside County’s independent judgment; (4) ensure that all significant effects on the environment are avoided or substantially lessened where feasible; and, if necessary (5) make written findings for each unavoidable significant environmental effect stating the reasons why



mitigation measures or project alternatives identified in this Program EIR are infeasible and citing the specific benefits of the proposed Project that outweigh its unavoidable adverse effects (State CEQA Guidelines §§ 15090-15093).

The roles and responsibilities of the County of Riverside Planning Commission and Board of Supervisors for Project-related approvals are as follows.

- **The Planning Commission:** The Planning Commission will recommend to the Board of Supervisors whether the Project’s applications, which include GPA 190008, SP 239A1, and CZ 1900024, should be approved, modified, or denied, and will recommend to the Board of Supervisors whether to certify the Final Program EIR (FPEIR) with or without modifications.
- **Board of Supervisors:** The Board of Supervisors will decide whether to approve, modify, or deny GPA 190008, SP 239A1, and CZ 1900024. Project-related approvals will be subject to noticed, public hearings held before the Board of Supervisors, which will include the information contained in the Program EIR, and the associated administrative record. Upon approval or conditional approval of the Project and certification of this Program EIR by the Board of Supervisors, the County would conduct administrative level reviews and grant the permits and approvals needed to implement the Project.

This Program EIR and all supporting technical appendices are available for review at the County of Riverside Planning Department, 4080 Lemon Street, 12th Floor, Riverside, CA 92501 during the County’s regular business hours, or can be requested in electronic form by contacting the County Planning Department.

1.2 SUMMARY OF THE PROJECT EVALUATED BY THIS PROGRAM EIR

The County of Riverside is the Lead Agency for the proposed Project, under whose authority this Program EIR has been prepared. For purposes of this Program EIR, the term “Project” refers to the Project’s discretionary applications for the first amendment to the Stoneridge Specific Plan No. 239 (SP 239A1), a General Plan Amendment (GPA 190008), and Change of Zone (CZ 1900024); future implementing discretionary actions required to implement the Project (e.g., tentative tract maps, plot plans, etc.); and all of the activities associated with Project implementation including planning, construction, and long-term operations.

The Project as evaluated herein consists of two separate land use alternatives for the 582.6-acre site, both of which are evaluated herein at an equal level of detail. Two alternatives are considered because the Riverside County Transportation Commission (RCTC) is currently planning for construction of a regional transportation facility, the “Mid-County Parkway” (MCP). A portion of the MCP is currently planned to traverse the northwestern portions of the Project site. It is currently not known when or if the MCP would be constructed by RCTC; thus, for purposes of evaluation in this EIR, the “Primary Land Use Plan” anticipates that the MCP would not be constructed through the property, in which case the site would be developed with up to 388.5 acres of Light Industrial land uses, 49.1 acres of Business Park land uses, 8.0 acres of Commercial Retail, Open Space – Conservation on 18.1 acres, Open Space – Conservation Habitat on 81.6 acres, and major



roadways on 37.3 acres. The “Alternative Land Use Plan” anticipates that the MCP would be constructed through the northwest portions of the site, in which case the site would be developed with 388.5 acres of Light Industrial land uses, 51.5 acres of Business Park land uses, 8.5 acres of Commercial Retail land uses, 18.1 acres of Open Space – Conservation, 81.6 acres of Open Space – Conservation Habitat, and 34.4 acres of major roadways. For purposes of analysis throughout this EIR, the “Primary Land Use Plan” is the preferred and primary land use plan for the proposed Project. The “Alternative Land Use Plan” only would be implemented in the event that the RCTC constructs the MCP through the northernmost portions of the Project site.

Specifically, the Project Applicant is requesting the following governmental approvals from the County of Riverside to implement the Project (refer to Chapter 3.0, *Project Description*, for a complete description of the Project’s construction and operational characteristics):

- **General Plan Amendment No. 190008 (GPA 190008)** is proposed to modify the approved land uses for the Project site in order to reflect changes proposed as part of proposed Amendment No. 1 to the Stoneridge Commerce Center Specific Plan No. 239 (SP 239A1), which is discussed below. The adopted General Plan designates the Project site for “Community Center (CC),” “Commercial Retail (CR),” “Medium Density Residential (MDR),” “Medium-High Density Residential (MHDR),” “Very High Density Residential (VHDR),” “Open Space-Recreation,” “Open Space – Conservation (OS-C),” “Open Space – Conservation Habitat (OS-CH),” and “Open Space – Water (OS-W)” land uses. With approval of GPA 190008, the Project site would be designated for “Light Industrial (LI),” “Business Park (BP),” CR, OS-C and OS-CH land uses in a manner that corresponds to the land use designations proposed for the site as part of SP 239A1 (as discussed below).
- **Amendment No. 1 to Specific Plan No. 239 (SP 239A1)** is proposed to modify the allowed land uses and planning area boundaries within the Stoneridge Specific Plan (SP 239). Under the Primary Land Use Plan, the 582.6-acre site would be designated for “Light Industrial” land uses on 388.5 acres, “Business Park” land uses on 49.1 acres, “Commercial Retail” on 8.0 acres, “Open Space – Conservation” on 18.1 acres, “Open Space – Conservation Habitat” on 81.6 acres, and major roadways on 37.3 acres. As proposed by SP 239A1, areas designated for “Light Industrial” and “Business Park” uses may be developed with a Floor Area Ratio (FAR) up to 0.50, while areas designated for “Commercial Retail” uses may be developed with a FAR up to 0.35. Accordingly, implementation of the Primary Land Use Plan would allow for up to 8,461,530 square feet (s.f.) of light industrial building area, up to 1,069,398 s.f. of business park building area, and up to 121,968 s.f. of commercial retail building area; however, for purposes of analysis throughout this EIR, it is assumed that the Primary Land Use Plan would result in up to 8,476,776 s.f. of light industrial building area. Under the Alternative Land Use Plan, the 582.6-acre site would be designated for “Light Industrial” land uses on 388.5 acres, “Business Park” land uses on 51.5 acres, “Commercial Retail” on 8.5 acres, “Open Space – Conservation” on 18.1 acres, “Open Space – Conservation Habitat” on 81.6 acres, and major roadways on 34.4 acres. It should be noted that approximately 8.5 acres of areas proposed for “Business Park” land uses and approximately 0.2 acre of areas proposed for “Commercial Retail” land uses would occur within the right-of-way of the Mid-County Parkway (MCP), and thus would not be developed with any buildings under the Alternative Land Use Plan. Based on the proposed allowable



FAR of 0.5 for the proposed “Light Industrial” and “Business Park” land uses and allowable FAR of 0.35 for “Commercial Retail” land uses, and excluding areas within the planned alignment of the MCP, the Alternative Land Use Plan would allow for up to 8,461,530 s.f. of light industrial building area, up to 936,540 s.f. of business park building area, and up to 126,542 s.f. of commercial retail building area; however, for purposes of analysis throughout this EIR, it is assumed that the Alternative Land Use Plan would result in up to 8,476,776 s.f. of light industrial building area.

- **Change of Zone No. 1900024 (CZ 1900024)** is proposed to modify the Planning Area boundaries, permitted uses, and development standards throughout the 582.6-acre site in order to reflect the land uses proposed as part of SP 239A1, as described above.

1.3 CEQA PROCESS OVERVIEW

CEQA requires that all public agencies within the State of California, having land use approval over project activities that have the potential to affect the quality of the environment, shall regulate such activities so that impacts to the environment can be prevented to the extent feasible. Such activity is reviewed and monitored through the CEQA process, as provided in the State CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, §§ 15000-15387). CEQA distinguishes varied levels of documentation and public review based on a project’s anticipated level of effect on the environment.

When it is determined through preliminary review that a project may likely have one or more significant effects upon the environment, then an Environmental Impact Report (EIR) must be prepared. The “scope” of the EIR may be determined through preparation of an Initial Study and a public scoping process. The EIR should consider both the potential project-specific (direct and indirect) and cumulative environmental impacts that could result from the implementation of the proposed project.

Pursuant to State CEQA Guidelines § 15121, the EIR is primarily an informational document intended to inform the public agency decision-makers and the general public of the potentially significant effects of a proposed project. The EIR should disclose all known potentially significant impacts; identify feasible means to minimize or mitigate those effects; and consider a number of feasible alternatives to the project that might further reduce significant impacts while still attaining the project objectives. The decision-makers must consider the information in an EIR before taking action on the proposed project. The EIR may constitute substantial evidence in the record to support the agency’s action on the project.

The EIR is prepared by or under the direction of the Lead Agency, which for the proposed Project is the County of Riverside. The County of Riverside is the public agency that has the primary responsibility for approving or carrying out the Project. Further, Responsible and Trustee Agencies, which are public agencies that have a level of discretionary approval over some component of the proposed Project, may rely upon the EIR prepared by the County of Riverside.

An EIR is prepared in two key stages. First, a Draft EIR is prepared and distributed for public and agency review. Once comments on the Draft EIR are received, responses to those comments and any additional relevant project information are prepared and compiled in a Final EIR. Both of these documents (i.e., the Draft



EIR and the Final EIR), along with any related technical appendices, represent the complete record of the EIR. Throughout this document, the terms Final (Program) EIR or Draft (Program) EIR may be used interchangeable since both are part of the ultimate EIR record; however, “Draft EIR” or “Draft Program EIR” may be used specifically when referring to information provided in the volume made available for the CEQA-required 45-day public review period.

In accordance with State CEQA Guidelines § 15087, this Draft Program EIR will be made available for review by the public and public agencies for a minimum period of 45 days to provide comments “on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated” (State CEQA Guidelines § 152049(a)). Responses to written comments received during the public review period will be included in the Final Program EIR (FPEIR). During the decision-making process, the Project and its design features, objectives, merits, environmental consequences, and socioeconomic factors, among other information contained in the Project’s administrative record will be considered by Riverside County decision-makers. If the FPEIR is certified and the Project approved, Riverside County and other public agencies with permitting authority over all, or portions, of the Project would be able to rely on the FPEIR as part of their permitting processes to evaluate the environmental effects of the Project as they pertain to the approval or denial of applicable permits.

1.4 PROGRAM EIR SCOPE, FORMAT, AND CONTENT

1.4.1 PROGRAM EIR SCOPE

Pursuant to the procedural requirements of CEQA, on April 27, 2020, the County filed a Notice of Preparation (NOP) with the California Office of Planning and Research (State Clearinghouse) and Riverside County Clerk to indicate that an EIR would be prepared to evaluate the Project’s potential to impact the environment. The NOP also was distributed to surrounding property owners, responsible and trustee agencies, and other interested parties for a 30-day public review period that commenced on April 27, 2020 and concluded on May 27, 2020. The NOP was distributed for public review to solicit responses to help the County identify the full scope and range of potential environmental concerns associated with the Project so that these issues could be fully examined in this EIR. Comments on the NOP were received from the following agencies:

- California Air Resources Board
- California Department of Fish and Wildlife
- California Department of Conservation
- City of Perris Planning and Economic Development Department, Planning Division
- Endangered Habitats League
- Metropolitan Water District of Southern California
- Native American Heritage Commission
- Pechanga Band of Mission Indians
- Riverside County Department of Waste Resources
- Riverside Transit Agency
- South Coast Air Quality Management District



- Santa Rosa Band of Cahuilla Indians
- State of California Department of Justice/Attorney General

In addition, a publicly-noticed EIR Scoping Meeting was held at the Riverside County Administrative Center, located at 4080 Lemon Street, Riverside, California, 92501 on May 11, 2020, which provided members of the general public an additional opportunity to comment on the scope of environmental issues to be addressed in this Program EIR.

An Initial Study was not prepared for the proposed Project, and as such this Program EIR evaluates all of the environmental topics identified in Appendix G to the State CEQA Guidelines and in the County’s standard Environmental Assessment (EA) Checklist form. Based Appendix G, the County’s EA Checklist form, and in consideration of all comments received by the County on the NOP and during the EIR Scoping Meeting, Section 4.0 of this Program EIR evaluates the Project’s potential to cause adverse effects to the following environmental issue 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
- Noise
- Paleontological Resources
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

The Project’s potential to result in growth-inducing impacts are discussed in Section 5.0, *Other CEQA Considerations*, of this Program EIR. The NOP, public review distribution list, and written comments received by the County during the NOP public review period are provided in Technical Appendix A to this EIR. Please refer to Table 1-1, *Summary of NOP Comments*, for summarized comments received during NOP public review period.

Table 1-1 Summary of NOP Comments

Commenter	Date	Comment(s)	Location in EIR Where Comment(s) Addressed
California Air Resources Board	May 27, 2020	<ul style="list-style-type: none"> • Evaluate potential cumulative health impacts from air pollution associated with the construction and operation of the Project, particularly impacts affecting disadvantaged communities, including schools and residences 	<ul style="list-style-type: none"> • Subsection 4.3 (Air Quality)



Table 1-1 Summary of NOP Comments

Commenter	Date	Comment(s)	Location in EIR Where Comment(s) Addressed
		<ul style="list-style-type: none"> Prepare a Health Risk Assessment to quantify and discuss the potential cancer and health risks from on-site transport refrigeration units, diesel particulate matter, and construction emissions 	<ul style="list-style-type: none"> Subsection 4.3 (Air Quality)
California Department of Fish and Wildlife (CDFW)	May 26, 2020	<ul style="list-style-type: none"> Assess direct, indirect, and cumulative impacts to biological resources, including impacts to flora and fauna, with particular emphasis on identifying rare, threatened endangered, and other sensitive species and associated habitat Identify mitigation measures and alternatives that are appropriate and adequate to avoid or minimize potential impacts to biological resources, to the extent feasible 	<ul style="list-style-type: none"> Subsection 4.4 (Biological Resources) Subsection 4.4 (Biological Resources)
California Department of Conservation (CDC)	May 19, 2020	<ul style="list-style-type: none"> Consider feasible alternatives or mitigation measures for impacts due to the conversion of agricultural land to non-agricultural use Disclose the type, amount, and location of farmland conversion resulting directly and indirectly from implementation of the proposed project. Evaluate impacts on any current and future agricultural operations in the vicinity Evaluate incremental impacts leading to cumulative impacts on agricultural land 	<ul style="list-style-type: none"> Subsection 4.2 (Agriculture and Forestry Resources)
City of Perris Planning and Economic Development Department, Planning Division	May 27, 2020	<ul style="list-style-type: none"> Evaluate land use consistency and compatibility with surrounding areas Evaluate air quality and health risks to the surrounding community Evaluate noise impacts associated with truck traffic, construction, and long-term operations Evaluate truck routes and traffic during peak hours Prepare a drainage study to evaluate how drainage will be conveyed to the San Jacinto River in Perris 	<ul style="list-style-type: none"> Subsection 4.11 (Land Use and Planning) Subsection 4.3 (Air Quality) Subsection 4.13 (Noise) Subsection 4.18 (Transportation) Subsection 4.10 (Hydrology and Water Quality)
Endangered Habitats League (EHL)	April 24, 2020	<ul style="list-style-type: none"> Concerns regarding biological impacts, conformance with the Western Riverside 	<ul style="list-style-type: none"> Subsections 4.4 (Biological Resources)



Table 1-1 Summary of NOP Comments

Commenter	Date	Comment(s)	Location in EIR Where Comment(s) Addressed
		County Multiple Species Habitat Conservation Plan (MSHCP), and Greenhouse Gas (GHG) emissions	and 4.8 (Greenhouse Gas Emissions)
Metropolitan Water District of Southern California (MWD)	May 21, 2020	<ul style="list-style-type: none"> Evaluate potential impacts to Metropolitan's Colorado River Aqueduct and Lakeview Pipeline Incorporate water conservation measures and include water efficient fixtures, drought-tolerant landscaping, and reclaimed water 	<ul style="list-style-type: none"> Section 4.0 (Environmental Analysis) Subsection 4.20 (Utilities and Service Systems)
Native American Heritage Commission (NAHC)	April 27, 2020	<ul style="list-style-type: none"> Project is subject to Native American Consultation pursuant to Assembly Bill (AB) 52 and Senate Bill (SB) 18 Prepare a cultural resources assessment to evaluate potential impacts to archaeological and historical resources 	<ul style="list-style-type: none"> Subsections 4.5 (Cultural Resources) and 4.19 (Tribal Cultural Resources) Subsections 4.5 (Cultural Resources) and 4.19 (Tribal Cultural Resources)
Pechanga Band of Mission Indians	May 8, 2020	<ul style="list-style-type: none"> Include involvement of and consultation with the Pechanga tribe in the environmental review process Evaluate potential effects to Traditional Cultural Property (TCP), Traditional Cultural Landscapes (TCLs), and tribal cultural resources Evaluate potential impacts to surface and subsurface resources during ground-disturbing activities Requests tribal involvement (including tribal monitoring) and mitigation for impacts to TCP, TCLs, and Native American cultural resources 	<ul style="list-style-type: none"> Subsections 4.5 (Cultural Resources) and 4.19 (Tribal Cultural Resources) Subsections 4.5 (Cultural Resources) and 4.19 (Tribal Cultural Resources) Subsections 4.5 (Cultural Resources) and 4.19 (Tribal Cultural Resources) Subsections 4.5 (Cultural Resources) and 4.19 (Tribal Cultural Resources)
Riverside County Department of Waste Resources (RCDWR)	April 28, 2020	<ul style="list-style-type: none"> Assess waste impacts, including the projected maximum amount of waste generated from build-out of the Project, using appropriate waste generation factors for the proposed land uses Incorporate mitigation measures to reduce solid waste generation 	<ul style="list-style-type: none"> Subsection 4.20 (Utilities and Service Systems) Subsection 4.20 (Utilities and Service Systems)
Riverside Transit Agency (RTA)	April 28, 2020 and	<ul style="list-style-type: none"> Requests accommodation of bus turnouts and bus stops along major transportation 	<ul style="list-style-type: none"> Subsection 4.18 (Transportation)



Table 1-1 Summary of NOP Comments

Commenter	Date	Comment(s)	Location in EIR Where Comment(s) Addressed
	November 20, 2019	<ul style="list-style-type: none"> facilities Requests information regarding signalization and construction of overpass 	<ul style="list-style-type: none"> Subsection 4.18 (Transportation)
South Coast Air Quality Management District (SCAQMD)	May 5, 2020	<ul style="list-style-type: none"> Requests an analysis of air quality impacts based on South Coast Air Quality Management District (SCAQMD) guidance Requests an analysis of consistency with the 2016 Air Quality Management Plan Incorporate mitigation measures and other features per the California Air Resources Board <i>Air Quality and Land Use Handbook: A Community Health Perspective</i> and the SCAQMD <i>CEQA Air Quality Handbook</i> Evaluate air quality emissions against the SCAQMD regional and localized thresholds for both construction and operations Identify feasible mitigation measures to address Project-related air quality impacts Identify alternatives to reduce or avoid air quality impacts 	<ul style="list-style-type: none"> Subsection 4.3 (Air Quality) Section 6.0 (Alternatives)
Santa Rosa Band of Cahuilla Indians	April 28, 2020	<ul style="list-style-type: none"> No comments on the proposed Project or the scope of the EIR were provided 	<ul style="list-style-type: none"> N/A
State of California Department of Justice/Attorney General	June 1, 2020	<ul style="list-style-type: none"> Analyze the Project's impact on the public health and safety of nearby sensitive receptors already exposed to high pollution burdens, including nearby residents and school children Consider the socioeconomic characteristics of the communities of Nuevo and Lakeview, which increase their sensitivity to the health effects of the heavy pollution burdens they experience Disclose and analyze the Project's foreseeable impacts, including cumulative impacts from nearby industrial projects Relate pollutant data to specific adverse human health effects on the local 	<ul style="list-style-type: none"> Subsections 4.3 (Air Quality), 4.9 (Hazards and Hazardous Materials) Subsection 4.3 (Air Quality) Subsection 4.0 (Environmental Analysis) Subsection 4.3 (Air Quality)



Table 1-1 Summary of NOP Comments

Commenter	Date	Comment(s)	Location in EIR Where Comment(s) Addressed
		community <ul style="list-style-type: none"> Consider all feasible measures to mitigate any potentially significant project impacts Implement the County’s “good neighbor” policy for logistics and warehouse/distribution uses with this Project 	<ul style="list-style-type: none"> Subsection 4.0 (Environmental Analysis) Subsection 4.3 (Air Quality) and 4.8 Greenhouse Gas Emissions)

1.4.2 CONTENT AND ORGANIZATION OF THIS PROGRAM EIR

This Program EIR contains all of the information required to be included in an EIR as specified by the CEQA Statutes and Guidelines (California Public Resources Code, Section 21000 et. seq. and California Code of Regulations, Title 14, Chapter 5). This Program EIR is organized in the following manner:

- **Section S.0, Executive Summary**, provides an overview of the Program EIR document and CEQA process. The Project, including its objectives, is described, and the location and regional setting of the Project site is documented. In addition, the Executive Summary discloses potential areas of controversy related to the Project, including those issues identified by other agencies and the public, and identifies potential alternatives to the proposed Project that would reduce or avoid significant impacts, as required by CEQA. Finally, the Executive Summary provides a summary of the Project’s impacts, mitigation measures, and conclusions, in a table that forms the basis of the EIR’s Mitigation, Monitoring, and Reporting Program (MMRP).
- **Section 1.0, Introduction**, provides introductory information about the CEQA process and the responsibilities of the County of Riverside, serving as the Lead Agency for this EIR; a brief description of the Project; the purpose of this EIR; applications proposed by the Project Applicant that would require discretionary County approvals; permits and approvals required by other agencies; and an overview of the EIR format.
- **Section 2.0, Environmental Setting**, describes the environmental setting, including an overview of the regional and local setting, as well as descriptions of the Project site’s physical conditions and surrounding context. The existing setting is defined as the condition of the Project site and surrounding area at the approximate date this EIR’s NOP was released for public review on April 27, 2020. The setting discussion also addresses the relevant regional planning documents that apply to the Project site and vicinity.
- **Section 3.0, Project Description**, serves as the EIR’s Project Description for purposes of CEQA and contains a level of specificity commensurate with the level of detail proposed by the Project, including the summary requirements pursuant to State CEQA Guidelines § 15123. This section provides a



detailed description of the Project, including its purpose and main objectives; design features; landscaping; site drainage; utilities; grading and construction characteristics; and operational characteristics expected over the Project's lifetime. In addition, the discretionary actions required of the County of Riverside and other government agencies to implement the Project are discussed.

- **Section 4.0, Environmental Analysis**, provides an analysis of the potential direct, indirect, and cumulative impacts that may occur from implementing the proposed Project. The topics analyzed in this section include the topics summarized above under subsection 1.4.1. Topics that were found to have no potential of being significantly impacted are discussed in Section 5.0, *Other CEQA Considerations*. A conclusion concerning significance is reached for each discussion, and mitigation measures are presented as warranted. The environmental changes identified in Section 4.0 and throughout this EIR are referred to as “effects” or “impacts” interchangeably. The State CEQA Guidelines also describe the terms “effects” and “impacts” as being synonymous (State CEQA Guidelines § 15358).

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

The analyses in Section 4.0 are based in part upon technical reports that are appended to this Program EIR. Information also is drawn from other sources of analytical materials that directly or indirectly relate to the proposed Project and are cited in Section 7.0, *References*. Where the analysis demonstrates that a physical adverse environmental effect may or would occur without undue speculation, feasible mitigation measures are recommended to reduce or avoid the significant effect. Mitigation measures must be fully enforceable, have an essential nexus to a legitimate governmental interest, and be “roughly proportional” to the impacts of the Project. The discussion then indicates whether the identified mitigation measures would reduce impacts to below a level of significance. In most cases, implementation of the mitigation measures would reduce the adverse environmental impacts to below a level of significance. If mitigation measures are not available or feasible to reduce an identified impact to below a level of significance, the environmental effect is identified as a significant and unavoidable adverse impact, for which a Statement of Overriding Considerations (SOC) would need to be adopted by the County of Riverside pursuant to State CEQA Guidelines § 15093.

- **Section 5.0, Other CEQA Considerations**, includes specific topics that are required by CEQA. These include a summary of the Project's significant and unavoidable environmental effects, a discussion of the significant and irreversible environmental changes that would occur should the Project be implemented, as well as potential growth-inducing impacts of the proposed Project.



- **Section 6.0, Project Alternatives**, describes and evaluates alternatives to the proposed Project that could reduce or avoid the Project’s adverse environmental effects. CEQA does not require an EIR to consider every conceivable alternative to the Project but rather to consider a reasonable range of alternatives that will foster informed decision making and public participation. A range of three (3) alternatives is presented in Section 6.0.
- **Section 7.0, References**, cites all reference sources used in preparing this Program EIR and lists the agencies and persons that were consulted during preparation of this Program EIR. Section 7.0 also lists the persons who authored or participated in preparing this Program EIR.

CEQA requires that an EIR contain, at a minimum, certain specified content. Table 1-2, *Location of CEQA Required Topics*, provides a quick reference in locating the CEQA-required sections within this document.

Table 1-2 Location of CEQA Required Topics

CEQA Required Topic	State CEQA Guidelines Reference	Location in this EIR
Table of Contents	§ 15122	Table of Contents
Summary	§ 15123	Section S.0
Project Description	§ 15124	Section 3.0
Environmental Setting	§ 15125	Section 2.0
Consideration and Discussion of Environmental Impacts	§ 15126	Section 4.0
Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented	§ 15126.2(b)	Section 4.0 & Subsection 5.1
Significant Irreversible Environmental Impacts Which Would be Involved in the Proposed Action Should it be Implemented	§ 15126.2(c)	Subsection 5.2
Growth-Inducing Impacts of the Proposed Project	§ 15126.2(d)	Subsection 5.3
Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant Effects	§ 15126.4	Section 4.0 & Table S-1
Consideration and Discussion of Alternatives to the Proposed Project	§ 15126.6	Section 6.0
Effects Not Found to be Significant	§ 15128	Subsection 5.4
Organizations and Persons Consulted	§ 15129	Section 7.0 & Technical Appendices
Discussion of Cumulative Impacts	§ 15130	Section 4.0
Energy Conservation	Appendices F and G	Subsection 4.6

1.4.3 INCORPORATION BY REFERENCE

State CEQA Guidelines § 15147 states that the “information contained in an EIR shall include summarized... information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public,” and that the “placement of highly technical and specialized analysis and data in the body of an EIR shall be avoided.” State CEQA Guidelines § 15150 allows for the incorporation “by



reference all or portions of another document... [and is] most appropriate for including long, descriptive, or technical materials that provide general background but do not contribute directly to the analysis of a problem at hand.” The purpose of incorporation by reference is to assist the Lead Agency in limiting the length of this Program EIR. Where this Program EIR incorporates a document by reference, the document is identified in the body of the EIR, citing the appropriate section(s) of the incorporated document and describing the relationship between the incorporated part of the referenced document and this EIR.

Therefore, the detailed technical studies, reports, and supporting documentation that were used in preparing this Program EIR are bound separately as Technical Appendices. The Technical Appendices are available for review at the Riverside County Planning Department, 4080 Lemon Street, 12th Floor, Riverside, CA 92502, during the County’s regular business hours or can be requested in electronic form by contacting the County’s Planning Department. The individual technical studies, reports, and supporting documentation that comprise the Technical Appendices are as follows:

- A. Notice of Preparation and Written Comments on the NOP
- B1. Air Quality Emissions Assessment
- B2. Alternative Truck Route Emissions Assessment (Southern Truck Route)
- C1. Biological Technical Report
- C2. Jurisdictional Delineation
- D1. Cultural Resources Assessment (On Site)
- D2. Cultural Resources Assessment (Off Site)
- D3. Phase II Cultural Resources Significance Evaluation Program
- D4. Supplemental Cultural Resources Assessment
- D5. Alternative Truck Route Cultural Resources Assessment (Southern Truck Route)
- E. Energy Analysis
- F. Updated Geotechnical Evaluation
- G. Phase I Environmental Site Assessment Report
- H1. Preliminary Hydrology Study
- H2. Water Quality Management Plan
- I. General Plan Consistency Analysis
- J1. Noise Impact Analysis
- J2. Alternative Truck Route Noise Assessment (Southern Truck Route)
- J3. Supplemental Traffic Noise Assessment
- J4. Supplemental Traffic Noise Assessment (Southern Truck Route)
- K. Paleontological Resource Monitoring and Mitigation Program
- L1. Traffic Impact Analysis
- L2. Vehicle Miles Travelled Analysis
- L3. Alternative Truck Route Traffic Assessment (Southern Truck Route)
- M. Water Supply Assessment
- N. Fire Protection Plan
- O. Project Application Materials
- P. Draft Specific Plan No. 239, Amendment No. 1



Other reference sources that are incorporated into this EIR by reference are listed in Section 7.0, *References*, of this EIR. In most cases, documents or websites not included in the EIR's Technical Appendices are cited by a link to the online location where the document/website can be viewed by the public. All references relied upon by this EIR are included as part of Riverside County's Administrative Record pertaining to the proposed Project.

1.5 RESPONSIBLE AND TRUSTEE AGENCIES

The California Public Resource Code (§ 21104) requires that all EIRs be reviewed by responsible and trustee agencies (see also State CEQA Guidelines § 15082 and § 15086(a)). As defined by State CEQA Guidelines § 15381, "the term 'Responsible Agency' includes all public agencies other than the Lead Agency which have discretionary approval power over the project." A Trustee Agency is defined in State CEQA Guidelines § 15386 as "a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California."

For the proposed Project, the Santa Ana River Basin Water Quality Control Plan is responsible for issuance of a National Pollutant Discharge Elimination System (NPDES) Permit to ensure that on-site water flows do not result in siltation, other erosional effects, or degradation of surface or subsurface water quality. The United States Army Corps of Engineers (ACOE) is identified as a Responsible Agency for issuance of the Project's Section 404 Permit. The Santa Ana River Basin Water Quality Control Board is identified as a Responsible Agency for reviewing the Project's Determination of Biological Equivalent or Superior Preservation (DBESP), which was prepared in accordance with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) to address planned impacts to riparian/riverine areas on site. The California Department of Fish and Wildlife (CDFW) is identified as a Trustee Agency for issuance of a 1602 Streambed Alteration Agreement. There are no other agencies that are identified as Responsible Trustee Agencies for the proposed Project.

1.6 AREAS OF CONTROVERSY

Substantive issues raised in response to the NOP were previously summarized in Table 1-1. The purpose of this table is to present the primary environmental issues of concern raised by public agencies and the general public during the NOP review period. The table is not intended to list every comment received by the County during the NOP review period. Regardless of whether or not a comment is listed in the table, all applicable comments received in responses to the NOP are addressed in this Program EIR. Based on comments received during the NOP review period, the issue of land use consistency was raised by the City of Perris and is addressed in EIR Subsection 4.11, *Land Use and Planning*. No other areas of controversy were identified as part of the NOP process, beyond comments regarding the Project's potential environmental effects.

1.7 ISSUES TO BE RESOLVED BY THE DECISION-MAKING BODY

The primary issues to be resolved by the decision-making body for the proposed Project involves the Project's significant and unavoidable impacts in the issue areas of Agriculture and Forestry Resources, Air Quality,



Noise, and Transportation, which are addressed in EIR Subsections 4.2, 4.3, 4.13, and 4.18, respectively. The Riverside County Board of Supervises will need to evaluate whether the mitigation measures proposed to reduce the Project's unavoidable impacts adequately reduce Project impacts to the maximum feasible extent. The Board of Supervisors also will make a determination as to whether the Project's benefits outweigh theses adverse environmental effects in support of adopting a Statement of Overriding Consideration's pursuant to State CEQA Guidelines § 15093. Finally, the Board of Supervisors will decide whether to approve one of the Project alternatives in lieu of the proposed Project, if it is determined that one of the alternatives is feasible and its approval would serve to substantially reduce or avoid significant environmental impacts.



2.0 ENVIRONMENTAL SETTING

This Section 2.0 is provided pursuant to State CEQA Guidelines § 15125(a), and includes a description of the physical environmental conditions in the vicinity of the Project site and its off-site improvement areas from both a local and regional perspective as it existed at the time the Notice of Preparation (NOP) was published for this Program EIR, which occurred on April 27, 2020. This section provides a brief overview of resources on and surrounding the Project site; additional detail regarding existing conditions for individual issue areas (e.g., biology, geology, etc.) is provided within the appropriate subsection headings within Section 4.0, *Environmental Analysis*, of this Draft Program EIR.

2.1 REGIONAL SETTING AND LOCATION

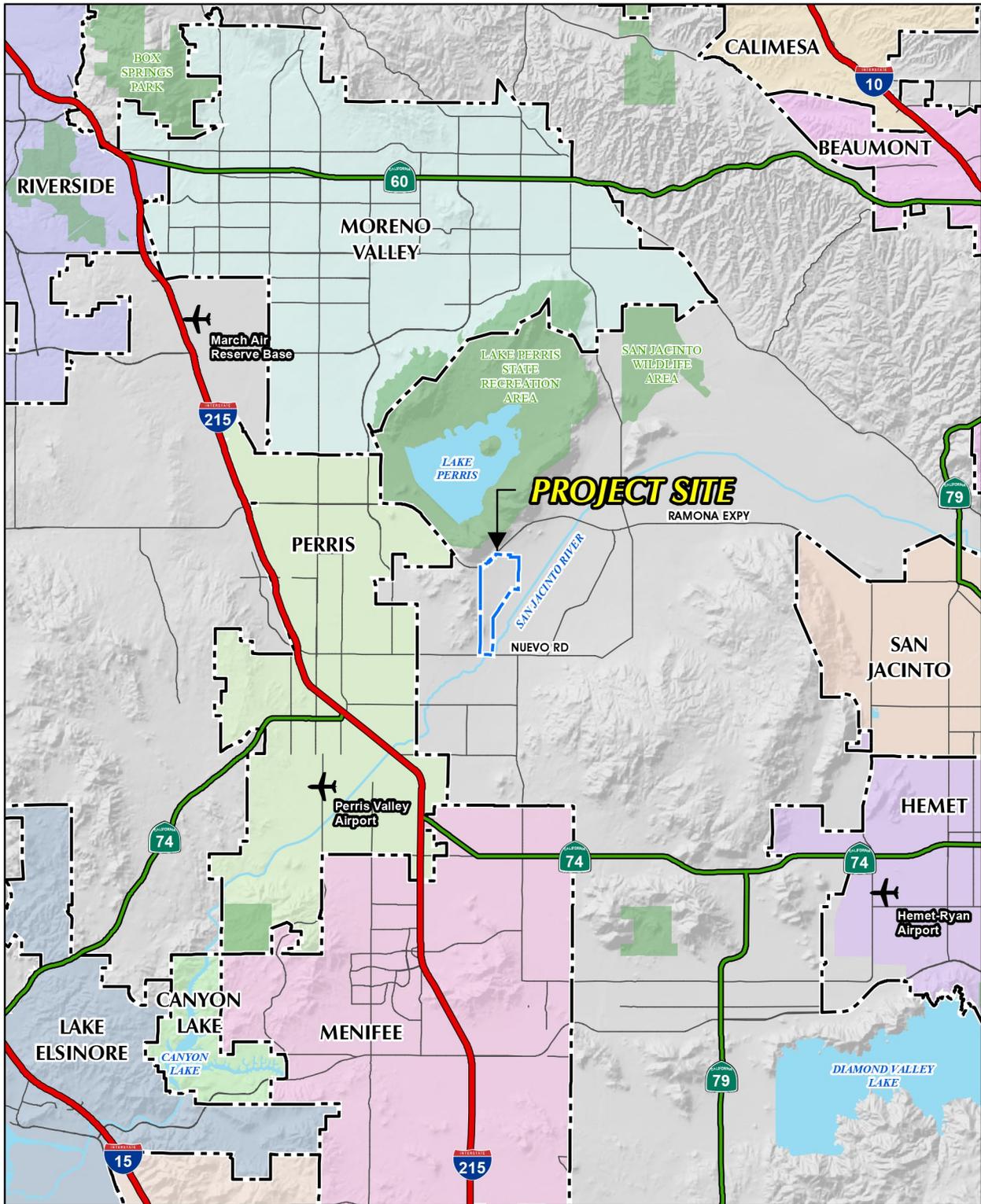
The 582.6-acre Project site is located within the western portion of unincorporated Riverside County, California. Figure 2-1, *Regional Map*, depicts the Project site's location within the regional vicinity. As shown, Riverside County abuts San Bernardino County to the north; Orange County to the west; and San Diego and Imperial Counties to the south. Riverside County is located in an urbanizing area of southern California commonly referred to as the Inland Empire. The Inland Empire is an approximate 28,000 square-mile region comprising western San Bernardino County, western Riverside County, and the eastern reaches of Los Angeles County. As of 2018, SCAG estimates that Riverside County as a whole had a population 2,415,954 (SCAG, 2019b, p. 3). SCAG estimates that the population will increase to 22.1 million by 2040 (SCAG, 2016, p. 48)

2.2 LOCAL SETTING AND LOCATION

The Project site is located within the western region of unincorporated Riverside County, California. As depicted on Figure 2-2, *Vicinity Map*, the Project site is located in the Nuevo community, south of Lake Perris, east of the City of Perris, and north of the City of Menifee. More specifically, and as depicted on Figure 2-2, the 582.6-acre Project site is located south of the Ramona Expressway, north of Nuevo Road, east of Foothill Drive, and west of the future extension of Menifee Road. Access to the Project site is currently available from the Ramona Expressway and Nuevo Road. Interstate 215 (I-215) is located approximately 2.6 miles southwest of the Project site, State Route 74/Ethanac Road occurs approximately 4.0 miles to the south, while State Route 79 (SR 79) occurs approximately 8.8 miles east of the Project site. (Google Earth, 2018) The Project site includes Assessor Parcel Numbers (APNs) 307-070-003, 307-080-(005, 006, 008), 307-090-(001, 002, 004, 005, 006), 307-100-(001, 003, 004, 005), 307-110-(003, 007, 008), 307-220-001, and 307-230-(019, 020). The 582.6-acre Project site occurs within Sections 14 and 23, Township 4 South, Range 3 West, San Bernardino Baseline and Meridian. (RCIT, 2020)

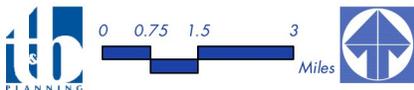
2.3 SURROUNDING LAND USES AND DEVELOPMENT

The site vicinity and surrounding areas contain a mixture of undeveloped lands/open space, with agricultural uses occurring to the southeast of the Project site and residential and school uses occurring to the west and northwest of the site. Land uses in the immediate vicinity of the Project site are illustrated on Figure 2-3, *Surrounding Land Uses and Development*, and described below.

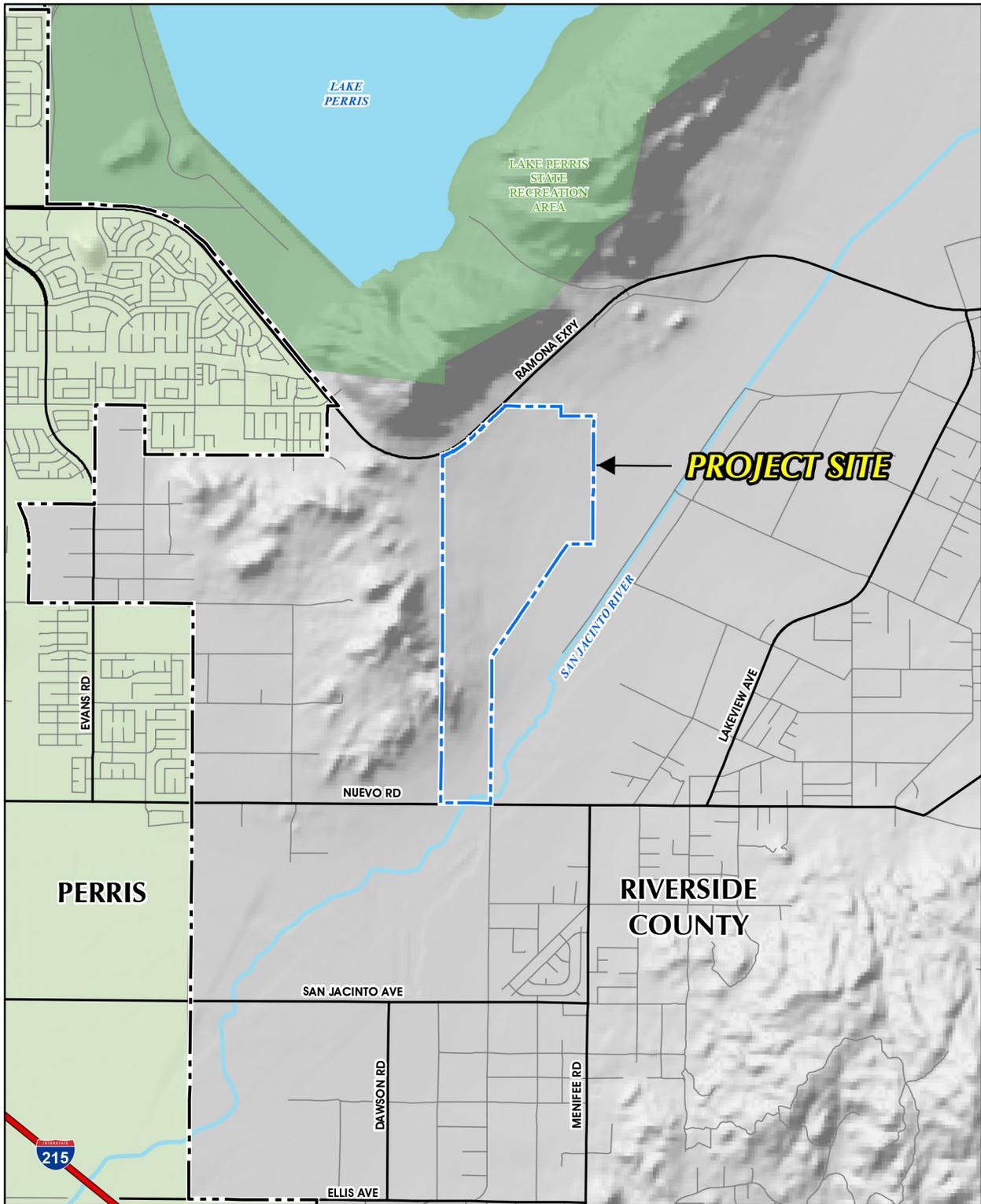


Source(s): ESRI, RCTLMA (2019)

Figure 2-1

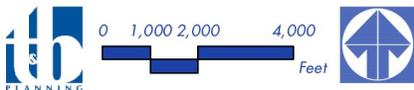


Regional Map

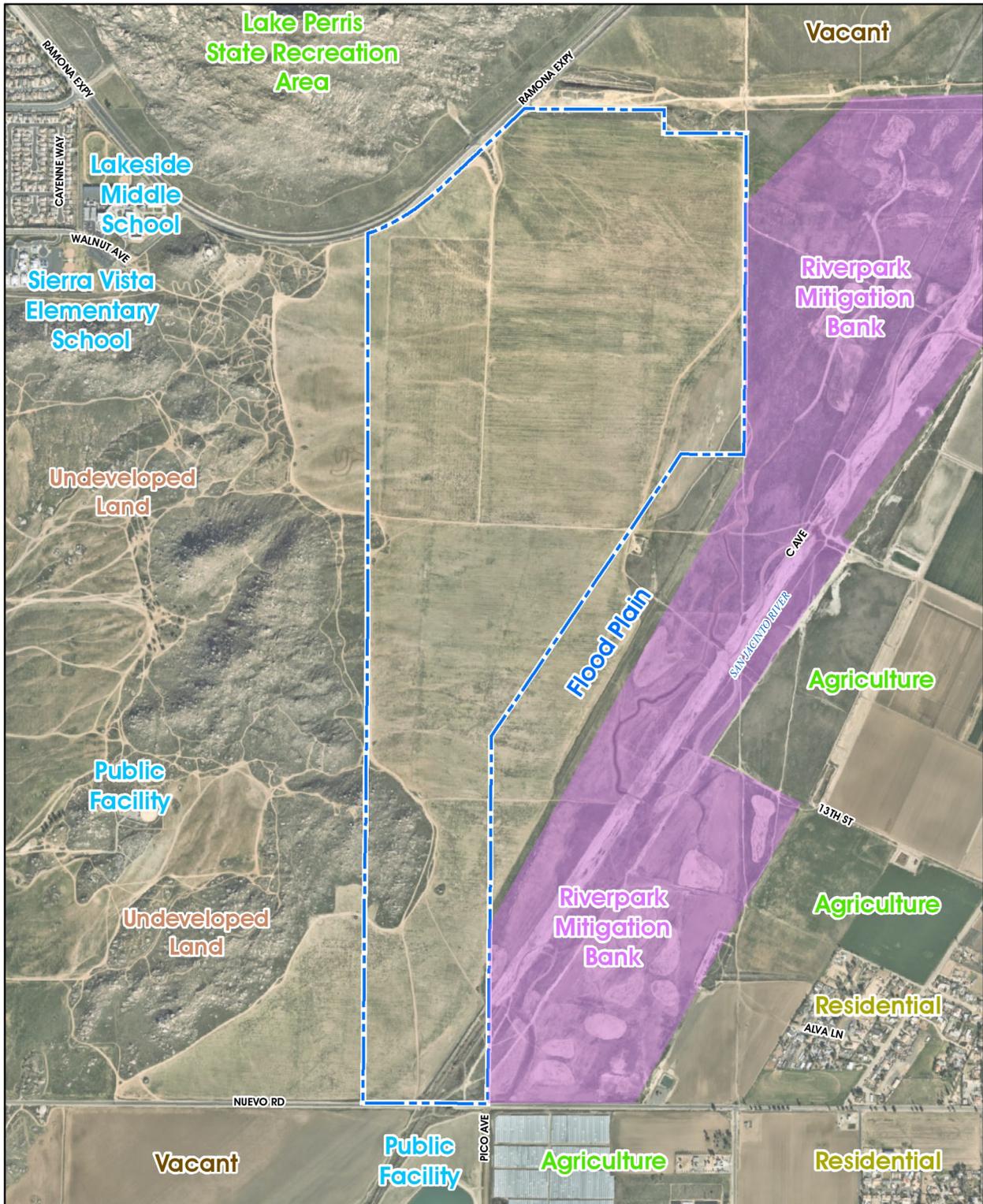


Source(s): ESRI, RCTLMA (2019)

Figure 2-2

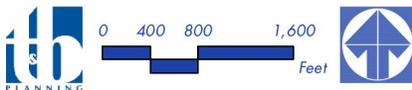


Vicinity Map



Source(s): ESRI, Nearmap Imagery (2020), RCTLMA (2019)

Figure 2-3



Surrounding Land Uses and Development



- North: To the north of the Project site is the Ramona Expressway, a large hill form, and open space associated with Lake Perris, which is located approximately 0.8 mile north of the Project site.
- East: To the east of the Project site are undeveloped open space, the San Jacinto River (a portion of which traverses the southeast corner of the Project site), agricultural uses, and scattered rural residential development.
- South: To the south of the Project site are undeveloped lands, the San Jacinto River, Ski Land Lake, and agricultural uses, beyond which are scattered residential communities.
- West: To the west of the Project site are several prominent hill forms, undeveloped lands, the Lakeside Middle School, the Sierra Vista Elementary School, rural residential homes, and a master-planned residential community located within the City of Perris.

2.4 LOCAL PLANNING CONTEXT

State CEQA Guidelines § 15125(d) requires that EIRs identify the general plans and regional plans that are applicable to the project under evaluation, and recognize potential inconsistencies. Plans that are applicable to the Project evaluated herein are summarized below, with additional information provided in the applicable resource discussions in Section 4.0, *Environmental Analysis*.

2.4.1 SCAG REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY (RTP/SCS)

The Southern California Association of Governments (SCAG) is a regional agency established pursuant to California Government Code § 6500, also referred to as the Joint Powers Authority law. SCAG is designated as a Council of Governments (COG), a Regional Transportation Planning Agency (RTPA), and a Metropolitan Planning Organization (MPO). The Project site is within SCAG's regional authority. On November 7, 2019, SCAG's Regional Council approved the release of the Draft Connect SoCal plan (also known as the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy or RTP/SCS) for public review and comment. The comment period for the Draft Connect SoCal plan started on November 14, 2019 and concluded at 5:00 p.m. on January 24, 2020. However, at the time the Project's NOP was distributed for public review on April 27, 2020, the Draft Connect SoCal plan had not been adopted by SCAG. Thus, the applicable RTP/SCS is the SCAG's 2016-2040 RTP/SCS, which was adopted by SCAG on April 7, 2016. The goals of the 2016-2040 RTP/SCS are to: 1) Align the plan investments and policies with improving regional economic development and competitiveness; 2) Maximize mobility and accessibility for all people and goods in the region; 3) Ensure travel safety and reliability for all people and goods in the region; 4) Preserve and ensure a sustainable regional transportation system; 5) Maximize the productivity of our transportation system; 6) Protect the environment and health of our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking); 7) Actively encourage and create incentives for energy efficiency, where possible; 8) Encourage land use and growth patterns that facilitate transit and active transportation; and 9) Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies. Performance measures and funding



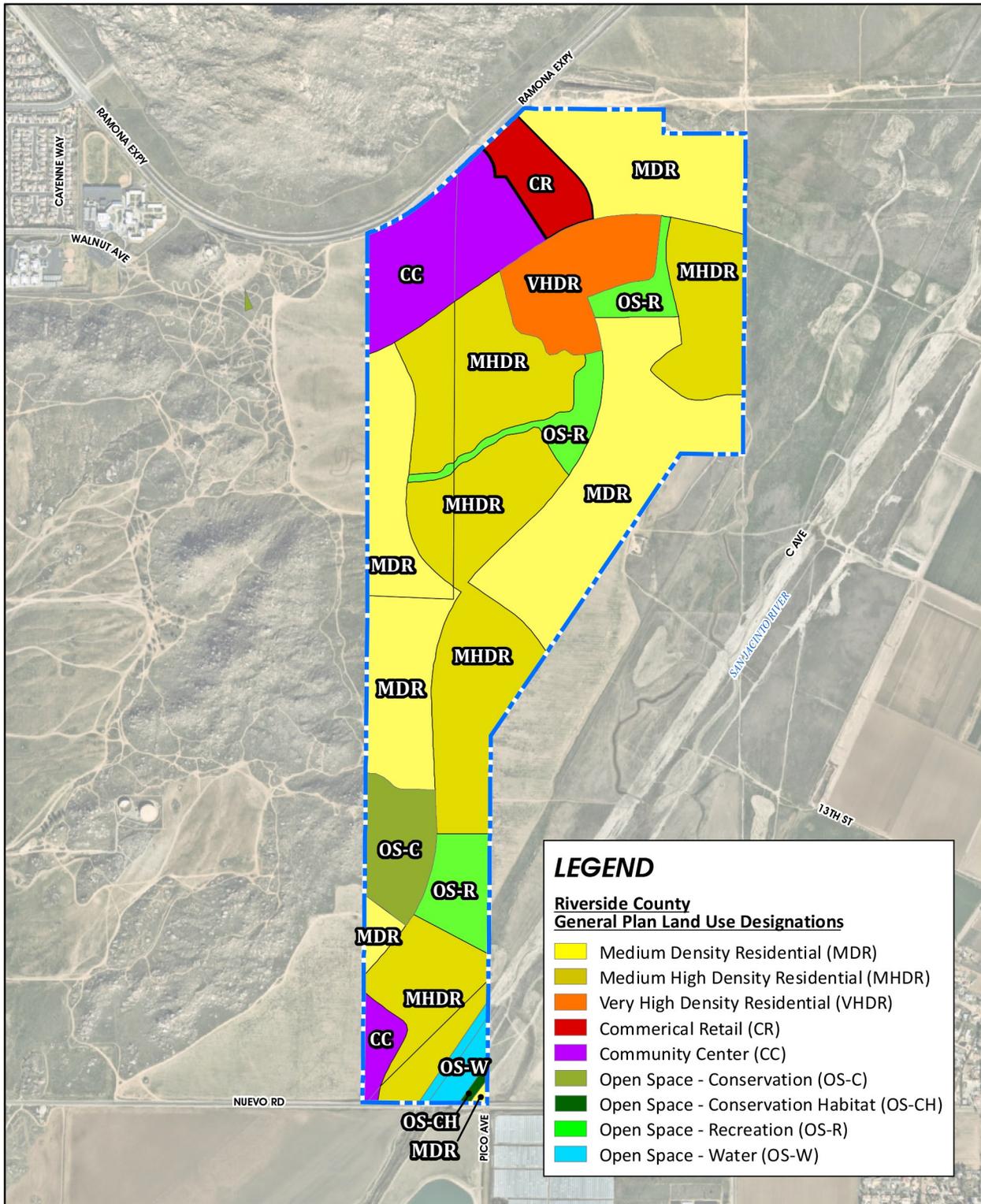
strategies also are included to ensure that the adopted goals are achieved through implementation of the RTP. (SCAG, 2016, p. 74; SCAG, 2019a)

2.4.2 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AIR QUALITY MANAGEMENT PLAN (AQMP)

Currently, the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are exceeded in most parts of the South Coast Air Basin. In response, and in conformance with California Health & Safety Code § 40702 et seq. and the California Clean Air Act, the SCAQMD has adopted a series of Air Quality Management Plans (AQMPs) to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. Each version of the plan is an update of the previous plan and has a 20-year horizon with a revised baseline. The most recent AQMP was adopted by the AQMD Governing Board on March 3, 2017 (“2016 AQMP”). The 2016 AQMP incorporates the latest scientific and technological information and planning assumptions, including the *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS) and updated emission inventory methodologies for various source categories. The 2016 AQMP is based on assumptions provided by the Emission FACTor model (EMFAC) developed by the California Air Resources Board (CARB) for motor vehicle information and assumptions provided by SCAG for demographics. The air quality levels projected in the 2016 AQMP are based on the assumption that development associated with general plans, specific plans, residential projects, and wastewater facilities will be constructed in accordance with population growth projections identified by SCAG in its *2016 RTP/SCS*. The 2016 AQMP also assumes that such development projects will implement strategies to reduce emissions generated during the construction and operational phases of development. (SCAQMD, 2017a)

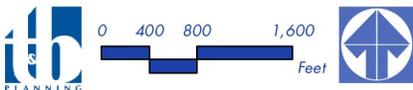
2.4.3 COUNTY OF RIVERSIDE GENERAL PLAN AND LAKEVIEW/NUEVO AREA PLAN (LNAP)

The prevailing planning document for the Project site and its surrounding area is the Riverside County General Plan. The Project site is located within the Lakeview/Nuevo Area Plan (LNAP) of the Riverside County General Plan. As depicted on Figure 2-4, *Existing General Plan Land Use Designations*, the 582.6-acre Project site is located within the boundaries of the Stoneridge Specific Plan (SP 239). The General Plan and LNAP designate the property for “Community Center (CC),” “Commercial Retail (CR),” “Medium Density Residential (MDR),” “Medium High Density Residential (MHDR),” “Very High Density Residential (VHDR),” “Open Space – Recreation (OS-R),” “Open Space – Conservation (OS-C),” “Open Space – Conservation Habitat (OS-CH),” and “Open Space – Water” land uses. The CC land use designation is intended to accommodate combination of small-lot single family residences, multi-family residences, commercial retail, office, business park uses, civic uses, transit facilities, and recreational open space within a unified planned development area. The CR land use designation is intended to accommodate local and regional serving retail and services uses. The MDR land use designation allows for single-family residential development at a density range of 2 to 5 dwelling units per acre (du/ac). The MHDR land use designation allows for single-family attached and detached residences with a density range of 5 to 8 du/ac. The VHDR land use designation is intended to accommodate single-family attached residences and multifamily dwellings at densities between 14 to 20 du/ac. The OS-R designation is intended to accommodate recreational uses



Source(s): ESRI, Nearmap Imagery (2020), RCTLMA (2019)

Figure 2-4



Existing General Plan Land Use Designations



including parks, trails, athletic fields, and golf courses. The OS-C land use designation is intended to provide for the protection of open space for natural hazard protection, cultural preservation, and natural and scenic resource preservation. The OS-CH land use designation applies to public and private lands conserved and managed in accordance with adopted Multi Species Habitat and other Conservation Plan (MSHCP) and in accordance with related Riverside County policies. The OS-W land use designation includes bodies of water and natural or artificial drainage corridors. (Riverside County, 2019b, Table 1)

2.4.4 STONERIDGE SPECIFIC PLAN NO. 239 (SP 239)

The Stoneridge Specific Plan No. 239 (SP 239) was approved by the Riverside County Board of Supervisors in April 1992. At the time SP 239 was adopted, the Specific Plan encompassed a total of approximately 605.4 acres. However, changes to SP 239 were made as part of an amendment to an adjacent specific plan, the McCanna Hills Specific Plan No. 246 (SP 246). Specifically, Amendment No. 3 to SP 246 removed a 33.0-acre area in the southwestern portion of SP 239 and added this area to the boundaries of SP 246¹. SP 246 indicates that these changes to the approved boundaries of SP 239 would occur as part of a future amendment to SP 239. Figure 2-5, *Existing Stoneridge Specific Plan Land Use Designations*, depicts the approved SP 239 land use plan, which does not reflect the elimination of the southwestern portions of SP 239. As shown, the adopted SP 239 allows for up to 718 “Medium Residential (2-5 du/ac)” dwelling units on 185.0 acres; 903 “Medium-High Residential (5-8 du/ac)” dwelling units on 185.0 acres; 446 “Very High Residential (14-20 du/ac)” dwelling units on 30.0 acres; “Commercial” uses on 75.0 acres, which also allows for up to 169 dwelling units in Planning Area 1; “Parks” on 33.7 acres; “Open Space – Natural” on 20.8 acres; “Open Space – Recreational” on 8.6 acres; three planning areas designated for “Schools” on 27.0 acres; and 40.3 acres of major circulation facilities. (Riverside County, 1991, Table 3.1 and Figure 3; Riverside County, 2015b)

2.4.5 ZONING

Under existing conditions, the 582.6-acre Project site is zoned for “Specific Plan Zone (SP Zone),” indicating that the property is within the boundaries of an adopted specific plan. As such, the 582.6-acre Project site is subject to the zoning classifications established by the adopted SP 239, which generally reflect the land use designations applied to the site as part of SP 239 (described above). (RCIT, 2020)

2.4.6 RIVERSIDE COUNTY AIRPORT LAND USE COMPATIBILITY PLAN

The Riverside County Airport Land Use Commission (RCALUC) has jurisdiction over development in the Project area due to the location of the March Air Reserve Base (approximately 4.8 miles northwest of the Project site). The March Air Reserve Base Inland Port Airport Land Use Compatibility Plan (ALUCP) identifies land use standards and design criteria for new development located in the proximity of the March Air Reserve Base to ensure compatibility between the airport and surrounding land uses and to maximize

¹ Based on current calculations of Project site acreage, the amount of land incorporated into the boundaries of SP 246 and to be removed from the boundaries of SP 239 comprises approximately 22.8 acres (SP 239 comprises 605.4 acres per the adopted SP 239 land use plan, while the Project site evaluated herein comprises 582.6 acres; thus, approximately 22.8 acres would be removed from the boundary of SP 239 as part of the Project).

LAND USE SUMMARY TABLE			
LAND USE DESIGNATION/DENSITY	PLANNING AREA	GROSS ACRES	TOTAL DU'S *
M MEDIUM RESIDENTIAL (2-5 DU/AC) (6,000-7,200 sq. ft. lots)	3	45.0	184
	4	12.0	49
	15	37.0	141
	16	39.0	139
	17	33.0	137
	22	19.0	68
SUBTOTAL		185.0	718
M-H MEDIUM-HIGH RESIDENTIAL (5-8 DU/AC) (5,000 sq. ft. lots average)	5	29.0	136
	8	33.0	173
	10	24.0	105
	13	34.0	165
	18	28.0	140
	23	37.0	184
SUBTOTAL		185.0	903
V-H VERY HIGH RESIDENTIAL (14-20 DU/AC)	6	17.0	238
	7	13.0	208
SUBTOTAL		30.0	446
COMMERCIAL	1	44.0	169
	2	14.0	
	24	2.0	
	25	15.0	
SUBTOTAL		75.0	169
RESIDENTIAL TOTAL			* 2,236
PARKS	11	8.0	
	14	10.7	
	21	15.0	
SUBTOTAL		33.7	
OPEN SPACE			
	• NATURAL	19	20.8
	• RECREATIONAL	26	8.6
SUBTOTAL		29.4	
SCHOOLS	9	10.0	
	12	7.0	
	20	10.0	
SUBTOTAL		27.0	
CIRCULATION		40.3	
GRAND TOTAL		605.4	2,236 D.U.

* Total dwelling units do not include up to 300 additional units as permitted by an approved affordable housing program. Up to 150 affordable units and a matching number of bonus units may be allocated to planning areas 1 and 29.

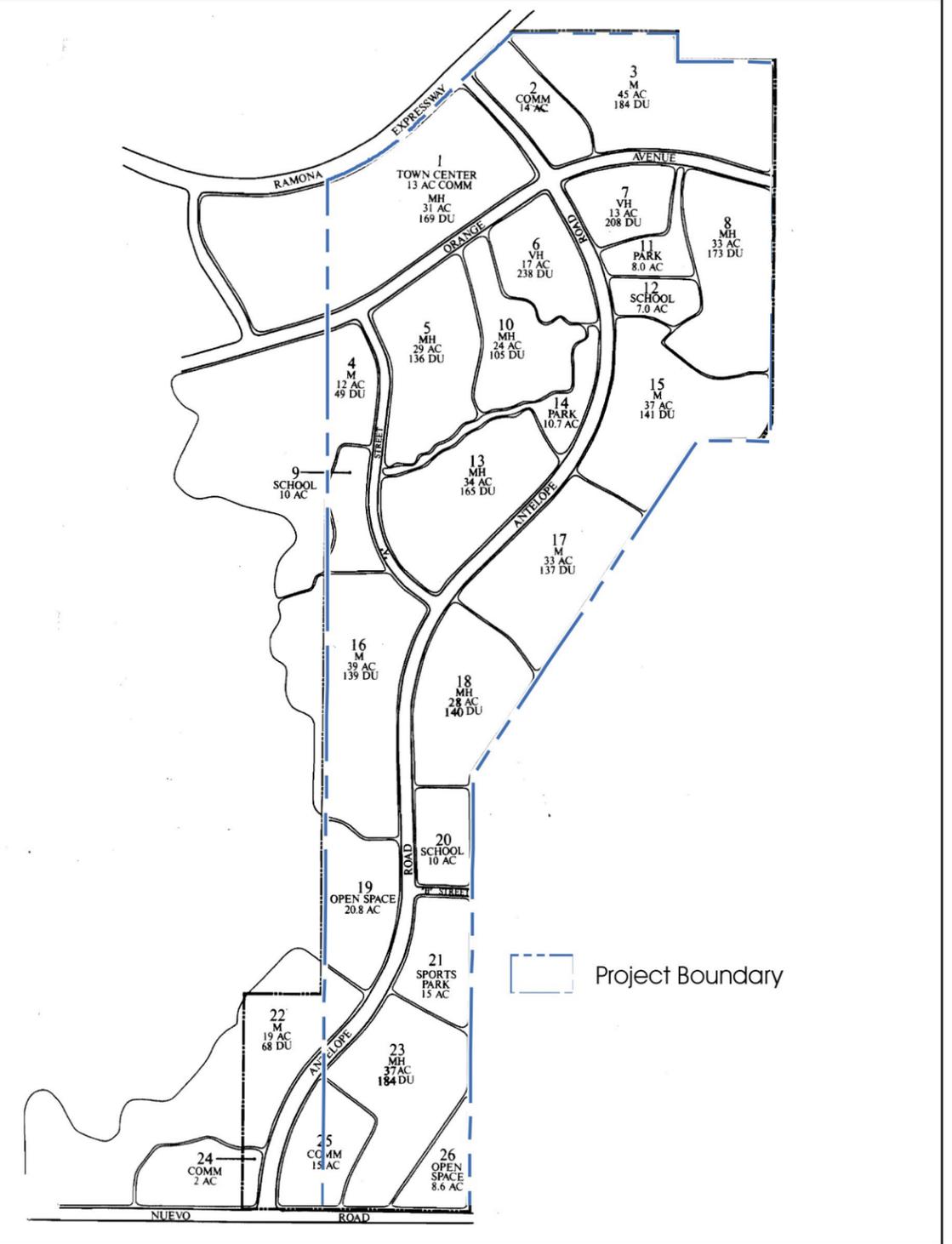
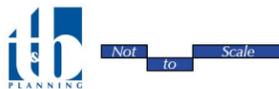


Figure 2-5



Existing Stoneridge Specific Plan Land Use Designations



public safety (ALUC, 2014). A majority of the western, central, and southern portions of the Project site are located within the Airport Influence Area (AIA) for the March Air Reserve Base and are located within ALUCP Compatibility Zone E (RCIT, 2020). No restrictions are identified by the ALUCP for Compatibility Zone E, other than prohibiting specific types of land uses that can create a hazard to flight (ALUC, 2014). Refer to EIR Subsections 4.9, *Hazards and Hazardous Materials*, 4.13, *Noise*, and 4.18 *Transportation/Traffic*, for additional discussion of the March Air Reserve Base.

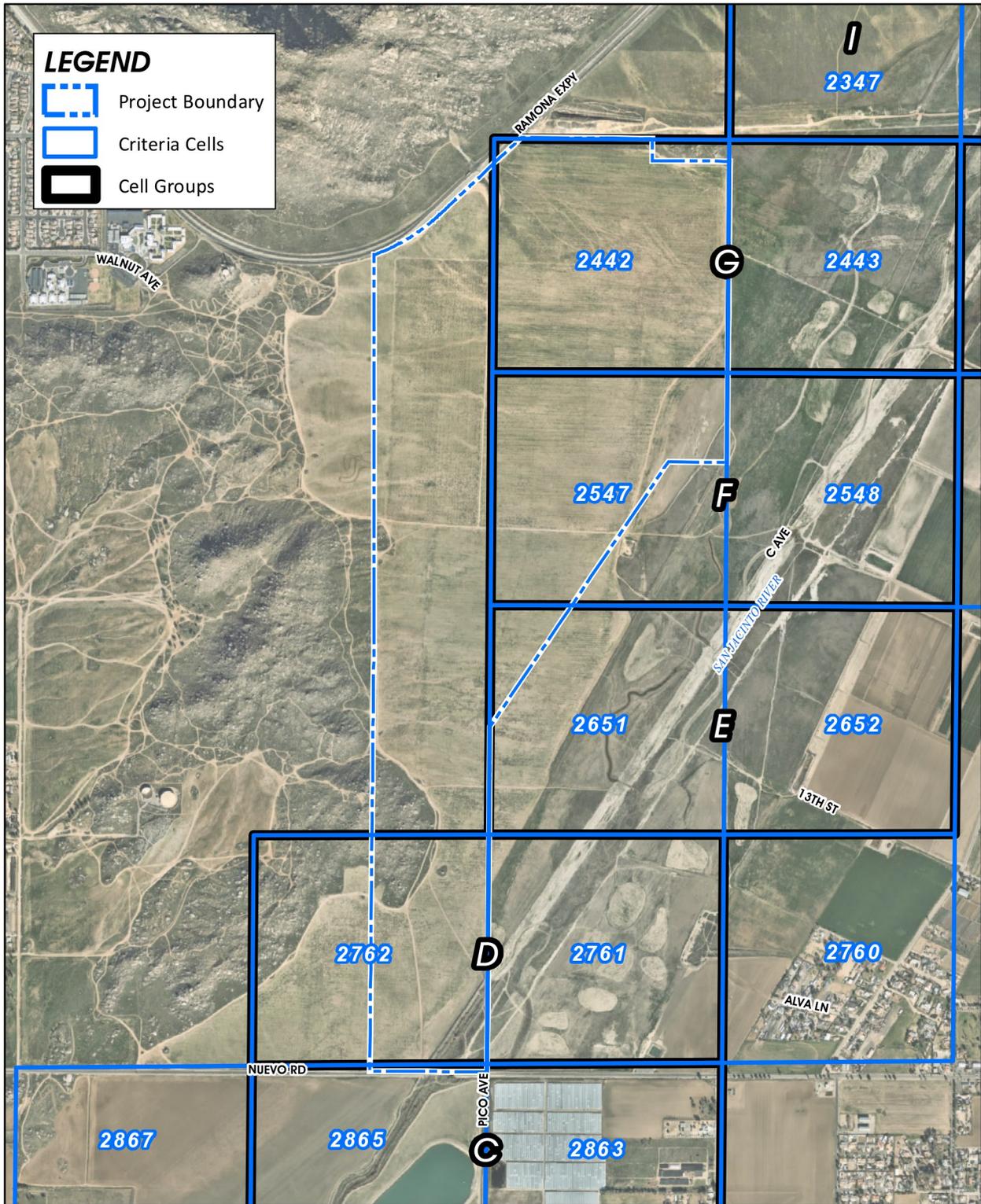
2.4.7 WESTERN RIVERSIDE COUNTY MULTIPLE SPECIES HABITAT CONSERVATION PLAN

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), a regional Habitat Conservation Plan (HCP), was adopted on June 17, 2003, and an Implementing Agreement (IA) was executed between the United States Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and participating entities. The intent of the Western Riverside County MSHCP is to preserve native vegetation and meet the habitat needs of multiple species, rather than focusing preservation efforts on one species at a time. The MSHCP identifies Criteria Areas, in which habitat conservation efforts are targeted. As shown on Figure 2-6, *MSHCP Cell Groups and Criteria Cells*, the eastern and southern portions of the Project site are located within MSHCP Criteria Cells. The northeast portion of the Project site is located within Criteria Cell 2442 within Cell Group G of the MSHCP Lakeview/Nuevo Area Plan (LNAP), Criteria Cell 2547 within Cell Group F of the LNAP, and Criteria Cell 2651 within Cell Group E of the LNAP. The southern portions of the Project site are located within Criteria Cell 2762 within Cell Group D of the LNAP. Refer to EIR Subsection 4.4, *Biological Resources*, for a discussion of the conservation criteria for these Criteria Cells and Cell Groups. (RCIT, 2020; Riverside County, 2003)

In addition to conservation criteria within areas designated to be included within the MSHCP Reserve System, the MSHCP also identifies a number of additional survey and conservation requirements. The eastern and southern portions of the Project site are located within the Criteria Area Species Survey Area (CASSA) for the San Jacinto Valley crownscale, Parish's brittlescale, Davidson's saltscale, Thread-leaved brodiaea, Round-leaved filaree, Smooth tarplant, Coulter's goldfields, Little mousetail, and Mud nama. The eastern and southern portions of the Project site also are located within the CASSA for the L.A. Pocket Mouse. The eastern and southern portions of the Project site also are located within the Narrow Endemic Plant Species Survey Area (NEPSSA) for Munz's onion, San Diego ambrosia, Many-stemmed dudleya, Spreading navarretia, California Orcutt grass, Wright's trichocoronis. The entire 582.6-acre Project site is located within the Burrowing Owl Survey Area. (RCA, 2020)

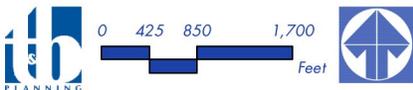
2.5 EXISTING PHYSICAL SITE CONDITIONS

Pursuant to State CEQA Guidelines § 15125, the physical environmental condition for purposes of establishing the setting of an EIR is the environment as it existed at the time the EIR's NOP was released for public review. The NOP for this EIR was released for public review on April 27, 2020. The following subsections provide a description of the Project site's physical environmental condition ("existing conditions") as of that approximate date. The site's current physical conditions and surrounding areas are shown on Figure 2-7, *Aerial Photograph*. More detailed information regarding the Project's site's environmental setting as it relates to a specific environmental issue area is provided in the various subsections of EIR Section 4.0, *Environmental Analysis*.

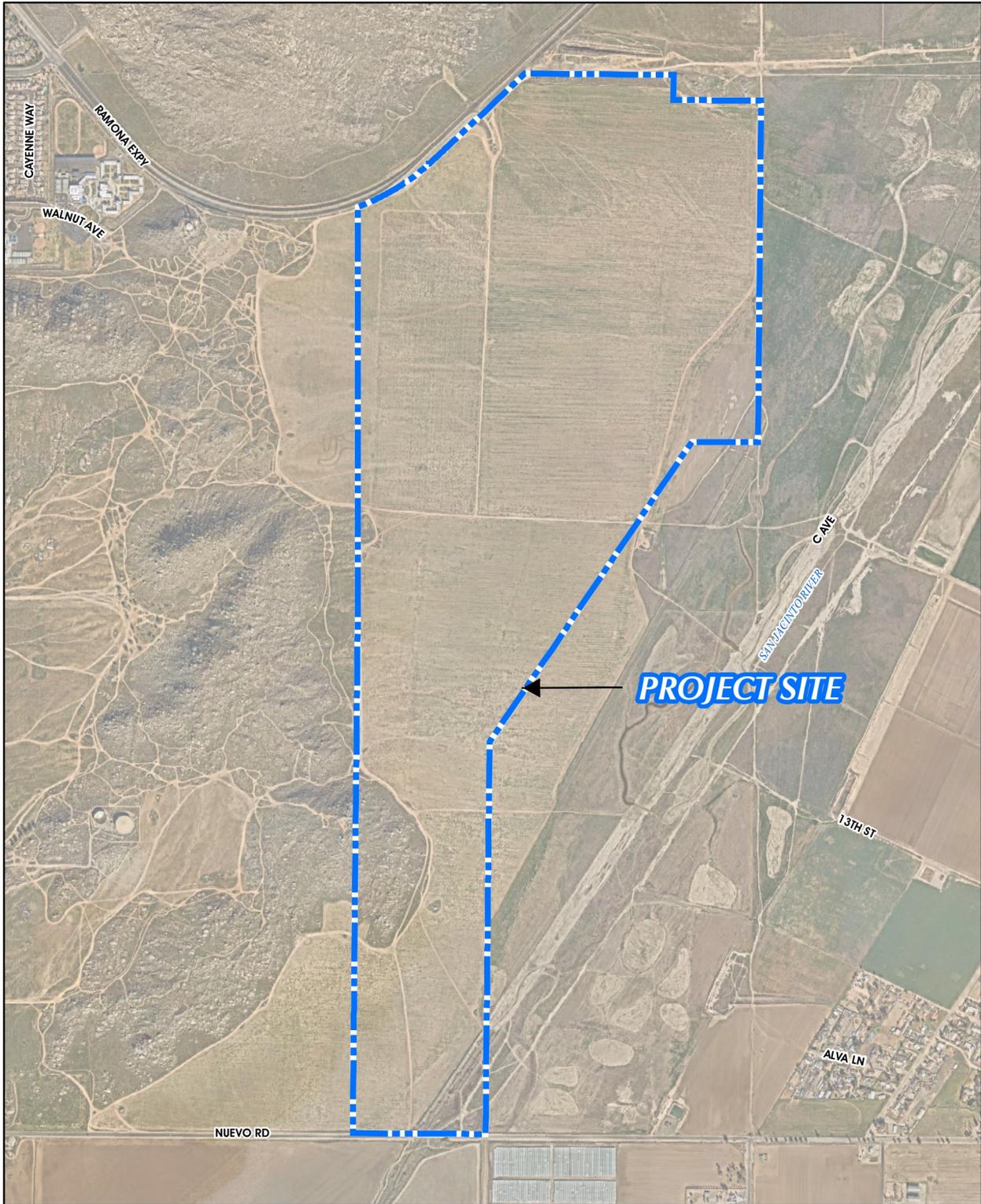


Source(s): ESRI, Nearmap Imagery (2020), RCLMA (2019)

Figure 2-6

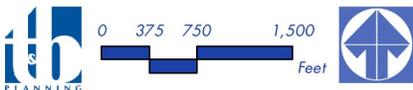


MSHCP Cell Groups and Criteria Cells



Source(s): ESRI, Nearmap Imagery (2021), RCLMA (2019)

Figure 2-7



Aerial Photograph



2.5.2 LAND USE

As shown on Figure 2-7, the 582.6-acre Project site is vacant and undeveloped under existing conditions. A majority of the flatter portions of the Project site were previously subject to agricultural activity, and is routinely disced for fire abatement purposes. The hill forms located in the western portions of the Project site were not previously used for agriculture, and contain natural open space that is partially disturbed by pedestrian activity, particularly in the northwest portion of the Project site. The San Jacinto River traverses the southeastern corner of the Project site.

2.5.3 SITE TOPOGRAPHY

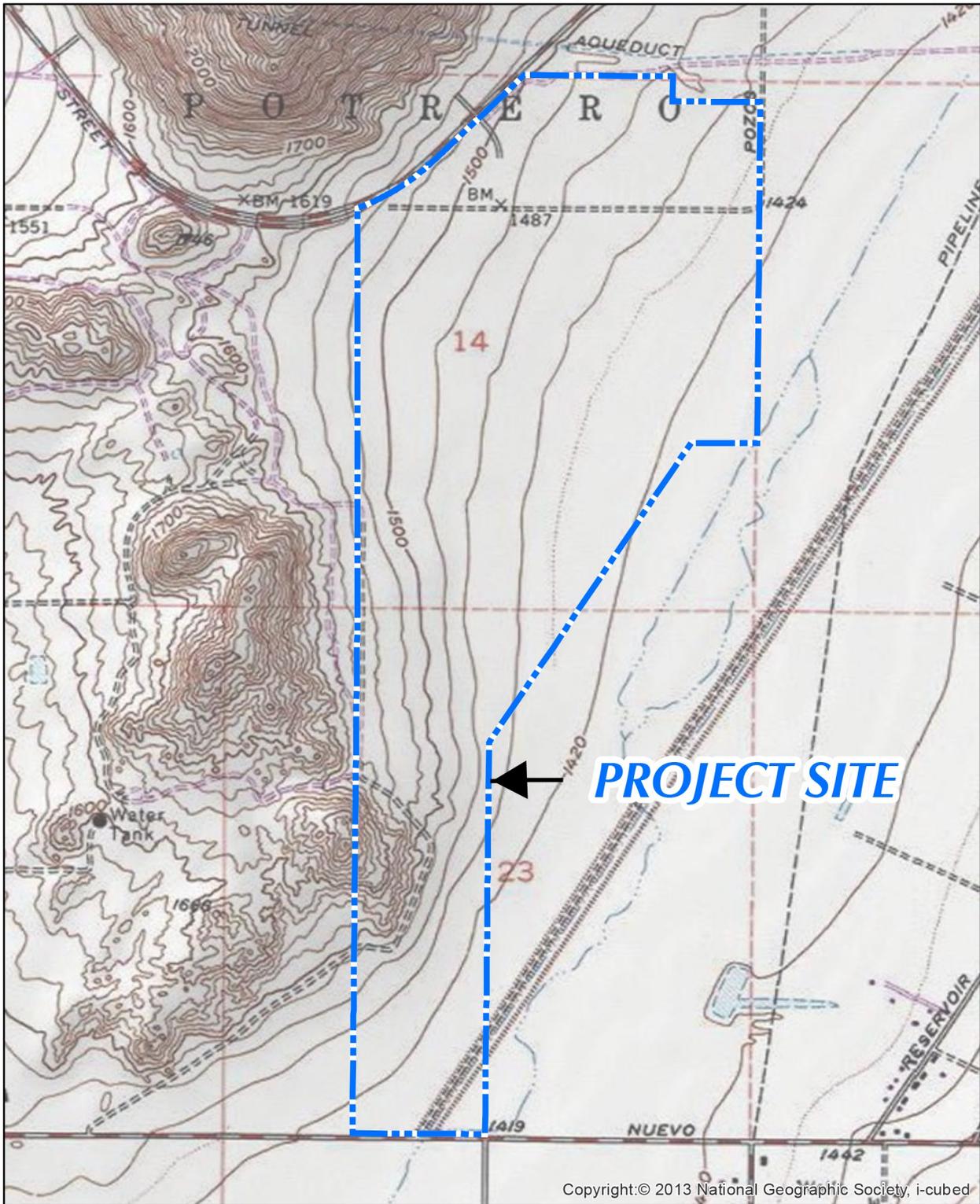
As shown on Figure 2-8, *USGS Topographic Map*, the topography of the Project site is largely characterized by flat lands throughout most of the site, with several large hill forms occurring along the western Project boundary. In general, the topography of the Project site decreases from west to east, with drainage under existing conditions being conveyed to the San Jacinto River. Elevations on site range from 1,425 feet above mean sea level (amsl) in the southeastern corner of the Project site (i.e., within the San Jacinto River) to 1,695 feet amsl along the western Project boundary. Overall topographic relief is approximately 270 feet.

2.5.4 AIR QUALITY AND CLIMATE

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

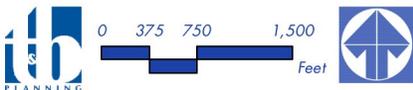
2.5.5 AGRICULTURE AND FORESTRY RESOURCES

As more fully discussed in EIR Subsection 4.2, *Agriculture and Forestry Resources*, the California Department of Conservation (CDC) Farmland Mapping and Monitoring Program (FMMP) identifies "Important Farmland" to include lands mapped as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and "Farmland of Local Importance." As mapped by the CDC's FMMP, the Project site is mapped as containing approximately 297.8 acres of "Prime Farmland," approximately 24.6 acres of "Farmland of Statewide Importance," approximately 4.0 acres of "Unique Farmland," and approximately 180.3 acres of "Farmland of



Source(s): USGS (2019)

Figure 2-8



USGS Topographic Map



Local Importance.” The Project site is not zoned for agricultural use, is not currently used for agricultural production, and is not subject to any Williamson Act Contracts or County Agricultural Preserves. Additionally, no forestry resources occur on-site under existing conditions.

2.5.6 BIOLOGICAL RESOURCES

The Project site supports the following vegetation/land cover types: agriculture, disturbed alkali playa, disturbed/developed, non-native grassland, ornamental, Riversidean sage scrub, ruderal, and southern riparian scrub. Table 2-1, *Summary of Vegetation/Land Use Types for the Project Site*, provides a summary of the vegetation/land cover types and their corresponding acreage within and adjacent to the Project site. Table 2-2, *Summary of Vegetation/Land Use Types for Off-Site Roadway Improvement Areas*, provides a summary of the vegetation/land cover types and their corresponding acreage within the Project’s off-site improvement areas. Refer to EIR Subsection 4.4, *Biological Resources*, for a detailed description of the vegetation communities that occur on site. (GLA, 2022a, p. 24)

Table 2-1 Summary of Vegetation/Land Use Types for the Project Site

VEGETATION/LAND USE TYPE	PROJECT SITE (acres)
Agriculture	176.82
Disturbed Alkali Playa	21.30
Disturbed/Developed	21.19
Non-Native Grassland	2.92
Ornamental	0.97
Riversidean Sage Scrub	26.36
Ruderal	362.82
Southern Riparian Scrub	1.50
Total	613.89

(GLA, 2022a, Table 4-1)

Table 2-2 Summary of Vegetation/Land Use Types for Off-Site Roadway Improvement Areas

VEGETATION/LAND USE TYPE	PROJECT SITE (acres)
Disturbed/Developed	96.69
Total	96.69

(GLA, 2022a, Table 4-2)

The Project site occurs within Multiple Species Habitat Conservation Plan (MSHCP) Narrow Endemic Plant Species Survey Area (NEPSSA) designated Survey Area 3, as well as CAPSSA designated Survey Area 3; therefore, pursuant to the MSHCP, the following target species were evaluated: San Jacinto Valley crownscale, Parish's brittle scale, Davidson's salt scale, thread-leaved brodiaea, round-leaved filaree, smooth tarplant, Coulter's goldfields, little mousetail, mud nama, Munz’s onion, San Diego ambrosia, many-stemmed dudleya, spreading navarretia, California orcutt grass, and Wright’s trichocoronis along with other special-status plants that could cause a potential constraint to the Project under CEQA. Table 4-3 of the Project’s Biological Technical Report (“BTR”; *Technical Appendix C1*) provides a list of special-status plants evaluated for the Project site through general biological surveys, habitat assessments, and focused surveys. The following



special-status plants were detected at the Project site and are described in detail in Table 4-3 of the Project's BTR: Coulter's goldfields, San Jacinto Valley crowscale, smooth tarplant, and spreading navarretia. Refer to EIR Subsection 4.4, *Biological Resources*, for a detailed description of sensitive plants that occur or have the potential to occur on site. (GLA, 2022a, p. 26)

The following special-status animals were detected at the Project site: ferruginous hawk (*Buteo regalis*), northern harrier (*Circus cyaneus*), white-tailed kite (*Elanus leucurus*), loggerhead shrike (*Lanius ludovicianus*), Los Angeles pocket mouse (*Perognathus longimembris brevinasus*), northwestern San Diego pocket mouse (*Chaetodipus fallax*), San Diego desert woodrat (*Neotoma lepida intermedia*), Stephens' kangaroo rat (*Dipodomys stephensi*), and San Diego black-tailed jackrabbit (*Lepus californicus sandiogensis*). Table 4-4 of the Project's BTR (*Technical Appendix C1*) provides a list of special-status animals evaluated for the Project site through general biological surveys, habitat assessments, and focused surveys. Refer to EIR Subsection 4.4, *Biological Resources*, for a detailed description of sensitive animals that occur or have the potential to occur on site. (GLA, 2022a, p. 33)

2.5.7 GEOLOGY

The Project site is regionally located in the Peninsular Ranges geomorphic province which extends from the Los Angeles Basin south to Baja California. The province is characterized by numerous southwest trending mountain ranges and valleys that are geologically controlled by a series of paralleling major active faults. More specifically, the 582.6-acre Project site is located in the northern portion of the Perris block, which is bordered to the northeast by the San Jacinto Fault Zone and to the southwest by the Chino/Elsinore Fault Zone. The Peninsular Ranges batholith is composed of Cretaceous-aged plutonic rocks mainly of tonalitic composition. Near the Project site, the plutonic rocks are associated with the Lakeview Mountain Pluton which primarily consists of biotite-hornblende tonalite characterized by ubiquitous schlieren and the lack of potassium feldspar. (LGC, 2019, p. 6)

The Project site is situated on the western margin of an alluvial flood plain associated with the San Jacinto River. Most of the alluvial areas west of the San Jacinto River consists of Pleistocene age fluvial deposits similar to those observed at the subject site. These alluvial materials generally form the large area flanking the Perris Valley and the west side of the San Jacinto River Valley. (LGC, 2019, p. 6)

Based on the Geologic Map of the 7.5-foot Perris Quadrangle, the Project site is underlain by Very Old Fan Deposits of the late Pleistocene. In addition, Lakeview Mountain plutonic bedrock is present along and adjacent to the western boundary of the Project site. The presence of some minor amounts of artificial fill (not mapped) associated with existing "dirt" roadway construction and past agricultural uses likely occur on site. The approximate lateral limits of the geologic units are depicted on the Geotechnical Maps included in the Project's Geotechnical Evaluation (refer to Sheets 1 through 3 of EIR *Technical Appendix F*). (LGC, 2019, p. 6)



2.5.8 SOILS

Figure 2-9, *On-Site Soils*, depicts the location and extent of soils within the Project site. Table 2-3, *Summary of On-Site Soil Characteristics*, provides a summary of the soils present on the Project site, and identifies the attendant rate of runoff and erosion susceptibility. As shown, approximately 7.9% of the Project site has a “Very Slow” rate of runoff, with no erosion susceptibility identified. Approximately 1.8% of the Project site has a slow rate of runoff and a slight susceptibility to erosion. Approximately 68.1% of the Project site has a slow to medium rate of runoff and a slight to moderate susceptibility to erosion. Approximately 18.2% of the Project site has a medium rate of runoff and a moderate erosion susceptibility, while approximately 3.3% of the Project site has a rapid rate of runoff and a high susceptibility to erosion. Approximately 0.8% of the Project site is not rated by the United States Department of Agriculture (USDA) for rate of runoff or erosion susceptibility. (USDA, 1971, pp. 23-24, 32, 38-40, 47, 54-55, 65, and 67-68; USDA, 2020)

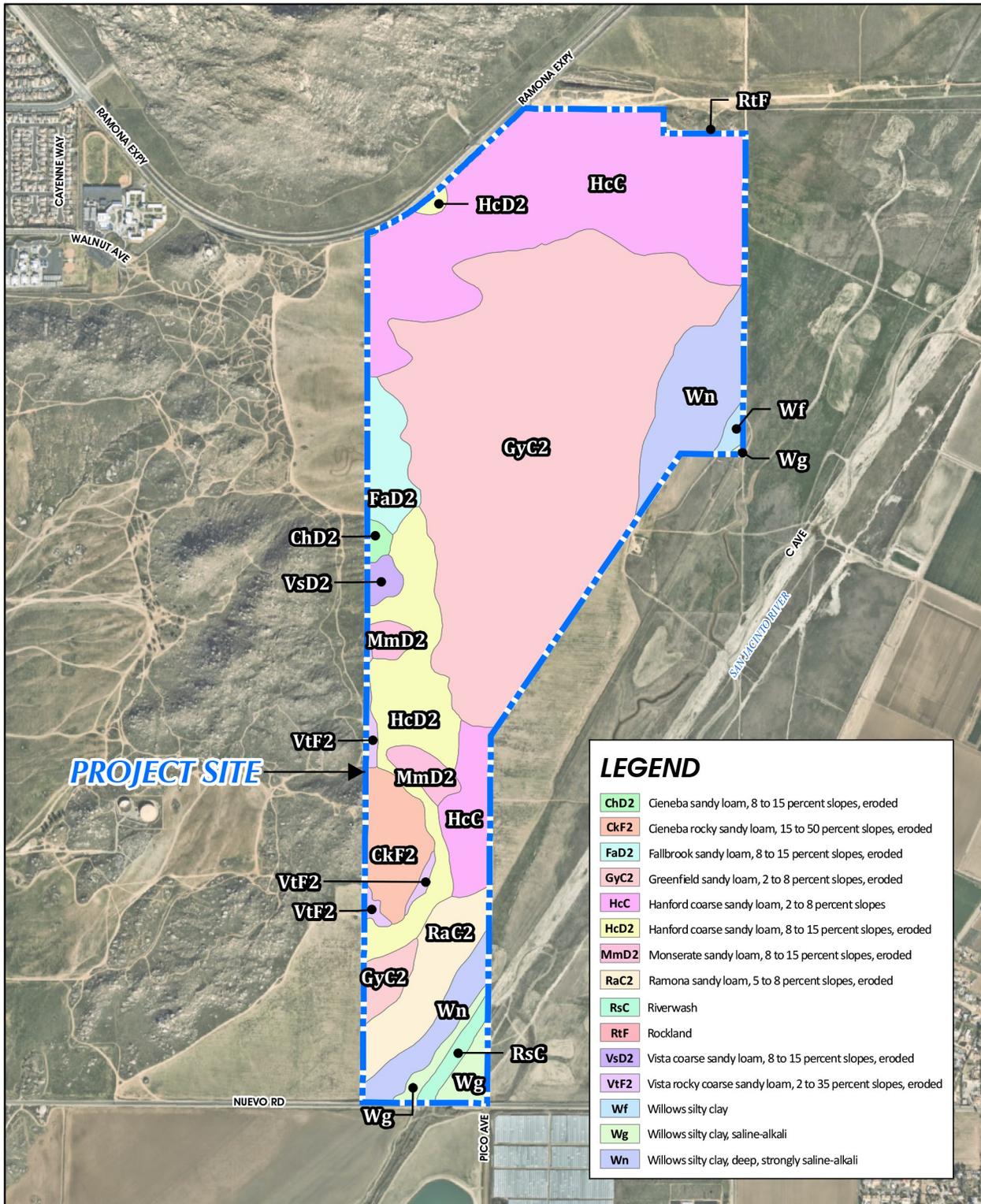
Table 2-3 Summary of On-Site Soil Characteristics

Map Symbol	Map Unit Name	Rate of Runoff	Erosion Susceptibility	Acres in AOI¹	Percent of AOI¹
ChD2	Cieneba sandy loam, 8 to 15 percent slopes, eroded	Medium	Moderate	2.1	0.4%
0.4	Cieneba rocky sandy loam, 15 to 50 percent slopes, eroded	Rapid	High	19.3	3.3%
FaD2	Fallbrook sandy loam, 8 to 15 percent slopes, eroded	Medium	Moderate	14.5	2.5%
GyC2	Greenfield sandy loam, 2 to 8 percent slopes, eroded	Slow to Medium	Slight to Moderate	251.1	43.1%
HcC	Hanford coarse sandy loam, 2 to 8 percent slopes	Slow to Medium	Slight to Moderate	145.7	25.0%
HcD2	Hanford coarse sandy loam, 8 to 15 percent slopes, eroded	Medium	Moderate	47.6	8.2%
MmD2	Monserate sandy loam, 8 to 15 percent slopes, eroded	Medium	Moderate	9.6	1.6%
RaC2	Ramona sandy loam, 5 to 8 percent slopes, eroded	Medium	Moderate	23.9	4.1%
RsC	Riverwash	--	--	4.5	0.8%
RtF	Rockland	--	--	0.1	0.0%
VsD2	Vista coarse sandy loam, 8 to 15 percent slopes, eroded	Medium	Moderate	3.4	0.6%
VtF2	Vista rocky coarse sandy loam, 2 to 35 percent slopes, eroded	Medium	Moderate	4.7	0.8%
Wf	Willows silty clay	Very Slow	--	2.2	0.4%
Wg	Willows silty clay, saline-alkali	Slow	Slight	10.3	1.8%
Wn	Willows silty clay, deep, strongly saline-alkali	Very Slow	--	43.5	7.5%
Totals for Area of Interest:		--	--	582.6	100.0%

1. Totals reflect rounding. AOI = Areas of Interest
(USDA, 1971, pp. 23-24, 32, 38-40, 47, 54-55, 65, and 67-68; USDA, 2020)

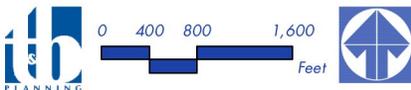
2.5.9 HYDROLOGY

Under existing conditions, a majority of the Project site is relatively flat, with a large hillform occurring along the western Project site boundary in the southern portion of the site. Runoff on the site and areas tributary to the site generally is conveyed in a west-to-east orientation towards the San Jacinto River, which is located immediately east of the Project site. The topography of the site is typical of the Perris Valley in that it exhibits



Source(s): ESRI, Nearmap Imagery (2020), RCTLMA (2019), USDA (2019)

Figure 2-9



On-Site Soils



gently rolling topography with elevations ranging from approximately 1,420 feet to 1,720 feet above mean sea level. (Hunsaker, 2021a) Refer to EIR Subsection 4.10, *Hydrology and Water Quality*, for additional information regarding the site's existing drainage conditions.

2.5.10 NOISE

The most common and significant source of noise in Riverside County is mobile noise generated by transportation-related sources. Other sources of noise are the various land uses (i.e., residential, commercial, and institutional) that generate stationary-source noise. The Project site is bound by Ramona Expressway to the north and Nuevo Road to the south. Both of these are major roadways within the County that serve a wide variety of residential, industrial, agricultural, and commercial land uses. As shown in EIR Table 4.13-3, the ambient recorded noise level on the Project site is 41.4 dBA. Refer to EIR Subsection 4.13, *Noise*, for additional information regarding the site's existing noise conditions.

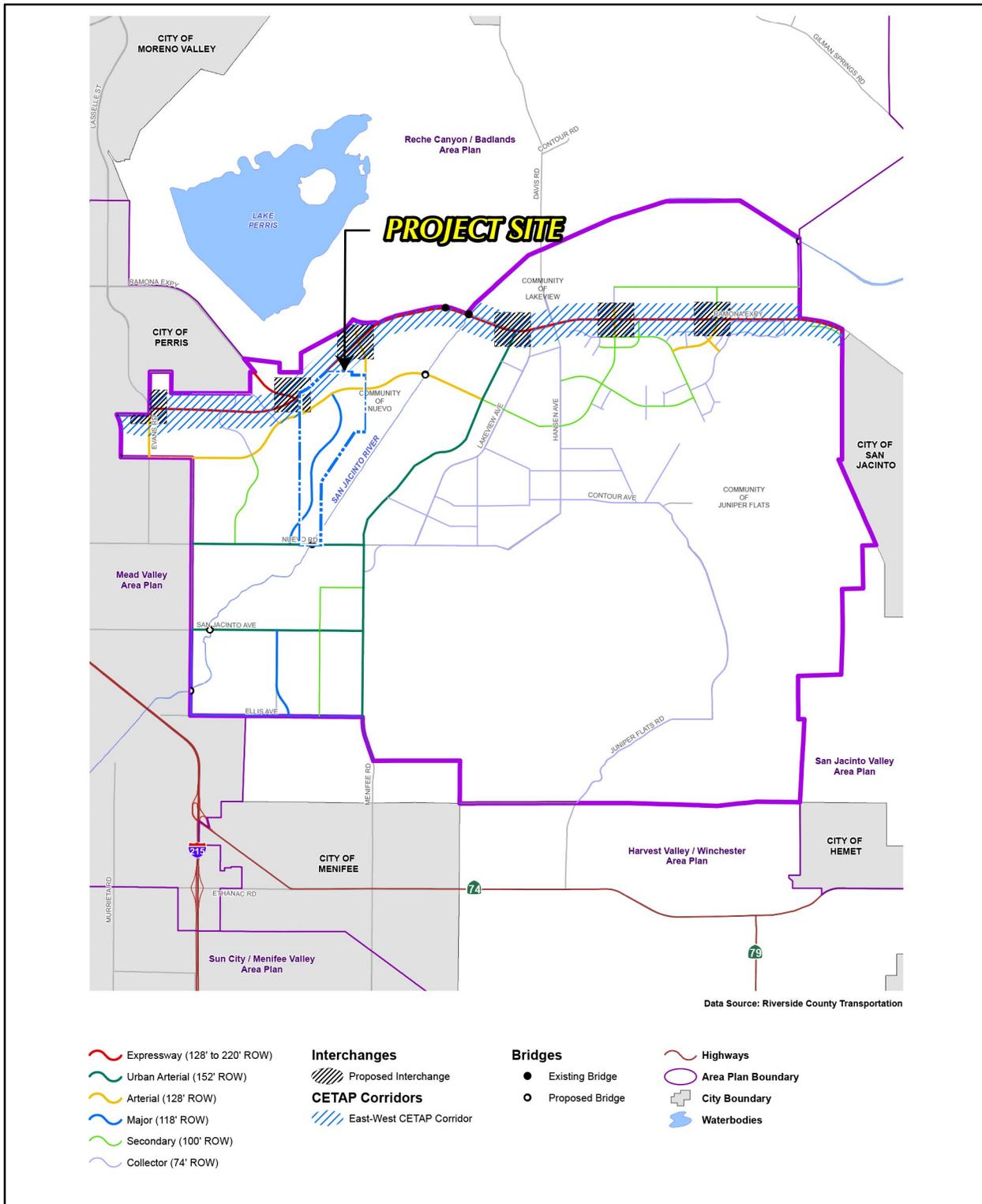
2.5.11 TRANSPORTATION

Interstate 215 (I-215) is located approximately 2.6 miles southwest of the Project site, State Route 74/Ethanac Road occurs approximately 4.0 miles to the south, while State Route 79 (SR 79) occurs approximately 8.8 miles east of the Project site. Direct access to the Project site is currently available from the Ramona Expressway, located along the northern Project boundary, and Nuevo Road, located along the southern Project boundary. (Google Earth, 2018)

As shown on Figure 2-10, *LNAP Circulation Plan*, the Riverside County General Plan and LNAP classifies the Ramona Expressway as an "Expressway (128' to 220' ROW)," while Nuevo Road is classified as an "Urban Arterial (152' ROW)." Additionally, the General Plan and LNAP indicates Orange Avenue is planned to traverse the Project site in an east-west orientation, and classifies Orange Avenue as an "Arterial (128' ROW)" roadway. The General Plan and LNAP also show Antelope Road traversing the Project site in a north-south orientation between Orange Avenue and Nuevo Road, and classifies this road as a "Major (118' ROW)" roadway. An unnamed roadway also is planned between Orange Avenue and the Ramona Expressway, and is classified as an "Arterial (128' ROW)" roadway by the General Plan and LNAP. Additionally, the proposed Mid-County Parkway (MCP) is identified as an "Expressway (128' to 220' ROW)," and is identified as part of a Community Environmental Transportation Acceptability Process (CETAP) East-West Corridor. (Riverside County, 2019b, Figure 7)

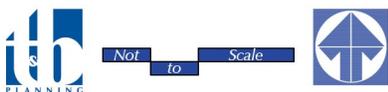
Transit service is currently not available at the Project site, although existing Riverside Transit Agency (RTA) bus stops occur near the intersection of Sherman Road at Walnut Street, approximately 0.5 mile west of the Project site in the City of Perris.

Under existing conditions, no pedestrian or bicycle facilities have been constructed on the Project site, with exception of a number of informal trails within the hillsides in the western portion of the Project site. (Google Earth, 2018) As shown on Figure 2-11, *LNAP Trails and Bikeway System*, the General Plan and LNAP identify numerous planned trails on and adjacent to the Project site. A "Combination Trail (Regional Trail/Class I Bike

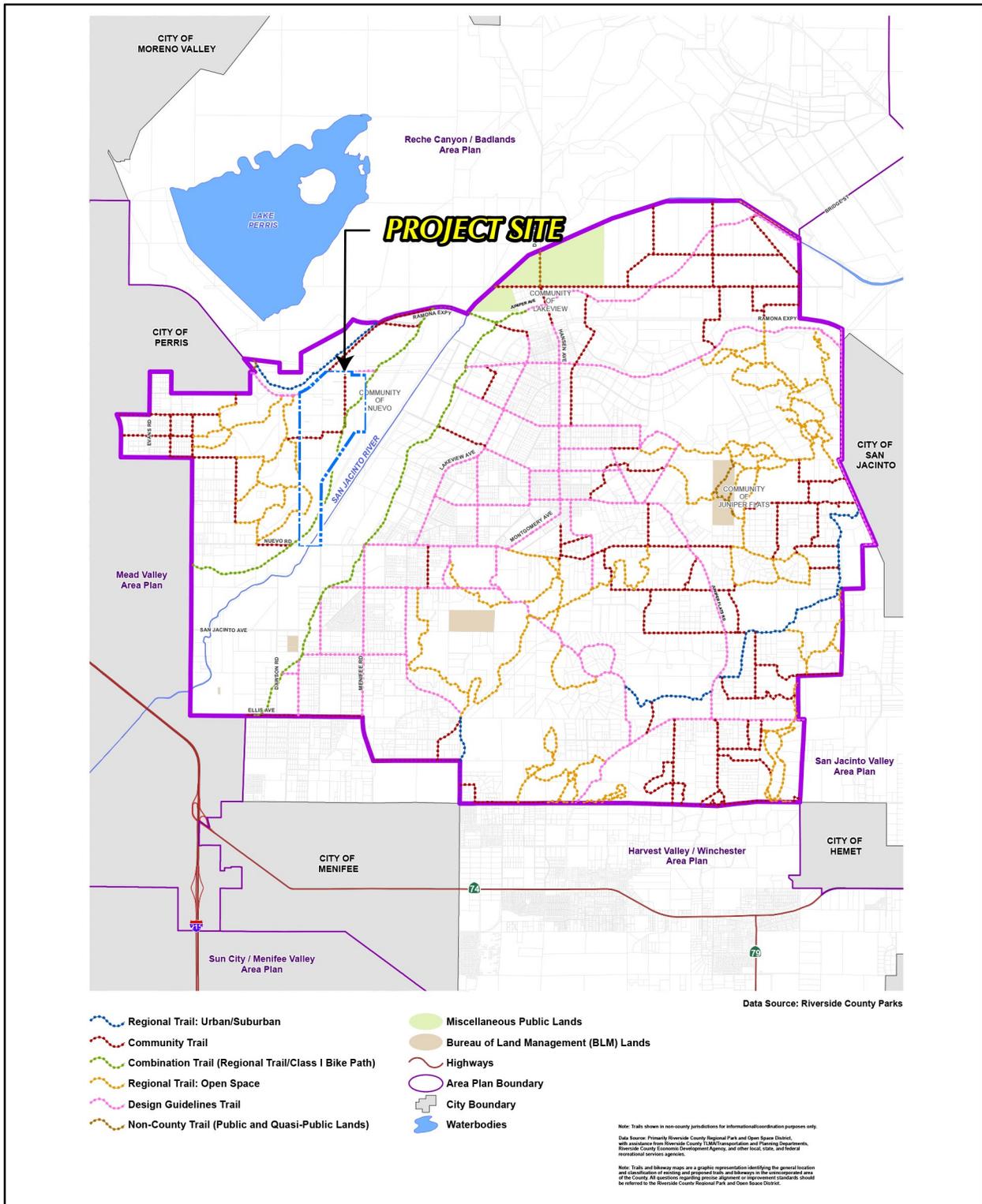


Source(s): Riverside County (04-16-2019)

Figure 2-10

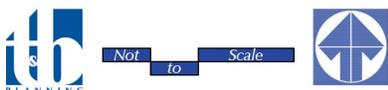


LNAP Circulation Plan



Source(s): Riverside County (04-16-2019)

Figure 2-11



LNAP Trails and Bikeway System



Path)” is planned to traverse the southern and northeastern portions of the Project site. A “Community Trail” is planned to traverse the central portions of the Project site in a west-east orientation, with this trail continuing in a north-south alignment in the eastern portion of the site up to the northern site boundary, where it would connect to a proposed “Design Guidelines Trail.” The “Design Guidelines Trail” is planned along the southern alignment of the Ramona Expressway, and east along the northern Project boundary where it would connect to off-site portions of the Combination Trail (Regional Trail/Class I Bike Path). Several “Regional Trail: Open Space” trail segments are planned in the western portions of the site, primarily associated with the hill forms located in the western portions of the site and off site to the west. (Riverside County, 2019b, Figure 8)

2.5.12 PUBLIC FACILITIES

Fire protection services in the Project area are primarily provided by the Riverside County Fire Department (RCFD). The primary fire station servicing the site would be RCFD Station 3 (Nuview), which is located approximately 3.2 roadway miles east of the Project site. Secondary fire protection services would be provided by RCFD Station 90 (North Perris City), located approximately 3.3 roadway miles west of the Project site. (Google Earth, 2018) Police protection services in the Project area are provided by the Riverside County Sheriff’s Department (RCSA). The nearest sheriff’s station to the Project site is the Perris Station, located at 137 North Perris Boulevard, Perris, or approximately 3.3 miles southwest of the Project site (Google Earth, 2018). In addition to community policing, other services provided by the Sheriff’s Department include, but are not limited to, operating of the emergency 911 system, operating correctional facilities, performing traffic control, and providing crime prevention education. Also, the Sheriff’s Department coordinates with volunteer groups such as Neighborhood Watch Programs and the Community Oriented and Policing Problem Solving (COPPS) Program and the Community Oriented Policing (COP) Program.

2.5.13 UTILITIES AND SERVICE SYSTEMS

A. Water Service

The Project site is located in the service area of the Eastern Municipal Water District (EMWD). The EMWD provides water services to communities in Riverside County extending from Moreno Valley to Temecula, and west of Perris to the City of Hemet. Approximately 75% of the EMWD’s potable water demand is supplied from imported water from Metropolitan Water District (MWD) of Southern California through its Colorado River Aqueduct and its connections to the State Water Project. The remaining 25% of potable water demand within EMWD is supplied through groundwater management and desalination efforts. (EMWD, 2019)

Under existing conditions, there is no water infrastructure on the Project site. An existing 12-inch water line occurs within Ramona Expressway. There are no additional water lines in roadways abutting the Project site.

B. Sewer Service

The Project site is located in the service area of EMWD. The EMWD wastewater collection and treatment facilities treat approximately 43 million gallons per day (mgd) of wastewater at its four active regional water reclamation facilities through 1,813 miles of sewer pipelines. (EMWD, n.d.) Sewer flows from the Project area are treated by the Perris Valley Regional Water Reclamation Facility (PVRWRC), which has a current



daily capacity of 22 mgd with typical daily flows of approximately 13.8 mgd. The PVRWRC has an ultimate capacity of 100 million gpd (EMWD, 2016, p. 1).

The only existing EMWD sewer facility in the Project area is an existing 27-inch gravity sewer main within Pico Avenue, south of the Project site.

C. Solid Waste Services

The Riverside County Department of Waste Resources (RCDWR) is responsible for the efficient and effective landfill disposal of non-hazardous county waste within the County, and operates six active landfills in addition to holding a contract agreement to dispose of waste at the private El Sobrante Landfill (Riverside County, 2015a, p. 4.17-36). Solid waste from the Project site would be taken to the Moreno Valley Transfer Station before being loaded into larger trucks and transferred to the El Sobrante Landfill for disposal. The El Sobrante Landfill is located at 10910 Dawson Canyon Road in Riverside County, east of the Interstate 15 and south of the City of Corona. Solid waste could also be taken to the Lamb Canyon Landfill or the Badlands Landfill which are both located within Riverside County (Riverside County, 2015a).

D. Other Services

The Project site also is located in the service territories of the Southern California Gas Company (natural gas) and Southern California Edison (electricity) (SCE, 2015; SoCalGas, 2016).

2.5.14 RARE AND UNIQUE RESOURCES

As required by State CEQA Guidelines § 15125(c), the environmental setting should identify any inconsistencies between a proposed project and applicable general, specific, or regional plans, and place special emphasis on resources that are rare or unique to that region and would be affected by the project. The principal discretionary actions required of Riverside County to implement the Project are described in detail in Section 3.0, *Project Description*, and are listed in Table 3-11, *Matrix of Project Approvals/Permits*.

Based on the existing conditions of the Project site and surrounding area described above and discussed in more detail in Section 4.0, *Environmental Analysis*, the Project site contains one prominent hill form occurring in the southern portion of the Project site along the western Project boundary. Additionally, the San Jacinto River, which is a channelized drainage facility in the Project area, traverses the southeast corner of the Project site. As discussed in EIR Section 4.2, *Agriculture and Forest Resources*, the Project site contains approximately 297.8 acres of “Prime Farmland,” approximately 24.6 acres of “Farmland of Statewide Importance,” approximately 4.0 acres of “Unique Farmland,” and approximately 180.3 acres of “Farmland of Local Importance,” for a total of 506.7 acres of “Farmland” on site. There are no other rare or unique resources on the Project site under existing conditions.



3.0 PROJECT DESCRIPTION

This section will provide all of the information required for an EIR Project Description by State CEQA Guidelines § 15124, including a description of the Project’s precise location and boundaries; a statement of the Project’s objectives; a description of the Project’s technical, economic, and environmental characteristics; and a description of the intended use of this EIR, including a list of the government agencies that are expected to use this EIR in their decision-making process; a list of the permits and approvals that are required to implement the project; and a list of related environmental review and consultation requirements.

3.1 REGIONAL SETTING

The 582.6-acre Project site is located within the western portion of unincorporated Riverside County, California. Figure 2-1 (previously presented) depicts the Project site’s location within the regional vicinity. As shown, Riverside County abuts San Bernardino County to the north; Orange County to the west; and San Diego and Imperial Counties to the south. Riverside County is located in an urbanizing area of southern California commonly referred to as the Inland Empire. The Inland Empire is an approximate 28,000 square-mile region comprising western San Bernardino County, western Riverside County, and the eastern reaches of Los Angeles County.

3.2 PROJECT LOCATION AND SETTING

The 582.6-acre site that is subject of this EIR (“Project site”) is located within the Lakeview/Nuevo community of unincorporated Riverside County, south of Lake Perris and the Ramona Expressway, east of the City of Perris, and north of the City of Menifee. More specifically, and as previously depicted on Figure 2-2, the 582.6-acre Project site is located south of the Ramona Expressway, north of Nuevo Road, east of Foothill Drive, and west of the future extension of Menifee Road. Under existing conditions, the Project site is vacant and undeveloped, but has been disturbed in the past by agricultural activities and on-going discing for fire abatement purposes. The site vicinity and surrounding areas contain a mixture of undeveloped lands/open space, with agricultural uses occurring to the southeast of the Project site and residential and school uses occurring to the west and northwest of the site. Refer to EIR subsection 2.0 for a detailed description of the local setting and surrounding land uses.

3.3 PROPOSED PROJECT

The Project as evaluated herein includes two separate land use plans for the 582.6-acre Project site. The “Primary Land Use Plan” anticipates that the Project would be constructed with Ramona Expressway providing primary access from the north and Nuevo Road providing access from the south, and that the site would be developed with up to 3888.5 acres of Light Industrial land uses, 49.1 acres of Business Park land uses, 8.0 acres of Commercial Retail land uses, Open Space – Conservation on 18.1 acres, Open Space – Conservation Habitat on 81.6 acres, and major roadways on 37.3 acres. Pursuant to Amendment No. 1 to Specific Plan No. 239 (SP 239A1), Light Industrial and Business Park land uses may be developed at a Floor Area Ratio (FAR) up to 0.50, while Commercial Retail land uses can be developed at a FAR up to 0.35. However, the Riverside County Transportation Commission (RCTC) is currently planning the construction of



a regional transportation facility, the “Mid-County Parkway (MCP),” a segment of which, along with an interchange, are planned to traverse the northwestern portions of the Project site. The MCP is a long-range transportation improvement by RCTC; however, the RCTC has not secured or identified funding for the segment of the MCP which traverses the Project area, and therefore the timing of this segment of the MCP and the associated interchange is unknown at this time. In addition, and due to environmental, economic, right of way, or other factors, it is possible that RCTC ultimately may not construct the MCP in this portion of Riverside County. Notwithstanding, the “Alternative Land Use Plan” anticipates that the MCP would be constructed through the northwest portions of the site, in which case the site would be developed with 388.5 acres of Light Industrial land uses, 51.5 acres of Business Park land uses (of which 8.5 acres would be within the alignment of the MCP and would not be developed with Business Park land uses), 8.5 acres of Commercial Retail land uses (of which 0.2 acre would occur within the alignment of the MCP and would not be developed with Commercial Retail land uses), 18.1 acres of Open Space – Conservation, 81.6 acres of Open Space – Conservation Habitat, and 34.4 acres of major roadways. As with the Primary Land Use Plan, the Alternative Land Use Plan would allow for development of Light Industrial and Business Park uses at a maximum FAR of 0.50, while Commercial Retail land uses could be developed at a maximum FAR of 0.35. Thus, in order to accommodate both the potential for the future construction of the MCP while also providing for development of the site in the event the MCP is not constructed as currently planned by RCTC, the two land use concepts are evaluated for the site throughout this EIR at an equal level of detail. However, the “Primary Land Use Plan” is the preferred and primary land use plan for the proposed Project. The “Alternative Land Use Plan” only would be implemented in the event that the RCTC constructs the MCP through the northernmost portions of the Project site.

This Program EIR analyzes the physical effects associated with all components of the proposed Project, including planning, construction, and on-going operation. The governmental approvals requested by the Project Applicant from Riverside County to implement the Project consist of the following:

1. Adoption by resolution of a General Plan Amendment (GPA 190008);
2. Adoption of Amendment No. 1 to Specific Plan No. 239 (SP 239A1); and
3. Adoption by ordinance of a Change of Zone (CZ 1900024).

The Project’s applications, as submitted to the County of Riverside by the Project Applicant, are herein incorporated by reference pursuant to State CEQA Guidelines § 15150 and are available for review at the Riverside County Planning Department, 4080 Lemon Street, 12th Floor, Riverside, CA 92501. A copy of the Project’s application materials also are included as *Technical Appendix O* to this EIR. All other discretionary and administrative approvals that would be required of the County of Riverside or other government agencies to implement the Project are also within the scope of the Project analyzed in this EIR.

3.4 STATEMENT OF OBJECTIVES

The fundamental purpose and goal of the Stoneridge Commerce Center Project is to accomplish the orderly development of light industrial, business park, and commercial retail land uses to increase employment opportunities in a housing rich portion of unincorporated Riverside County. This underlying purpose aligns with various aspects of the Southern California Association of Governments’ (SCAG’s) draft 2020-2045



Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) primarily related to accommodating goods movement industries and balancing job and housing opportunities in local areas to reduce long commutes from home to work, while also complying with the SCAG’s adopted 2016 RTP/SCS. SCAG identifies the Inland Empire as a housing rich area and coastal communities as job rich areas and is striving in their policies to achieve more equal balances locally. The Project would achieve its underlying purpose and goal through the following objectives:

- A. To efficiently develop an underutilized property with a complementary mix of employment-generating land uses, including light industrial, business park, and commercial retail land uses in an area predominately composed of housing.
- B. To assist the SCAG region in attempting to achieve jobs/housing balance region-wide and the local area by providing additional job opportunities in a housing rich area of the Inland Empire.
- C. To attract new businesses to Riverside County and thereby provide a more equal jobs-housing balance in the Inland Empire region that will reduce the need for members of the local workforce to commute outside the area for employment.
- D. To establish development standards and design guidelines to ensure future development on site complements other existing and planned uses in the immediate vicinity and minimizes conflicts with other nearby land uses.
- E. To establish a unified thematic concept for future development through design elements such as architecture, monumentation, theme walls, and landscaping using a long-range comprehensive planning approach that cannot be accomplished on a parcel-by-parcel basis.
- F. To anticipate market demand by providing a mixture of light industrial, business park, and commercial retail land uses in a master-planned commerce center that would be marketable within the evolving economic profile of western Riverside County.
- G. To develop a mix of light industrial, business park, and commercial retail uses in unincorporated Riverside County that are designed to meet contemporary industry standards, can accommodate a wide variety of users, and are economically competitive with similar uses in the local area and region.
- H. To develop a property that has access to available infrastructure, including roads and utilities.

3.5 PROJECT’S COMPONENT PARTS AND DISCRETIONARY APPROVALS

The proposed Project consists of applications for General Plan Amendment No. 190008 (GPA 190008), Amendment No. 1 to the Stoneridge Specific Plan 239 (SP 239A1), and Change of Zone No. 1900024 (CZ 1900024). Two land use concepts are proposed for the site. In the scenario in which the MCP is not constructed within the northern portions of the Project site (i.e., the “Primary Land Use Plan” scenario), approval of these applications would allow for the future development of up to 388.5 acres of Light Industrial uses, 49.1 acres



of Business Park land uses, 8.0 acres of Commercial Retail uses, 18.1 acres of Open Space-Conservation, 81.6 acres of Open Space-Conservation Habitat, and 37.3 acres of major roadways. In the scenario in which the MCP is constructed through the northwestern portions of the Project site (i.e., the “Alternative Land Use Plan” scenario), the Project would allow for a total of 388.5 acres of Light industrial, 51.5 acres of Business Park land uses (of which 8.5 acres would be within the alignment of the MCP and would not be developed with Business Park land uses), 8.5 acres of Commercial Retail (of which 0.2 acre would occur within the alignment of the MCP and would not be developed with Commercial Retail land uses), 18.1 acres of open space-conservation, 81.6 acres of open space-conservation habitat, and 34.4 acres of major roadways. As previously noted, proposed SP 239A1 allows for development of Light Industrial and Business Park uses at a maximum FAR of 0.50, and allows for development of Commercial Retail uses at a maximum FAR of 0.35. As such, implementation of the Primary Land Use Plan would allow for up to 8,461,530 s.f. of Light Industrial building area, 1,069,398 s.f. of Business Park building area, and 121,968 s.f. of Commercial Retail building area, while the Alternative Land Use Plan would allow for up to 8,461,530 s.f. of Light Industrial building area, 936,540 s.f. of Business Park building area, and 126,542 s.f. of Commercial Retail building area. It should be noted that the analysis throughout this EIR assumes that under both the Primary and Alternative Land Use Plans, areas proposed for Light Industrial uses would be developed with up to 8,476,776 s.f. of building area, even though these areas would be restricted to a maximum FAR of 0.50 and a maximum building area of 8,461,530 s.f. Additional discretionary and administrative actions that would be necessary to implement the proposed Project are listed in Table 3-5, *Matrix of Project Approvals/Permits*, at the end of this EIR section.

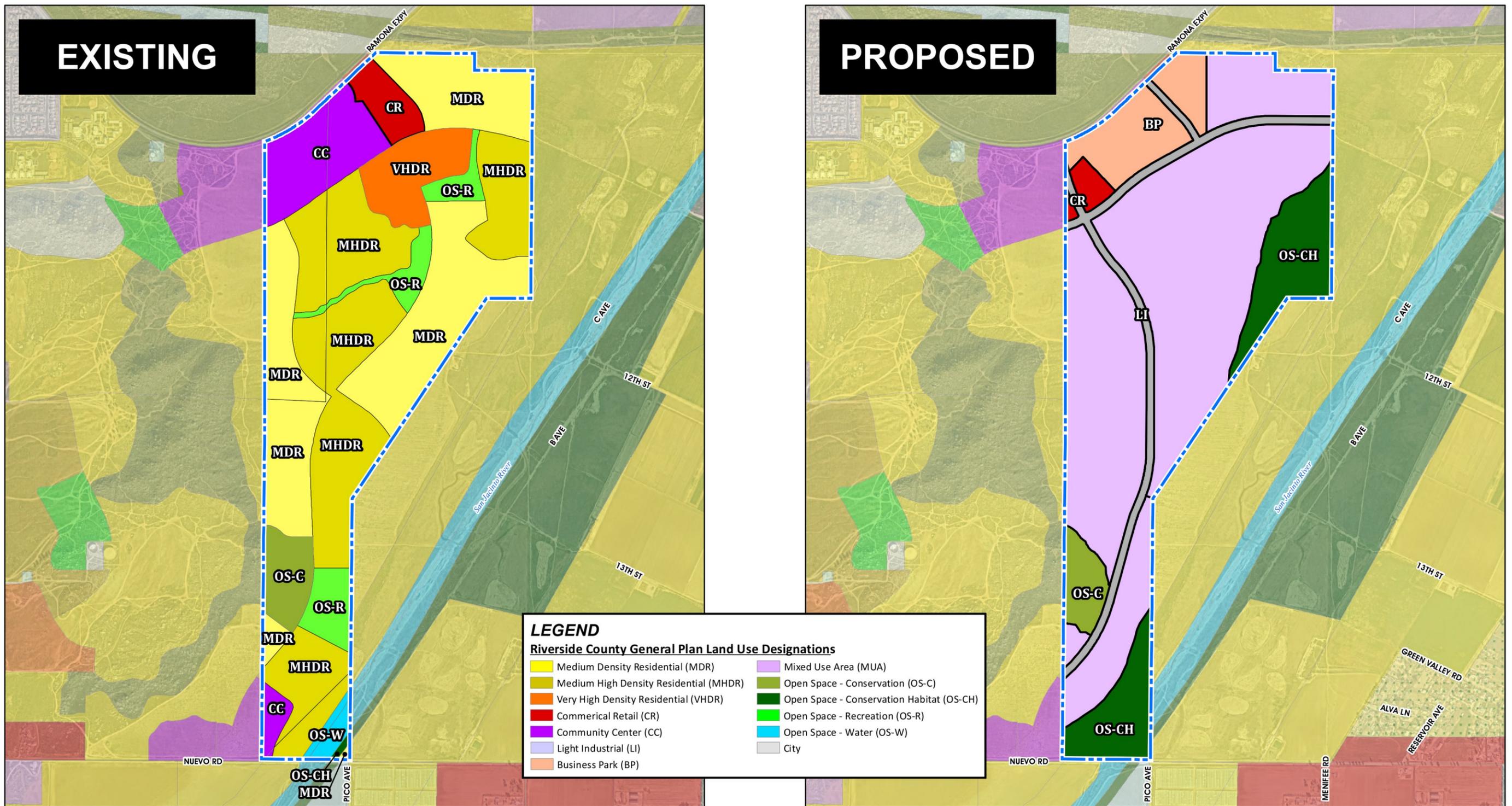
3.5.1 GENERAL PLAN AMENDMENT NO. 190008 (GPA 190008)

As shown on Figure 3-1, *General Plan Amendment No. 190008*, the Project Applicant is seeking a General Plan Amendment (GPA 190008) to modify the land use designations for the Project site in order to reflect changes proposed as part of proposed Amendment No. 1 to the Stoneridge Commerce Center Specific Plan No. 239 (SP 239A1), which is discussed below. The land use designations proposed as part of GPA 190008 are intended to reflect the land use designations proposed for both the Primary Land Use Plan and the Alternative Land Use Plan as part of SP 239A1, which is discussed below. The adopted General Plan and Lakeview/Nuevo Area Plan (LNAP) designate the Project site for “Medium Density Residential (MDR),” “Medium High Density Residential (MHDR),” “Very High Density Residential (VHDR),” “Commercial Retail (CR),” “Community Center (CC),” “Open Space – Conservation (OS-C),” “Open Space – Recreation (OS-R),” and “Open Space – Water (OS-W).” Proposed GPA 190008 would amend the General Plan and LNAP land use designations to reflect those proposed as part of SP 239A1, which would include “Light Industrial (LI),” “Business Park (BP),” “Commercial Retail (CR),” “Open Space – Conservation (OS-C),” and “Open Space – Conservation Habitat” land uses.

3.5.2 SPECIFIC PLAN NO. 239, AMENDMENT NO. 1 (SP 239A1)

A. Proposed Land Uses

The Project entails the first amendment to the Stoneridge Specific Plan No. 239 (SP 239A1). As previously indicated, the Mid-County Parkway (MCP) is planned to traverse the northwestern portions of the Project site. As such, this EIR evaluates two land use alternatives for the Project. The “Primary Land Use Plan,” which is



Source(s): ESRI, Nearmap Imagery (2020), RCTLMA (2019)

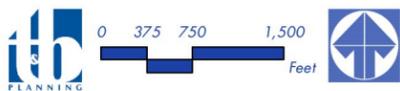


Figure 3-1



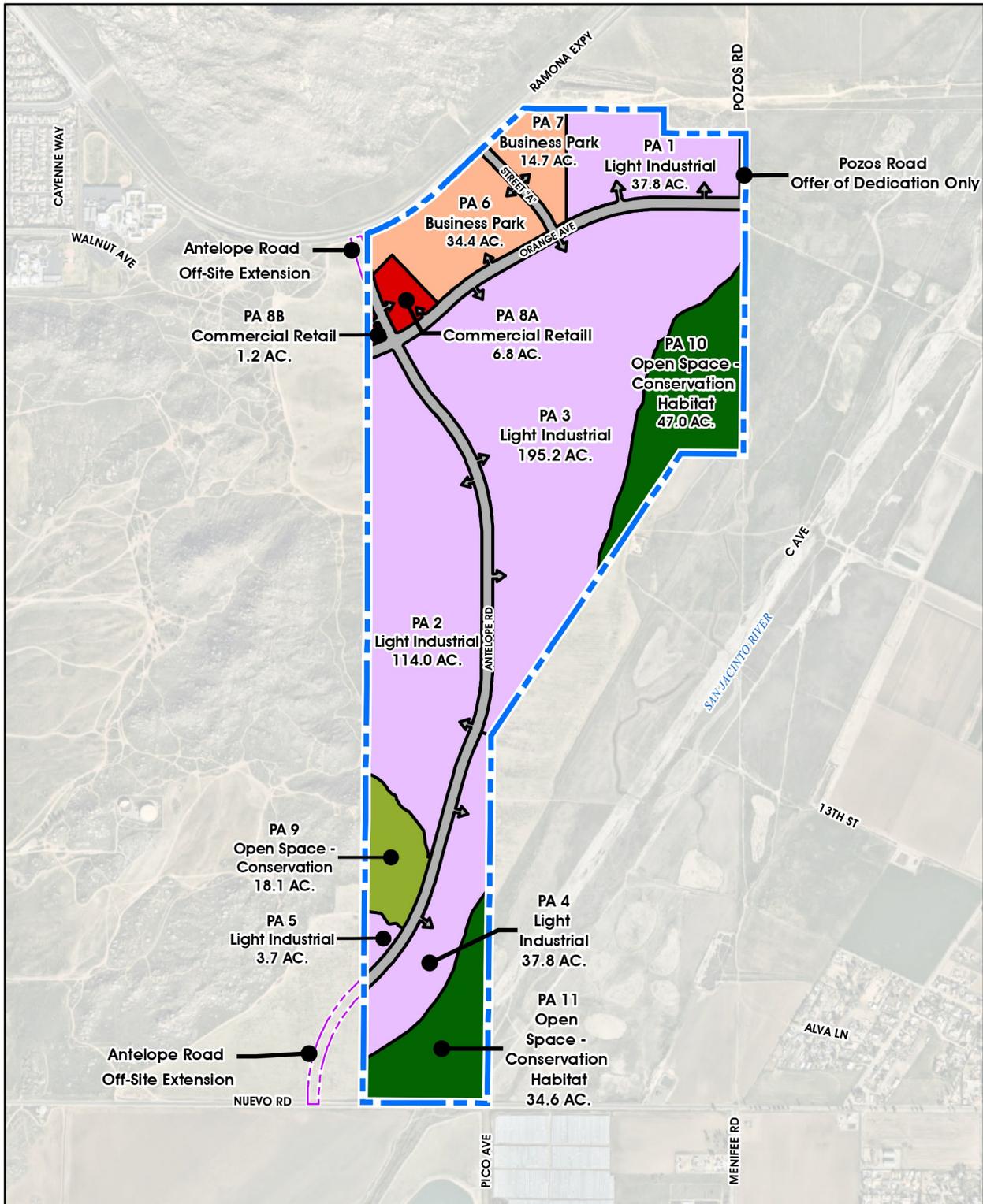
depicted on Figure 3-2, *Primary Land Use Plan*, and summarized on Table 3-1, *SP 239A1 Proposed Land Uses – Primary Land Use Plan*, anticipates that the MCP would not be constructed through the property, in which case areas within the potential alignment of the MCP would be developed with Business Park and Commercial Retail land uses. As shown in Table 3-1, the Primary Land Use Plan would allow for development of up to 388.5 acres of Light Industrial land uses, 49.1 acres of Business Park land uses, 8.0 acres of Commercial Retail (CR), 18.1 acres of Open Space – Conservation, 81.6 acres of Open Space – Conservation Habitat, and 37.3 acres of major roadways. Proposed SP 239A1 would allow for Light Industrial and Business Park land uses to be developed at a maximum Floor Area Ratio (FAR) of 0.5, and would allow for Commercial Retail areas to be developed at a FAR of up to 0.35. Accordingly, implementation of the Primary Land Use Plan would allow for up to 8,461,530 square feet (s.f.) of light industrial building area, up to 1,069,398 s.f. of business park building area, and up to 121,968 s.f. of commercial retail building area. It should be noted that the analysis throughout this EIR assumes that under the Primary Land Use Plan, the Light Industrial planning areas would be developed with up to 8,476,776 s.f. of light industrial building area, even though the total amount of light industrial building area would be limited to a maximum of 8,461,530 s.f. For purposes of analysis throughout this EIR, the “Primary Land Use Plan” is the preferred and primary land use plan for the proposed Project. Additionally, as part of its future review of implementing plot plans, Riverside County would ensure that no development that would interfere with implementation of the MCP is allowed within the MCP alignment unless or until RCTC makes a final decision it will not construct the MCP through the northern portions of the Projects site.

Table 3-1 SP 239A1 Proposed Land Uses – Primary Land Use Plan

PA	Land Use Designation	Acres	Maximum Building Square Footage ¹
1	LI	37.8	823,284
2	LI	114.0	2,482,920 ¹
3	LI	195.2	4,251,456
4	LI	37.8	823,284
5	LI	3.7	80,586 ¹
6	BP	34.4	749,232
7	BP	14.7	320,166
8A	CR	6.8	103,673
8B	CR	1.2	18,295
9	OS-C	18.1	--
10	OS-CH	47.0	--
11	OS-CH	34.6	--
--	Circulation	37.3	--
Total:		582.6	9,652,896¹

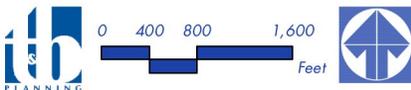
1. The analysis of the Primary Land Use Plan throughout this EIR assumes that Planning Areas 2 and 5 would be developed with 2,495,988 s.f. and 82,764 s.f. of light industrial building area, respectively, although these planning areas would be restricted to a maximum of 2,482,920 s.f. and 80,586 s.f. of industrial building area, respectively.

Notes: PA = Planning Area; LI = Light Industrial; BP = Business Park; CR = Commercial Retail; OS-C = Open Space – Conservation; OS-CH = Open Space – Conservation Habitat.



Source(s): ESRI, Nearmap Imagery (2021), RCLMA (2019)

Figure 3-2



Primary Land Use Plan



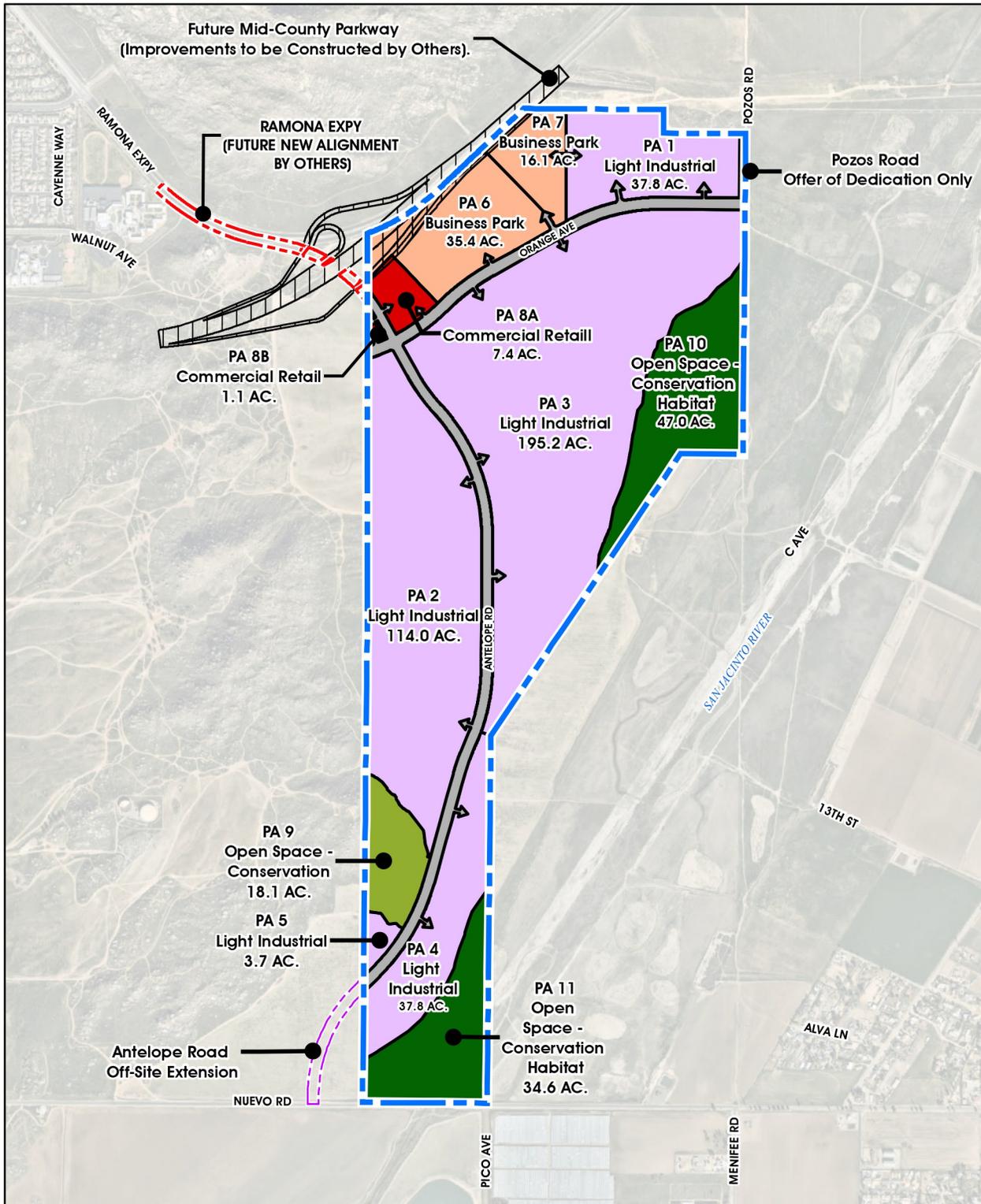
The “Alternative Land Use Plan,” which is depicted on Figure 3-3, *Alternative Land Use Plan*, and summarized on Table 3-2, *SP 239A1 Proposed Land Uses – Alternative Land Use Plan*, anticipates that the MCP would be constructed through the property. As shown, for the Alternative Land Use Plan, proposed SP 239A1 would allow for development of 388.5 acres of Light Industrial land uses, 51.5 acres of Business Park land uses (of which 8.5 acres would occur within the MCP alignment and would not be developed with Business Park land uses), 8.5 acres of Commercial Retail (of which 0.2 acre would occur within the MCP alignment and would not be developed with Commercial Retail land uses), 18.1 acres of Open Space – Conservation, 81.6 acres of Open Space – Conservation Habitat, and 34.4 acres of major circulation facilities. As noted above, proposed SP 239A1 would allow for Light Industrial and Business Park land uses to be developed at a maximum FAR of 0.5, and would allow for Commercial Retail areas to be developed at a FAR of up to 0.35. Thus, excluding areas within the planned alignment of the MCP, the Alternative Land Use Plan would allow for up to 8,461,530 s.f. of light industrial building area, up to 936,540 s.f. of business park building area, and up to 126,542 s.f. of commercial retail building area. It should be noted that the analysis throughout this EIR assumes that under the Alternative Land Use Plan, the Light Industrial planning areas would be developed with up to 8,476,776

Table 3-2 SP 239A1 Proposed Land Uses – Alternative Land Use Plan

PA	Land Use Designation	Acres	Maximum Building Square Footage ^{1,2}
1	LI	37.8	823,284
2	LI	114.0	2,482,920 ²
3	LI	195.2	4,251,456
4	LI	37.8	823,284
5	LI	3.7	80,586 ²
6	BP	35.4	616,374 ¹
7	BP	16.1	320,166 ¹
8A	CR	7.4	109,771 ¹
8B	CR	1.1	16,771
9	OS-C	18.1	--
10	OS-CH	47.0	--
11	OS-CH	34.6	--
--	Circulation	34.4	--
Totals:		582.6	9,524,612

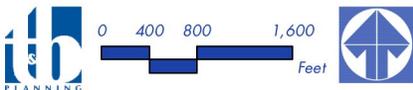
1. The Mid-County Parkway (MCP) would encompass approximately 7.1 acres within Planning Area 6, 1.4 acres within Planning Area 7, and 0.2 acre within Planning Area 8A. These areas would not be developed with Business Park or Commercial Retail land uses with construction of the MCP, and thus have been excluded from the calculation of allowable building square footage.
2. The analysis of the Alternative Land Use Plan throughout this EIR assumes that Planning Areas 2 and 5 would be developed with 2,495,988 s.f. and 82,764 s.f. of light industrial building area, respectively, although these planning areas would be restricted to a maximum of 2,482,920 s.f. and 80,586 s.f. of industrial building area, respectively.

Notes: PA = Planning Area; LI = Light Industrial; BP = Business Park; CR = Commercial Retail; OS-C = Open Space – Conservation; OS-CH = Open Space – Conservation Habitat.



Source(s): ESRI, Nearmap Imagery (2021), RCLMA (2021)

Figure 3-3



Alternative Land Use Plan



s.f. of light industrial building area, even though the total amount of light industrial building area would be limited to a maximum of 8,461,530 s.f. As previously indicated, for purposes of analysis throughout this EIR, the “Primary Land Use Plan” is the preferred and primary land use plan for the proposed Project. The “Alternative Land Use Plan” only would be implemented in the event that the RCTC constructs the MCP through the northernmost portions of the Project site.

As proposed as part of SP 239A1, Light Industrial land uses are proposed in Planning Areas 1, 2, 3, 4, and 5, with a total maximum of approximately 8,461,530 s.f. of building area under both the Primary Land Use Plan and Alternative Land Use Plan, although for purposes of analysis throughout this EIR it is assumed that these planning areas would be developed with up to 8,476,776 s.f. of light industrial building area. Light Industrial buildings are anticipated to accommodate users such as industrial incubators, light manufacturing, parcel hub, warehouse/storage, fulfillment center, and e-commerce operations. For purposes of analysis within this EIR, Light Industrial building area is assumed to consist of approximately 20% high-cube cold storage uses, 35% high-cube fulfillment center uses, 35% high-cube warehouse uses, and 10% manufacturing uses.

Business Park land uses are proposed in Planning Areas 6 and 7, with a total maximum of approximately 1,069,398 s.f. of building area under the Primary Land Use Plan and 936,540 s.f. of building area for the Alternative Land Use Plan. Business Park land uses would include small-scale light industrial, incubator industrial, merchant wholesalers, professional services, hospitality, professional office, small-scale warehousing/ storage, and research and development uses. For purposes of analysis within this EIR, Business Park building area is assumed to consist of approximately 60% industrial park uses and 40% warehouse uses.

Commercial Retail land uses are proposed in Planning Areas 8A and 8B, with a total maximum of approximately 121,968 s.f. under the Primary Land Use Plan and 126,542 s.f. under the Alternative Land Use Plan. The Commercial Retail areas are designed to accommodate retail uses that provide convenient services to people who work or have business in the area, as well as to commuters on Ramona Expressway. Anticipated businesses include restaurants, financial institutions, commercial retailers, and personal service shops, as well as small retail businesses and offices. For purposes of analysis within this EIR, it is conservatively assumed that Commercial Retail uses under both the Primary and Alternative Land Use Plans would include 100,000 s.f. of free-standing discount superstore building area, with the remaining allowable building area (21,968 s.f. under the Primary Land Use Plan and 26,542 s.f. under the Alternative Land Use Plan) consisting of general commercial retail land uses.

Open Space – Conservation land uses are proposed in Planning Area 9 on 18.1 acres under both the Primary Land Use Plan and Alternative Land Use Plan. These areas are intended to preserve the on-site natural open space and hillsides in the western portion of the Project site.

Open Space – Conservation Habitat land uses are proposed in Planning Areas 10 and 11 on approximately 81.6 acres under both the Primary Land Use Plan and Alternative Land Use Plan. These areas are intended to preserve the on-site portions of the San Jacinto River habitat and floodplain in the eastern portion of the Specific Plan for inclusion into the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) reserve.

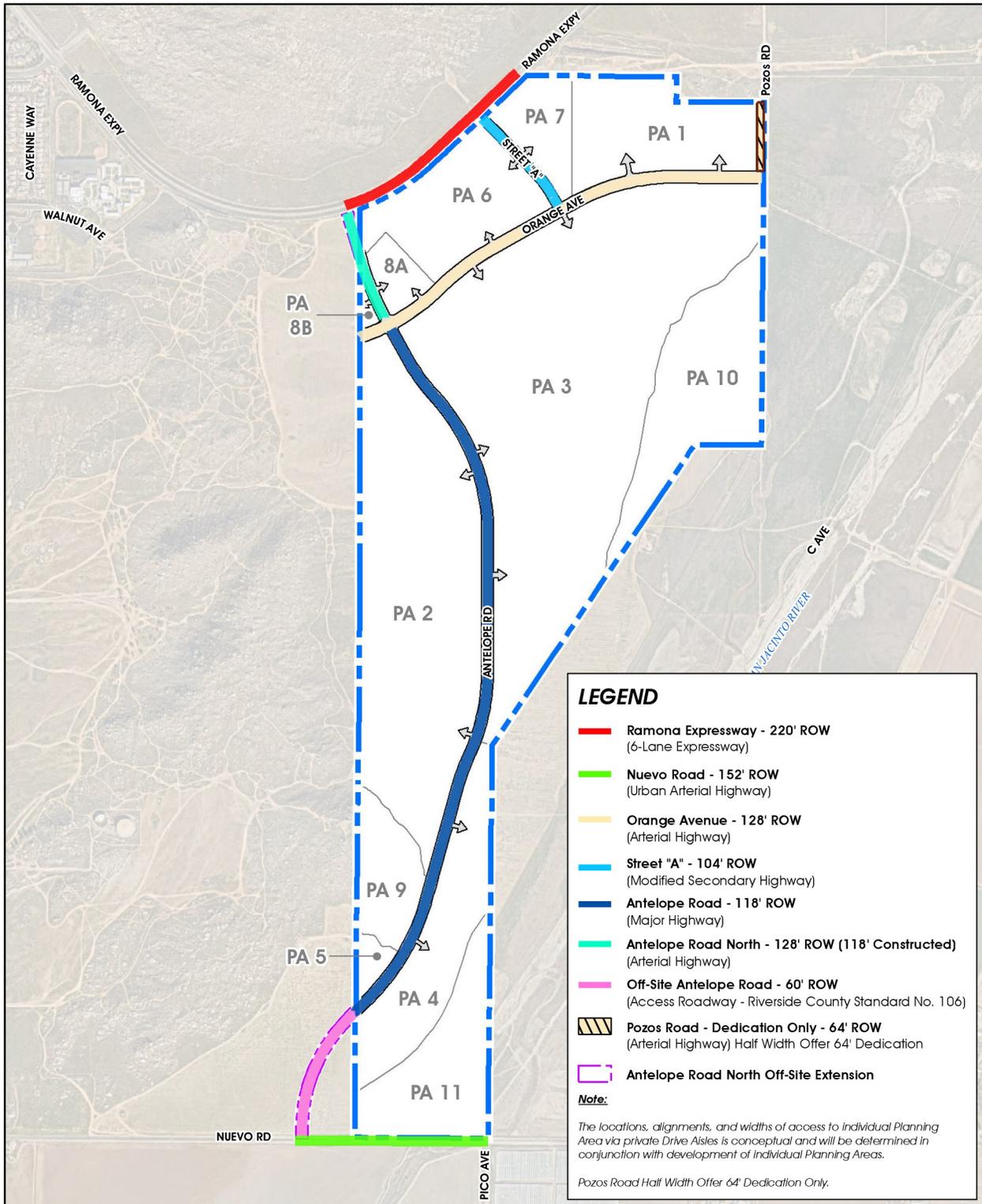


Proposed SP 239A1 also includes land use and development standards to facilitate implementation of intended development. These development standards would limit the development intensity within the proposed Light Industrial and Business Park areas to a maximum FAR of 0.5, and would limit development within the Commercial Retail areas to a maximum FAR of 0.35. The proposed land use and development standards also would allow for a 15% variation in Planning Area acreage without the need for a Specific Plan Amendment, provided that the total amount of allowable building area does not increase; notes that additional CEQA compliance shall be conducted for future implementing development on site in order to evaluate site-specific components of implementing development applications and to verify or refine the mitigation requirements specified by this EIR; requires design plans for common areas, specifying location and extent of landscaping, irrigation system, structures, and circulation; requires measures for security and safety; requires a Master Sign Program as part of future implementing developments; includes standards for ownership and maintenance; and identifies applicable State law, County ordinances, and other agency requirements for future implementing developments.

B. Circulation Plan

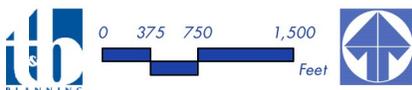
SP 239A1 includes a circulation plan, which is depicted on Figure 3-4, *Proposed Circulation Plan*. Proposed cross-sections are depicted on Figure 3-5, *Roadway Cross-Sections*. Traffic is to be conveyed by a hierarchical circulation system with roadway rights-of-way (ROW) ranging from 26 to 220 feet in width (inclusive of Private Drive Aisles, which are not depicted on Figure 3-4 and Figure 3-5). For the Primary Land Use Plan, access from the east and west would be accommodated by Orange Avenue, while access from the north and south would occur via Antelope Road, which would connect to the Ramona Expressway in the north and Nuevo Road to the south. For the Alternative Land Use Plan, east-west access would be provided via the Mid-County Parkway and Orange Avenue, while north-south access would be accommodated via Antelope Road, which would connect to Ramona Expressway in the north and Nuevo Road to the south. A summary of the roadway cross sections proposed as part of SP 239A1 is provided below. It should be noted that under the Alternative Land Use Plan scenario, the Mid-County Parkway (MCP) would be constructed through the northwestern portions of the Project site. However, the MCP is a planned regional improvement, and the Project Applicant would not be required to construct this facility as it is planned for improvement by the Riverside County Transportation Commission (RCTC). Impacts associated with the construction of the MCP were evaluated as part of a separate Environmental Impact Report/Environmental Impact Statement and Section 4(F) Evaluation (SCH No. 2004111103), which is herein incorporated by reference and is available for public review at the RCTC, 4080 Lemon Street, 3rd Floor, Riverside, CA 92501. As such, the MCP is not discussed below, but this facility ultimately may provide regional access to the Project site. As part of the Project, the Project Applicant would implement the following improvements:

- ***Ramona Expressway (220' ROW)***. Ramona Expressway is designated as a 6-Lane Expressway by the Riverside County General Plan Circulation Element and proposed SP 239A1, with an ultimate planned 220-foot wide right-of-way and six (6) vehicular travel lanes. Under existing conditions, this roadway is partially improved with a total ROW of 80 feet and 41 feet of pavement. The Project Applicant would dedicate an additional 110 feet of right-of-way, providing for a total of 190 feet of ROW along

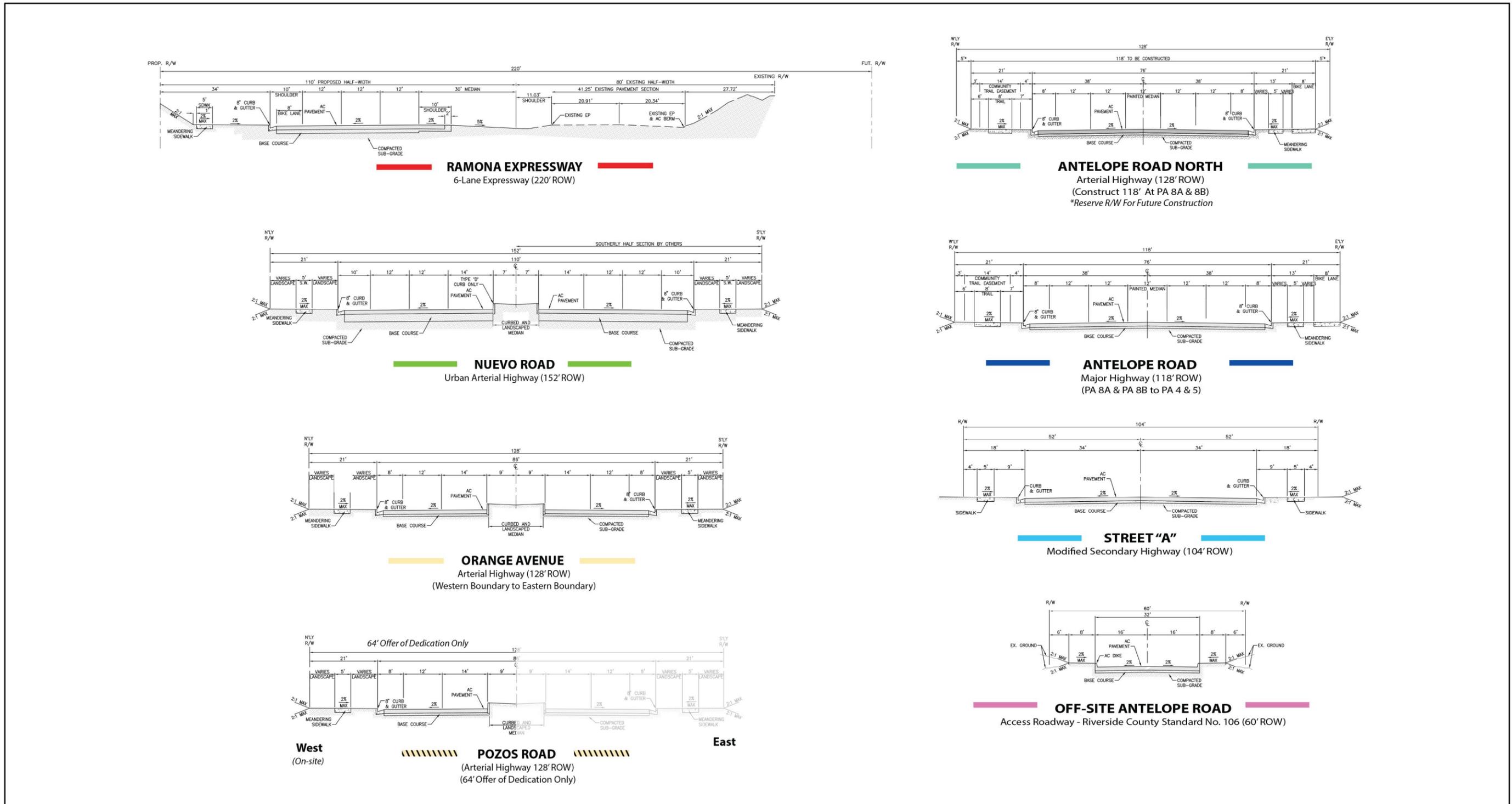


Source(s): ESRI, Nearmap Imagery (2021), RCTLMA (2021)

Figure 3-4



Proposed Circulation Plan



Source(s): Albert A. Webb Associates (02-20-2020) & Hunsaker Engineering (07-20-2020)

Figure 3-5





the Project site's frontage with this roadway. Ultimately, with future ROW dedications by others anticipated along the northern side of the Ramona Expressway, this roadway would have a total of 220 feet of ROW. Improvements proposed as part of the Project would include an additional 56 feet of paved drive aisles, curb, and gutter, 8-foot bike lanes located outside of the vehicular travel lanes, and a five-foot meandering sidewalk along the site's frontage with Ramona Expressway.

- ***Nuevo Road (152' ROW)***. Nuevo Road is designated as an Urban Arterial Highway by the General Plan Circulation Element and proposed SP 239A1, with an ultimate 152-foot ROW and six (6) vehicular travel lanes. Under existing conditions, Nuevo Road adjacent to the southern Project boundary consists of a two-lane roadway (one lane in each direction). As part of the Project, the Project Applicant would improve this facility to its ultimate half-width standard. The Project Applicant would dedicate approximately 76 feet of ROW along the site's frontage with this roadway, and would improve Nuevo Road between Antelope Road and Pico Avenue to provide 48 feet of paving, 7 feet of the ultimate 14-foot wide landscaped median, and a 5-foot wide meandering sidewalk within a 21-foot wide landscaped parkway. The remaining half of this roadway would be constructed by others in the future. It should be noted that this segment of Nuevo Road would require the construction of a bridge over the San Jacinto River, although bridge is identified for improvement as part of the County's Transportation Uniform Mitigation Fee (TUMF) program. Impacts associated with improvements to Nuevo Road are evaluated throughout this EIR, including impacts associated with the bridge, although it is anticipated that some or all of the required improvements to Nuevo Road would be implemented as part of the TUMF program.
- ***Orange Avenue (128' ROW)***. Orange Avenue is designated as an Arterial Highway by the Riverside County General Plan and proposed SP 239A1, with an ultimate 128-foot-wide right-of-way and four (4) vehicular travel lanes. Under existing conditions, Orange Avenue does not exist on or adjacent to the Project site. As part of the Project, the Project Applicant would construct full-width improvements to the on-site segments of Orange Avenue between the western and eastern boundary of the Specific Plan. The Project Applicant would dedicate a total of 128 feet of ROW on site, and would improve the roadway to include 68 feet of paved drive aisles, an 18-foot wide landscaped median, and 5-foot wide meandering sidewalks within 21-foot landscaped parkways on each side of the roadway.
- ***Antelope Road – On Site (118' ROW)***. The segment of Antelope Road planned on site between Ramona Expressway and Orange Avenue is designated as a Major Highway (118' ROW) by the General Plan Circulation Element and proposed SP 239A1. Under existing conditions, this road segment does not exist. As part of the Project, the Project Applicant would implement full-width improvements for the on-site segments of Antelope Road. The Project Applicant would dedicate a total of 118 feet of ROW, and would improve the roadway to include 64 feet of drive aisles; a 12-foot wide painted median; a five-foot wide meandering sidewalk and 8-foot bike lane within a 21-foot wide landscaped parkway along the eastern edge of the roadway; and an 8-foot wide community trail within a 21-foot wide landscaped parkway along the western side of the roadway.



- ***Antelope Road – Northern Off-Site Extension (118’ ROW).*** The off-site segment of Antelope Road proposed between the northwest Specific Plan boundaries and the Ramona Expressway is designated as Major Highway by the General Plan Circulation Element and proposed SP 239A1. Under existing conditions, this segment of Antelope Road does not exist. As part of the Project, the Project Applicant would make full-width improvements to Antelope Road along this off-site segment. The Project Applicant would dedicate a total of 118 feet of ROW, and would improve this segment to provide for 64 feet of drive aisles; a 12-foot-wide painted median; a five-foot wide curb-separated sidewalk and an 8-footwide bike lane within a 21-foot wide landscaped parkway along the eastern side of the road; and an 8-foot wide community trail within a 21-foot wide landscaped parkway along the western edge of the road.
- ***Antelope Road – Southern Off-Site Extension (60’ ROW).*** The segment of proposed Antelope Road located between the southwest boundary of SP 239A1 and Nuevo Road is identified for interim improvements by proposed SP 239A1 (i.e., the construction of travel lanes only), as needed to provide vehicular access to and from the Project site to Nuevo Road. Under existing conditions, this segment of Antelope Road does not exist. Interim condition improvements proposed for this segment of Antelope Road include 32 feet of drive isles in accordance with Riverside County Standard No. 106. This portion of Antelope Road ultimately would be improved by others as a Major Highway with 118 feet of ROW, with similar improvements as described above for the on-site portions of this roadway.
- ***Street “A” – Modified Secondary Highway (104’ ROW).*** Street “A,” which is proposed between Ramona Expressway and proposed Orange Avenue in the northern portion of the site (east of proposed Antelope Road), is designated as a Modified Secondary Highway by proposed SP 239A1. It should be noted that this roadway only would be constructed under the Primary Land Use Plan, and would not be constructed under the Alternative Land Use Plan. Under existing conditions, this road segment does not exist. As part of the Project, and assuming the MCP is not developed through the Project site, the Project Applicant would construct full-width improvements to Street “A.” Planned improvements include the dedication of 104 feet of ROW, 68 feet of drive aisles, and 5-foot wide curb-separated sidewalks within 18-foot wide landscaped parkways on each side of the roadway.
- ***Private Drive Aisles.*** Private Drive Aisles would connect individual planning areas to Antelope Road, Orange Avenue, and Street “A.” Within each planning area, Private Drive Aisles would provide vehicular access for automobiles and trucks to parking lots, truck courts, loading dock areas, etc. Private Drive Aisles would include pavement widths that range between 26 and 60 feet. Private Drive Aisles are not depicted in Figure 3-4 and Figure 3-5 because their locations, alignments, and widths would be determined in the future in conjunction with the development of individual planning areas.

In addition, as part of the Project, the Project Applicant would dedicate 64 feet of ROW for Pozos Road along the northeastern boundary of the Project site (refer to Figure 3-4), although no improvements to Pozos Road are proposed as part of the Project.



C. Non-Vehicular Circulation and Mobility Plan

Proposed SP 239A1 also includes a conceptual non-vehicular circulation and mobility plan, as depicted on Figure 3-6, *Conceptual Non-Vehicular Circulation and Mobility Plan*. As shown, the western side of Antelope Road would have an enhanced parkway that includes an 8-foot bike lane and 5-foot meandering sidewalk along the eastern edge of the roadway, with a community trail proposed along the western side of the roadway. On-site portions of Orange Avenue would include meandering sidewalks along both sides of the roadway. Street “A” would include non-curb adjacent sidewalks along both sides of the roadway. A Class I bike lane also is proposed along the Project site’s frontage with Ramona Expressway. A Regional Trail also is proposed at the boundary between Planning Area 9 and adjacent light industrial planning areas, while a trail easement would be accommodated along the northern boundary of proposed Planning Area 11.

D. Drainage and Water Quality Improvements

The Project site is located within the San Jacinto River Watershed, which is a sub-watershed of the Santa Ana River Watershed in the County of Riverside. According to mapping information from the Riverside County Flood Control and Water Conservation District (RCFCWCD), the Project site currently is located outside of but between the Lakeview/Nuevo Master Drainage Plan (MDP) to the east and the Perris Valley MDP to the west.

As shown in Figure 3-7, *Conceptual Drainage and Water Quality Plan*, on-site flows would be conveyed within the proposed streets to a series of catch basins and storm water lines which would direct storm flows to three “primary” retention basins on site. Two “primary” retention basins would be located within proposed Planning Area 3 and one “primary” retention basin is proposed within Planning Area 4. Additionally, catch basins and/or infiltration BMPs are proposed within Orange Avenue to capture surface runoff from developed areas within proposed Planning Areas 6, 8A, and 8B, and would direct the flows into storm drain lines within Orange Avenue and Antelope Road. Surface runoff originating in proposed Planning Areas 1 and 7 would flow easterly within Orange Avenue to a pair of catch basins at the eastern terminus of Orange Avenue, from which flows would be conveyed to the “primary” detention basin proposed in Planning Area 3.

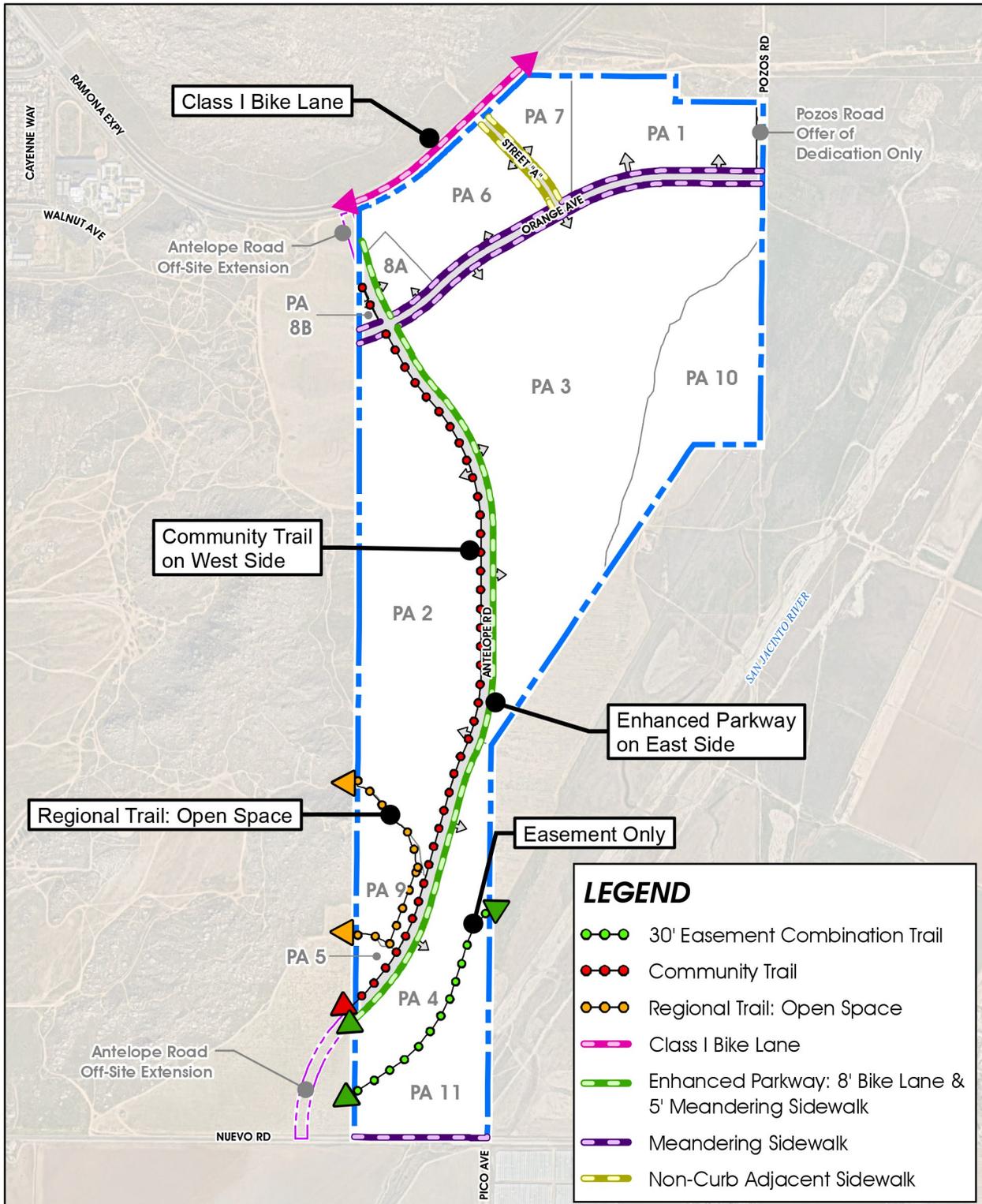
Off-site flows from the west would be captured along the western boundary of proposed Planning Area 2 and conveyed in proposed storm drain lines through proposed Planning Areas 2, 3, and 4 and would discharge directly into the San Jacinto River.

It should be noted that if the MCP is implemented through the Project site, there would be no substantial change in the Project’s proposed master drainage or water quality plans.

E. Water and Sewer Plans

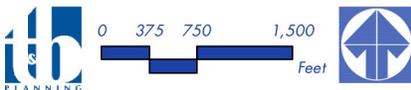
1. Water Plan

Potable water services to the proposed Project would be provided by the Eastern Municipal Water District (EMWD). Domestic water provided by EMWD consists of a blend of the California State Water Project and

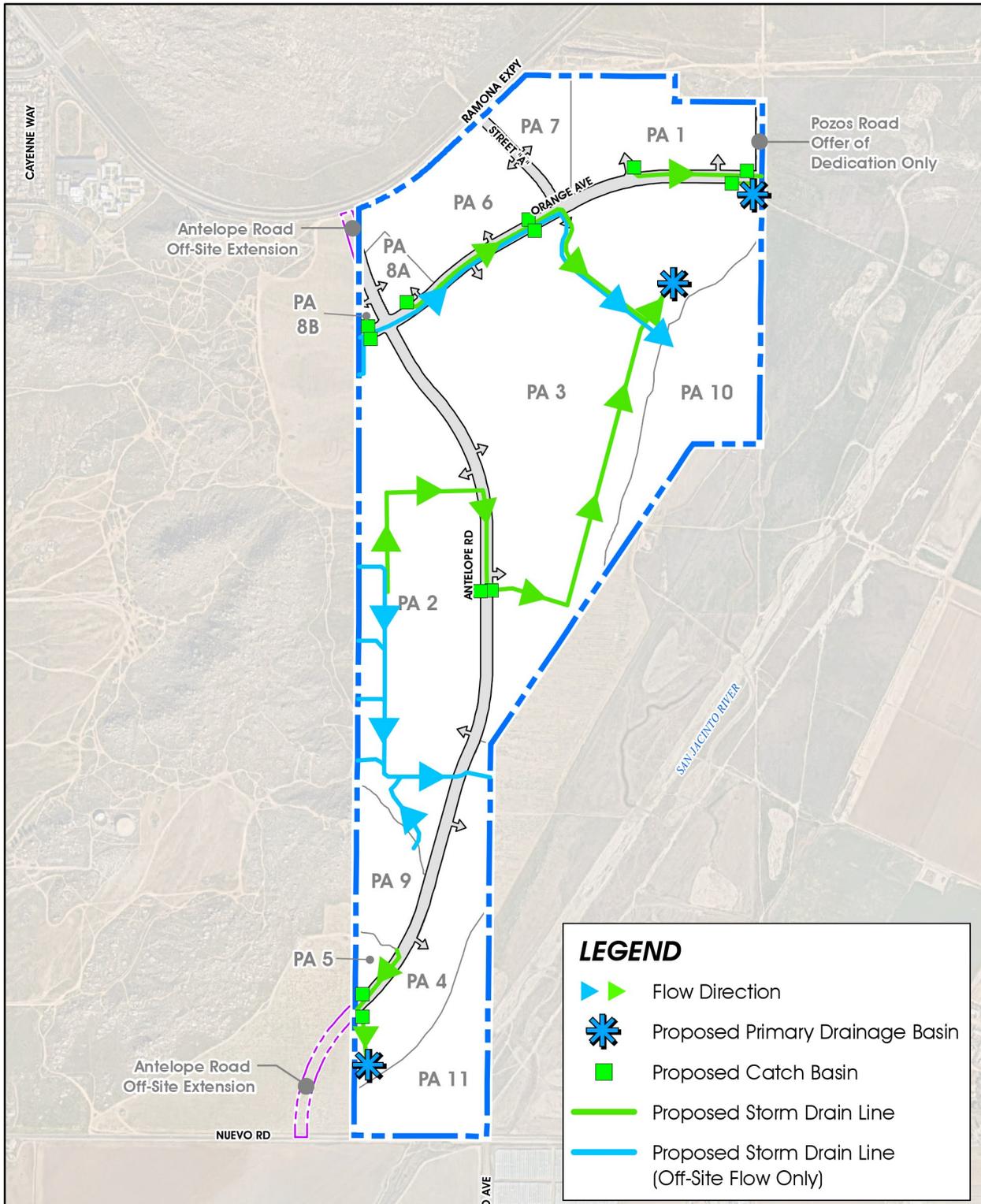


Source(s): ESRI, Nearmap Imagery (2021), RCTLMA (2021)

Figure 3-6

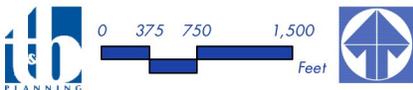


**Conceptual Non-Vehicular
Circulation and Mobility Plan**



Source(s): ESRI, Nemap Imagery (2021), RCTLMA (2021), Hunsaker Engineering (2020)

Figure 3-7



Conceptual Drainage and Water Quality Plan



Colorado River waters, which are imported and supplied to EMWD by the Metropolitan Water District (MWD). EMWD has indicated that adequate water service can be provided for the proposed Project using existing facilities and extending master-planned facilities through and along the perimeter of the Project site (refer to the Project's Water Supply Assessment (WSA), included as *Technical Appendix M*).

Figure 3-8, *Conceptual Domestic Water Plan*, depicts the existing and proposed water facilities in the area. It should be noted that the planned improvements depicted on Figure 3-8 generally would not change if the Mid-County Parkway (MCP) is constructed through the Project site. As shown, the Project site is served by EMWD in the 1720 Pressure Zone. The Project Applicant would construct the following facilities as necessary to serve the Project site with potable water: proposed on-site and off-site water mains within roadways, two (2) proposed 2.5-3.0 MG water tanks located off-site approximately 0.3 mile to the west of the Project site, a proposed booster station located approximately 500 feet west of the Project site.

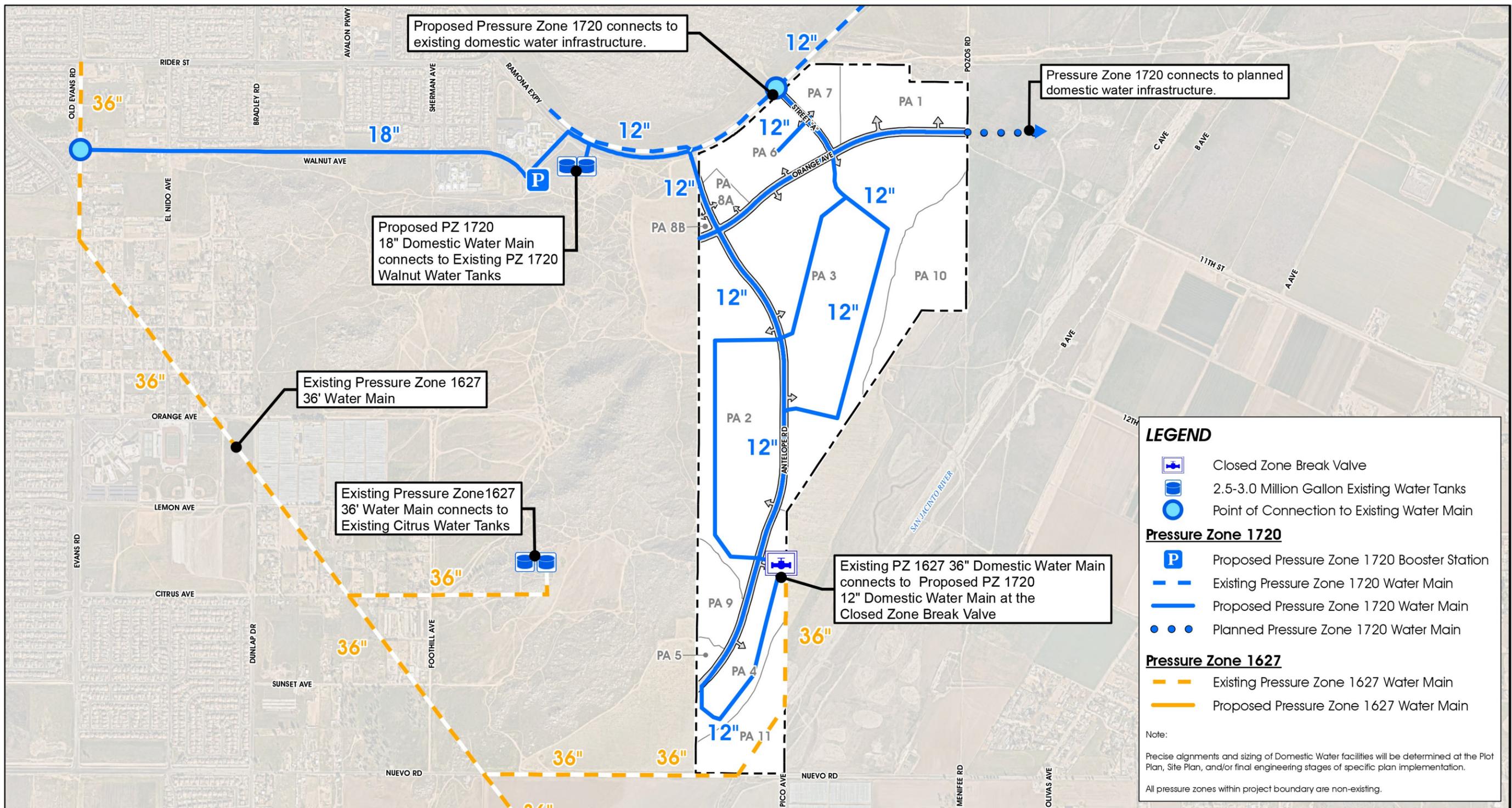
Two (2) points of connection are proposed to existing EMWD water mains located off-site: (1) at the intersection of Old Evans Road and Walnut Ave; and (2) at the intersection of the Ramona Expressway and the proposed Street "A" (which would be constructed regardless as to whether Street "A" is constructed). The Project Applicant would be responsible for constructing the off-site water mains between the existing points of connection and the Project site.

As depicted on Figure 3-8, a proposed water line ranging in size from 12 to 18 inches would be constructed by the Project Applicant within Walnut Avenue and a portion of the Ramona Expressway between the existing point of connection at Old Evans Road and proposed Antelope Road. This water main would represent a transition between Pressure Zone 1627 to the west and Pressure Zone 1720 to the east, and a booster station for Pressure Zone 1720 is proposed at the easterly terminus of Walnut Street. An existing water tank located near the eastern terminus of Walnut Avenue and south of Ramona Expressway would be demolished as part of the Project, and replaced with two (2) 2.5-3.0 million-gallon water tanks.

In addition, 12-inch water lines also would be constructed within Antelope Road (within EMWD Pressure Zone 1720), between Ramona Expressway and the southwestern Project boundary, which would connect in the north to the above-described proposed 12-inch water line within Ramona Expressway and in the south to an existing Closed Zone Break Valve within Planning Area 4. T.

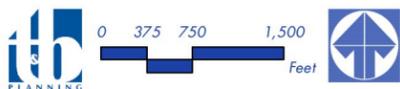
A 12-inch water main also is proposed within Orange Avenue, and would connect to domestic water infrastructure planned to the east of the Project site (which would be constructed by others in the future) and to the proposed water mains within Antelope Road and Street "A." A 12-inch water line also is proposed within Street "A," which would be constructed regardless as to whether Street "A" is constructed as part of the Project, and would connect to an existing water main within Ramona Expressway and the proposed 12-inch water main within Orange Avenue.

Water service to the remaining portions of the Project site would be accommodated by proposed 12-inch water lines that would be constructed throughout the Project site and would connect to the proposed facilities within Antelope Road, Orange Avenue, and Street "A."



Source(s): ESRI, Nearmap Imagery (2021), RCTLMA (2021), Hunsaker Engineering (2020)

Figure 3-8



Conceptual Domestic Water Plan



2. Sewer Plan

In addition to potable water services, the Eastern Municipal Water District (EMWD) would provide sewer services to the Project site. A series of proposed sewer lines, force mains, and sewer lift stations are proposed by the Project Applicant to convey sewer flows toward an existing 27-inch gravity main in Pico Avenue that flows to the existing Perris Valley Regional Water Reclamation Facility (PVRWRF) to the south.

As shown in Figure 3-9, *Conceptual Sewer Plan*, sewer flows within the northern portions of the Project site (i.e., north of the northern boundary of proposed Planning Area 4) would be conveyed via a series of proposed 8- to 10-inch sewer mains within Antelope Road, Orange Avenue, Street “A,” and internal roadways to a proposed sewer lift station within proposed Planning Area 3. Under the Alternative Land Use Plan, Street “A” would not be constructed but an 8-inch sewer line would be installed within the internal road providing access to Planning Areas 6 and 7. A proposed force main and sewer lift station would be constructed within proposed Planning Area 3, which would convey sewer flows from the northern portions of the Project site to a proposed 12-inch gravity sewer main proposed within Antelope Road. The proposed 12-inch gravity sewer within Antelope Road would extend south to a proposed sewer lift station at the southeast corner of the future intersection of Antelope Road and Nuevo Road. The proposed sewer lift station would convey sewer flows easterly to a proposed point of connection within Nuevo Road near the southeastern corner of the Project site, where a proposed 18-inch gravity sewer main would convey flows east within Nuevo Road and south within Pico Avenue to an existing 27-inch sewer main located near the intersection of Nuevo Road and Pico Avenue.

F. Grading Plan

As shown on Figure 3-10, *Conceptual Grading Plan*, grading is proposed within the Project site to facilitate site development. Proposed elevations on the site would range from a low point at approximately 1,425 feet above mean sea level (amsl) in the east portion of the site to a high point approximately 1,630 feet amsl in the southwest portion of the site within proposed open space Planning Area 9. Grading proposed as part of the Project would result in an approximate 6,820,000 cubic yards (c.y.) of cut and 6,820,000 c.y. of fill. The conceptual grading is intended to provide for an overall balanced earthwork condition, requiring no import or export of earthwork materials. It should be noted that grading within the northwestern portions of the site may be different than shown on Figure 3-10 if the County implements the MCP through the northern portions of the site; however, if the MCP is constructed through the site, impacts due to grading would be associated with the MCP and would not be associated with the Project. Additionally, in the event the MCP is constructed through the Project site, earthwork on site would continue to be balanced, with no need for import or export of earth materials.

In addition, as part of site grading activities, some blasting would be required off-site as part of the demolition of the existing water tank and replacement with two new 2.5-3.0 million-gallon water tanks. Total areas of blasting in this off-site area would involve approximately 68,877 c.y. over approximately 1.9 acres, with an over excavation depth of four feet below design grades.

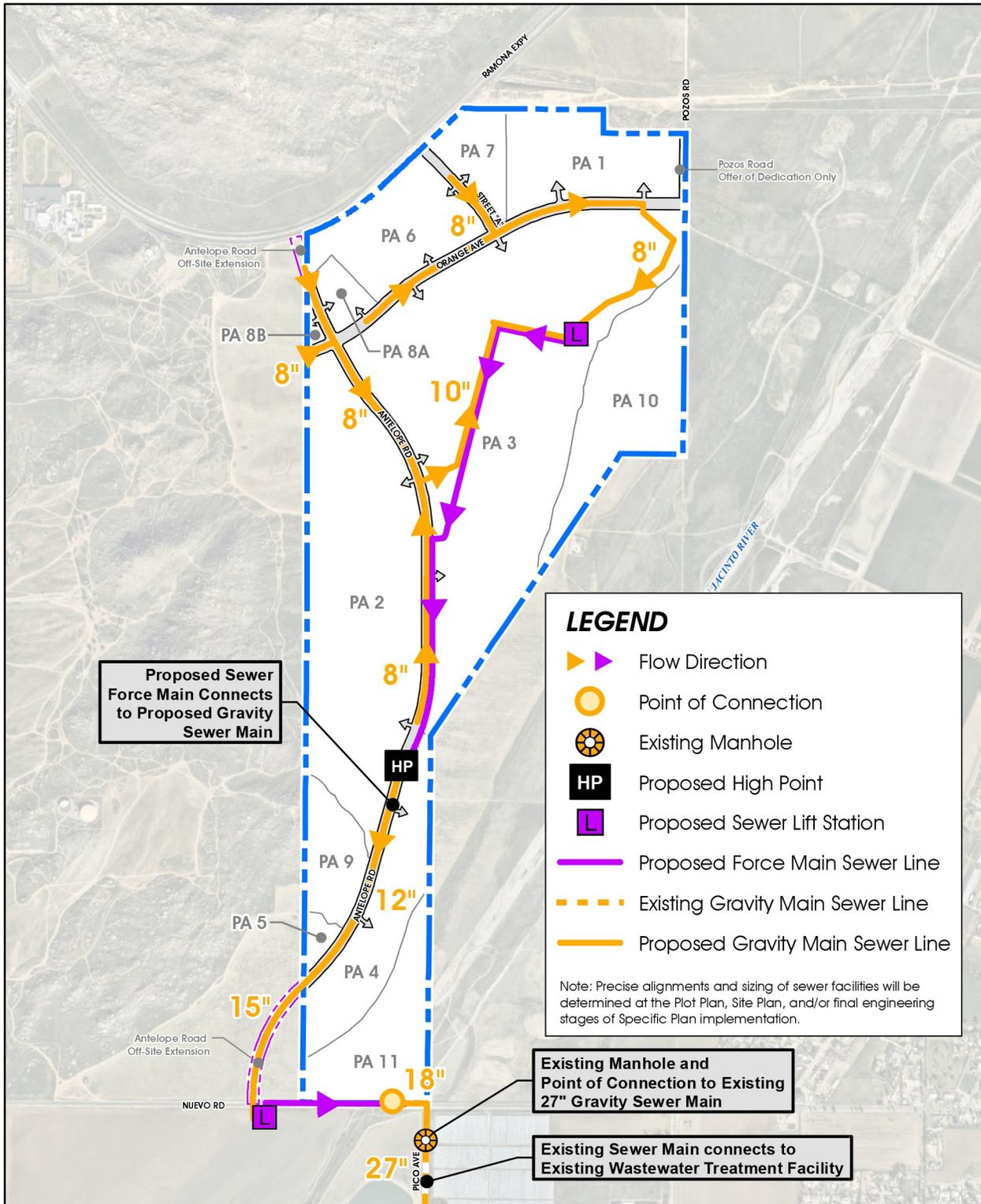
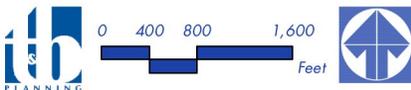
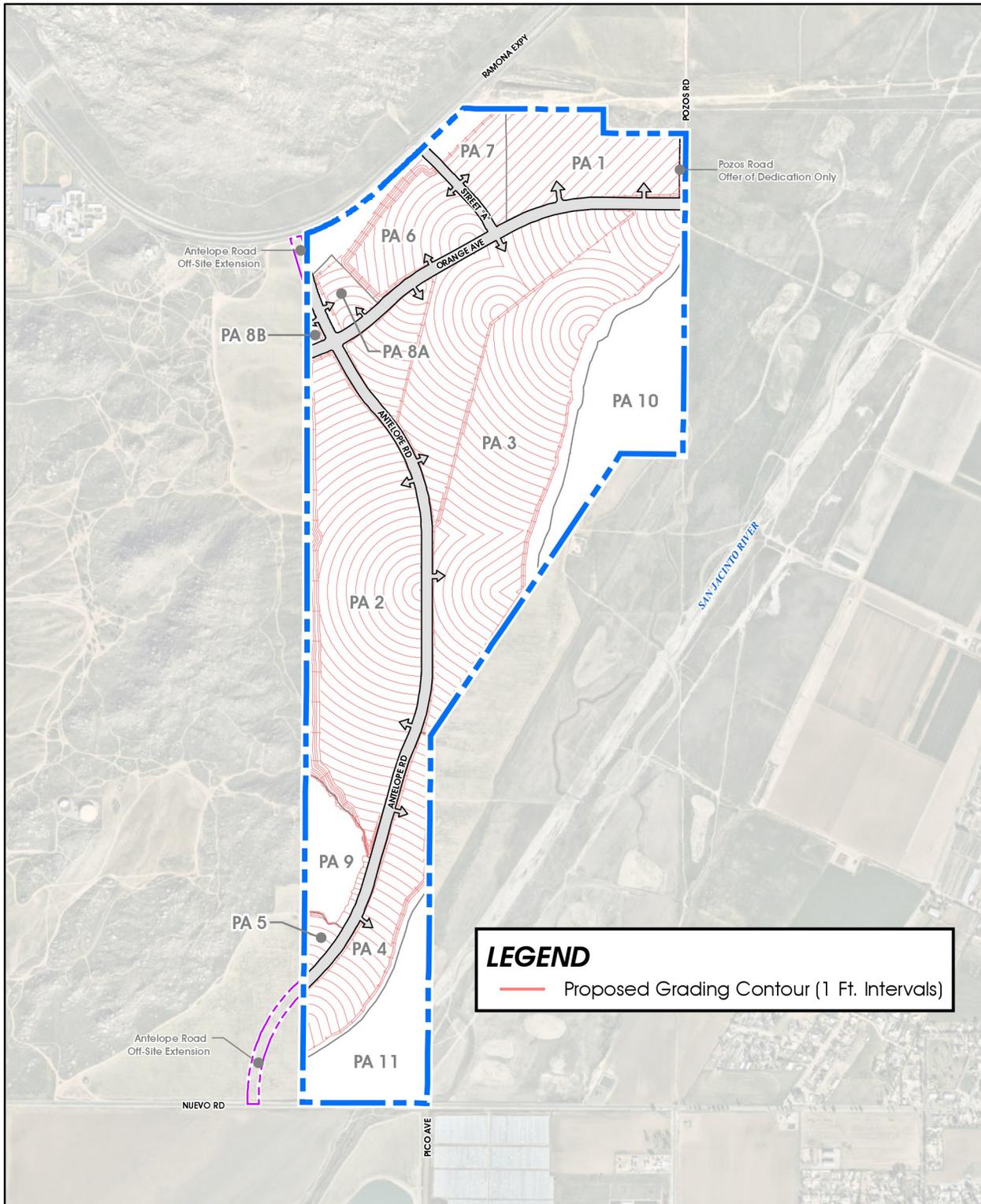


Figure 3-9

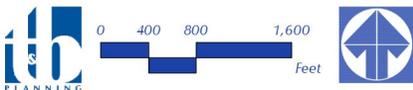


Conceptual Sewer Plan



Source(s): ESRI, Nearmap Imagery (2021), RCTLMA (2021)- Hunsaker & Associates (06-02-2021)

Figure 3-10



Conceptual Grading Plan



G. Stoneridge Commerce Center Design Guidelines

Proposed SP 239A1 also includes Design Guidelines related to architecture, lighting, energy efficiency, signage, and landscape/hardscape design. The Design Guidelines are intended to allow for flexibility for future implementing developments while providing standards to help ensure the site is developed in a manner consistent with the development quality, character, and theme as described SP 239A1. Future implementing developments would be reviewed by the County for compliance with the Design Guidelines section of SP 239A1. Refer to Section 4 of proposed SP 239A1 for the specific design standards that would apply to future development.

3.5.3 CHANGE OF ZONE NO. 1900024 (CZ 1900024)

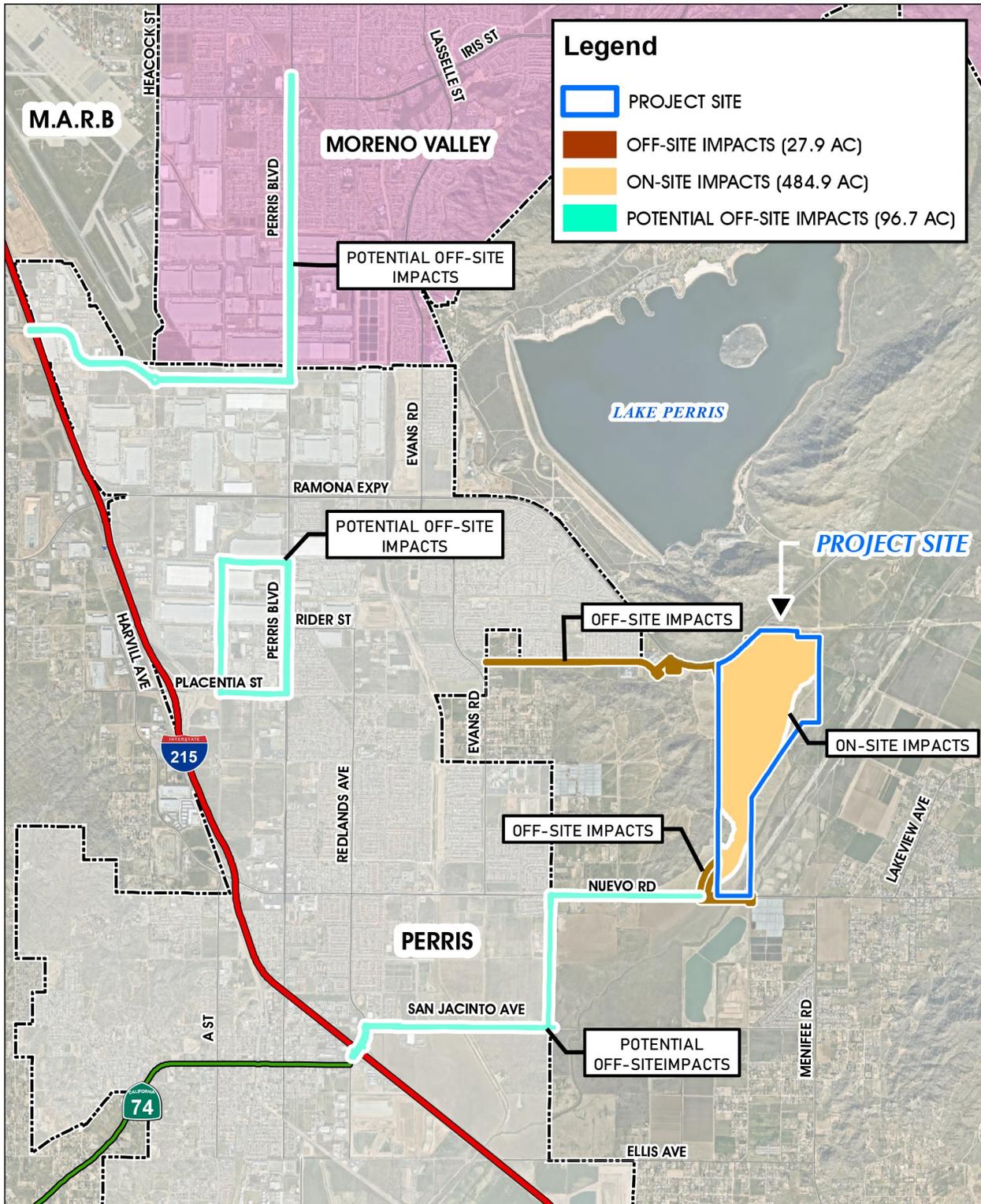
The Riverside County Zoning Ordinance, which is part of the County’s Municipal Code, assigns a zoning designation to all properties within unincorporated Riverside County. Development is required by law to comply with the provisions of the Zoning Ordinance. Under existing conditions, the 582.6-acre Project site is classified as “SP Zone,” indicating that zoning requirements for the Project site are governed by the adopted Stoneridge Specific Plan No. 239 (SP 239). Thus, the zoning requirements for the Project site currently are as established by the zoning ordinances adopted in conjunction with SP 239. Proposed Change of Zone No. 1900024 (CZ 1900024) would modify and establish the Planning Area boundaries, permitted uses, and development standards throughout the 582.6-acre site in order to reflect the land uses proposed as part of SP 239A1. Refer to subsection 3.5.2 for a description of the land uses proposed as part of SP 239A1.

3.6 PROJECT CONSTRUCTION AND OPERATIONAL CHARACTERISTICS

3.6.1 CONSTRUCTION DETAILS

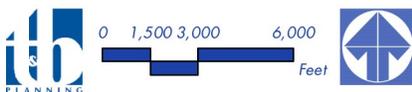
A. Proposed Physical Disturbances

For purposes of analysis throughout this EIR, it is assumed that implementation of the Project would result in physical disturbance to all portions of the Project site that are planned for development with “Light Industrial (LI),” “Business Park (BP),” and “Commercial Retail (CR)” land uses by proposed SP 239A1, as well as areas planned for major circulation facilities (i.e., Antelope Road, Orange Avenue, and Street “A”). In addition, the Project Applicant would construct half-width improvements to Nuevo Road along the Project site’s frontage, portions of which would be constructed on site. As shown in Figure 3-11, *Proposed Limits of Physical Disturbance*, on-site disturbances are anticipated to encompass approximately 484.9 acres of the Project site that are proposed for development as part of the Project. Off-site disturbances that would be required regardless as to which land use plan (Primary Land Use Plan or Alternative Land Use Plan) is implemented, and regardless as to which truck route ultimately is implemented, would include water, sewer, and roadway facilities, and would encompass approximately 27.9 acres offsite. Specifically, off-site improvements include the construction of water lines and a booster station within Walnut Avenue, between Old Evans Road and the Ramona Expressway, as well as a proposed water main within Ramona Expressway and the off-site portion of Antelope Road. An existing water tank located near the easterly terminus of Walnut Street, south of Ramona Expressway, would be demolished and replaced by two new water tanks. The Project Applicant also would improve off-site portions of Antelope Road (between the southwestern Project boundary and Nuevo Road, and



Source(s): ESRI, RCTLMA (2022), Nearmap (2021), Werland Permitting (02-25-2022)

Figure 3-11



Proposed Limits of Physical Disturbance



between the northwestern Project boundary and Ramona Expressway) and Nuevo Road (between proposed Antelope Road and Pico Avenue). A sewer lift station also is planned at the southeast corner of the future intersection of Antelope Road at Nuevo Road. The Project also could result in up to 96.69 acres of additional impacts associated with roadway improvements required for the Primary and/or Southern Truck Route (refer to subsection 3.6.2.B.2), although all of these improvements would occur within areas mapped as disturbed/developed. It should be noted that if the MCP is constructed through the northwestern portions of the Project site by the RCTC, Project-related impacts on site would be slightly reduced and none of the 96.69 acres of potential off-site disturbance areas would be impacted. Lands within the MCP alignment that would be impacted by construction of the MCP are considered a separate project unrelated to the proposed Project evaluated herein.

B. Timing of Construction Activities

At the time the Project's Notice of Preparation (NOP) was distributed for public review in April 2020, it was anticipated that Project construction activities would commence as early as summer 2021, and would be completed by 2030. Due to delays caused by the COVID-19 pandemic, it is now likely that Project construction activities would not commence until at least 2022. Notwithstanding, the analysis throughout this EIR assumes construction would commence in summer 2021, which provides a "worst case" assessment of potential construction-related impacts since air quality emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.¹ Although it is anticipated that the Project would be phased, no phasing plan is currently proposed. Buildout of the Project would occur based on market conditions at the time of implementation.

3.6.2 OPERATIONAL CHARACTERISTICS

At the time this EIR was prepared, the future users of the Stoneridge Commerce center buildings were unknown. For purposes of evaluation in this EIR, the Project is assumed to be operational 24 hours per day, seven days per week, with exterior loading and parking areas illuminated at night. Lighting would be subject to compliance with County of Riverside Ordinance Nos. 655 and 915. Ordinance No. 655 would require the use of low-pressure sodium lamps and the shielding of all nonexempt outdoor lighting fixtures. Ordinance No. 915 requires that all outdoor luminaires shall be located, adequately shielded, and directed such that no direct light falls outside the Project boundaries or onto the public right-of-way.

A. Employment

Because the users of the Project's buildings are not yet known, the number of jobs that the Project would generate cannot be precisely determined. Appendix E-1 to the Riverside County General Plan provides an estimate of the number of employees typically associated with various proposed land use types. However, it should be noted that the employment factors specified in Appendix E-1 do not account for the increasing automation of the industrial sector. As noted by the Southern California Association of Governments (SCAG)

¹ As shown in the CalEEMod User's Guide Version 2016.3.2, Section 4.3 "OFFROAD Equipment" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.



in the draft 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (“Connect SoCal”), “[w]arehouses are increasingly integrating automation to improve operational efficiencies in responding to the dramatic surge in direct-to-consumer e-commerce. Additionally, continued developments and demonstrations of automated truck technologies will alter the goods movement environment with far-reaching impacts ranging from employment to highway safety.” SCAG further notes that “as automation is adopted more holistically throughout supply chains, the region faces serious challenges for those whose jobs may be changed or eliminated as a result.” (SCAG, 2019a, Goods Movement Appendix, p. 2) Notwithstanding, Table 3-3, *Estimated Employment*, provides a conservative estimate of the number of employees anticipated with the Primary Land Use Plan and the Alternative Land Use Plan, based on the rates identified in Appendix E-1 to the County’s General Plan. As shown, buildout of the Primary Land Use Plan is estimated to result in up to 10,256 employees, while up to 10,044 employees are estimated for buildout of the Alternative Land Use Plan. While it is acknowledged that the number of jobs that would be created by the Project may be less than shown in Table 3-3 due to automation within the industry, the Project nonetheless would result in the creation of a substantial number of jobs that would serve to assist Riverside County in improving its jobs-housing balance. (Riverside County, 2015a, Appendix E-1, Table E-5)

Table 3-3 Estimated Employment

Land Use Designation	Building Area ¹	Building Area Per Employee	Estimated Employees
Primary Land Use Plan			
Light Industrial	8,476,776 s.f. ¹	1,030 s.f.	8,230
Business Park	1,069,398 s.f.	600 s.f.	1,782
Commercial Retail	121,968 s.f.	500 s.f.	244
Totals:	9,668,142 s.f.	--	10,256
Alternative Land Use Plan			
Light Industrial	8,476,776 s.f. ¹	1,030 s.f.	8,230
Business Park	936,540 s.f.	600 s.f.	1,561
Commercial Retail	126,542 s.f.	500 s.f.	253
Totals:	9,539,858 s.f.¹	--	10,044

1. Although Light Industrial land uses would be restricted to a maximum of 8,461,530 s.f. of building area, the analysis throughout this EIR assumes the Light Industrial planning areas would be developed with a maximum of 8,476,776 s.f. of building area in order to provide a “worst case” assessment of the Project’s potential impacts to the environment. (Riverside County, 2015a, Appendix E-1, Table E-5)

B. Traffic

1. Trip Generation

The trip generation summary illustrating daily and peak hour trip generation estimates for the proposed Project in actual vehicles and Passenger Car Equivalents (PCE) with construction of the MCP (i.e., the Alternative Land Use Plan) are shown in Tables 4-4 and 4-5, respectively, of the Project’s Traffic Impact Analysis (“TIA”; EIR *Technical Appendix LI*). The trip generation summary illustrating daily and peak hour trip generation estimates without construction of the MCP (i.e., the Primary Land Use Plan) in actual vehicles and PCE are shown in Tables 4-2 and 4-3 of the Project’s TIA, respectively. A summary of Project-generated trips in both



actual vehicles and PCEs is provided below for each land use scenario evaluated by the Project's TIA. (Urban Crossroads, 2022c, Tables 4-2 through 4-5)

- EAP (2030), EAPC (2030), and Horizon Year With MCP conditions (Alternative Land Use Plan): 23,624 vehicle trip-ends per day (actual vehicles), with 1,681 AM peak hour trips and 2,180 PM peak hour trips (of which 3,850 trip-ends per day are associated with trucks with 231 AM peak hour truck trips and 230 PM peak hour truck trips).
- Horizon Year Without MCP conditions (Primary Land Use Plan): 23,894 vehicle trip-ends per day (actual vehicles), with 1,720 AM peak hour trips and 2,212 PM peak hour trips (of which 3,916 trip-ends per day are associated with trucks with 236 AM peak hour truck trips and 234 PM peak hour truck trips).

2. ***Truck Routes***

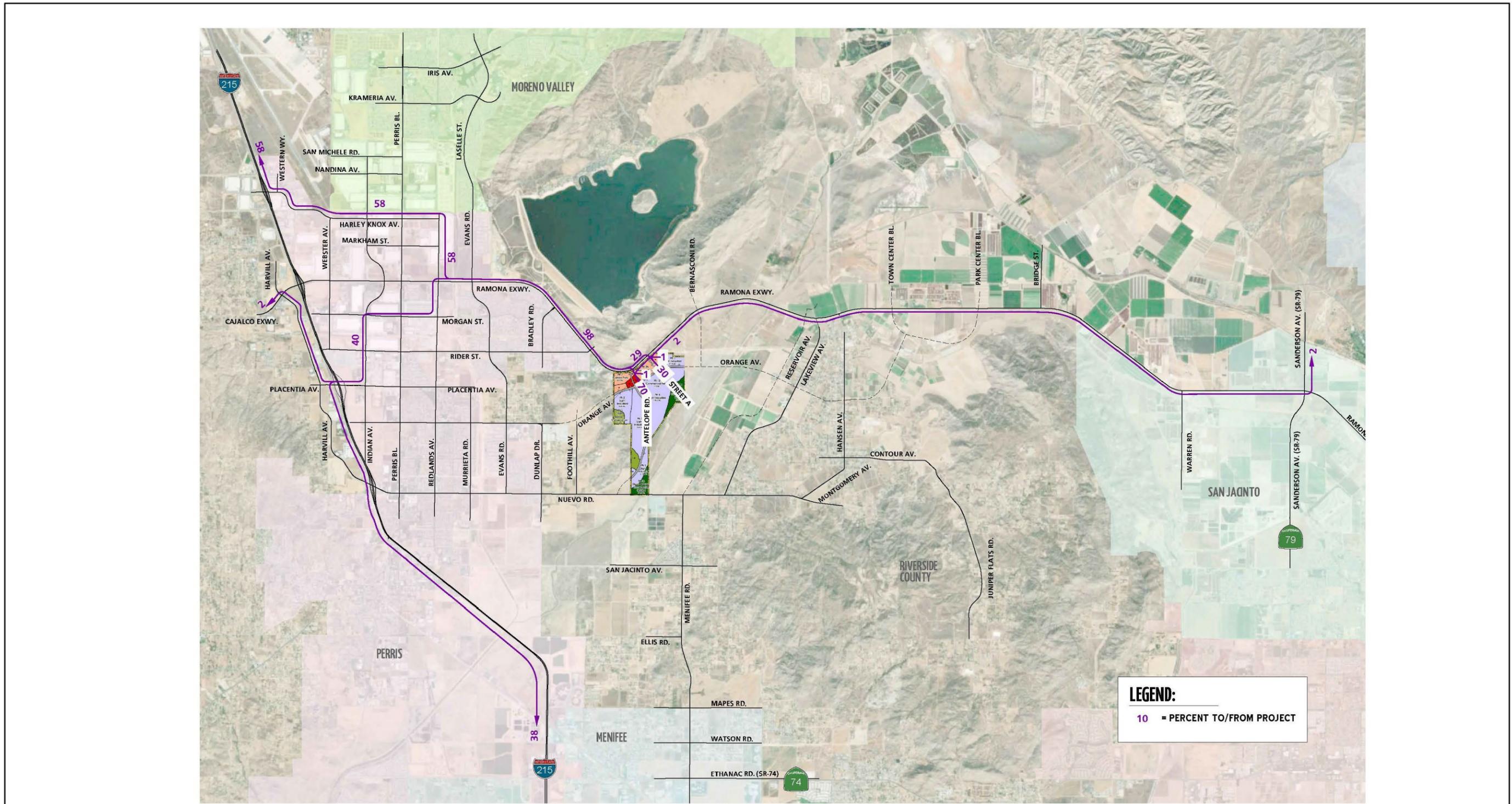
For purposes of analysis throughout this EIR, it is assumed that a majority of Project-related truck trips would utilize the MCP to access I-215, once the MCP has been constructed and is in place. However, in the event the Project is implemented prior to completion of the MCP, or in the event the MCP project is not implemented by Riverside County, then this EIR evaluates two different alternatives for Project-related truck access to I-15.

The first alternative (herein, "Primary Truck Route") assumes that Project-related truck traffic would utilize truck routes as identified by the City of Perris General Plan to access the I-215. Accordingly, the Primary Truck Route anticipates that Project-related truck traffic would utilize Ramona Expressway only as necessary to access designated truck routes within the City of Perris, including Redlands Avenue, Harley Knox Boulevard, Indian Avenue, Morgan Street, and Placentia Avenue. Figure 3-12, *Primary Truck Route*, depicts the expected distribution of truck traffic associated with the Primary Truck Route.

The second alternative ("Southern Truck Route") assumes that Project-related truck trips heading south on I-215 would utilize Nuevo Road to access I-215 instead of Ramona Expressway. All Project-related truck trips that would head north on I-215 would continue to utilize Ramona Expressway to access the City of Perris designated truck routes, similar to what is described above for the Primary Truck Route. Specifically, the Southern Truck Route assumes that approximately 38% of Project-related truck trips would head west along Nuevo Road, south along Dunlap Drive, and west along San Jacinto Drive to access the I-215 at the Redlands Avenue interchange. The Southern Truck Route is identified in order to minimize the amount of Project-related truck traffic that is routed through the City of Perris. Figure 3-13, *Southern Truck Route Trip Distribution*, depicts the expected distribution of truck traffic associated with the Southern Truck Route.

C. ***Water Demand***

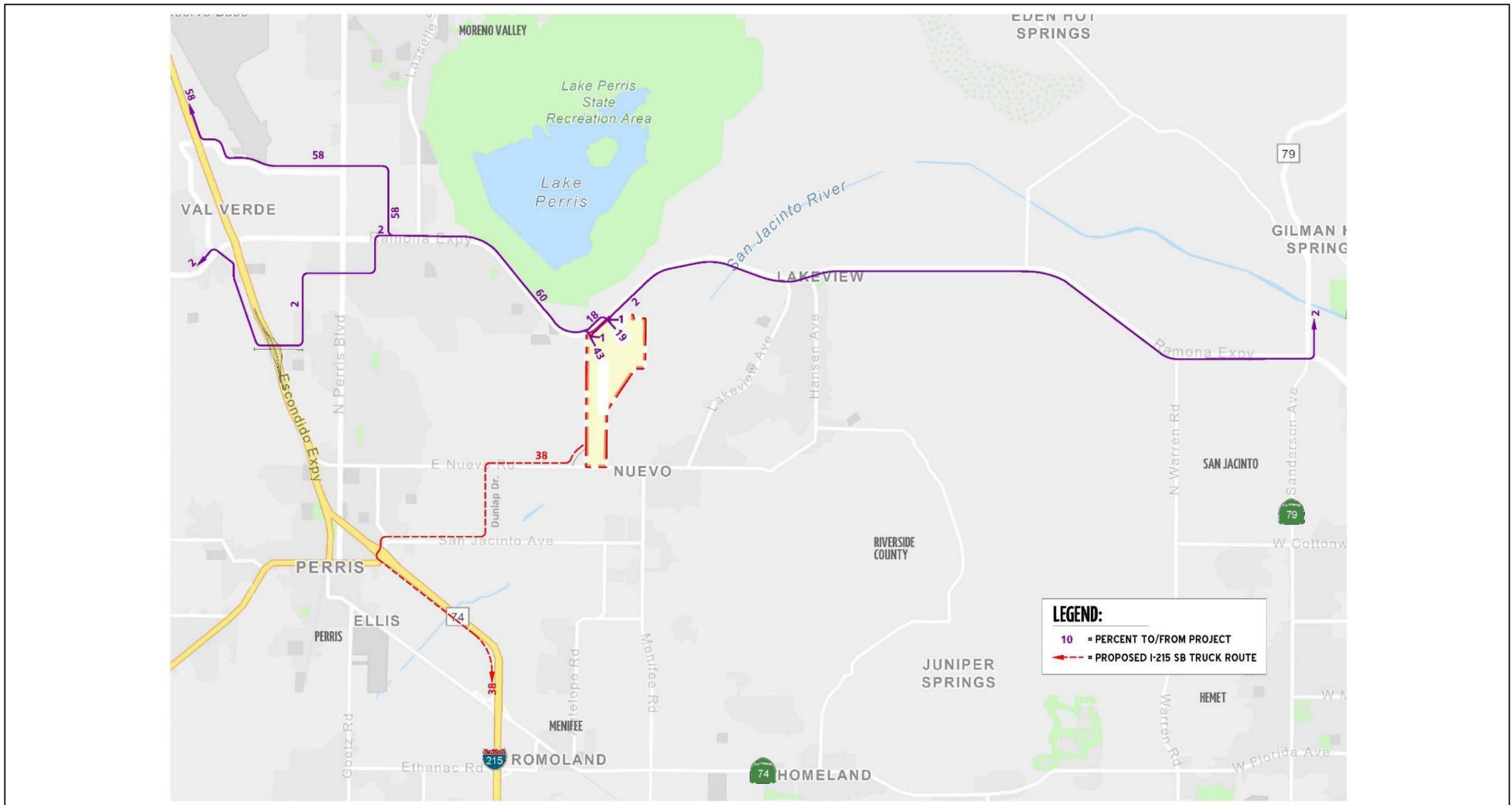
Based on a Project-specific Water Supply Assessment (WSA) prepared by the Eastern Municipal Water District (EMWD), which is included as EIR *Technical Appendix M*, the Project is estimated to generate a demand for approximately 1,101 acre-feet per year (AF/yr). (EMWD, 2020a, p. 20)



Source(s): Urban Crossroads (03-03-2022)

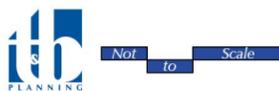
Figure 3-12





Source(s): Urban Crossroads (03-09-2022)

Figure 3-13



Southern Truck Route Trip Distribution



D. Wastewater Generation

Based on Table 5.5-AF, *Cumulative Effect on Theoretical Wastewater Treatment Demand*, of the EIR prepared for Riverside County General Plan Amendment No. 960 (herein, EIR No. 521), Table 3-4, *Estimated Wastewater Generation* provides an estimate of the amount of wastewater that would be generated by the Project. As shown, the Project is anticipated to generate approximately 666,000 gallons per day (gpd) of wastewater under the Primary Land Use Plan, and approximately 657,210 gpd under the Alternative Use Plan. (Riverside County, 2015a, Table 5.5-AF)

Table 3-4 Estimated Wastewater Generation

Land Use	Commercial Acreage	Wastewater Generation Factors	Total Wastewater Generation
Primary Land Use Plan			
Light Industrial	388.5 acres	1,500 gpd/acre	582,750 gpd
Business Park	49.1 acers	1,500 gpd/acre	73,650 gpd
Commercial Retail	8.0 acres	1,200 gpd/acre	9,600 gpd
Totals:	446.3 acres	--	666,000 gpd
Alternative Land Use Plan			
Light Industrial	388.5 acres	1,500 gpd/acre	582,750 gpd
Business Park ¹	43.0 acres ¹	1,500 gpd/acre	64,500 gpd
Commercial Retail	8.3 acres ¹	1,200 gpd/acre	9,960 gpd
Totals	440.5 acres	--	657,210 gpd

1. For the Alternative Land Use Plan, acreage shown for Business Park excludes 7.1 acres within Planning Area 6 and 1.4 acres within Planning Area 7, and acreage shown for Commercial Retail excludes 0.2 acres within Planning Area 8A. These areas would be located within the alignment of the MCP, and thus would not be developed with Business Park or Commercial Retail uses.

(Riverside County, 2015a, Table 5.5-AF)

3.7 SUMMARY OF REQUESTED ACTIONS

The County of Riverside has primary approval responsibility for the proposed Project. As such, the County serves as the Lead Agency for this EIR pursuant to State CEQA Guidelines § 15050. The role of the Lead Agency was previously described in detail in Section 1.0 of this EIR. As part of the approval process for the proposed Project, the County’s Planning Commission will hold a public hearing to consider the Program EIR, the Project’s General Plan Amendment (GPA 190008), Amendment No. 1 to Specific Plan No. 293 (SP 239A1), and Change of Zone (CZ 1900024). The Planning Commission will make advisory recommendations to the Board of Supervisors on whether to approve, approve with changes, or deny GPA 190008, SP 239A1, and CZ 1900024, and whether to certify this Program EIR. A public hearing would then be held before the Board of Supervisors, which will consider the information contained in the Project’s EIR and the EIR’s Administrative Record in its decision-making processes and will approve, approve with changes, or deny proposed GPA 190008, SP 239A1, and CZ 1900024.



3.8 RELATED ENVIRONMENTAL REVIEW AND CONSULTATION REQUIREMENTS

Subsequent to approval of GPA 190008, SP 239A1, and CZ 1900024, additional discretionary applications would be required to implement the Project. Specifically, Tentative Tract Maps (TTMs) would be required to subdivide the 582.6-acre Project site in a manner that corresponds to the planning area boundaries proposed as part of SP 239A1 and/or to subdivide individual planning areas for ownership purposes. Additionally, Plot Plans would be required for development within the Light Industrial, Business Park, and Commercial Retail portions of the Project, while Conditional Use Permits (CUPs) also may be required for certain types of uses. Riverside County would review future applications for TTMs, Plot Plans, and CUPs for consistency with the General Plan, LNAP, SP 239A1, and the adopted zoning ordinance for the site. Additionally, the County would be required to conduct additional CEQA review for the future implementing TTMs, plot plans, and/or CUPs, and would evaluate whether the implementing discretionary action(s) meet the conditions of State CEQA Guidelines §§ 15162 and 15163 requiring preparation of a Subsequent or Supplemental EIR. If the implementing discretionary action(s) do not meet the conditions of State CEQA Guidelines §§ 15162 or 15163, then an Addendum to this Program EIR may be prepared in accordance with State CEQA Guidelines § 15164.

Following approval of implementing discretionary actions, ministerial actions also would be necessary to implement the proposed Project. These include, but are not limited to, grading permits, building permits, encroachment permits/road improvements, drainage infrastructure improvements, water and sewer infrastructure improvements, stormwater permit(s) (NPDES), and State and federal resource agency permits. Table 3-5, *Matrix of Project Approvals/Permits* provides a summary of the agencies responsible for subsequent discretionary approvals associated with the Project. This EIR covers all federal, State and local government approvals which may be needed to construct or implement the Project, whether explicitly noted in Table 3-5, or not [State CEQA Guidelines §15124(d)].



Table 3-5 Matrix of Project Approvals/Permits

Public Agency	Approvals and Decisions
County of Riverside	
Proposed Project – Riverside County Discretionary Approvals	
Riverside County Planning Commission	<ul style="list-style-type: none"> • Provide recommendations to the Riverside County Board of Supervisors whether to approve Amendment No. 1 to the Stoneridge Commerce Center Specific Plan No. 239, General Plan Amendment No. 190008, and Change of Zone No. 1900024. • Provide recommendations to the Riverside County Board of Supervisors regarding certification of this Program EIR.
Riverside County Board of Supervisors	<ul style="list-style-type: none"> • Approve, conditionally approve, or deny Amendment No. 1 to the Stoneridge Commerce Center Specific Plan No. 239. • Approve or deny General Plan Amendment No. 190008. • Approve or deny Change of Zone No. 1900024. • Reject or certify this Program EIR along with appropriate CEQA Findings.
Subsequent Riverside County Discretionary and Ministerial Approvals	
Riverside County Subsequent Implementing Approvals: Planning Department and/or Building & Safety	<ul style="list-style-type: none"> • Approve implementing Tentative Tract Maps. • Approve implementing Plot Plans. • Approve implementing Conditional Use Permits. • Record Final Maps. • Issue Grading Permits. • Issue Building Permits. • Approve Road Improvement Plans. • Issue Encroachment Permits. • Issue Conditional Use Permits, if required.
Other Agencies – Subsequent Approvals and Permits	
Regional Water Quality Control Board	<ul style="list-style-type: none"> • Compliance with National Pollutant Discharge Elimination System (NPDES) Permit. Waste Discharge Requirements • Issuance of a Construction Activity General Construction Permit • Waste Discharge Requirements • Issuance of a Clean Water Act Section 401 Water Quality Certification pursuant to the CWA
California Department of Fish and Wildlife	<ul style="list-style-type: none"> • Issuance of a Section 1602 Streambed Alteration Agreement (SAA)
U.S. Army Corps of Engineers	<ul style="list-style-type: none"> • Issuance of a Section 404 Permit
Riverside County Flood Control and Water Conservation District (RCFCWCD)	<ul style="list-style-type: none"> • Approval of proposed drainage infrastructure
South Coast Air Quality Management District (SCAQMD)	<ul style="list-style-type: none"> • Permits and approvals associated with operation of stationary equipment, if proposed.
Eastern Municipal Water District (EMWD)	<ul style="list-style-type: none"> • Approval of proposed water and sewer connections.



4.0 ENVIRONMENTAL ANALYSIS

4.0.1 SUMMARY OF EIR SCOPE

In accordance with CEQA Guidelines §§ 15126-15126.4, this EIR Section 4.0, *Environmental Analysis*, provides analyses of potential direct, indirect, and cumulatively-considerable impacts that could occur from planning, constructing, and operating the proposed Project.

In compliance with the procedural requirements of CEQA, a Notice of Preparation (NOP) was prepared and distributed for public review, in accordance with State CEQA Guidelines § 15082. An Initial Study was not prepared for the Project, and as such the NOP indicated that the required EIR will evaluate all of the topics listed in Appendix G to the State CEQA Guidelines, as implemented by Riverside County and the County’s standard Environmental Assessment (EA) Form. Public comment on the scope consisted of written comments received by the Riverside County in response to the NOP issued for this Program EIR. A publicly-noticed Scoping Session also was held as part of a Riverside County Planning Director’s Hearing on May 11, 2020 at the County of Riverside Administrative Building (4080 Lemon Street, Riverside, CA 92501), although no comments on the scope of the EIR were provided as part of the Scoping Session. Pursuant to Appendix G to the State CEQA Guidelines and the County’s standard EA form, this Program EIR evaluates 21 primary environmental subject areas, as listed below. Each Subsection evaluates several specific subject matters related to the general topic of the Subsection. The title of each Subsection is not limiting; therefore, refer to each subsection for a full account of the subject matters addressed therein.

- | | | | |
|------|------------------------------------|------|-------------------------------|
| 4.1 | Aesthetics | 4.12 | Mineral Resources |
| 4.2 | Agriculture and Forestry Resources | 4.13 | Noise |
| 4.3 | Air Quality | 4.14 | Paleontological Resources |
| 4.4 | Biological Resources | 4.15 | Population and Housing |
| 4.5 | Cultural Resources | 4.16 | Public Services |
| 4.6 | Energy | 4.17 | Recreation |
| 4.7 | Geology and Soils | 4.18 | Transportation |
| 4.8 | Greenhouse Gas Emissions | 4.19 | Tribal Cultural Resources |
| 4.9 | Hazards and Hazardous Materials | 4.20 | Utilities and Service Systems |
| 4.10 | Hydrology and Water Quality | 4.21 | Wildfire |
| 4.11 | Land Use and Planning | | |

4.0.2 SCOPE OF CUMULATIVE EFFECTS ANALYSIS

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



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

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

State CEQA Guidelines § 15130(b) describes two acceptable methods for identifying a study area for purposes of conducting a cumulative impact analysis. These two approaches include: 1) a list of past, present, and probable future projects producing related or cumulative impacts, including if necessary, those projects outside the control of the agency [‘the list of projects approach’], or 2) a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact (‘the summary of projections approach’).”

As a Program EIR, the analysis herein primarily relies upon the summary of projections approach because implementation of the proposed Project would require subsequent discretionary approvals from Riverside County (e.g., tentative tract maps, plot plans, etc.), and it is not possible to identify a list of cumulative developments that may be proposed in the future when implementing discretionary applications are filed with Riverside County. As such, the analysis herein considers impacts that would result from Project buildout on the existing (2020) environment, as well as long-term cumulatively-considerable impacts that may result from buildout of the Riverside County General Plan and the local general plans of cities within the Project vicinity.

Notwithstanding, and in order to provide a comprehensive analysis of potential near-term cumulatively-considerable impacts, the analyses of cumulatively-considerable traffic-related air quality, greenhouse gas, and noise impacts are based on existing traffic conditions plus ambient growth and the manual addition of traffic from past, present, and reasonably foreseeable projects and includes approved and pending development projects in proximity to the Project site that would contribute traffic to the same transportation facilities as the Project, as well as large, traffic-intensive projects farther from the Project site that have the potential to affect regional transportation facilities. This methodology recognizes development projects that have the potential to contribute measurable traffic to the same intersections, roadway segments, and/or State highway system facilities as the proposed Project and have the potential to be made fully operational in the foreseeable future. As shown on Table 4.0-1, *Cumulative Development Land Use Summary*, and as depicted on Figure 4.0-1, *Cumulative Development Projects Location Map*, the near-term cumulative impact analysis of traffic impacts, as well as the near-term cumulative impact analysis of air quality, greenhouse gases, and noise, includes 69 other past, present, and reasonably foreseeable projects within this study area in addition to ambient growth. The analysis of long-term cumulatively-considerable traffic impacts considers full buildout of the City of Perris, City of Moreno Valley, and nearby portions of unincorporated Riverside County, based on the General Plan land use plans for these jurisdictions, except as otherwise noted in the cumulative impact analyses provided in EIR Subsections 4.1 through 4.21.



Table 4.0-1 Cumulative Development Land Use Summary

No.	Project Name / Case Number	Land Use ¹	Quantity	Units ²	Location
Riverside County					
RC1	McCanna Hills / TTM 33978	SFDR	63	DU	SWC OF SHERMAN AVE. & WALNUT AVE.
RC2	PP26293	High-Cube Warehouse	612.481	TSF	SWC OF PATTERSON AVE. & RIDER ST.
RC3	PPT180023: Rider Commerce Center	Warehousing	204.330	TSF	NEC OF PATTERSON AVE. & RIDER ST.
RC4	PPT180025: Seaton Commerce Center	High-Cube Warehouse	210.800	TSF	SEC OF SEATON AV. & PERRY ST.
RC5	Farmer Boys/Retail Shop	Retail	16.306	TSF	NEC OF HARVILL AVE. & CAJALCO RD.
		Fast-Food with Drive Thru	3.252	TSF	
RC6	PP26173	High-Cube Warehouse	423.665	TSF	SWC OF HARVILL AVE. & RIDER ST.
RC7	Val Verde Logistics Center	High-Cube Warehouse	280.308	TSF	NWC OF HARVILL AVE. & OLD CAJALCO RD.
RC8	Majestic Freeway Business Center - Building 5	Warehousing	40.000	TSF	NEC OF HARVILL AVE. & MESSENNIA LN.
RC9	Majestic Freeway Business Center - Building 6	Warehousing	72.000	TSF	NORTH OF MESSENNIA LN., EAST OF HARVILL AVE.
RC10	Majestic Freeway Business Center - Building 7	Warehousing	80.000	TSF	NORTH OF CAJALCO EXWY., EAST OF HARVILL AVE.
RC11	Majestic Freeway Business Center - Building 8	Warehousing	110.000	TSF	NORTH OF CAJALCO EXWY., EAST OF HARVILL AVE.
RC12	Majestic Freeway Business Center - Building 9	Warehousing	45.000	TSF	EAST OF MESSENNIA LN., NORTH OF HARVILL AVE.
RC13	Majestic Freeway Business Center - Building 10	High-Cube Warehouse	600.000	TSF	SEC OF HARVILL AVE. & PERRY ST.
RC14	Majestic Freeway Business Center - Buildings 1, 3 & 4	Warehousing	48.930	TSF	NWC OF HARVILL AVE. & CAJALCO RD.
		High-Cube Warehouse	1195.740	TSF	
RC15	Majestic Freeway Business Center - Building 11	High-Cube Warehouse	391.045	TSF	NEC OF HARVILL AVE. & PERRY ST.
RC16	Majestic Freeway Business Center - Building 15	Warehousing	90.279	TSF	NWC OF HARVILL AVE. & COMMERCE CENTER DR.
RC17	Majestic Freeway Business Center - Building 19	Warehousing	364.560	TSF	SWC OF HARVILL AVE. & OLD OLEANDER AVE.
RC18	Majestic Freeway Business Center - Building 20	Warehousing	425.830	TSF	SWC OF HARVILL AVE. & OLD OLEANDER AVE.
RC19	Majestic Freeway Business Center - Building 21,22	Warehousing	241.059	TSF	NEC OF DECKER RD. & OLD OLEANDER AVE.
RC20	Knox Logistics Center	High-Cube Warehouse	1259.410	TSF	NWC OF DECKER RD. & OLD OLEANDER AVE.
RC21	Oleander Business Park	High-Cube Warehouse	680.000	TSF	NWC OF DECKER RD. & HARLEY KNOX BLVD.
RC22	Majestic Freeway Business Center - Building 12	Warehousing	154.751	TSF	NEC OF HARVILL AVE. & COMMERCE CENTER DR.
RC23	Harvill Distribution Center	High-Cube Warehouse	345.103	TSF	EAST OF HARVILL AVE., SOUTH OF ORANGE ST.
RC24	PP26241	Warehousing	23.600	TSF	SEC OF HARVILL AVE. & PLACENTIA ST.
RC25	PP26220	Warehousing	66.000	TSF	EAST OF HARVILL AVE., NORTH OF PLACENTIA ST.
RC26	Barker Logistics	High-Cube Warehouse	699.630	TSF	SWC OF PATTERSON AVE. & PLACENTIA ST.



Table 4.0-1 Cumulative Development Land Use Summary (Cont'd)

No.	Project Name / Case Number	Land Use ¹	Quantity	Units ²	Location
RC27	Harvill / Rider Warehouse	High-Cube Warehouse	284.746	TSF	NORTH OF RIDER ST., WEST OF HARVILL AV.
		General Light Industrial	50.249	TSF	
RC28	Placentia Logistics	High-Cube Warehouse	274.190	TSF	NWC OF HARVILL AV. & PLACENTIA AV.
RC29	Dedeaux Harvill	Truck Terminal	55.700	TSF	NORTH OF RIDER ST., WEST OF HARVILL AV.
RC30	The Villages of Lakeview	Multifamily Residential	8,725	DU	SOUTH OF RAMONA EXWY., EAST OF LAKEVIEW AV.
		Office	825.000	TSF	
		School	114.2	AC	
		Public Facilities	49.7	AC	
		Open Space	82.0	AC	
City of Perris					
P1	Bargemann / DPR 07-09-0018	Warehousing	173.000	TSF	NEC OF WEBSTER & NANCE
P2	Duke 2 / DPR 16-00008	High-Cube Warehouse	669.000	TSF	NEC OF INDIAN & MARKHAM
P3	First Perry / DPR 16-00013	High-Cube Warehouse	240.000	TSF	SWC OF REDLANDS AVE. & PERRY ST.
P4	Gateway / DPR 16-00003	High-Cube Warehouse	400.000	TSF	SOUTH OF HARLEY KNOX BLVD., EAST OF HWY. 215
P6	OLC 1 / DPR 12-10-0005	High-Cube Warehouse	1,455.000	TSF	WEST OF WEBSTER AVE., NORTH OF RAMONA EXWY.
P5	Duke Realty - Perris & Markham	High-Cube Warehouse	1,189.860	TSF	SEC OF PERRIS BL. & MARKHAM ST.
P7	OLC2 / DPR 14-01-0015	High-Cube Warehouse	1,037.000	TSF	WEST OF WEBSTER AVE., NORTH OF MARKHAM ST.
P8	Canyon Steel	Manufacturing	28.124	TSF	NWC OF PATTERSON AVE. & CALIFORNIA AVE.
P9	Markham Industrial / DPR 16-00015	Warehousing	170.000	TSF	NEC OF INDIAN AVE. & MARKHAM ST.
P10	Rados / DPR 07-0119	High-Cube Warehouse	1,200.000	TSF	NWC OF INDIAN AVE. & RIDER ST.
P11	Rider 1 / DPR 16-0365	High-Cube Warehouse	350.000	TSF	SWC OF REDLANDS AVE. & RIDER ST.
P12	Indian/Ramona Warehouse	High-Cube Warehouse	428.730	TSF	NORTH OF RAMONA EXWY., WEST OF INDIAN AVE.
P13	Rider 3 / DPR 06-0432	High-Cube Warehouse	640.000	TSF	NORTH OF RIDER ST., WEST OF REDLANDS
P14	Westcoast Textile / DPR 16-00001	Warehousing	180.000	TSF	SWC OF INDIAN ST. & NANCE ST.
P15	Duke at Patterson / DPR 17-00001	High-Cube Warehouse	811.000	TSF	SEC OF PATTERSON AVE. & MARKHAM ST.
P16	Harley Knox Commerce Park / DPR 16-004	High-Cube Warehouse	386.278	TSF	NWC OF HARLEY KNOX BLVD. & REDLANDS AVE.
P17	Perris Marketplace / DPR 05-0341	Commercial Retail	520.000	TSF	WEST OF PERRIS BLVD. AT AVOCADO AVE.
P18	Stratford Ranch Residential / TTM 36648	SFDR	270	DU	WEST OF EVANS RD. AT MARKHAM ST.
P19	Pulte Residential / TTM 30850	SFDR	496	DU	WEST OF EVANS RD. AT CITRUS AVE.



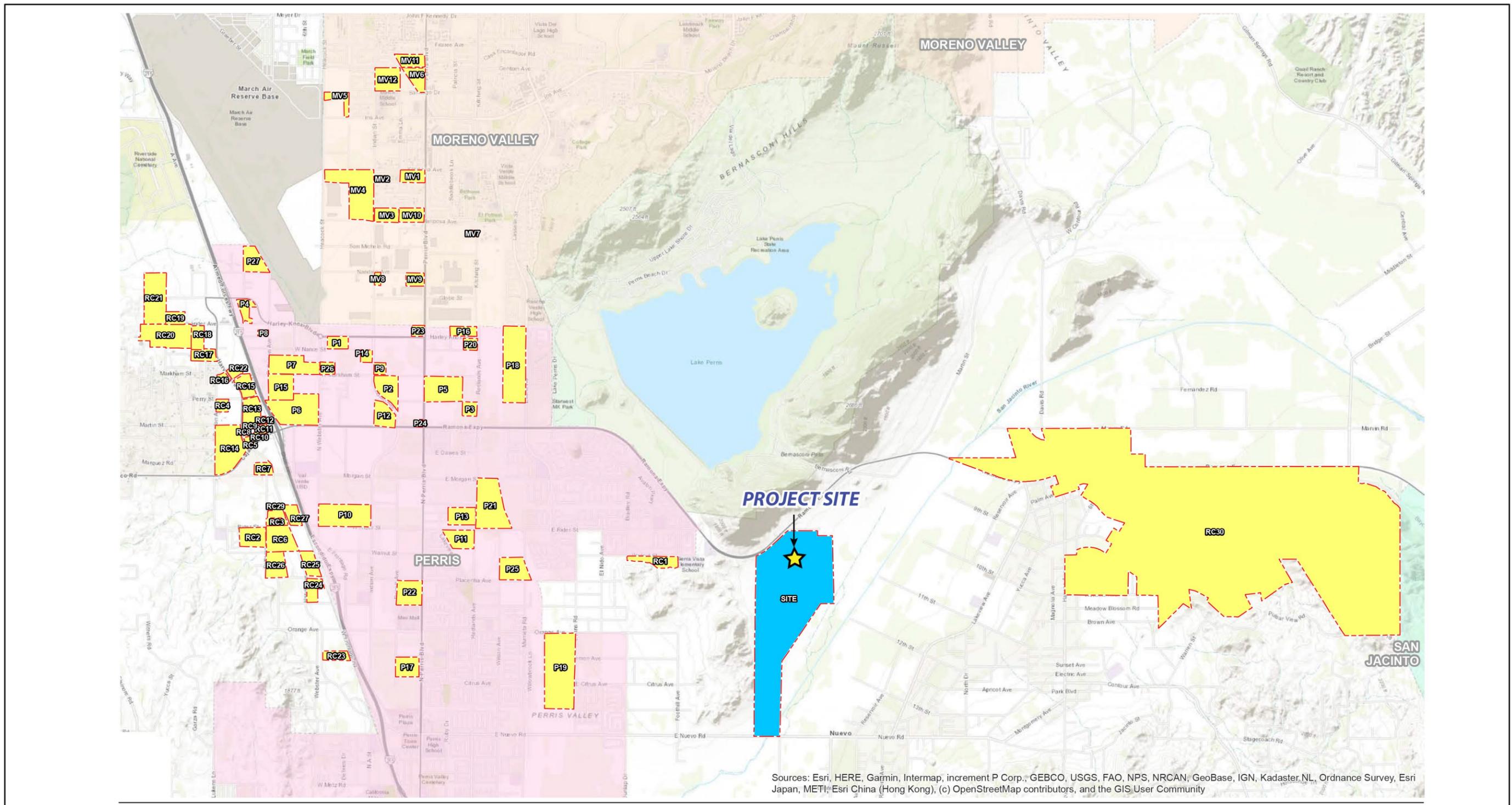
Table 4.0-1 Cumulative Development Land Use Summary (Cont'd)

No.	Project Name / Case Number	Land Use ¹	Quantity	Units ²	Location
P20	Perris Circle 3	Warehousing	210.900	TSF	NWC OF REDLANDS AVE. & NANCE AVE.
P21	Rider 2 and 4	High-Cube Warehouse	1,376.721	TSF	NWC OF REDLANDS AVE. AND RIDER ST.
P22	Weinerschnitzel / CUP 17-05083	Fast-Food Restaurant	2.000	TSF	WEST OF PERRIS BL., SOUTH OF PLACENTIA AVE.
P23	March Plaza / CUP16-05165	Commercial Retail	47.253	TSF	NWC OF PERRIS BL. AND HARLEY KNOX BL.
P24	Cali Express Carwash / CUP 16-05258	Carwash	5.600	TSF	NWC OF PERRIS BL. AND RAMONA EXWY.
P25	Wilson Industrial / DPR 19-00007	High-Cube Warehouse	303.000	TSF	SEC OF WILSON AVE. AND RIDER ST.
P26	Integra Expansion / MMOD 17-05075	High-Cube Warehouse	273.000	TSF	NCE OF MARKHAM ST. AND WEBSTER AVE.
P27	Western Industrial / DRP 19-00003	High-Cube Warehouse	250.000	TSF	NEC or WESTERN WY. AND NANDINA AVE.
City of Moreno Valley					
MV1	PEN18-0042	SFDR	2	DU	SEC OF INDIAN ST. & KRAMERIA AVE.
MV2	Tract 33024	SFDR	8	DU	SEC OF INDIAN ST. & KRAMERIA AVE.
MV3	Tract 32716	SFDR	57	DU	NEC OF INDIAN ST. & MARIPOSA AVE.
MV4	Prologis 1	High-Cube Warehouse	1000.000	TSF	NEC OF INDIAN AVE. & MARIPOSA AVE.
MV5	Moreno Valley Industrial Park	High-Cube Warehouse	207.684	TSF	NEC OF HEACOCK ST. & IRIS AVE.
MV6	Moreno Valley Walmart	Retail	193.000	TSF	SWC OF PERRIS BLVD. & GENTIAN AVE.
MV7	Moreno Valley Utility Substation	High-Cube Warehouse	PUBLIC	TSF	NWC OF EDWIN RD. & KITCHING ST.
MV8	Phelan Development	High-Cube Warehouse	98.210	TSF	SEC OF INDIAN ST. & NANDINA AVE.
MV9	Nandina Industrial Center	High-Cube Warehouse	335.966	TSF	SOUTH OF NANDINA AVE., WEST OF PERRIS BLVD.
MV10	Tract 31442	SFDR	63	DU	NWC OF PERRIS BLVD. & MARIPOSA AVE.
MV11	Tract 22180	SFDR	140	DU	NORTH OF GENTIAN AVE., EAST OF INDIAN ST.
MV12	Tract 36760	SFDR	221	DU	SEC OF INDIAN ST. & GENTIAN AVE.

¹ SFDR = Single Family Detached Residential

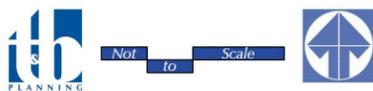
² DU = Dwelling Units; TSF = Thousand Square Feet; AC = Acres

(Urban Crossroads, 2022c, Table 4-6)



Source(s): Urban Crossroads (06-29-2020)

Figure 4.0-1



Cumulative Development Projects Location Map



The cumulative study area for evaluation is identified and defined in each Subsection of Chapter 4.0. For example, the issue of aesthetics considers the Project's viewshed, which is defined as the geographical area that is visible from a given location and represents the area within which the Project has the potential to result in adverse impacts to scenic resources. Within the Project's viewshed, which primarily includes portions of Riverside County as well as very limited portions of the City of Perris, the cumulative analysis of aesthetics assumes buildout in accordance with the County and City General Plans. For the issue of biology, the cumulative study area corresponds to the boundaries of the Western Riverside County Multiple Habitat Species Conservation Plan (MSHCP), as the MSHCP provides for the conservation of a wide variety of special status plant and animal species and encompasses a broad region that generally represents biological conditions associated with the Project area; thus, the cumulative study area for biological resources includes all future land uses within western Riverside County as called for by the General Plans of the County and the various cities that are included in the MSHCP region. Refer to the cumulative impact analysis provided in each Subsection in Chapter 4.0 for an issue-specific discussion of the cumulative study area.

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

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

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

The cumulative analysis provided in EIR Subsection 4.3 assumes that individual projects that do not generate 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. Alternatively, individual project-related emissions that exceed SCAQMD thresholds for Project-specific impacts would be considered cumulatively considerable.



Compliance with the SCAQMD guidelines for evaluating direct and cumulatively-considerable impacts due to air quality emissions has been shown to result in a demonstrable reduction in air quality pollutants within the South Coast Air Basin. As more thoroughly discussed in EIR Subsection 4.3, regulations promulgated by the SCAQMD have led to a dramatic reduction in the level of air quality pollutants within the South Coast Air Basin (SCAB), including levels of ozone, particulate matter (PM₁₀ and PM_{2.5}), carbon monoxide (CO), and oxides of nitrogen (NO_x). As noted in the SCAQMD 2016 AQMP, “the remarkable historical improvement in air quality since the 1970’s is the direct result of Southern California’s comprehensive, multiyear strategy of reducing air pollution from all sources as outlined in its AQMPs” (SCAQMD, 2017). Improvements also have been seen in ozone levels. Part of the control processes of the SCAQMD’s duty to greatly improve the air quality in the SCAB is the uniform CEQA review procedures required by SCAQMD’s CEQA Handbook (SCAQMD, 2019). The single threshold of significance used to assess Project direct and cumulative impacts has in fact been successful, as evidenced by the track record of the air quality in the Basin dramatically improving over the course of the past decades (refer to EIR Subsection 4.3 for an additional discussion on the improvements of air quality within the SCAB).

4.0.3 IDENTIFICATION OF IMPACTS

Subsections 4.1 through 4.21 of this EIR evaluate the twenty-one (21) environmental subjects warranting detailed analysis. The format of discussion is standardized as much as possible in each Subsection for ease of review. The environmental setting is discussed first, followed by a discussion of the Project’s potential environmental impacts based on specified thresholds of significance used as criteria to determine whether potential environmental effects are significant.

The thresholds of significance used in this Program EIR are based on the thresholds presented in State CEQA Guidelines Appendix G and as applied by Riverside County to create the Project’s standard Environmental Assessment (EA) Form. The thresholds are intended to assist the reader of this EIR in understanding how and why this EIR reaches a conclusion that an impact would or would not occur, is significant, or is less than significant.

Serving as the CEQA Lead Agency for this Program EIR, Riverside County is responsible for determining whether an adverse environmental effect identified in this EIR should be classified as significant or less than significant. While Riverside County has generally elected to use the thresholds presented in State CEQA Guidelines Appendix G, it should be noted that CEQA affords the County discretion to formulate standards of significance, and recognizes that the significance of a particular impact may vary with the setting. (14 Cal. Code Regs., § 15064(b).) The standards of significance used in this EIR are based on the independent judgment of the Riverside County, taking into consideration the updated State CEQA Guidelines Appendix G, Riverside County’s Municipal Code, and adopted County policies and ordinances; the judgment of the technical experts that prepared this EIR’s Technical Appendices; performance standards adopted, implemented, and monitored by regulatory agencies; significance standards recommended by regulatory agencies; and the standards in CEQA that trigger the preparation of an EIR. As required by State CEQA Guidelines § 15126.2(a), impacts are identified in this EIR as direct, indirect, cumulative, short-term, long-term, on-site, and/or off-site impacts of the proposed Project. A summarized “impact statement” is provided in each subsection following the analysis.



The following terms are used to describe the level of significance related to the physical conditions within the area affected by the proposed Project:

- No Impact: An adverse change in the physical environment would not occur.
- Less-than-Significant Impact: An adverse change in the physical environment would occur but the change would not be substantial or potentially substantial and would not exceed the threshold(s) of significance presented in this Program EIR.
- Significant Impact: A substantial or potentially substantial adverse change in the physical environment would occur and would exceed the threshold(s) of significance presented in this Program EIR, requiring the consideration of mitigation measures.

Each Subsection also includes a discussion or listing of the applicable regulatory criteria (laws, policies, regulations, etc.) that the Project is required to comply with (if any). If impacts are identified as significant after mandatory compliance with regulatory criteria, feasible mitigation measures are presented that would either avoid the impact or reduce the magnitude of the impact. The following terms are used to describe the level of significance following the application of recommended mitigation measures:

- Less-than-Significant Impact with Mitigation: A substantial or potentially substantial adverse change in the physical environment would occur that would exceed the threshold(s) of significance presented in this Program EIR; however, the impact can be avoided or reduced to a less-than-significant level through the application of feasible mitigation measure(s).
- Significant and Unavoidable Impact: A substantial or potentially substantial adverse change in the physical environment would occur that would exceed the threshold(s) of significance presented in this Program EIR. Feasible and enforceable mitigation measure(s) that have a proportional nexus to the Project's impact are either not available or would not be fully effective in avoiding or reducing the impact to below a level of significance.

For any impact identified as significant and unavoidable, Riverside County would be required to adopt a statement of overriding considerations pursuant to State CEQA Guidelines § 15093 in order to approve the Project despite its significant impact(s) to the environment. The statement of overriding considerations would list the specific economic, legal, social, technological, and other benefits of the Project, supported by substantial evidence in the Project's administrative record, that outweigh the unavoidable impacts.



4.1 AESTHETICS

This subsection describes the aesthetic qualities and visual resources present on the Project site and in the site's vicinity and evaluates the potential effects that the Project may have on these resources. Descriptions of existing visual characteristics, both on-site and in the vicinity of the Project site, and the analysis of potential impacts to aesthetic resources are based, in part, on field observations and site photographs collected by T&B Planning Inc. in December 2019, analysis of aerial photography (Google Earth, 2018), and Project application materials submitted to Riverside County and described in Section 3.0, *Project Description*, of this EIR. This Subsection also is based in part on information and policies contained in the Riverside County General Plan Update No. 960 (Riverside County, 2019a), Riverside County GIS database (RCIT, 2020), Riverside County Ordinance No. 348 (Riverside County, 2019c), and Riverside County Ordinance No. 655 (Riverside County, 1988).

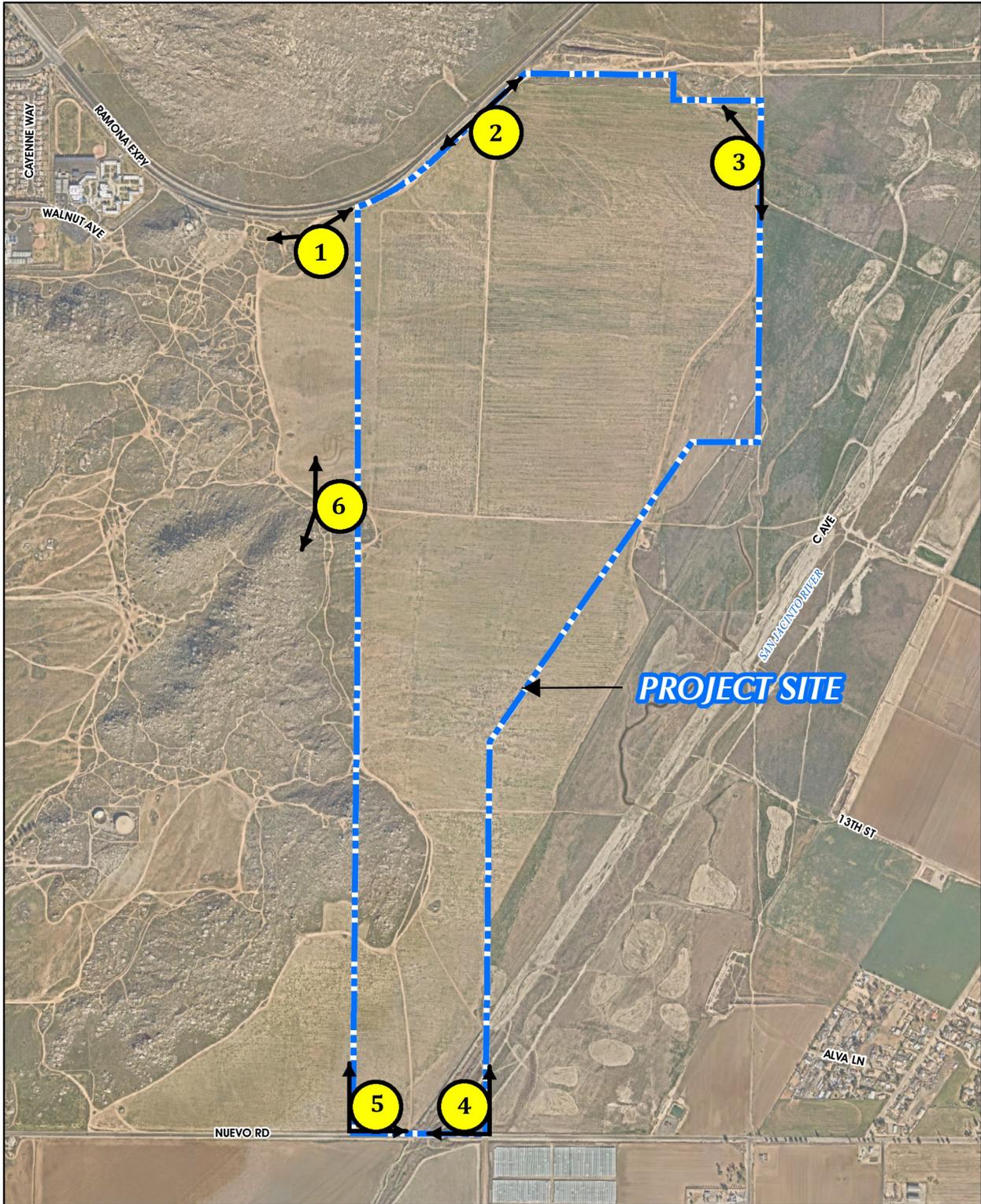
4.1.1 EXISTING CONDITIONS

A. Existing Aesthetic Conditions

The Project site comprises 582.6 acres of undeveloped land located south of and abutting the Ramona Expressway, north of and abutting Nuevo Road, west of the San Jacinto River, and east of the City of Perris. Under existing conditions, a majority of the Project site consists of relatively flat lands that were previously used for agricultural purposes and that are routinely disced for fire abatement purposes. Along the western boundary in the southern portion of the Project site is an existing undisturbed hillside that includes informal pedestrian trails at the base. With exception of Ramona Expressway, Nuevo Road, and the San Jacinto River, no improvements occur on site under existing conditions.

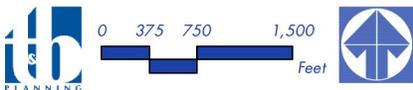
To illustrate the existing visual conditions of the Project site in more detail, a photographic inventory was prepared. Figure 4.1-1, *Site Photograph Key Map*, depicts the locations of the six vantage photographs, each of which are described below. These photographs, shown on Figure 4.1-2 through Figure 4.1-4, were taken in December 2019 and provide a representative visual inventory of the site's visual characteristics as seen from surrounding public viewing areas.

- Site Photograph 1 (Figure 4.1-2): Site Photograph 1 was taken near the northwestern corner of the Project site near the Ramona Expressway, looking northeast to west. In the foreground and in the left and right portions of this photo is an existing dirt road and unvegetated disturbed lands. The Ramona Expressway and associated power lines are visible on the left portion of the photo. In the middle ground are vegetated areas on site that are highly disturbed and subject to routine discing for fire abatement purposes. The existing hillforms that occur on and off site near the western Project boundary are visible in the right portion of the photo in the distance. The Lakeview Mountains are visible along the horizon.
- Site Photograph 2 (Figure 4.1-2): Site Photograph 2 was taken along the northern Project boundary near the Ramona Expressway, looking northeast to southwest. In the foreground are dirt and gravel



Source(s): ESRI, Nearmap Imagery (2020), RCLMA (2019), Riverside County General Plan (2019)

Figure 4.1-1



Site Photograph Key Map



Figure 4.1-2



Site Photograph 3: Northeast portion of project boundary looking South to Northwest



Site Photograph 4: Southeast corner of project boundary, along Pico Ave, looking West to North

Figure 4.1-3



West

East

Site Photograph 5: Southwest corner of project boundary, along Nuevo Rd, looking North to East



North

Southwest

Site Photograph 6: Western portion of project boundary looking North to Southwest

Figure 4.1-4



roads that occur on site, with trash and furniture that have been illegally dumped on the Project site visible in the foreground. The Ramona Expressway and associated power poles are visible in the left and right portions of the photo. In the middle ground of the photo, ruderal vegetation that is routinely disced for fire abatement purposes is visible and dominates views of a majority of the site. The hillforms that straddle the western boundary of the Project site are visible in the right portion of the photo in the distance. The Lakeview Mountains are visible along the horizon.

- Site Photograph 3 (Figure 4.1-3): Site Photograph 3 was taken along an existing dirt road near the northeastern corner of the Project site, looking northwest to south. In the foreground of this photograph is natural vegetation that appears disturbed, portions of which are routinely disced for fire abatement purposes. The existing north-south oriented dirt road along the Project site's eastern boundary is visible in the left and right portions of the photo. Visible in the distance is the Ramona Expressway, beyond which are the Bernasconi Hills that surround the Lake Perris State Recreation Area. The large hillform that straddles the western Project boundary, along with several off-site hillforms, are visible along the horizon in the left-central portion of the photo.
- Site Photograph 4 (Figure 4.1-3): Site Photograph 4 was taken from the southeastern Project boundary, along Nuevo Road, looking west to north. As shown in the foreground, this portion of the Project site contains ruderal vegetation that is routinely disced for fire abatement purposes. Nuevo Road and associated power poles are visible in the left and right portions of the photo. In the distance, the hillform that occur on and off site near the Project site's western boundary are visible. The San Bernardino Mountains are visible along the distant horizon in the right-central portion of the photo.
- Site Photograph 5 (Figure 4.1-4): Site Photograph 5 was taken at the southwest Project boundary along Nuevo Road, looking north to east. In the foreground of this photo is the existing disturbed shoulder of Nuevo Road, while Nuevo Road and associated power lines are visible in the left and right portions of the photo. On the Project site in the central portions of the photo, ruderal vegetation that is routinely disced for fire abatement purposes is visible. The existing hillforms that occur on and off site near the Project site's western boundary are visible along the horizon in the left-central portion of the photo. The San Bernardino Mountains are visible along the distant horizon in the right-central portion of the photo.
- Site Photograph 6 (Figure 4.1-4): Site Photograph 6 was taken in the west-central portion of the Project site along an existing dirt road, looking north to southwest. In the foreground is natural vegetation and several boulders, beyond which are the flatter portions of the Project site that are routinely disced for fire abatement purposes. Several existing dirt roadways are visible in the left and right portions of the photo, with additional dirt roads visible in the distance. In the right portion of the photo, the on-site portions of the hillform that straddle the Project's western boundary are visible. In the left portion of the photo in the distance are the Bernasconi Hills that surround the Lake Perris State Recreation Area. The Lakeview Mountains and San Bernardino Mountains are visible in the far distance along the horizon.



B. Scenic Highways

According to Figure C-8 (Scenic Highways) of the County’s General Plan, and as shown on Figure 4.1-5, *General Plan Scenic Highways Map*, there are no State-Designated scenic highways in the Project vicinity. The nearest State-Designated scenic highway is the portion of SR-74 within the Idyllwild National Forest, which occurs approximately 20.8 miles southeast of the Project site. The nearest State-Eligible scenic highway is a portion of I-215/SR-74 located approximately 2.7 miles southwest of the Project site. While there are no County-Designated scenic highways in the Project’s vicinity, the Ramona Expressway, which occurs along the Project’s northern boundary, is designated as a County-Eligible scenic highway. (Google Earth, 2018; Riverside County, 2019a, Figure C-8)

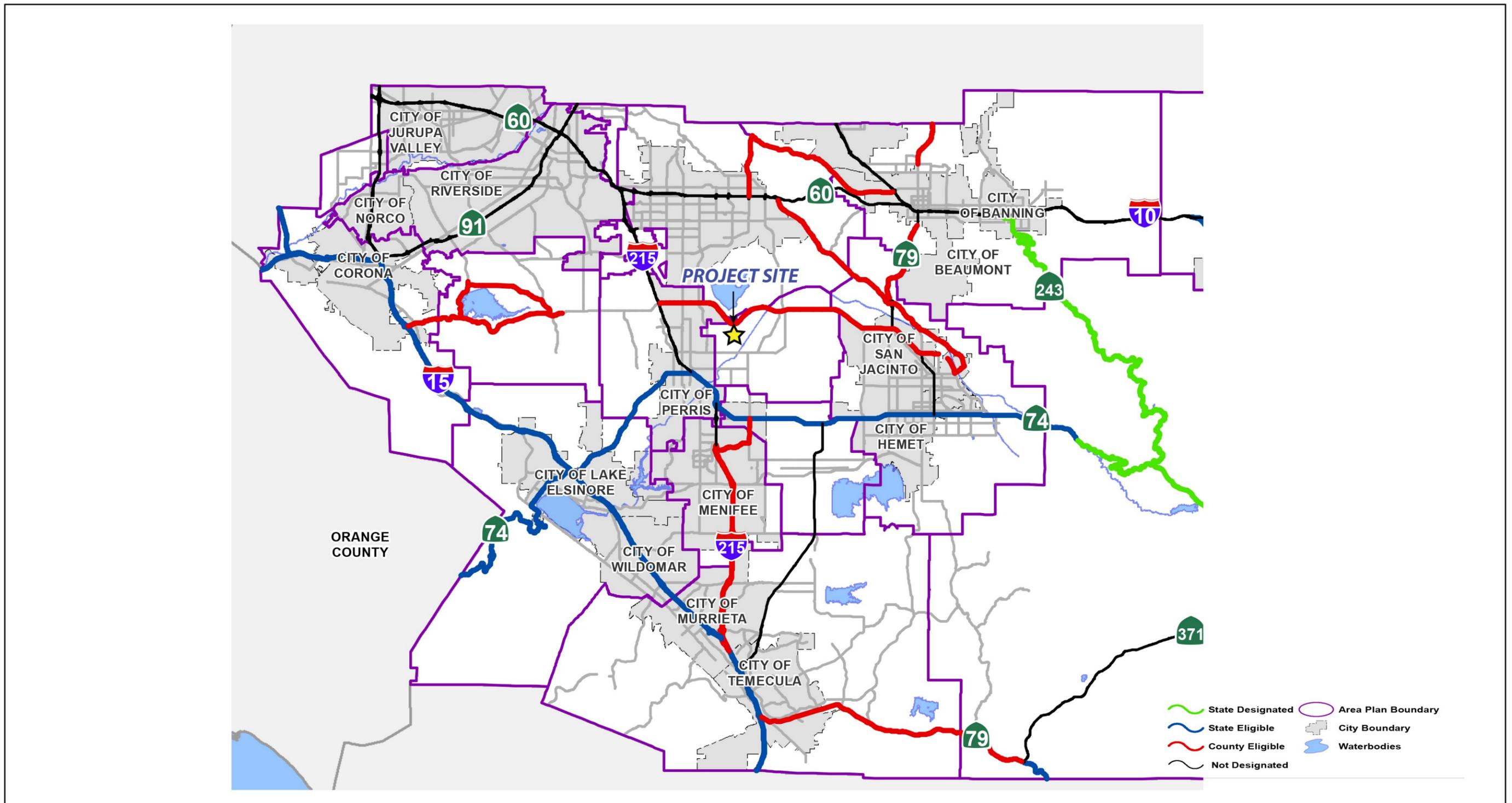
4.1.2 APPLICABLE REGULATORY REQUIREMENTS

A. Riverside County General Plan

The Riverside County General Plan does not have any specific sections related to aesthetics and visual resources. However, the Land Use Element of the Riverside County General Plan includes policies related to Land Use Compatibility, Community Design, and Scenic Corridors, which have applicability to the topic of aesthetics. The Land Use Element provides direction related to how future development is intended to build out, such as the intensity/density and character of new development. The Land Use Element also addresses the relationship between development, community enhancement, and natural resource management.

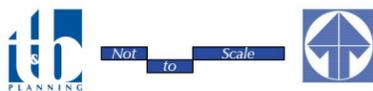
The Multipurpose Open Space Element of the Riverside General Plan also addresses open space and scenic resources in Riverside County. According to the Multipurpose Open Space Element, scenic resources include: “...areas that are visible to the general public and considered visually attractive,” and “...natural landmarks and prominent or unusual features of the landscape.” Hillsides and ridges that rise above urban or rural areas or highways can also be considered scenic backdrops. Additionally, the Multipurpose Open Space Element defines scenic vistas as “...points, accessible to the general public, that provide a view of the countryside.” Riverside County General Plan Policy OS 21.1 intends to “[i]dentify and conserve the skylines, view corridors, and outstanding scenic vistas within Riverside County.” (Riverside County, 2019a, pp. OS-52 to OS-53)

The Circulation Element, Land Use Element, and Multipurpose Open Space Element of the Riverside County General Plan also identify scenic corridors, which are roadways (including State and County eligible and designated scenic highways) that traverse scenic resources, and identify policies that are intended to protect and maintain the scenic resources within these corridors (Riverside County, 2019a, p. OS-52). Scenic highways in the Project vicinity are depicted on Figure 4.1-5. As noted in the LNAP, Policy LNAP 11.1 seeks to “Protect the scenic highways in the Lakeview/Nuevo planning area from change that would diminish the aesthetic value of views of the Bernasconi Hills, the San Jacinto River, the Mystic Lake Corridor, and the San Jacinto Wildlife Area in accordance with the Scenic Highways section of the General Plan Land Use, Multipurpose Open Space, and Circulation Elements” (Riverside County, 2019b, p. 51).



Source(s): Riverside County General Plan

Figure 4.1-5





B. Riverside County Ordinance No. 348, Land Use Ordinance

Riverside County’s Land Use Ordinance No. 348 establishes allowable uses of land and sets standards for what and how land may be developed. The ordinance protects the people and property of Riverside County from development of unsuitable land uses and aims to ensure that built areas are developed safely and with minimal conflict with surrounding lands. Ordinance No. 348 also identifies requirements for landscaping associated with development proposals. The landscaping of development projects enhances the visual character and aesthetic quality of a site and its surroundings. (Riverside County, 2020)

C. Riverside County Ordinance No. 655, Regulating Light Pollution

The County of Riverside has adopted an ordinance regulating light pollution (Ordinance No. 655). Ordinance No. 655 is intended to restrict the permitted use of certain light fixtures emitting light into the night sky which could have a detrimental effect on astronomical observation and research. Ordinance No. 655 sets forth requirements for lamp source and shielding of light emissions for outdoor fixtures to reduce “skyglow” or light pollution that affects day or nighttime views from the Mt. Palomar Observatory, which is located approximately 35.2 miles southeast of the Project site. As shown on LNAP Figure 6 (Lakeview/Nuevo Area Plan Mt Palomar Nighttime Lighting Policy Area), the Project site is located within the limits of “Zone B” of the Mt. Palomar Observatory Lighting Policy Area (Riverside County, 2019b, Figure 6). As such, the Project site is subject to the outdoor lighting policies and requirements applicable to Zone B that are stated in Riverside County Ordinance No. 655. This Ordinance includes specific standards for lighting fixtures installed along public roadways and in other common areas and applies to all new development. The use of low-pressure sodium lamps is encouraged where possible by Ordinance No. 655, and the Ordinance also requires the shielding of all nonexempt outdoor lighting fixtures, specifies the hours of operation for non-exempt outdoor lighting fixtures, and regulates lighting fixtures used to illuminate an outdoor advertising display. (Riverside County, 1988)

D. Riverside County Ordinance No. 915, Regulating Outdoor Lighting

The County of Riverside has adopted an ordinance regulating outdoor lighting (Ordinance No. 915). Ordinance No. 915 is intended to provide minimum requirements for outdoor lighting in order to reduce light trespass. Ordinance No. 915 provides regulations on adequate lighting shielding, glare, and light trespass in order to ensure all development in Riverside County installs lighting in a way that does not jeopardize the health, safety, or general welfare of Riverside County residents and degrade their quality of life. (Riverside County, 2012)

4.1.3 BASIS FOR DETERMINING SIGNIFICANCE

According to Section I of Appendix G to the State CEQA Guidelines, the proposed Project would result in a significant impact to aesthetics if the Project or any Project-related component would (OPR, 2018a):

- Have a substantial adverse effect on a scenic vista;



- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Additionally, the following thresholds are derived from Riverside County's Environmental Assessment Checklist, as revised to reflect the December 2018 updates to the State CEQA Guidelines. As such, the following thresholds are used to evaluate the significance of the proposed Project's impacts on aesthetics. The proposed Project would result in a significant impact to aesthetics if the Project or any Project-related component would:

- Have a substantial effect upon a scenic highway corridor within which it is located;*
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features; obstruct any prominent scenic vista or view open to the public; or result in the creation of an aesthetically offensive site open to public view;*
- 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 points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality;*
- Interfere with the nighttime use of the Mt. Palomar Observatory, as protected through Riverside County Ordinance No. 655;*
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area; or*
- Expose residential property to unacceptable light levels.*

The significance thresholds set forth in Riverside County's Environmental Assessment Checklist, which are based on Appendix G to the State CEQA Guidelines, were used to evaluate the significance of the proposed Project's impacts on aesthetics.



4.1.4 IMPACT ANALYSIS

Threshold a.: Would the Project have a substantial effect upon a scenic highway corridor within which it is located?

As previously indicated and depicted on Figure 4.1-5, the nearest State-Designated scenic highway is the portion of SR-74 within the Idyllwild National Forest, which occurs approximately 20.8 miles southeast of the Project site. Due to distance, intervening topography, and other features of the viewshed for this facility, the Project site is not visible from this portion of SR-74 and the Project would therefore have no impact on State-Designated scenic highways. The nearest State-Eligible scenic highway is a portion of I-215/SR-74 located approximately 2.7 miles southwest of the Project site. Based on an analysis of the Project's viewshed conducted in Google Earth, the hillside that straddles the Project site's western boundary is distantly visible along portions of I-215/SR-74; however, the portions of the Project site that are proposed for development are not visible from any portion of I-215/SR-74. As such, the Project would have less-than-significant impacts to State-Eligible scenic highways. (Google Earth, 2018; Riverside County, 2019a, Figure C-8)

As previously noted, there are no County-Designated scenic highways in the Project's vicinity; however, the Ramona Expressway, which occurs along the Project's northern boundary, is designated as a County-Eligible scenic highway (Google Earth, 2018; Riverside County, 2019a, Figure C-8). The Project would be prominently visible along nearby portions of the Ramona Expressway. Specifically, the Project would result in the conversion of the site from an undeveloped, disturbed condition to a master-planned light industrial, business park, and commercial retail development. Although this represents a substantial change to views along this County-eligible facility, development on site would be required to comply with the development standards and design guidelines included as part of proposed SP 239A1, which have been designed to ensure that the property is developed in a manner that is not aesthetically offensive. Design guidelines included as part of SP 239A1 include guidance related to site design, architecture, and landscaping, compliance with which would be assured by the County's future review of implementing applications (e.g., plot plans, building permits, etc.). The following is a summary of the SP 239A1 Design Guidelines that are related to the issue of aesthetics (refer to EIR *Technical Appendix P* for a complete listing of the design guideline requirements of proposed SP 239A1):

- Section 4.2, *Design Theme*, of proposed SP 239A1 requires a contemporary aesthetic, which provides architectural styling with attractive detailing, steel accents, a light-toned color palette, and timeless features. Design elements are required to be included to reduce the visibility and intensity of the light industrial activities, including walls, landscaping, and building design. Signs are required to be modern, with lighting focused and directed, landscaping is required to be colorful and drought-tolerant, and design features are applied that lower energy use demands of building operations.
- Section 4.4, *Architectural Design Guidelines*, of proposed SP 239A1 emphasizes a contemporary interpretation of the traditional context with a focus on reducing the appearance of building massing with the use of structural articulation. Buildings are planned to be 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 are encouraged to be mixed to create interest. Specific elements of the Architectural Design Guidelines include the following:

- Subsection 4.4.1, *Building Form*, specifies standards for building facades that are visible along view corridors, such as Orange Avenue, Ramona Expressway, Antelope Road, and the future Mid-County Parkway. The design guidelines presented in this subsection are intended to ensure that structural development is visually consistent, appealing, and inviting to pedestrians and motorists.
- Subsection 4.4.2, *Building Materials, Colors, and Textures*, specifies standards requiring that the selected exterior materials, colors, and textures should complement one another throughout, with slight variations are encouraged to provide visual interest.
- Subsection 4.4.3, *Windows and Doors*, specifies standards encouraging the patterns of window and door openings to correspond with the overall rhythm of the building and to be consistent in form, pattern, and color within each Planning Area.
- Subsection 4.4.4, *Walls and Fences*, specifies standards for walls and fencing to ensure that these features complement the overall design theme and are attractive from public viewing areas, scaled appropriately, durable, and integrated consistently within the Specific Plan area.
- Subsection 4.4.5, *Truck Courts and Loading Docks*, specifies standards related to the orientation and screening from public view of loading doors, service docks, and equipment areas.
- Subsection 4.4.6, *Ground or Wall-Mounted Equipment*, specifies standards related to the screening of ground and wall-mounted equipment from public viewing areas including public roadways, and encourages these features to be integrated into the architectural elements of the building when visible from streets or public areas.
- Subsection 4.4.7, *Rooftop Equipment*, establishes design guidelines requiring rooftop equipment, such as mechanical equipment, electrical equipment, storage tanks, etc., must be screened by rooftop screens or parapet walls so as not to be visible from public locations, and requires such screening to be integrated into the architecture of the main building.
- Subsection 4.4.8, *Trash Enclosures*, establishes design guidelines requiring screening of refuse containers from public view, with the design of such enclosures is required to reflect the architectural style of adjacent building. Outdoor trash enclosures also are required to be constructed with solid roofs, and trash enclosures are encouraged to be located behind or to the side of buildings.



- Subsection 4.4.10, *Outdoor Lighting*, establishes design guidelines to minimize glare and “spill over” lighting onto public streets and adjacent properties, and requires that lighting fixtures be complementary with respect to design, materials, fixture color, and light color. The design guidelines prohibit the use of neon and other similar types of lighting, and requires electrical meter pedestals to be screened from public view. The design guidelines also prohibit the use of High-Pressure Sodium (HPS) light fixtures on site.
- Subsection 4.4.11, *Signage Guidelines*, and requires the establishment of a Master Sign Program subject to review and approval of the Riverside County Planning Director, which would establish cohesive guidelines for signage within the proposed development. The design guidelines require building signage to be in scale with the proposed building facades, prohibits signage that would be oriented in a way that may cause obstructions, and requires signage to be visually compatible with the architectural design of the future buildings.
- Section 4.5, *Supplemental Guidelines for Light Industrial & Business Park Uses*, sets forth additional guidelines that address considerations unique to the proposed light industrial and business park land uses. The guidelines encourage office spaces to be located at the corners of the building and facing public roadways where possible; requires screen elements to be oriented away from public viewing areas; recommends textured forms, reveals, or scoring on concrete tilt-up panels to provide visual relief; encourages variations in rooflines; recommends the avoidance of arched gable, hip and shed roof forms as a primary roof form, but allows such elements to be used as a secondary/accent roof form; and requires all rooftop mounted equipment to be screened from public view.
- Section 4.6, *Supplemental Guidelines for Commercial Retail Uses*, sets forth guidelines that address considerations unique to commercial retail uses within the proposed development. Among other guidelines, this Section encourages the use of simple building forms and to maximize the play of light on mass and voids to provide strong contrast; positioning of lower building masses and other design elements near pedestrian entrances, especially where visible from major public roadways; the use of towers and well-proportioned building elements to define entries and create pedestrian scale; buildings to be designed with a modern contemporary aesthetic; and the use of architectural projections to break up flat rooflines.
- Section 4.7, *Landscape Design Guidelines*, establishes landscape principles and standards that apply to all future development within SP 239A1. The intent is to ensure that plant materials, entries and monuments, streetscapes and other amenities are compatible with the overall design theme and that all implementing development projects are united under a common design vocabulary. The Landscape Design Guidelines include a plant palette to establish and differentiate area within the Project, including identification of plant species at Project entries, along streetscapes, within proposed buffer zones, and other areas of the proposed development. Also included are guidelines related to entry monumentation, streetscape treatments, walls and fencing, and landscape interfaces.



Furthermore, no development is proposed along the prominent hillform along the western boundary, as this area would be preserved as natural open space within Planning Area 9 of proposed SP 239A1. Buildings proposed as part of the Project would not exceed a height of 60 feet (as required by proposed SP 239A1), and would not obstruct views of the prominent hillforms that occur on and off site near the Project’s western boundary. Additionally, the Project would have no impact on views of the Bernasconi Hills visible from the Ramona Expressway, which occur north of Ramona Expressway and the Project site. Furthermore, the Ramona Expressway is not officially designated as a County-Designated scenic highway.

Based on the foregoing analysis, and assuming mandatory compliance with the design guidelines and development standards of proposed SP 239A1, Project impacts to scenic highways would be less than significant.

Threshold b.: *Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features; obstruct any prominent scenic vista or view open to the public; or result in the creation of an aesthetically offensive site open to public view?*

Threshold c.: *In non-urbanized areas, would the Project 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 points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

Under existing conditions, the majority of the Project site consists of level terrain containing ruderal vegetation that is routinely disced for fire abatement purposes, with several large hillforms prominently visible on and off site near the western Project boundary that contain rock outcroppings. The only trees that occur on site under existing conditions are associated with the San Jacinto River, which traverses the southeastern corner of the Project site. (Google Earth, 2018)

With implementation of the proposed Project, most of the flatter portions of the Project site would be developed with light industrial, business park, and commercial retail land uses. The on-site portions of the existing hillform, as well as areas within the floodplain of the San Jacinto River, would be preserved as natural open space within Planning Areas 9, 10, and 11 of proposed SP 239A1. Thus, the Project would not significantly affect the existing hillforms, rock outcroppings, or trees along the San Jacinto River. There are no other scenic resources on site under existing conditions. Thus, the Project would result in less-than-significant impacts to scenic resources.

Scenic vistas in the Project area include the on- and off-site hillforms near the western Project boundary, the San Jacinto River, and the Bernasconi Hills that surround the Lake Perris State Recreation Area to the north. The on-site portion of the hillform that straddles the western Project boundary in the southern portion of the Project site would be preserved in open space as part of the Project and would continue to be visible from off-site locations. The Project also would not affect public viewing locations of the Bernasconi Hills or the Lake



Perris State Recreation Area, as these features occur north of Ramona Expressway and the Project site. Accordingly, the Project would not obstruct any prominent scenic vista or view open to the public, and impacts would be less than significant.

Development on site would be required to comply with the development standards and design guidelines included as part of proposed SP 239A1, which have been designed to ensure that the property is developed in a manner that is not aesthetically offensive. Refer to the analysis of Threshold a. for a description of applicable design guidelines. Design guidelines included as part of SP 239A1 include guidance related to site design, architecture, and landscaping, compliance with which would be assured by the County’s future review of implementing applications (e.g., plot plans, building permits, etc.). Mandatory compliance with the design guidelines and development standards of proposed SP 239A1 would ensure the Project site is developed in a manner that is not aesthetically offensive. Additionally, compliance with the design guidelines and development standards of proposed SP 239A1 would ensure that the Project does not result in the creation of an aesthetically offensive site open to public view. Additionally, all future development on site would be required to comply with the SP 239A1 zoning ordinance and all other applicable requirements of the Riverside County Municipal Code.

Although the proposed Project would be developed in a manner that is not aesthetically offensive; that would not adversely affect scenic resources on site, such as hill forms, rock outcroppings, and trees; and that would not obstruct any prominent scenic vistas or views open to the public, under existing conditions the Project site consists of undeveloped lands while lands in the Project vicinity exhibit a rural and agricultural character. Development of the Project site with light industrial, business park, and commercial retail land uses would represent a substantial change to the existing visual character and quality of public views of the site and its surroundings. Although the Project site is planned for a mixture of residential, commercial, and recreational land uses as part of the County’s adopted General Plan, the proposed light industrial, business park, and commercial retail uses proposed as part of the Project would be substantially more intense than the land uses currently allowed on site by the General Plan, and would therefore have a much greater effect on the existing visual quality and character of the Project site and its surroundings. Due to the level of development intensity proposed as part of the Project as well as the rural and agricultural character of lands within the immediate Project vicinity, the Project’s impacts due to a change to the existing visual character and quality of public views of the site and its surroundings would represent a significant impact of the proposed Project.

Threshold d.: Would the Project interfere with the nighttime use of the Mt. Palomar Observatory, as protected through Riverside County Ordinance No. 655?

As shown on LNAP Figure 6 (Lakeview/Nuevo Area Plan Mt Palomar Nighttime Lighting Policy Area), the Project site is located within the limits of “Zone B” of the Mt. Palomar Observatory Lighting Policy Area (Riverside County, 2019b, Figure 6). All development projects within Zone B of the Mt. Palomar Nighttime Lighting Policy Area are required to adhere to the requirements of Riverside County Ordinance No. 655, which controls artificial lighting sources to protect the Observatory. Ordinance No. 655 states that low-pressure sodium lamps are the preferred illuminating source, and that outdoor lighting fixtures are required to be



shielded. Pursuant to Section 7 of Ordinance No. 655, future building permits would be required to include specific information with regards to lighting, as follows: 1) the location of the site where outdoor light fixtures would be installed; 2) plans indicating the location and type of fixtures of the premises; and 3) a description of the outdoor light fixtures, including, but not limited to, manufacturer’s catalog cuts and drawings. The required plans and descriptions would enable the County to determine whether compliance with the requirements of the ordinance is met. No building permits would be issued by the County unless the building permit applications demonstrate consistency with the applicable provisions of Ordinance No. 655. As such, the Project has no potential to interfere with the nighttime use of the Mt. Palomar Observatory, as protected through Riverside County Ordinance No. 655, and impacts would be less than significant. (Riverside County, 1988)

Threshold e.: Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Threshold f.: Would the Project expose residential property to unacceptable light levels?

In addition to Riverside County Ordinance No. 655, which is addressed above under the analysis of Threshold d., future development on the Project site would be subject to Riverside County Ordinance No. 915 as well as the development standards and design guidelines of SP 239A1. Ordinance No. 915 requires that all outdoor luminaires shall be located, adequately shielded, and directed such that no direct light falls outside the parcel of origin, or onto the public right-of-way. Compliance with Ordinance No. 915 would be assured through future review of building permit applications by Riverside County, and would ensure that the Project does not expose residential property to unacceptable light levels. Impacts would be less than significant.

Additionally, SP 239A1 includes the following design guidelines for exterior lighting, which would serve to prevent the creation of substantial light that could adversely affect day or nighttime views in the area and the exposure of residential properties to unacceptable light levels (T&B Planning, 2022, Section 4.4.10):

- 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.
- Select all lighting fixtures used in the Specific Plan 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.
- Neon and similar types of lighting are prohibited in all areas of the Project site.
- Locate all electrical meter pedestals and light switch/control equipment in areas with minimum public visibility or screen them with appropriate plant materials.
- High Pressure Sodium (HPS) light fixtures are prohibited for site lighting.

Riverside County would review future implementing building permit applications for compliance with the Specific Plan design guidelines related to lighting.



Furthermore, none of the Project's proposed building materials would consist of reflective materials, except for the proposed windows, which would not be mirrored and would have similar low-potential glare characteristics as do other glass windows on buildings in the Project vicinity. The proposed Project does not include any components that would generate substantial amounts of reflective surfaces to the Project vicinity; therefore, impacts associated with glare would be less than significant. Mandatory compliance with the development standards and design guidelines of SP 239A1 and Riverside County Ordinance Nos. 655 and 915 would ensure that all lighting and building design elements proposed by the Project are designed to prevent the creation of substantial light or glare that could affect day or nighttime views in the area. Accordingly, implementation of the Project would result in a less-than-significant impact related to new sources of light or glare.

Based on the foregoing analysis, and because the Project would be required to comply with the lighting standards in SP 239A1 as well as lighting provisions of Riverside County Ordinance Nos. 655 and 915, impacts due to Project lighting and glare, and due to the exposure of residential property to unacceptable light levels, would be less than significant.

4.1.5 CUMULATIVE IMPACT ANALYSIS

For purposes of analysis, the Project's cumulative study area includes all areas within the Project's viewshed, as the Project does not have the potential to result in cumulatively-considerable impacts to visual quality outside of areas in which the Project site is visible.

As indicated under the analysis of Threshold a., the Project would result in less-than-significant direct impacts to the Ramona Expressway (a County-Eligible scenic highway) with mandatory compliance with the development standards and design guidelines of proposed SP 239A1. Residential developments are proposed to the west as part of the McCanna Hills Specific Plan (SP 246) and would be required to comply with the development standards and design guidelines of SP 246, while lands to the east and south are designated by the Riverside County General Plan for development with low and medium density housing developments. Very little development is planned to the north side of the Ramona Expressway in this portion of Riverside County. Thus, while the Project and other cumulative development would contribute to a change in southern views along the Ramona Expressway from that of a rural/undeveloped area to a mixed-use community, neither the Project nor surrounding cumulative development would obstruct views of the existing hillforms that occur on and off site near the Project's western boundary, the Bernasconi Hills that surround the Lake Perris State Recreation Area, or any other scenic resources visible from the Ramona Expressway. As such, Project impacts to scenic highways would be less-than-cumulatively considerable.

The Project would not damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features, and impacts would therefore be less-than-cumulatively considerable. Although the Project site and surrounding areas would be developed in the long-term with a mixture of urban and rural land uses, future development is not anticipated to obstruct views of any scenic vistas or views open to public review, as future development in the area would not adversely affect views of the existing hillforms that occur on and off site near the Project's western boundary, the Bernasconi Hills that surround the Lake Perris State Recreation Area, or any other scenic resources; thus, impacts would be less-than-cumulatively considerable.



Additionally, because the Project would be developed in compliance with the design guidelines and development standards of proposed SP 239A1, the Project would not contribute to the creation of an aesthetically offensive site open to public view. Furthermore, the Project would comply with the SP 239A1 development standards, design guidelines, and zoning ordinance, and the Project also would be required to comply with all applicable Riverside County ordinances governing scenic quality. Notwithstanding, the Project vicinity exhibits a rural and agricultural character, and the development of the Project site with light industrial, business park, and commercial retail land uses would represent a substantial change to the existing visual character and quality of public views of the site and its surroundings. Development of the surrounding areas in conformance with the Riverside County General Plan would contribute to the changes to the existing visual character and quality of public views available in the local area. Accordingly, the Project's potential impacts to the existing visual character and quality of public views of the site and its surroundings would be cumulatively considerable.

The Project and other cumulative developments within the Project's viewshed would be required to comply with Riverside County Ordinance No. 655 requirements pertaining to Zone B. Compliance with Ordinance No. 655 would be assured through future County review of building permit applications. As such, cumulatively-considerable impacts due to a conflict with Ordinance No. 655 would not occur.

The proposed Project as well as other cumulative developments within the Project's viewshed would be subject to compliance with Riverside County Ordinance Nos. 655 and 915. Additionally, future development on site would be subject to the SP 239A1 lighting design guidelines (cited above under the analysis of Thresholds e. and f.), while development to the west within the McCanna Hills SP 246 would be subject to the lighting requirements of SP 246. There are no components of the proposed Project that would contribute to cumulatively-considerable impacts due to the creation of substantial light or glare. Additionally, most of the development in areas surrounding the Project site would consist of residential communities that would not have the potential to contribute to substantial light or glare impacts, as development of these areas also would be subject to compliance with Riverside County Ordinance Nos. 655 and 915 and residential uses are not associated with the generation of glare. Although the Project and cumulative developments may incorporate building materials with the potential to create glare, such as glass elements, such impacts would be minor as the use of glass or other materials with the potential to result in glare would not be prominently visible from off-site locations and therefore would not adversely affect day or nighttime views in the area. Impacts due to light and glare would be less-than-cumulatively considerable.

4.1.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a.: Less-than-Significant Impact. The Project site is not located within the viewshed of any officially designated State or County scenic highways or State-Eligible scenic highways. While the Project would be visible from Ramona Expressway, which is designated as a County-Eligible scenic highway, development on site would be required to comply with the development standards and design guidelines included as part of proposed SP 239A1, which have been designed to ensure that the property is developed in a manner that is not aesthetically offensive. As such, Project impacts to scenic highways would be less than significant.



Thresholds b. and c.: Significant Direct and Cumulatively-Considerable Impact. The Project would not substantially damage scenic resources; obstruct any prominent scenic vista or view open to the public; result in the creation of an aesthetically offensive site open to public view; or conflict with applicable zoning and other regulations governing scenic quality. However, the Project vicinity exhibits a rural and agricultural character, and the development of the Project site with light industrial, business park, and commercial retail land uses would represent a substantial change to the existing visual character and quality of public views of the site and its surroundings. Impacts would therefore be significant.

Threshold d.: Less-than-Significant Impact. Project compliance with the provisions of County Ordinance No. 655 would be assured through future County review of building permits. Impacts due to a conflict with Ordinance No. 655 would be less than significant.

Thresholds e. and f.: Less-than-Significant Impact. Mandatory compliance with the SP 239A1 design guidelines related to lighting, along with compliance with Riverside County Ordinance Nos. 655 and 915, would ensure that Project-related lighting and glare would not adversely affect day or nighttime views in the area, and also would ensure the Project does not expose residential property to unacceptable light levels. Impacts would be less than significant.

4.1.7 COUNTY REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

Applicable County Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

- The Project is required to comply with Riverside County Ordinance No. 655, which is intended to restrict the permitted use of certain light fixtures emitting light into the night sky which could have a detrimental effect on astronomical observation and research. Ordinance No. 655 sets forth requirements for lamp source and shielding of light emissions for outdoor fixtures to reduce "skyglow" or light pollution that affects day or nighttime views from the Mount Palomar Observatory (located approximately 35.2 miles south of the Project site in northern San Diego County). Pursuant to the requirements of Ordinance No. 655, all lighting shall consist of low-pressure sodium lighting, or other lamp types that emit 4050 lumens or less. If light fixtures are proposed above 4050 lumens, then the lighting shall be fully shielded in conformance with the requirements of Ordinance No. 655.
- The Project is required to comply with Riverside County Ordinance No. 915, which is intended to provide minimum requirements for outdoor lighting in order to reduce light trespass. Ordinance No. 915 provides regulations on adequate lighting shielding, glare, and light trespass in order to ensure all development in Riverside County installs lighting in a way that does not jeopardize the health, safety, or general welfare of Riverside County residents and degrade their quality of life.



- The Project is required to comply with the Development Standards and Design Guidelines of SP 239A1, including standards related to lighting. Compliance with these Design Guidelines would be assured by the County’s future review of implementing building permit applications for compliance with the Specific Plan’s design features that would serve to reduce and/or avoid impacts relating to aesthetics.

Mitigation

Although the Project would be required to comply with the design guidelines and development standards of proposed SP 239A1, the SP 239A1 zoning ordinance, and all other applicable requirements of the Riverside County Municipal Code, mitigation measures are not available to address the Project’s significant impacts due to substantial changes to the existing visual character and quality of public views of the site and its surroundings.

4.1.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Thresholds b. and c.: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. The Project vicinity exhibits a rural and agricultural character, and the development of the Project site with light industrial, business park, and commercial retail land uses would represent a substantial change to the existing visual character and quality of public views of the site and its surroundings. Although the Project would be required to comply with the design guidelines and development standards of proposed SP 239A1, the SP 239A1 zoning ordinance, and all other applicable requirements of the Riverside County Municipal Code, which would serve to ensure that the Project site is developed in a manner that is not visually offensive, mitigation measures are not available to address the Project’s significant impacts due to substantial changes to the existing visual character and quality of public views of the site and its surroundings. Impacts would be significant and unavoidable.



4.2 AGRICULTURE AND FORESTRY RESOURCES

The information and analysis in this Subsection is based in part on information obtained from the California Department of Conservation (CDC) Farmland Mapping & Monitoring Program (FMMP) (CDC, 2020), Riverside County GIS (RCIT, 2020), and the Riverside County General Plan Amendment 960 Final EIR (Riverside County, 2015a). Refer to Section 7.0, *References*, for a complete list of these and other reference sources.

4.2.1 EXISTING CONDITIONS

A. Forest Resources

The Project site is located in the Lakeview/Nuevo portion of unincorporated Riverside County, a rapidly urbanizing region that generally contains dry, sparsely-vegetated terrain in the natural condition. As shown in Figure 4.5.2 of the Riverside County General Plan Update Draft EIR No. 521, there are no forest resources in the Project's vicinity under existing conditions (Riverside County, 2015a, Figure 4.5.2).

B. Agricultural Resources

1. Regional Agricultural Setting

According to the Riverside County Agricultural Commissioner's Office, in a document entitled, "Riverside County Agricultural Production Report 2018," the top three categories of agricultural resources cultivated in Riverside County (by value) are nursery stock, milk, and table grapes. In 2018 (the most recent year for which data is available), the total gross value of agricultural production in Riverside County was approximately \$1.30 billion, which represents a slight increase (6.3%) from 2017 when total values were \$1.22 billion. (Agricultural Commissioner's Office, 2018)

The CDC reports that agricultural lands face continuing pressure from urbanization and rising production costs. The CDC's "2014-2016 California Farmland Conversion Report" summarizes land use conversion between 2014 and 2016 (the most recent years for which information has been reported by the CDC), and states that Riverside County as a whole experienced a net loss of 3,635 acres of "Important Farmland" between 2014 and 2016, representing a decline of 0.9% (CDC, n.d., p. 53, Table A-25). "Important Farmlands," as defined in the CDC report, include Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance.

2. Historic and Existing Site Conditions

According to the Project's Phase I Environmental Site Assessment (ESA, *Technical Appendix G*), the Project site was historically used for agricultural production as early as 1938 until at least 1985. However, agricultural activities on site ceased in the late 1980s. (Hillman, 2019, p. 15) Under existing conditions, the flatter portions of the Project site consist of disturbed lands that are routinely disced for fire abatement purposes. The hillform that straddles the site's western boundary was not previously used for agricultural production, and consists of natural vegetation.



3. Zoning

As described in EIR Section 2.0, *Environmental Setting*, the 582.6-acre Project site is zoned for “Specific Plan Zone (SP Zone),” indicating that the Project site is located within the boundaries of the Stoneridge Specific Plan No. 239 (SP 239). Zoning requirements are as established by the zoning ordinance adopted in conjunction with SP 239. SP 239 designates the Project site with a mixture of mixed-use, commercial retail, residential, recreational, and open space land uses, with no agricultural designations applied to the Project site. As such, the Project site is not zoned for agricultural production under existing conditions.

4. Agricultural Land Designations

The goal of the California Department of Conservation’s Farmland Mapping and Monitoring Program (FMMP) is to provide consistent, timely, and accurate data to decision makers for use in planning for the present and future of California's agricultural land resources. To meet this goal, FMMP's objective is to provide maps and statistical data to the public, academia, and local, State, and federal governments to assist them in making informed decisions for the best utilization of California's farmland. The FMMP was established in 1982 in response to what was by then a critical need for data on the nature, location, and extent of farmland, grazing land, and urban built-up areas in the State. California Government Code § 65570 mandates FMMP to biennially report to the Legislature on the conversion of farmland and grazing land, and to provide maps and data to local governments and the public. The FMMP also was directed to prepare and maintain an automated map and database system to record and report changes in the use of agricultural lands. It was the intent of the Legislature and a broad coalition of building, business, government, and conservation interests that FMMP be non-regulatory, and provide a consistent and impartial analysis of agricultural land use and change in California. With this in mind, FMMP provides basic data from which observations and analyses can be made in the land use planning process. (CDC, 2004, p. 3)

Pursuant to the FMMP, all lands within California are classified into one of seven map categories. The minimum mapping unit is generally 10 acres, except as otherwise noted (CDC, 2004, p. 6). Provided below is a description of the various map categories established by the FMMP:

- **Prime Farmland (P):** Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date. (CDC, 2004, p. 6)
- **Farmland of Statewide Importance (S):** Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date. (CDC, 2004, p. 6)

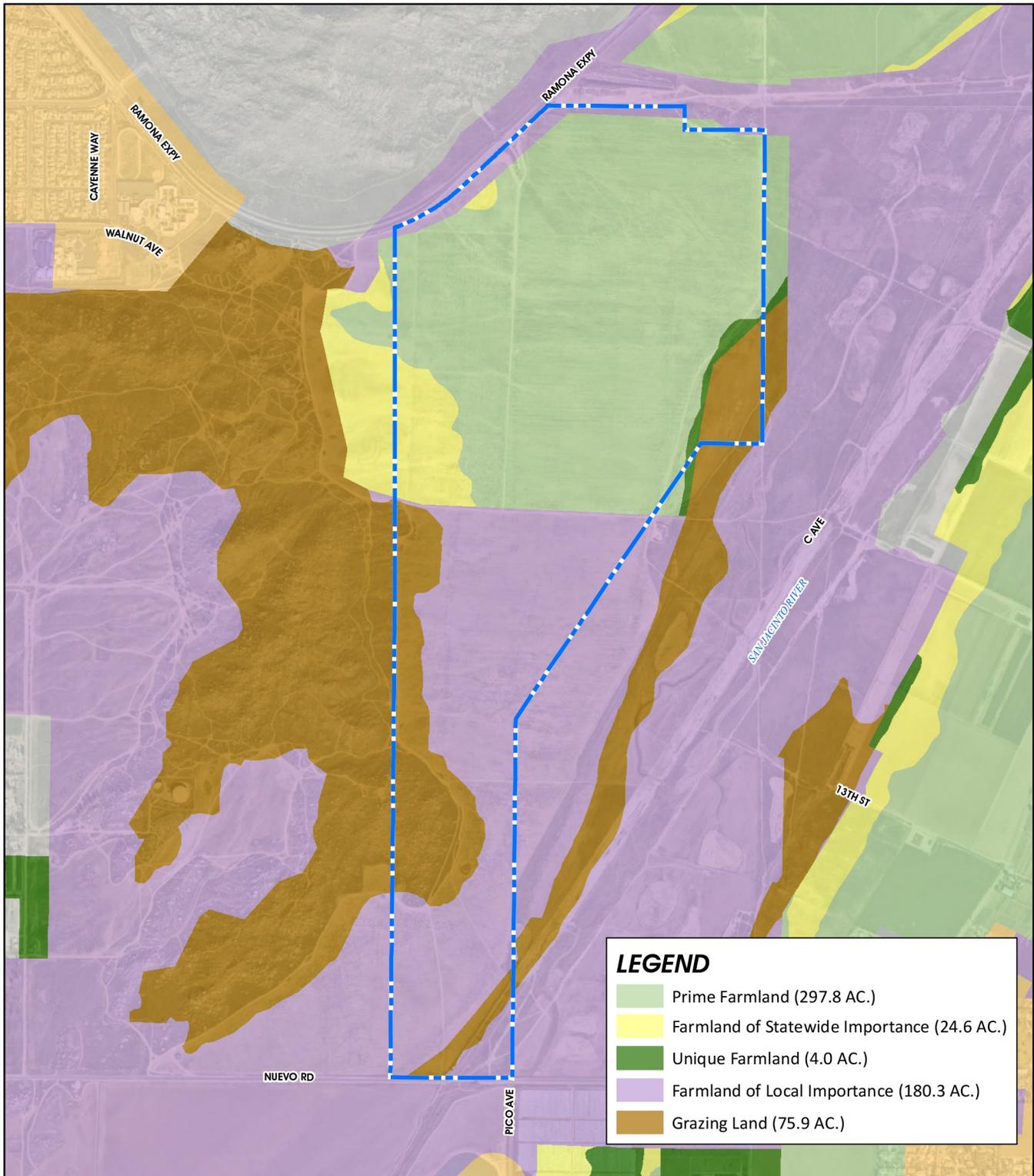


- **Unique Farmland (U):** Farmland of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date. (CDC, 2004, p. 6)
- **Farmland of Local Importance (L):** Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee. (CDC, 2004, p. 6)
- **Grazing Land (G):** Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres. (CDC, 2004, p. 6)
- **Urban and Built-Up Land (D):** Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, institutional, public administrative purposes, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes. (CDC, 2004, p. 6)
- **Other Land (X):** Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land. (CDC, 2004, p. 6)

As shown on Figure 4.2-1, *FMMP Farmland Map*, approximately 297.8 acres of the Project site are mapped as containing “Prime Farmland,” approximately 24.6 acres are mapped as containing “Farmland of Statewide Importance,” approximately 4.0 acres are mapped as “Unique Farmland,” approximately 180.3 acres are mapped as “Farmland of Local Importance,” and approximately 75.9 acres are mapped as “Grazing Land.” “Farmland” is defined in Section II (a) of Appendix G of the State CEQA Guidelines to mean “Prime Farmland,” “Farmland of Statewide Importance,” “Unique Farmland,” or “Farmland of Local Importance.” Thus, “Farmland” on the Project site includes approximately 297.8 acres of “Prime Farmland,” approximately 24.6 acres of “Farmland of Statewide Importance,” approximately 4.0 acres of “Unique Farmland,” and approximately 180.3 acres of “Farmland of Local Importance,” for a total of 506.7 acres of “Farmland” on site.

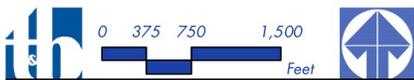
5. *Williamson Act Land Preserves and Agricultural Preserves*

Agricultural preserves are the result of Riverside County’s participation in the California Land Conservation Act (CLCA) of 1965, also known as the Williamson Act, CA Gov. Code § 51200, et seq. This program allows



Source(s): ESRI, Nearmap Imagery (2020), RCTLMA (2019)

Figure 4.2-1



FMMP Farmland Map



owners of agricultural land to have their properties assessed for tax purposes on the basis of agricultural production rather than current market value. The main purpose of the Act is to encourage property owners to continue to farm their land, and to prevent the premature conversion of farmland to urban uses. According to Riverside County GIS, the Project site is not included in any agricultural preserves, and is not subject to a Williamson Act Contract. The nearest agricultural preserve and Williamson Act contracted land occurs approximately 0.6 mile southwest of the Project site, south of Nuevo Road.

4.2.2 APPLICABLE REGULATORY REQUIREMENTS

The following is a brief description of the state and local environmental laws and related regulations governing the protection of agricultural and forest resources.

A. State Regulations

1. **California Land Conservation Act (CLCA)**

The California Land Conservation Act (CLCA) of 1965, also known as the Williamson Act (CA Gov. Code § 51200, et seq.), enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value. Pursuant to Government Code § 51230, counties and cities may establish Agricultural Preserves, which define boundaries of those areas within which the city or county will be willing to enter into contracts pursuant to the CLCA; Contracts pursuant to the CLCA only are allowed for areas within established Agricultural Preserves. Agricultural Preserves generally must be at least 100 acres in size; however, a city or county may allow for lesser acreage if a finding is made that the characteristics of the agricultural enterprises in the area are unique and that the establishment of preserves of less than 100 acres is consistent with the general plan of the county or city. Once established, land uses within an Agricultural Preserve must be agricultural in nature, or other such uses that are not incompatible with agricultural uses. For lands within Agricultural Preserves, individual land owners may enter into a Contract with a county or city, which would provide for the exclusion of uses other than agricultural, and other than those compatible with agricultural uses, for the duration of the Contract, even if the land is sold to a new owner. In return for entering into a Contract, the landowner is granted preferential taxes that are based upon agricultural and related land uses rather than fair market value. Contracts may be exited at the option of the landowner or local government by initiating the process of term nonrenewal. Under this process, the remaining contract term (nine years in the case of an original term of ten years) is allowed to lapse, with the contract null and void at the end of the term. During the nonrenewal process, the annual tax assessment continually increases each year until it is equivalent to current tax rates at the end of the nonrenewal period. Under a set of specifically defined circumstances, a Contract may be cancelled without completing the process of term nonrenewal. Contract cancellation, however, involves a comprehensive review and approval process, and the payment of a fee by the landowner equal to 12.5 percent of the full market value of the property in question. (CDC, 2019a; CA Legislative Info, n.d.)



2. *Farmland Mapping and Monitoring Program (FMMP)*

The goal of the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) is to provide consistent, timely, and accurate data to decision makers for use in planning for the present and future of California's agricultural land resources. To meet this goal, FMMP's objective is to provide maps and statistical data to the public, academia, and local, state, and federal governments to assist them in making informed decisions for the best utilization of California's farmland. The FMMP was established in 1982 in response to what was by then a critical need for data on the nature, location, and extent of farmland, grazing land, and urban built-up areas in the State. Government Code § 65570 mandates FMMP to biennially report to the Legislature on the conversion of farmland and grazing land, and to provide maps and data to local government and the public. The FMMP also was directed to prepare and maintain an automated map and database system to record and report changes in the use of agricultural lands. It was the intent of the Legislature and a broad coalition of building, business, government, and conservation interests that FMMP be non-regulatory, and provide a consistent and impartial analysis of agricultural land use and change in California. With this in mind, FMMP provides basic data from which observations and analyses can be made in the land use planning process. (CDC, 2004, p. 3)

Pursuant to the FMMP, all lands within California are classified into one of seven map categories. The minimum mapping unit is generally 10 acres, except as otherwise noted (CDC, 2004, p. 6). A description of the seven map categories identified as part of the FMMP is included above in subsection 4.2.1.B.

3. *California Forest Practice Act*

The California Department of Forestry and Fire Protection (CAL FIRE) enforces the laws that regulate logging on privately-owned lands in California. The Forest Practice Act was enacted in 1973 to ensure that logging is done in a manner that will preserve and protect fish, wildlife, forests and streams. The State Board of Forestry and Fire Protection enacts and enforces additional rules to protect these resources. (CAL FIRE, n.d.)

CAL FIRE ensures that private landowners abide by these laws when harvesting trees. Although there are specific exemptions in some cases, compliance with the Forest Practice Act and Board rules apply to all commercial harvesting operations for landowners of small parcels, to ranchers owning hundreds of acres, and large timber companies with thousands of acres. (CAL FIRE, n.d.)

The Timber Harvesting Plan (THP) is the environmental review documents submitted by landowners to CAL FIRE outlining what timber he or she wants to harvest, how it will be harvested, and the steps that will be taken to prevent damage to the environment. THPs are prepared by Registered Professional Foresters (RPFs) who are licensed to prepare these comprehensive, detailed plans. THPs can range from about 100 pages to more than 500 pages. (CAL FIRE, n.d.)

CAL FIRE does not have the authority to deny a THP that is in compliance with state and federal rules and laws, simply because the logging plan is unpopular with the public. The Department reviews and approves between 500 to 1400 THPs each year. A THP that does not comply with all forestry and environmental



regulations is returned to the RPF. It is only approved after the RPF and landowner agree to make the changes necessary to ensure compliance with all laws. CAL FIRE follows-up on approved THPs with site inspections and can shut down operations, cite or fine RPFs, Licensed Timber Operators (LTOs), and landowners if illegal operations are found. (CAL FIRE, n.d.)

B. Local Regulations

The following ordinances address farmland and agricultural preserves within unincorporated Riverside County.

- Riverside County Ordinance No. 509: This ordinance establishes uniform rules which apply to Agricultural Preserves. This ordinance determines which uses are agricultural or compatible uses within an Agricultural Preserve and prohibits all other uses within an Agricultural Preserve.
- Riverside County Ordinance No. 625: This “Right-to-Farm” Ordinance requires that development of residential uses adjacent to properties zoned primarily for agricultural purposes be regulated. Specifically, Ordinance No. 625 states that if any agricultural operation that has been in place for at least three years and is not considered a nuisance operation at the time the operation began, no change in surrounding land uses shall cause said operation to become a nuisance. A note is to be added to the Environmental Constraints Sheet for any tentative land division that states:

“...that 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.”

If any parcel within 300 feet of the site is zoned primarily for agricultural uses at the time of occupancy permit issuance, the Project shall comply with the “Right-to-Farm” Ordinance. County Ordinance No. 625 defines land zoned for “primarily agricultural purposes” as any land lying within any one of the following zone classifications established by the Riverside County Land Use Ordinance No. 348: A-1 (Light Agriculture); A-P (Light Agriculture with Poultry); A-2 (Heavy Agriculture); A-D (Agriculture-Dairy); or C/V (Citrus/Vineyard).

4.2.3 BASIS FOR DETERMINING SIGNIFICANCE

Section II of Appendix G to the State CEQA Guidelines addresses typical adverse effects to forest and agricultural resources, and includes the following threshold questions to evaluate the Project’s impacts on forest and agricultural resources (OPR, 2018a):



- *Would the Project convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Farmland of Local Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*
- *Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?*
- *Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?*
- *Would the Project result in the loss of forest land or conversion of forest land to non-forest use?*
- *Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?*

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, are derived from Section II of Appendix G to the State CEQA Guidelines (listed above), and state that the proposed Project would have a significant impact on forest or agricultural resources if construction and/or operation of the Project would:

- a. *Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Farmland of Local Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;*
- b. *Conflict with existing agricultural zoning, agricultural use or with land subject to a Williamson Act contract or land within a Riverside County Agricultural Preserve;*
- c. *Cause development of non-agricultural uses within 300 feet of agriculturally zoned property (Ordinance No. 625 "Right-to-Farm");*
- d. *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use;*
- e. *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 Govt. Code section 51104(g));*
- f. *Result in the loss of forest land or conversion of forest land to non-forest use; or*



- g. *Involve other changes in the existing environment which, due to their location or nature, could result in con-version of forest land to non-forest use.*

The significance thresholds set forth in Riverside County’s Environmental Assessment Checklist were used to evaluate the significance of the proposed Project’s impacts on forest and agricultural resources.

4.2.4 IMPACT ANALYSIS

Threshold a.: Would the Project convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Farmland of Local Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

As mapped by the CDC’s FMMP, the Project site is mapped as containing approximately 297.8 acres of “Prime Farmland,” approximately 24.6 acres of “Farmland of Statewide Importance,” approximately 4.0 acres of “Unique Farmland,” and approximately 180.3 acres of “Farmland of Local Importance.” Implementation of the proposed Project would result in direct impacts to approximately 272.1 acres of Prime Farmland, 24.6 acres of Farmland of Statewide Importance, and 151.0 acres of Farmland of Local Importance. In addition, the remaining 25.7 acres mapped as “Prime Farmland,” 4.0 acres mapped as “Unique Farmland,” and 29.3 acres of “Farmland of Local Importance” would occur in planning areas that are proposed for open space land uses as part of the Project, and agricultural activities within these open space planning areas would not be allowed as part of the Project. Thus, the Project would preclude agricultural activities and would result in direct and indirect impacts to the approximately 297.8 acres of “Prime Farmland,” approximately 24.6 acres of “Farmland of Statewide Importance,” approximately 4.0 acres of “Unique Farmland,” and approximately 180.3 acres of “Farmland of Local Importance” that occur on site. As previously indicated, between 2014 and 2016, Riverside County had a decline in “Important Farmlands” of approximately 0.9%. The Project would contribute towards the loss of “Important Farmland” within Riverside County because agricultural production on site would be permanently precluded with implementation of the proposed Project. This is evaluated as a significant impact of the proposed Project.

Threshold b.: Would the Project conflict with existing agricultural zoning, agricultural use or with land subject to a Williamson Act contract or land within a Riverside County Agricultural Preserve?

Under existing conditions, the 582.6-acre Project site is located within an adopted specific plan (SP 239), and zoning requirements are as established by the zoning ordinance adopted in conjunction with SP 239. Specifically, the Project site is located within the Stoneridge Commerce Center Specific Plan No. 239 (SP 239), which designates the Project site with a mixture of mixed-use, commercial retail, residential, recreational, and open space land uses, with no agricultural designations applied to the Project site. Moreover, according to Riverside County GIS the nearest agriculturally-zoned property, which is zoned for “Light Agriculture, 20-acre minimum lot size (A-1-20)” occurs approximately 0.3-mile (1,505 feet) west of the Project site, and this property is not used for agricultural production under existing conditions. Due to distance to the nearest



agriculturally-zoned property, there are no components of the Project that have the potential to adversely affect agricultural uses on the nearest agriculturally-zoned property. Therefore, the Project would not conflict with existing agricultural zoning, and impacts would be less than significant. (RCIT, 2020; Google Earth, 2018)

Although the Project site has been used for agricultural production in the past, the site has not been used for agricultural production since the 1980s. Thus, the Project would not directly conflict with existing agricultural uses. Existing agricultural uses occur to the west, south, and east of the Project site, with the nearest agricultural use occurring immediately to the southeast of the southeastern corner of the Project site. However, the portion of the Project site nearest to this existing off-site agricultural use are planned as open space as part of the Project. Areas proposed for light industrial uses on site would occur approximately 0.2 mile (1,220 feet) northwest of the nearest existing agricultural use. Furthermore, the light industrial land uses proposed in the southern portions of the Project site generally are considered to be a compatible use with agricultural activities. There are no components of the proposed Project that could result in indirect impacts to off-site agricultural uses such that agricultural use of off-site properties would be adversely affected. Accordingly, Project impacts to existing agricultural uses would be less than significant.

According to Riverside County GIS, the Project site is not included in any agricultural preserves, and is not subject to a Williamson Act Contract. Thus, the Project would not result in any direct impacts to agricultural preserves or Williamson Act-contracted lands. The nearest agricultural preserve and Williamson Act contracted land occurs approximately 0.6 mile southwest of the Project site, south of Nuevo Road. There are no components of the proposed Project that have the potential to adversely affect agricultural operations at the nearest agricultural preserve/Williamson Act-contracted lands. As such, Project impacts to agricultural preserves and Williamson Act-contracted lands would be less than significant.

Threshold c.: Would the Project cause development of non-agricultural uses within 300 feet of agriculturally zoned property (Ordinance No. 625 “Right-to-Farm”)?

Pursuant to Riverside County Ordinance No. 625, “agriculturally-zoned property” includes lands that are zoned for “Light Agriculture (A-1 Zone),” “Light Agriculture with Poultry (A-P Zone),” “Heavy Agriculture (A-2 Zone),” “Agriculture-Dairy (A-D Zone),” and “Citrus/Vineyard (C/V Zone).” According to Riverside County GIS, there are no lands within 300 feet of the Project site that are zoned for A-1, A-P, A-2, A-D, or C/V. The nearest agriculturally-zoned property occurs approximately 0.3-mile (1,505 feet) west of the Project site. Therefore, the Project would not cause development of non-agricultural uses within 300 feet of agriculturally-zoned property, and no impact would occur.

Threshold d.: Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

Aside from the Project’s impacts to “Farmland” as discussed under the analysis of Threshold a., there are no components of the Project that would involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use. Although agricultural uses



occur in the Project vicinity (refer to the discussion of Threshold a.), there are no components of the proposed Project that could indirectly affect these existing agricultural uses. Additionally, the light industrial, business park, and commercial retail land uses proposed as part of the Project generally are considered to be compatible with agricultural uses. Thus, aside from the Project's direct impacts to Farmland as discussed under the analysis of Threshold a., the Project would not result in any other changes to the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use, and impacts would be less than significant.

Threshold e.: *Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Govt. Code section 51104(g))?*

Threshold f.: *Would the Project result in the loss of forest land or conversion of forest land to non-forest use?*

Threshold g.: *Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use?*

The Project site and surrounding areas are not zoned for 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 Govt. Code section 51104(g)) (RCIT, 2020). As such, the Project has no potential to conflict with such zoning, and no impact would occur.

According to Figure 4.5.2 (Forestry Resources Western Riverside County) of Riverside County EIR No. 521, which was prepared in conjunction with the County's 2015 General Plan Update, the Project site and surrounding areas do not contain any forest resources (Riverside County, 2015a, Figure 4.5.2). Based on a review of aerial imagery, there are no forest-related uses within the vicinity of the Project site (Google Earth, 2018). As such, the Project has no potential to result in the loss of forest land or conversion of forest land to non-forest use, and no impact would occur.

Furthermore, the Project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use. No impact would occur.

4.2.5 CUMULATIVE IMPACT ANALYSIS

The cumulative study area for the evaluation of potential impacts to agriculture and forestry resources includes all of western Riverside County. Lands within western Riverside County generally exhibit similar climate, geologic, and soil characteristics, and agricultural production is evaluated by Riverside County and the State of California at the County level. Additionally, agricultural lands throughout western Riverside County are subject to future development that would preclude agricultural uses, based on the various land use designations applied to lands throughout western Riverside County by the County's General Plan.



As discussed under Threshold a., the Project site contains Farmland as defined by State CEQA Guidelines Appendix G Section II(a), which would be converted to non-agricultural land use. Specifically, the Project would result in the permanent direct and indirect conversion of approximately 297.8 acres of “Prime Farmland,” approximately 24.6 acres of “Farmland of Statewide Importance,” approximately 4.0 acres of “Unique Farmland,” and approximately 180.3 acres of “Farmland of Local Importance” to non-agricultural use. Other lands within western Riverside County that are designated by the County General Plan for urban development or that may be proposed in the future for urban development (i.e., as part of future General Plan Amendments) could also result in the conversion of Farmland to non-agricultural use. The Project and other cumulative developments would contribute to the on-going loss of “Important Farmlands” within the County. Accordingly, Project impacts to Farmland would be cumulatively considerable.

As there are no lands zoned primarily for agricultural use abutting the Project site, the Project would not result in a conflict with existing agricultural zoning, and impacts would therefore be less-than-cumulatively considerable. The Project site also does not contain any agricultural uses under existing conditions, the Project site is not located within a Riverside County Agricultural Preserve, and the site is not subject to a Williamson Act contract. There are no components of the proposed Project that could indirectly affect nearby Agricultural Preserves or Williamson Act-contracted lands. Therefore, Project impacts due to a conflict with existing agricultural zoning, agricultural use or with land subject to a Williamson Act contract or land within a Riverside County Agricultural Preserve would be less-than-cumulatively considerable.

There are no lands within 300 feet of the Project site that are zoned for A-1, A-P, A-2, A-D, or C/V. The nearest agriculturally-zoned property occurs approximately 0.3-mile (1,505 feet) west of the Project site. Therefore, impacts due to development of non-agricultural uses within 300 feet of agriculturally-zoned property would be less-than-cumulatively considerable.

There are no components of the proposed Project that could indirectly result in the conversion of nearby Farmland to non-agricultural uses, beyond the direct and indirect impacts to on-site Farmlands. As such, Project impacts due to such conversion would be less-than-cumulatively considerable.

There are no forest lands in the Project vicinity, and no lands in the Project vicinity are zoned for timberland, timberland production, or forest uses. Cumulatively-considerable impacts would not occur.

4.2.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a.: Significant Direct and Cumulatively-Considerable Impact. The Project would result in the conversion of approximately 297.8 acres of “Prime Farmland,” approximately 24.6 acres of “Farmland of Statewide Importance,” approximately 4.0 acres of “Unique Farmland,” and approximately 180.3 acres of “Farmland of Local Importance” to non-agricultural use. As previously indicated, between 2014 and 2016, Riverside County had a decline in “Important Farmlands” of approximately 0.9%. The Project would contribute towards the loss of “Important Farmland” within Riverside County because agricultural production on site would be permanently precluded with implementation of the proposed Project. This represents a significant impact of the proposed Project on both a direct and cumulatively-considerable basis.



Threshold b.: Less-than-Significant Impact. Due to distance to the nearest agriculturally-zoned property, there are no components of the Project that have the potential to adversely affect agricultural uses on the nearest agriculturally-zoned property. Therefore, the Project would not conflict with existing agricultural zoning, and impacts would be less than significant. There are no components of the proposed Project that could result in indirect impacts to off-site agricultural uses such that agricultural use of off-site properties would be adversely affected. Accordingly, Project impacts to existing agricultural uses would be less than significant. Additionally, the Project site is not subject to a Williamson Act contract and is not located within any County Agricultural Preserves, and there are no components of the proposed Project that have the potential to adversely affect agricultural operations at the nearest agricultural preserve/Williamson Act-contracted lands. As such, Project impacts to agricultural preserves and Williamson Act-contracted lands would be less than significant.

Threshold c.: No Impact. There are no lands within 300 feet of the Project site that are zoned primarily for agricultural use, as defined by Ordinance No. 625. As such, the Project would not cause development of non-agricultural uses within 300 feet of agriculturally-zoned property, and no impact would occur.

Threshold d.: Less-than-Significant Impact. The Project would not result in any other changes to the existing environment that could result in the conversion of off-site Farmland to non-agricultural use, and impacts would be less than significant.

Thresholds e., f., and g.: No Impact. There are no forest lands in the Project vicinity, and no lands in the Project vicinity are zoned for timberland, timberland production, or forest uses. The Project would not result in the conversion of forest land to non-forest use. No impact would occur.

4.2.7 COUNTY REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

Applicable County Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

- In the event that zoning changes are approved in the Project vicinity to establish new agriculturally-zoned lands as defined by Riverside County Ordinance No. 625, the provisions of Ordinance No. 625 would apply. Ordinance No. 625 requires that when lands are developed adjacent to properties zoned primarily for agricultural purposes (that support agricultural operations that have been in place for at least three years and not considered a nuisance operation at the time the operation began), future land buyers must be notified of any agricultural operations that are on-going in the area, and mandate that such agricultural uses shall not be the subject of nuisance complaints.

Mitigation

There are no feasible mitigation measures for impacts associated with converting Farmland to non-agricultural use.



On-site mitigation would not be feasible, as development of a light industrial, business park, and commercial retail development cannot co-exist with agricultural uses, and restricting a small portion of the land for agricultural uses would not be economically feasible for agricultural operations. Further, it would not be economically viable for the Project Applicant to reserve all or a portion of the Project site for agricultural uses, as reservation of the land would reduce the viability of future development of the Project site with light industrial, business park, and commercial retail land uses by reducing the areas planned for future development. The resulting planning area configurations would not be ideal for the Project's proposed light industrial, business park, and commercial retail land uses, thereby resulting in an inefficient development pattern on site as compared to the development pattern that would result from Project implementation. Preservation of agricultural lands on site also could result in land use conflicts between the agricultural activities and the proposed light industrial, business park, and commercial retail land uses, which could include conflicts between farm equipment and Project-related truck and passenger vehicle traffic. Additionally, agricultural uses on portions of the Project site likely would not be feasible due to the limited size and configuration of the areas that would be required to be preserved for agricultural uses. Agricultural uses also would be incompatible with development of the Project and other urbanized uses which exist or will exist in the future.

Off-site mitigation would also not be feasible. Available agricultural land within the general Project area are subject to the identical market conditions and challenges that other agricultural operations have faced before making the decision to cease operating or relocate; namely, market pressures related to urbanization, increasing expenses, and declining profitability. As discussed in the General Plan EIR (SCH No. 2009041065), similar agriculture operations either are in the process of converting to urbanized land uses, or are relatively small and surrounded by urban development on all sides. As development in Riverside County continues, these locations will become less viable for agriculture, and significant agricultural operations are not likely to continue. Therefore, off-site mitigation would be economically infeasible, or would be precluded due to the unavailability of appropriate mitigation land. Case law supports the finding that a Lead Agency need not require mitigation where the EIR noted the long-term trend in agricultural land conversion due to development pressures in the region and concluded that mitigation was not feasible (*Defend the Bay v. City of Irvine* (2004) 119 Cal.App.4th 1261, and *Cherry Valley Pass Acres, Neighbors v. City of Beaumont* (2010) 190 Cal.App.4th 316; and *King & Gardiner Farms v County of Kern* (2020) 45 CA5th 814). Specifically, in the *King & Gardiner Farms* case, the court held that a measure requiring conservation easements over off-site farmland would not provide adequate mitigation for the loss of farmland that would result from the project. The court reasoned that conservation easements do not compensate for the impact of converting farmland to another use because they do not create new farmland to offset the loss of the converted farmland. Accordingly, feasible mitigation is not available to reduce impacts associated with the conversion of approximately 297.8 acres of "Prime Farmland," approximately 24.6 acres of "Farmland of Statewide Importance," approximately 4.0 acres of "Unique Farmland," and approximately 180.3 acres of "Farmland of Local Importance" to non-agricultural use to non-agricultural use.



4.2.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a.: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. Feasible mitigation measures are not available for the Project's conversion of approximately 297.8 acres of "Prime Farmland," approximately 24.6 acres of "Farmland of Statewide Importance," approximately 4.0 acres of "Unique Farmland," and approximately 180.3 acres of "Farmland of Local Importance" to non-agricultural use.

Although it may be possible in some circumstances for impacts to agricultural land to be partially mitigated through the acquisition of off-site properties and placing such properties into permanent agricultural easements (i.e., compensatory mitigation), in this case such compensatory mitigation does not meet any of the definitions of mitigation as provided by State CEQA Guidelines § 15370. Specifically, off-site mitigation would not result in an avoidance of the impact by limiting the Project's scope (§ 15370[a]) and would not minimize impacts to agriculturally zoned property "by limiting the degree or magnitude of the Project and its implementation" (§ 15370[b]). Placing existing off-site agricultural lands into a conservation easement also would not rectify the Project's impacts to agriculturally zoned land by "repairing, rehabilitating, or restoring the impacted environment" (§ 15370[c]), given that such a conservation easement would encompass lands that already are suitable for, if not actively being used for, agricultural production. Similarly, such mitigation also would not meet the definition of State CEQA Guidelines § 15370(d) by "compensating for the impact by replacing or providing substitute resources or environments or in the form of conservation easements" because conservation easements would encompass lands that already are suitable for, if not actively being used for, agricultural production, and a conservation easement would not result in the compensation of Project impacts to Farmland. Finally, because no new agricultural lands would be created, off-site agricultural easements would not result in the replacement or establishment of "substitute resources or environments" (§ 15370[e]). Therefore, Riverside County finds that off-site mitigation for land containing important agricultural resources is not a viable form of mitigation pursuant to State CEQA Guidelines § 15370 (See also the discussion above in subsection 4.2.7 regarding the infeasibility of off-site mitigation).

Accordingly, a direct and cumulatively-considerable impact due to the conversion of Farmland to non-agricultural use would occur for which no feasible mitigation is available. Thus, impacts would be significant and unavoidable.



4.3 AIR QUALITY

This Subsection is based on a technical report prepared by ECORP, titled, “Air Quality & Greenhouse Gas Assessment, Stoneridge Commerce Center Specific Plan” (herein, “AQA”), which is dated December 2020 and is included as *Technical Appendix B1* to this EIR (ECORP, 2020b). This Subsection also is based in part on a focused health risk assessment prepared to evaluate an alternative truck route (i.e., the Southern Truck Route, as described in EIR subsection 3.6.2.B.2). The focused health risk assessment addressing the Southern Truck Route also was prepared by ECORP, is entitled, “Stoneridge Commerce Center Alternative Truck Route,” is dated April 21, 2021, and is included as *Technical Appendix B2* to this EIR (ECORP, 2021a). Refer to Section 7.0, *References*, for a complete list of reference sources.

4.3.1 EXISTING CONDITIONS

Air quality in a region is determined by its topography, meteorology, and existing air pollutant sources. These factors are discussed below, along with the current regulatory structure that applies to the South Coast Air Basin (SoCAB), which encompasses the Project site, pursuant to the regulatory authority of the South Coast Air Quality Management District (SCAQMD). Ambient air quality is commonly characterized by climate conditions, the meteorological influences on air quality, and the quantity and type of pollutants released. The air basin is subject to a combination of topographical and climatic factors that reduce the potential for high levels of regional and local air pollutants. The following subsection describes the pertinent characteristics of the air basin and provides an overview of the physical conditions affecting pollutant dispersion in the Project area. (ECORP, 2020b, p. 8)

A. South Coast Air Basin

The California Air Resources Board (CARB) divides the state into air basins that share similar meteorological and topographical features. The Project site lies in the SoCAB, which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange County. The air basin is on a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean on the southwest, with high mountains forming the remainder of the perimeter. (ECORP, 2020b, p. 8)

1. Temperature and Precipitation

The air basin is part of a semi-permanent high-pressure zone in the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds. The annual average temperature varies little throughout the 6,645-square-mile SoCAB, ranging from the low 60s to the high 80s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. (ECORP, 2020b, p. 8)

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all annual rains fall between November and April. Summer rainfall is normally restricted to widely scattered



thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains. (ECORP, 2020b, p. 8)

2. Humidity

Although the SoCAB has a semiarid climate, the air near the earth's surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog, especially along the coast, are frequent, and low clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SoCAB. (ECORP, 2020b, p. 8)

3. Wind

Wind patterns across the south coastal region are characterized by westerly or southwesterly onshore winds during the day and by easterly or northeasterly breezes at night. Wind speed is higher during the dry summer months than during the rainy winter. Between periods of wind, air stagnation may occur in both the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall, surface high-pressure systems over the SoCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished. The mountain ranges to the east affect the diffusion of pollutants by inhibiting the eastward transport of pollutants. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal Southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions. (ECORP, 2020b, p. 9)

4. Inversions

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, two similarly distinct types of temperature inversions control the vertical depth through which pollutants are mixed. These inversions are the marine/subsidence inversion and the radiation inversion. The height of the base of the inversion at any given time is known as the "mixing height." The combination of winds and inversions is a critical determinant leading to highly degraded air quality in the summer and generally good air quality in the winter in Riverside County. (ECORP, 2020b, p. 9)

B. Criteria Air Pollutants

Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health with a determined margin of safety. Ozone (O₃), coarse particulate matter (PM₁₀), and fine particulate matter (PM_{2.5}) are generally considered to be regional pollutants because they or their precursors affect air quality on a regional scale. Pollutants such as carbon monoxide (CO), nitrogen dioxide (NO₂), and sulfur dioxide (SO₂) are considered to be local pollutants because they tend to accumulate in the air locally. Particulate matter (PM)



also is considered a local pollutant. Health effects commonly associated with criteria pollutants are summarized in Table 4.3-1, *Criteria Air Pollutants – Summary of Common Sources and Effects*. (ECORP, 2020b, p. 9)

Table 4.3-1 Criteria Air Pollutants – Summary of Common Sources and Effects

Pollutant	Major Manmade Sources	Human Health & Welfare Effects
CO	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, effecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
NO ₂	A reddish-brown gas formed during fuel combustion for motor vehicles, energy utilities and industrial sources.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Causes brown discoloration of the atmosphere.
O ₃	Formed by a chemical reaction between reactive organic gases (ROGs) and nitrous oxides (N ₂ O) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, solvents, paints and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
PM ₁₀ & PM _{2.5}	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
SO ₂	A colorless, nonflammable gas formed when fuel containing sulfur is burned. Examples are refineries, cement manufacturing, and locomotives.	Respiratory irritant. Aggravates lung and heart problems. Can damage crops and natural vegetation. Impairs visibility.

(ECORP, 2020b, Table 2-1)

- Carbon Monoxide (CO):** CO, in the urban environment, is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. CO combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. High CO concentrations can cause headaches, aggravate cardiovascular disease, and impair central nervous system functions. CO concentrations can vary greatly over comparatively short distances. Relatively high concentrations of CO are typically found near crowded intersections and along heavy roadways with slow moving traffic. Even under the most severe meteorological and traffic conditions, high concentrations of CO are limited to locations within relatively short distances (i.e., up to 600 feet or 185 meters) of the source. Overall CO emissions are decreasing as a result of the Federal Motor Vehicle Control Program, which has mandated increasingly lower emission levels for vehicles manufactured since 1973. CO levels in the SoCAB are in compliance with the state and federal one- and eight-hour standards. (ECORP, 2020b, p. 10)
- Nitrogen Oxides (NO_x):** Nitrogen gas comprises about 80 percent of the air and is naturally occurring. At high temperatures and under certain conditions, nitrogen can combine with oxygen to form several



different gaseous compounds collectively called nitric oxides (NO_x). Motor vehicle emissions are the main source of NO_x in urban areas. NO_x is very toxic to animals and humans because of its ability to form nitric acid with water in the eyes, lungs, mucus membrane, and skin. In animals, long-term exposure to NO_x increases susceptibility to respiratory infections, and lowering resistance to such diseases as pneumonia and influenza. Laboratory studies show that susceptible humans, such as asthmatics, who are exposed to high concentrations can suffer from lung irritation or possible lung damage. Precursors of NO_x, such as NO and NO₂, attribute to the formation of O₃ and PM_{2.5}. Epidemiological studies have also shown associations between NO₂ concentrations and daily mortality from respiratory and cardiovascular causes and with hospital admissions for respiratory conditions. (ECORP, 2020b, pp. 10-11)

- **Ozone (O₃):** O₃ is a secondary pollutant, meaning it is not directly emitted. It is formed when volatile organic compounds (VOCs) or ROG and NO_x undergo photochemical reactions that occur only in the presence of sunlight. The primary source of ROG emissions is unburned hydrocarbons in motor vehicle and other internal combustion engine exhaust. NO_x forms as a result of the combustion process, most notably due to the operation of motor vehicles. Sunlight and hot weather cause ground-level O₃ to form. Ground-level O₃ is the primary constituent of smog. Because O₃ formation occurs over extended periods of time, both O₃ and its precursors are transported by wind and high O₃ concentrations can occur in areas well away from sources of its constituent pollutants. People with lung disease, children, older adults, and people who are active can be affected when O₃ levels exceed ambient air quality standards. Numerous scientific studies have linked ground-level O₃ exposure to a variety of problems including lung irritation, difficult breathing, permanent lung damage to those with repeated exposure, and respiratory illnesses. (ECORP, 2020b, p. 11)
- **Particulate Matter (PM₁₀ and PM_{2.5}):** Particulate matter includes both aerosols and solid particulates of a wide range of sizes and composition. Of concern are those particles smaller than or equal to 10 microns in diameter size (PM₁₀) and smaller than or equal to 2.5 microns in diameter (PM_{2.5}). Smaller particulates are of greater concern because they can penetrate deeper into the lungs than larger particles. PM₁₀ is generally emitted directly as a result of mechanical processes that crush or grind larger particles or form the resuspension of dust, typically through construction activities and vehicular travel. PM₁₀ generally settles out of the atmosphere rapidly and is not readily transported over large distances. PM_{2.5} is directly emitted in combustion exhaust and is formed in atmospheric reactions between various gaseous pollutants, including NO_x, sulfur oxides (SO_x) and VOCs. PM_{2.5} can remain suspended in the atmosphere for days and/or weeks and can be transported long distances. (ECORP, 2020b, p. 11)

The principal health effects of airborne PM are on the respiratory system. Short-term exposure of high PM_{2.5} and PM₁₀ levels are associated with premature mortality and increased hospital admissions and emergency room visits. Long-term exposure is associated with premature mortality and chronic respiratory disease. According to the U.S. Environmental Protection Agency (USEPA), some people are much more sensitive than others to breathing PM₁₀ and PM_{2.5}. People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worse illnesses; people with



bronchitis can expect aggravated symptoms; and children may experience decline in lung function due to breathing in PM₁₀ and PM_{2.5}. Other groups considered sensitive include smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive because many breathe through their mouths. (ECORP, 2020b, pp. 11-12)

C. Toxic Air Contaminants (TACs)

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis. (ECORP, 2020b, p. 12)

There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Additionally, diesel engines emit a complex mixture of air pollutants composed of gaseous and solid material. The solid emissions in diesel exhaust are known as diesel particulate matter (DPM). In 1998, California identified DPM as a TAC based on its potential to cause cancer, premature death, and other health problems (e.g., asthma attacks and other respiratory symptoms). Those most vulnerable are children (whose lungs are still developing) and the elderly (who may have other serious health problems). Overall, diesel engine emissions are responsible for the majority of California's known cancer risk from outdoor air pollutants. Diesel engines also contribute to California's PM_{2.5} air quality problems. Public exposure to TACs can result from emissions from normal operations, as well as from accidental releases of hazardous materials during upset conditions. The health effects of TACs include cancer, birth defects, neurological damage, and death. (ECORP, 2020b, p. 12)

DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. Diesel exhaust is a complex mixture of particles and gases produced when an engine burns diesel fuel. DPM is a concern because it causes lung cancer; many compounds found in diesel exhaust are carcinogenic. DPM includes the particle-phase constituents in diesel exhaust. The chemical composition and particle sizes of DPM vary between different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), fuel formulations (high/low sulfur fuel), and the year of the engine. Some short-term (acute) effects of diesel exhaust include eye, nose, throat, and lung irritation, and diesel exhaust can cause coughs, headaches, light-headedness, and nausea. DPM poses the greatest health risk among the TACs; due to their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung. (ECORP, 2020b, p. 12)

DPM is emitted from both mobile and stationary sources. In California, on-road diesel-fueled engines contribute approximately 24 percent of the statewide total, with an additional 71 percent attributed to other mobile sources such as construction and mining equipment, agricultural equipment, and transport refrigeration



units. Stationary sources contribute about five percent of total DPM. It should be noted that CARB has developed several plans and programs to reduce diesel emissions such as the Diesel Risk Reduction Plan, the Statewide Portable Equipment Registration Program, and the Diesel Off-Road Reporting System. (ECORP, 2020b, p. 52)

Diesel exhaust and many individual substances contained in it (including arsenic, benzene, formaldehyde, and nickel) have the potential to contribute to mutations in cells that can lead to cancer. Long-term exposure to diesel exhaust particles poses the highest cancer risk of any TAC evaluated by the Office of Environmental Health Hazard Assessment (OEHHA). CARB estimates that about 70 percent of the cancer risk that the average Californian faces from breathing toxic air pollutants stems from diesel exhaust particles. (ECORP, 2020b, pp. 52-53)

In its comprehensive assessment of diesel exhaust, OEHHA analyzed more than 30 studies of people who worked around diesel equipment including truck drivers, railroad workers, and equipment operators. The studies showed these workers were more likely to develop lung cancer than workers who were not exposed to diesel emissions. These studies provide strong evidence that long-term exposure to diesel exhaust increases the risk of lung cancer. Using information from OEHHA's assessment, CARB estimates that diesel particle levels measured in California's air in 2000 could cause 540 "excess" cancers in a population of one million people over a 70-year lifetime. Other researchers and scientific organizations, including the National Institute for Occupational Safety and Health, have calculated cancer risks from diesel exhaust similar to those developed by OEHHA and CARB. (ECORP, 2020b, p. 53)

Diesel engines are a major source of fine-particulate pollution. The elderly and people with emphysema, asthma, and chronic heart and lung disease are especially sensitive to fine-particulate pollution. Numerous 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. Because children's lungs and respiratory systems are still developing, they are also more susceptible than healthy adults to fine particles. Exposure to fine particles is associated with increased frequency of childhood illnesses and can also reduce lung function in children. In California, diesel exhaust particles have been identified as a carcinogen. For construction activity, DPM is the primary TAC of concern. (ECORP, 2020b, p. 53)

D. Ambient Air Quality

Ambient air quality at the Project site can be inferred from ambient air quality measurements conducted at nearby air quality monitoring stations. CARB maintains more than 60 monitoring stations throughout California. The Perris (237 ½ North D Street, Perris) air quality monitoring station, located approximately 3.5 miles southwest of the Project site, is the closest station to the site. The Perris monitoring station monitors ambient concentrations of O₃ and PM₁₀, two of the three pollutants in nonattainment of air quality standards in the Project region. PM_{2.5} ambient concentrations are monitored at the Riverside – Rubidoux (5888 Mission Boulevard, Riverside) air quality monitoring station, located approximately 18.4 miles northwest of the Project site. NO₂ and CO concentrations are monitored at the air basin level. Ambient emission concentrations will



vary due to localized variations in emission sources and climate and should be considered “generally” representative of ambient concentrations in the development area. (ECORP, 2020b, pp. 12-13)

Table 4.3-2, *Summary of Ambient Air Quality Data*, summarizes the published data concerning O₃, PM₁₀, and PM_{2.5} since 2016 from the Perris monitoring station and Riverside – Rubidoux monitoring station for each year that the monitoring data is provided. O₃, PM₁₀, and PM_{2.5} are the pollutant species most potently affecting the Project region. Table 4.3-2 also summarizes the published data concerning NO₂ and CO. (ECORP, 2020b, p. 13)

Table 4.3-2 Summary of Ambient Air Quality Data

Pollutant Standards	2017	2018	2019
O₃			
Max 1-hour concentration (ppm)	0.120	0.117	0.118
Max 8-hour concentration (ppm) (state/federal)	0.106 / 0.105	0.103 / 0.103	0.096 / 0.095
Number of days above 1-hour standard (state/federal)	33 / 0	31 / 0	28 / 0
Number of days above 8-hour standard (state/federal)	86 / 80	68 / 67	66 / 64
NO₂			
Max 1-hour concentration (ppb) (state/federal)	65.0 / 65.1	55.0 / 55.4	56.0 / 56.0
Number of days above 1-hour standard (state/federal)	0 / 0	0 / 0	0 / 0
CO			
Max concentration (ppm) (state/federal)	3.58 / 3.58	4.67 / 4.67	3.96 / 3.96
Number of days above standard (state/federal)	0 / 0	0 / 0	0 / 0
PM₁₀			
Max 24-hour concentration (µg/m ³) (state/federal)	75.4 / 75.4	64.4 / 64.4	92.1 / 97.0
Number of days above 24-hour standard (state/federal)	68.7 / 0	12.1 / 0	24.5 / 0
PM_{2.5}			
Max 24-hour concentration (µg/m ³) (state/federal)	50.3 / 50.3	68.3 / 66.3	57.6 / 55.7
Number of days above federal 24-hour standard	7.2	3.1	5.2

Source: CARB 2020

CO values are specific to the years 2010, 2011, and 2012, the latest available data for the South Coast Air Basin.

µg/m³ = micrograms per cubic meter; ppm = parts per million; ppb = parts per billion

* = Insufficient data available

(ECORP, 2020b, Table 2-2)

The USEPA and CARB designate air basins or portions of air basins and counties as being in “attainment” or “nonattainment” for each of the criteria pollutants. Areas that do not meet the standards are classified as nonattainment areas. The National Ambient Air Quality Standards (NAAQS) (other than O₃, PM₁₀, PM_{2.5}, and



those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. The NAAQS for O₃, PM₁₀, and PM_{2.5} are based on statistical calculations over one- to three-year periods, depending on the pollutant. The California Ambient Air Quality Standards (CAAQS) are not to be exceeded during a three-year period. The attainment status for the SoCAB is included in Table 4.3-3, *Attainment Status of Criteria Pollutants*. (ECORP, 2020b, p. 14)

Table 4.3-3 Attainment Status of Criteria Pollutants

Pollutant	State Designation	Federal Designation
O ₃	Nonattainment	Nonattainment
PM ₁₀	Nonattainment	Attainment
PM _{2.5}	Nonattainment	Nonattainment
CO	Attainment	Unclassified/Attainment
NO ₂	Attainment	Unclassified/Attainment
SO ₂	Attainment	Unclassified/Attainment

(ECORP, 2020b, Table 2-3)

The determination of whether an area meets the State and federal standards is based on air quality monitoring data. Some areas are unclassified, which means there is insufficient monitoring data for determining attainment or nonattainment. Unclassified areas are typically treated as being in attainment. Because the attainment/nonattainment designation is pollutant-specific, an area may be classified as nonattainment for one pollutant and attainment for another. Similarly, because the State and federal standards differ, an area could be classified as attainment for the federal standards of a pollutant and as nonattainment for the State standards of the same pollutant. The region is designated as a nonattainment area for the federal O₃ and PM_{2.5} standards and is also a nonattainment area for the State standards for O₃, PM₁₀, and PM_{2.5}. (ECORP, 2020b, p. 14)

E. Sensitive Receptors

Sensitive receptors are defined as facilities or land uses that include members of the population who are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. (ECORP, 2020b, p. 14)

The nearest existing noise-sensitive land uses to the Project site are Lakeside Middle School and Sierra Vista Elementary School to the west of the northern portion of the site, with a residential development beyond. Lakeside Middle School is located closest to the Project site boundary approximately 2,000 feet (0.4 miles) to the west. The installation of the proposed offsite water line would occur south of the Middle School, largely within the Walnut Avenue right-of-way. (ECORP, 2020b, pp. 14-15)



It is also noted that while not currently constructed, the approved McCanna Hills development is located directly adjacent to the Project's western boundary. Once built-out, commercial and residential land uses would exist on what is currently vacant land adjacent to the Project's western boundary. Additionally, lands to the east of the Project site are designated for future residential development by the Riverside County General Plan. (ECORP, 2020b, p. 15)

4.3.2 APPLICABLE REGULATORY REQUIREMENTS

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

A. Federal Regulations

1. Federal Clean Air Act

The Clean Air Act (CAA; 42 U.S.C. § 7401 et seq.) is the comprehensive federal law that regulates air emissions from stationary and mobile sources. Among other things, this law authorizes Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) to protect public health and public welfare and to regulate emissions of hazardous air pollutants, which include O₃, CO, NO_x, SO₂, PM₁₀, PM_{2.5}, and lead. (EPA, n.d.)

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

The sections of the federal CAA most directly applicable to the development of the Project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions). Title I provisions address the urban air pollution problems of ozone (smog), carbon monoxide (CO), and particulate matter (PM₁₀). Specifically, it clarifies how areas are designated and re-designated "attainment." It also allows EPA to define the boundaries of "nonattainment" areas: geographical areas whose air quality does not meet Federal air quality standards designed to protect public health. (EPA, 2017a) Mobile source emissions are regulated in accordance with the CAA Title II provisions. These standards are intended to reduce tailpipe emissions of hydrocarbons, CO, and NO_x on a phased-in basis that began in model year 1994. Automobile manufacturers also are required to reduce vehicle emissions resulting from the evaporation of gasoline during refueling. These provisions further require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. (EPA, 2017b)

Section 112 of the Clean Air Act addresses emissions of hazardous air pollutants. Prior to 1990, CAA established a risk-based program under which only a few standards were developed. The 1990 Clean Air Act Amendments revised Section 112 to first require issuance of technology-based standards for major sources



and certain area sources. "Major sources" are defined as a stationary source or group of stationary sources that emit or have the potential to emit 10 tons per year or more of a hazardous air pollutant or 25 tons per year or more of a combination of hazardous air pollutants. An "area source" is any stationary source that is not a major source. (EPA, n.d.)

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

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

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

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

B. State Regulations

1. *California Clean Air Act (CCAA)*

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



2. *Air Toxic Hot Spots Act*

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

3. *Air Quality Management Planning*

The California Air Resources Board (CARB) and local air districts throughout the State are responsible for developing clean air plans to demonstrate how and when California will attain air quality standards established under both the CAA and CCAA. For the areas within California that have not attained air quality standards, CARB works with local air districts to develop and implement State and local attainment plans. In general, attainment plans contain a discussion of ambient air quality data and trends; a baseline emissions inventory; future year projections of emissions, which account for growth projections and already adopted control measures; a comprehensive control strategy of additional measures needed to reach attainment; an attainment demonstration, which generally involves complex modeling; and contingency measures. Plans may also include interim milestones for progress toward attainment. Air quality planning activities undertaken by CARB also include the development of policies, guidance, and regulations related to State and federal ambient air quality standards; coordination with local agencies on transportation plans and strategies; and providing assistance to local districts and transportation agencies. (CARB, 2012)

4. *California Air Resources Board Rules*

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

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

5. *South Coast Air Quality Management District Rules*

The South Coast Air Quality Management District (SCAQMD) enforces rules related to air pollutant emissions in the SCAB. Rules with applicability to the Project include, but are not limited to, those listed below.



- SCAQMD Rule 201: Permit to Construct
- SCAQMD Rule 402: Nuisance Odors
- SCAQMD Rule 403: Fugitive Dust
- SCAQMD Rule 431.2: Low Sulfur Fuel
- SCAQMD Rule 1113: Architectural Coatings
- SCAQMD Rule 1186: PM₁₀ Emissions from Paved and Unpaved Roads, and Livestock Operations
- SCAQMD Rule 1401: New Source Review of Toxic Air Contaminants
- SCAQMD Rule 1403: Asbestos Emissions from Demolition/Renovation Activities

Refer to subsection 2.2.3 of the Project's AQA for a more detailed discussion of applicable SCAQMD regulations and requirements.

6. *Truck & Bus Regulation*

Under the Truck and Bus Regulation, adopted by CARB in 2008, all diesel truck fleets operating in California are required to adhere to an aggressive schedule for upgrading and replacing heavy-duty truck engines. Older, more polluting trucks are required to be replaced first, while trucks that already have relatively clean engines are not required to be replaced until later. Pursuant to the Truck and Bus Regulation, all pre-1994 heavy trucks (trucks with a gross vehicle weight rating greater than 26,000 pounds) were to be removed from service on California roads by 2015. Between 2015 and 2020, pre-2000 heavy trucks will be equipped with PM filters and will be upgraded or replaced with an engine that meets 2010 emissions standards. The upgrades/replacements will occur on a rolling basis based on model year. By 2023, all heavy trucks operating on California roads must have engines that meet 2010 emissions standards. Lighter trucks (those with a gross vehicle weight rating of 14,001 to 26,000 pounds) must adhere to a similar schedule, and will all be replaced by 2020. (CARB, 2019c)

7. *Advanced Clean Truck Regulation*

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



8. Senate Bill 535 – Disadvantaged Communities

Senate Bill 535 (“SB 535”; De León, Chapter 830, 2012) recognizes the potential vulnerability of low-income and disadvantaged communities to poor air quality. Disadvantaged communities in California are specifically targeted for investment of proceeds from the State’s cap-and-trade program. These investments are aimed at improving public health, quality of life and economic opportunity in California’s most burdened communities at the same time reducing pollution that causes climate change. Authorized by the California Global Warming Solutions Act of 2006 (AB 32), the State’s cap-and-trade program is one of several strategies that California uses to reduce greenhouse gas emissions that cause climate change. The funds must be used for programs that further reduce emissions of greenhouse gases. SB 535 requires that 25 percent of the proceeds from the Greenhouse Gas Reduction Fund go to projects that provide a benefit to disadvantaged communities. The California Environmental Protection Agency (CalEPA) is charged with the duty to identify disadvantaged communities. CalEPA bases its identification of these communities on geographic, socioeconomic, public health, and environmental hazard criteria (Health and Safety Code, section 39711, subsection (a)). In this capacity, CalEPA currently defines a disadvantaged community, from an environmental hazard and socioeconomic standpoint, as a community that scores within the top 25 percent of the census tracts, as analyzed by the California Communities Environmental Health Screening Tool Version 3.0 (CalEnviroScreen). (OEHHA, 2017)

9. Senate Bill 1000 – Environmental Justice in Local Land Use Planning

In an effort to address the inequitable distribution of pollution and associated health effects in low-income communities and communities of color, the Legislature passed and Governor Brown signed Senate Bill 1000 (SB 1000) in 2016, requiring local governments to identify environmental justice communities (called “disadvantaged communities”) in their jurisdictions and address environmental justice in their general plans. This new law has several purposes, including to facilitate transparency and public engagement in local governments’ planning and decision-making processes, reduce harmful pollutants and the associated health risks in environmental justice communities, and promote equitable access to health-inducing benefits, such as healthy food options, housing, public facilities, and recreation. SB 1000 requires environmental justice elements to identify objectives and policies to reduce unique or compounded health risks in disadvantaged communities. Generally, environmental justice elements will include policies to reduce the community’s exposure to pollution through air quality improvement. SB 1000 affirms the need to integrate environmental justice principles into the planning process to prioritize improvements and programs that address the needs of disadvantaged communities. (OAG, n.d.)

10. Assembly Bill 617

Assembly Bill 617 (AB 617) was enacted into law in 2017, and relates to criteria air pollutants and toxic air contaminants from sources other than vehicles. In response to AB 617, the California Air Resources Board (CARB) established the Community Air Protection Program (CAPP or Program). The Program’s focus is to reduce exposure in communities most impacted by air pollution. Communities around the State are working together to develop and implement new strategies to measure air pollution and reduce health impacts. This first-of-its-kind statewide effort includes community air monitoring and community emissions reduction



programs. In addition, the Legislature appropriated funding to support early actions to address localized air pollution through targeted incentive funding to deploy cleaner technologies in these communities, as well as grants to support community participation in the AB 617 process. AB 617 also includes new requirements for accelerated retrofit of pollution controls on industrial sources, increased penalty fees, and greater transparency and availability of air quality and emissions data, which will help advance air pollution control efforts throughout the State. This new effort provides an opportunity to continue to enhance air quality planning efforts and better integrate community, regional, and State level programs to provide clean air. (CARB, n.d.)

C. Local Regulations

1. Riverside County General Plan Air Quality Element

The County General Plan Air Quality Element identifies goals, policies and programs that are meant to balance the County's actions regarding land use, circulation, and other issues with their potential effects on air quality. The Air Quality Element addresses ambient air quality standards set forth by the USEPA and CARB. The Air Quality Element contains policies designed to establish a regional basis for improving air quality. The following relevant and applicable policies from the County's Air Quality Element have been identified for the Project:

AQ 1.1: Promote and participate with regional and local agencies, both public and private, to protect and improve air quality.

AQ 1.4: Coordinate with the SCAQMD and MDAQMD to ensure that all elements of air quality plans regarding reduction of air pollutant emissions are being enforced.

AQ 2.1: The County land use planning efforts shall assure that sensitive receptors are separated and protected from polluting point sources to the greatest extent possible.

AQ 2.2: Require site plan designs to protect people and land uses sensitive to air pollution through the use of barriers and/or distance from emissions sources when possible.

AQ 2.3: Encourage the use of pollution control measures such as landscaping, vegetation and other materials, which trap particulate matter or control pollution.

AQ 3.1: Allow the market place, as much as possible, to determine the most economical approach to relieve congestion and cut emissions.

AQ 3.3: Encourage large employers and commercial/industrial complexes to create Transportation Management Associations.

AQ 4.1: Require the use of all feasible building materials/methods which reduce emissions.

AQ 4.2: Require the use of all feasible efficient heating equipment and other appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces and boiler units.

AQ 4.6: Require stationary air pollution sources to comply with applicable air district rules and control measures.



AQ 4.7: To the greatest extent possible, require every project to mitigate any of its anticipated emissions which exceed allowable emissions as established by the SCAQMD, MDAQMD, SCAB, the Environmental Protection Agency and the California Air Resources Board.

AQ 4.9: Require compliance with SCAQMD Rules 403 and 403.1, and support appropriate future measures to reduce fugitive dust emanating from construction sites.

2. *Riverside County Board of Supervisors Good Neighbor Policy for Logistics and Warehouse/ Distribution Uses*

The County of Riverside Board of Supervisors *Good Neighbor Policy for Logistics and Warehouse/ Distribution Uses* (“Good Neighbor Policy”) provides a framework through which large-scale logistics and warehouse projects, such as that proposed by the Project, can be designed and operated in a way that lessens their impact on surrounding communities and the environment. It is meant to apply Best Management Practices to help minimize potential impacts to sensitive receptors and is intended to be used in conjunction with the County’s Land Use Ordinance, which provides development requirements for said projects. This policy provides a series of development and operational criteria applicable to logistics and warehouse projects that include any building larger than 250,000 square feet in size that are implemented to supplement project-level mitigation measures in order to further reduce impacts related to logistics and warehousing development and operations. A complete list of applicable Good Neighbor Policy requirements is included in subsection 2.2.3 of the Project’s AQA (*Technical Appendix B1*). It should be noted that the currently-proposed Project consists of applications for a General Plan Amendment, Specific Plan Amendment, and Change of Zone, and no site-specific development applications (e.g., plot plans, etc.) are proposed at this time. As the Good Neighbor Policy requirements relate to site-specific development and construction activities, the requirements of the Good Neighbor Policy would be enforced as part of the County’s review of future site-specific development applications, such as implementing plot plans.

4.3.3 BASIS FOR DETERMINING SIGNIFICANCE

A. Thresholds of Significance

Section III of Appendix G to the State CEQA Guidelines addresses typical adverse effects to air quality, and includes the following threshold questions to evaluate the Project’s impacts due to air quality emissions (OPR, 2018a):

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



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

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, are derived from Section II of Appendix G to the State CEQA Guidelines (listed above), and state that the proposed Project would have a significant impact due to air quality emissions if construction and/or operation of the Project would:

- Conflict with or obstruct implementation of the applicable air quality plan;*
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard;*
- Expose sensitive receptors, which are located within one (1) mile of the project site, to substantial pollutant concentrations; or*
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.*

The significance thresholds set forth in Riverside County's Environmental Assessment Checklist were used to evaluate the significance of the proposed Project's impacts due to air quality emissions.

B. SCAQMD Regional Thresholds

The significance criteria established by the applicable air quality management or air pollution control district (SCAQMD) may be relied upon to make the above determinations. According to the SCAQMD, an air quality impact is considered significant if the Proposed Project would violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The SCAQMD has established thresholds of significance for air quality for construction and operational activities of land use development projects such as that proposed, as shown in Table 4.3-4, *SCAQMD Regional Significance Thresholds (Pounds per Day)*. (ECORP, 2020b, p. 25)

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulative considerable. (ECORP, 2020b, p. 26)



Table 4.3-4 SCAQMD Regional Significance Thresholds (Pounds per Day)

Air Pollutant	Construction Activities	Operations
Reactive Organic Gas	75	55
Carbon Monoxide	550	550
Nitrogen Oxide	100	55
Sulfur Oxide	150	150
Coarse Particulate Matter	150	150
Fine Particulate Matter	55	55

(ECORP, 2020b, Table 2-4)

C. SCAQMD Localized Significance Thresholds

In addition to regional significance thresholds, the SCAQMD developed localized significance thresholds (LSTs) for emissions of NO₂, CO, PM₁₀, and PM_{2.5} generated at new development sites (offsite mobile source emissions are not included in the LST analysis protocol). LSTs represent the maximum emissions that can be generated at a Project site without expecting to cause or substantially contribute to an exceedance of the most stringent national or state ambient air quality standards. LSTs are based on the ambient concentrations of that pollutant within the Project source receptor area (SRA), as demarcated by the SCAQMD, and the distance to the nearest sensitive receptor. The Project site is located within SCAQMD SRA 24 (Perris Valley). Table 4.3-5, *Local Significance Thresholds at or within 25 Meters of a Sensitive Receptor*, shows the LSTs for a one-acre, two-acre, and five-acre project site in SRA 24 with sensitive receptors located within 25 meters of the Project site. Although the nearest existing sensitive receptor is Lakeside Middle School is located approximately 2,000 feet (610 meters) to the west, the installation of the proposed offsite water line would occur just south of the Middle School, largely within the Walnut Avenue right-of-way. It is also noted that while not currently constructed, the approved McCanna Hills development is located directly adjacent to the Project’s western boundary. Once built-out, commercial and residential land uses would exist on what is currently vacant land adjacent to the Project’s western boundary. Additionally, lands to the east of the Project site are designated for future residential development by the Riverside County General Plan. (ECORP, 2020b, p. 26)

Table 4.3-5 Local Significance Thresholds at or within 25 Meters of a Sensitive Receptor

Project Size	Pollutant (pounds per day Construction/Operations)			
	NO ₂	CO	PM ₁₀	PM _{2.5}
1 Acre	118 / 118	602 / 602	4 / 1	3 / 1
2 Acres	170 / 170	883 / 883	7 / 2	4 / 1
5 Acres	270 / 270	1,577 / 1,577	13 / 4	8 / 2

(ECORP, 2020b, Table 2-5)



D. Toxic Air Contaminant Thresholds

The SCAQMD regulates levels of air toxics through a permitting process that covers both construction and operation. The SCAQMD has adopted Rule 1401 for both new and modified sources that use materials classified as air toxics. The SCAQMD State CEQA Guidelines for permit processing consider the following types of projects significant: (ECORP, 2020b, pp. 26-27)

- Any project involving the emission of a carcinogenic or toxic air contaminant identified in SCAQMD Rule 1401 that exceeds the maximum individual cancer risk of 10 in one million if the project is constructed with best available control strategy for toxics (T-BACT) using the procedures in SCAQMD Rule 1401.
- Any project that could accidentally release an acutely hazardous material or routinely release a toxic air contaminant posing an acute health hazard above an acute or chronic hazard index of 1.0.

E. Methodology

Air quality impacts were assessed in accordance with methodologies recommended by the County of Riverside General Plan and the SCAQMD. Onsite construction-related (including worker commutes and vendors), area source, and energy source emissions were modeled using the California Emissions Estimator Model (CalEEMod), version 2016.3.2. Construction haul truck emissions and operational mobile source emissions were calculated with the 2017 version of the EMISSION FACTOR model (EMFAC) developed by CARB. Construction-generated air pollutant emissions, including proposed offsite improvements, were primarily calculated using CalEEMod model defaults for Riverside County. Emissions from blasting were calculated based on the USEPA AP-42 Compilation of Air Emissions Factors (1998; 1980). Additionally, construction-related DPM concentrations and associated dispersion generated from both off-road equipment and construction haul truck were modeled using the USEPA’s AERMOD air toxic dispersion model. Refer to subsection 2.3.3 of the Project’s AQA (*Technical Appendix B1*) for a complete discussion of the methodologies employed to estimate the Project’s air quality emissions. (ECORP, 2020b, pp. 27-28)

4.3.4 IMPACT ANALYSIS

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

As part of its enforcement responsibilities, the USEPA requires each state with nonattainment areas to prepare and submit a SIP that demonstrates the means to attain the federal standards. The SIP must integrate federal, State, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under State law, the CCAA requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the NAAQS and CAAQS. Air quality attainment plans outline emissions limits



and control measures to achieve and maintain these standards by the earliest practical date. (ECORP, 2020b, p. 47)

The Project site is located within the SoCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD is required, pursuant to the federal CAA, to reduce emissions of criteria pollutants for which the SoCAB is in nonattainment. In order to reduce such emissions, the SCAQMD drafted the 2016 AQMP. The 2016 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving State and national air quality standards. The 2016 AQMP is a regional and multi-agency effort including the SCAQMD, CARB, SCAG, and the USEPA. The plan's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans. The Project is subject to the SCAQMD's AQMP. (ECORP, 2020b, p. 47)

According to the SCAQMD, in order to determine consistency with SCAQMD's AQMP two main criteria must be addressed.

- **Consistency Criterion No. 1:** The proposed Project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

As discussed under the analysis of Threshold b., for both the Primary Land Use Plan and the Alternative Land Use Plan, Project-related construction activities have the potential to exceed the SCAQMD Regional Threshold of significance for NO_x, and under long-term operational conditions the Project has the potential to exceed the SCAQMD Regional Thresholds of significance for ROG, NO_x, and CO. As discussed under the analysis of Threshold b., the predominate source of these pollutant emissions would be due to mobile sources, primarily from heavy-duty trucks. Mobile emission cannot be regulated by the County. Therefore, the proposed Project would have the potential to cause or affect a violation of the ambient air quality standards. Additionally, because the Project would result in ROG and NO_x emissions that exceed the SCAQMD regional significance threshold during long-term operations, it could potentially delay the timely attainment of the O₃ air quality standard and/or the AQMP emission reduction requirements. As such, the Project has the potential to conflict with the AQMP according to this criterion. (ECORP, 2020b, p. 48)

- **Consistency Criterion No. 2:** The Project will exceed the assumptions in the AQMP based on the years of Project build-out phase.

SCAQMD's second criterion for determining Project consistency focuses on whether or not the proposed Project exceeds the assumptions utilized in preparing the forecasts presented its air quality planning documents. A project is consistent with regional air quality planning efforts in part if it is consistent with the population, housing, and employment assumptions that were used in the development of the SCAQMD air quality plans. Generally, three sources of data form the basis for the projections of air pollutant emissions in Riverside County. Specifically, SCAG's Growth Management Chapter of the Regional Comprehensive Plan



and Guide (RCPG) provides regional population forecasts for the region and SCAG's 2016 RTP/SCS provides socioeconomic forecast projections of regional population growth. The County of Riverside General Plan is referenced by SCAG in order to assist forecasting future growth in the unincorporated portions of the County. Determining whether or not a project exceeds the assumptions reflected in the 2016 AQMP involves the evaluation of the three criteria outlined below. The following discussion provides an analysis of each of these criteria. (ECORP, 2020b, p. 48)

- **Consistency Criterion No. 2a:** Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the 2016 AQMP?

The Proposed Project is not consistent with the land use designation and development density presented in the County General Plan. The Project is seeking a General Plan Amendment (GPA) to modify the land use designations for the Project site. Specifically, the County General Plan and Lakeview/Nuevo Area Plan (LNAP) designate the Project site for "Medium Density Residential (MDR)," "Medium High Density Residential (MHDR)," "Very High Density Residential (VHDR)," "Commercial Retail (CR)," "Community Center (CC)," "Open Space – Conservation (OS-C)," "Open Space – Recreation (OS-R)," and "Open Space – Water (OSW)." The proposed GPA would amend the General Plan and LNAP land use designations to reflect those proposed, which would include "Light Industrial (LI)," "Business Park (BP)," "Commercial Retail (CR)," "Open Space – Conservation (OS-C)," and "Open Space – Conservation Habitat" land uses. It is noted that the Project would result in the creation of a substantial number of jobs that would serve to assist Riverside County in improving its jobs-housing balance, thereby potentially shortening commute lengths of residents living in the unincorporated communities of the County yet traveling substantial distances to job centers outside of the County. Nonetheless, the Proposed Project is not consistent with the types, intensity, and patterns of land use envisioned for the site vicinity in the General Plan and RCPG. As a result, the Project could potentially conflict with the land use assumptions used by SCAQMD to develop the 2016 AQMP. The County's population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the County; and these are used by SCAG in all phases of implementation and review. Additionally, as the SCAQMD has incorporated these same projections into their air quality planning efforts, it can be concluded that the proposed Project could be inconsistent with the projections. Therefore, the Proposed Project would not be considered consistent with the population, housing, and employment growth projections utilized in the preparation of SCAQMD's air quality plans. (ECORP, 2020b, pp. 48-49)

- **Consistency Criterion No. 2b:** Would the project implement all feasible air quality mitigation measures?

In order to further reduce emissions, the Project would be required to comply with emission reduction measures promulgated by the SCAQMD, such as SCAQMD Rules 201, 402, 403, 1113, and 1401. Additionally, mitigation measures are identified herein to reduce the Project's air quality emissions to the maximum feasible extent, including requirements to implement the County Good Neighbor Policy provisions. As such, the proposed Project meets this consistency criterion. (ECORP, 2020b, pp. 49-50)



- **Consistency Criterion No. 2c:** Would the project be consistent with the land use planning strategies set forth by SCAQMD air quality planning efforts?

The AQMP contains air pollutant reduction strategies based on SCAG’s latest growth forecasts, and SCAG’s growth forecasts were defined in consultation with local governments and with reference to local general plans. For the reasons discussed above, the Project would not be consistent with the land use designation and development density presented in the County of Riverside’s General Plan and therefore could potential exceed or otherwise conflict with the population or job growth projections used by the SCAQMD to develop the AQMP. (ECORP, 2020b, p. 50)

In conclusion, the determination of AQMP consistency is primarily concerned with the long-term influence of a project on air quality. Under the proposed Project (with buildout of either the Primary Land Use Plan or Alternative Land Use Plan), resultant operational emissions would exceed regional significance thresholds potentially hindering the region’s ability to meet state and federal air quality standards, thereby conflicting with Criterion 1. Further, either land use plan could be inconsistent with Criterion 2. Thus, the Project would conflict with the SCAQMD 2016 AQMP, and impacts would be significant on both a direct and cumulatively-considerable basis. (ECORP, 2020b, p. 50)

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

Regional Construction Significance Analysis

Construction-generated emissions are temporary and short-term but have the potential to represent a significant air quality impact. Four basic sources of short-term emissions would be generated through construction of the proposed Project: operation of the construction vehicles (i.e., excavators, trenchers, dump trucks), the creation of fugitive dust during clearing and grading, the use of asphalt or other oil-based substances during paving activities, and the application of paint. Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed soils would generate exhaust emissions and fugitive PM emissions that affect local air quality at various times during construction. Effects would be variable depending on the weather, soil conditions, the amount of activity taking place, and the nature of dust control efforts. The dry climate of the area during the summer months creates a high potential for dust generation. (ECORP, 2020b, p. 28)

The Riverside County Board of Supervisors’ Good Neighbor Policy contains several policy provisions that address air pollutant generated during construction of warehouse/distribution projects proposing building space larger than 250,000 square feet in size. These provisions would apply to the construction of the Project under either the Primary Land Use Plan or Alternative Land Use Plan. For instance, Provision 2.1 states that during construction of the warehouse/distribution facility, all heavy-duty haul trucks accessing the site shall have CARB-approved 2010 engines or newer. Project construction is expected to haul 68,877 cubic yards of blasted rock and soil material offsite and therefore Provision 2.1 would substantially reduce emissions



compared with a typical construction project. Provision 2.2 requires that all excavators, graders, rubber-tired dozers, and similar “off-road” construction equipment shall be CARB Tier 3 Certified engines or better, and Provision 2.3 mandates that the maximum daily disturbance area (actively graded area) shall not exceed 10 acres per day. Provision 2.6 of the Good Neighbor Policy requires surrounding streets be swept on a regular basis to remove any construction related debris and dirt, and Provision 2.7 further requires dust control measures that meet the SCAQMD standards be implemented for grading and construction activity. Construction equipment maintenance records and data sheets, which includes equipment design specifications and equipment emission control tier classifications, as well as any other records necessary to verify compliance with Provisions 2.1-2.7 above, shall be kept onsite and furnished to the County upon request per Provision 2.8. Also, Provision 2.9 states that construction contractors prohibit truck drivers from idling more than five minutes and require operators to turn off engines when not in use, in compliance with CARB regulations. Lastly, Provision 5.5 requires that each proposed facility designate a Compliance Officer responsible for implementing the measures described herein and/or in the Project conditions of approval and mitigation measures. Contact information must be provided to the County and updated annually, and signs should be posted in visible locations providing the contact information of the Compliance Officer to the surrounding community. (ECORP, 2020b, p. 29)

Construction activities also would be subject to SCAQMD Rule 403, which requires taking reasonable precautions to prevent the emissions of fugitive dust, such as using water or chemicals, where possible, for control of dust during the clearing of land and other construction activities. Additionally, as a result of regulations adopted by the USEPA and CARB, all off-road, diesel-fueled construction equipment manufactured in 2006 or later has been manufactured to Tier 3 standards. The Tier 3 standards can reduce NO_x and PM emissions by as much as 64 and 39 percent, respectively. By requiring the use of Tier 3 construction equipment used during construction would substantially reduce temporary NO_x and PM emissions impacts generated during Project construction. (ECORP, 2020b, p. 29)

Construction-generated emissions associated with the Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. The duration of construction has been adjusted to reflect a start date in the summer of 2021 and an anticipated opening year in the year 2030. The CalEEMod model defaults for the number of construction equipment employed was doubled for all construction phases with accelerated timelines. Construction-generated emissions were calculated to account for the construction of the entire Project simultaneously in order to identify the worst-case construction emissions potential. However, the actual construction of the Project site would be dependent on several factors, including timing of Project approvals, market conditions, and/or Project funding. As such, this analysis accounts for minor modifications as Project plans evolve from conceptual planning to final mapping. If construction starts at a later date, it can be expected that Project emissions would be reduced because CalEEMod incorporates lower emission factors associated with construction equipment in future years due to improved emissions controls and fleet modernization through turnover. Refer to Attachment A to the Project’s AQA (*Technical Appendix B1*) for more information regarding the construction assumptions, including construction equipment and duration, used in the analysis. (ECORP, 2020b, p. 30)



Construction-Related Impacts – Primary Land Use Plan

Predicted maximum daily construction-generated emissions for the Primary Land Use Plan are summarized in Table 4.3-6, *Primary Land Use Plan – Construction Related Emissions (Regional Significance)*. Construction-generated emissions are short-term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD’s thresholds of significance. As shown in Table 4.3-6, emissions generated during typical construction under the Primary Land Use Plan, including the construction of offsite infrastructure, would not exceed the SCAQMD’s regional thresholds of significance. (ECORP, 2020b, pp. 30-31)

Table 4.3-6 Primary Land Use Plan – Construction Related Emissions (Regional Significance)

Construction Year	Pollutant (pounds per day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Construction in 2021 (including material export)	2.05	39.97	47.43	0.08	16.32	9.75
Construction in 2022 (including material export)	3.25	61.80	75.02	0.13	16.32	9.75
Construction in 2023 (including material export)	3.24	61.79	74.92	0.13	9.73	5.52
Construction in 2024	68.29	66.13	85.71	0.18	6.38	4.13
Construction in 2025	67.84	65.95	84.95	0.17	6.38	4.13
Construction in 2026	67.77	65.78	84.30	0.17	6.38	4.13
Construction in 2027	67.71	65.62	83.79	0.17	6.38	4.13
Construction in 2028	67.65	65.48	83.25	0.17	6.38	4.13
Construction in 2029	67.58	65.36	82.79	0.17	6.38	4.13
<i>SCAQMD Regional Significance Threshold</i>	75	100	550	150	150	55
Exceed SCAQMD Regional Threshold?	No	No	No	No	No	No

Source: CalEEMod version 2016.3.2; EMFAC2017. Refer to Attachment A to the Project’s AQA (*Technical Appendix B1*) for Model Data Outputs.

Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: sweeping/cleaning adjacent roadway access areas daily; washing equipment tires before leaving the construction site; water exposed surfaces three times daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. All off-road construction equipment was modeled as CARB Tier 3 Certified engines, consistent with County requirements. All on-road haul trucks were modeled as CARB-approved 2010 engines or newer, consistent with County requirements. Building construction, paving, and painting are assumed to occur simultaneously. Construction emissions taken from the season (summer or winter) with the highest output. (ECORP, 2020b, Table 2-6)



In addition to typical construction activities, construction would require blasting in order to remove non-ripple materials at the off-site water tank site. The blasting area would span 1.85 acres and involve an excavation depth of four feet below design grades resulting in approximately 68,877 cubic yards of excavation. The exact duration of blasting activities and anticipated amount of explosive material to be used daily is not known at the time of this analysis. Thus, for the purposes of this analysis, emissions generated from a range of blasting rates is disclosed in Table 4.3-7, *Blasting Emissions*. As shown in Table 4.3-7, the greater amount of days used to blast 68,877 cubic yards of hard rock generates the least daily emissions. For instance, 20 days of blasting would require the detonation of 1.72 tons of explosives daily over those 20 days while three days of blasting would require the detonation of 9.84 tons of explosives daily over three days. (ECORP, 2020b, pp. 31-32)

Table 4.3-7 Blasting Emissions

Rate of Blasting	Tons of Explosives Denotated Daily	Pollutant (pounds per day)				
		NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
20 Days	1.72	29.27	11.37	3.44	0.07	0.00
15 Days	2.30	39.03	153.83	4.59	0.19	0.01
10 Days	3.44	58.55	230.74	6.89	0.78	0.05
5 Days	6.89	117.09	461.48	13.78	8.83	0.51
3.5 Days	9.84	167.27	659.25	19.68	30.75	1.77

Source: AP-42 Compilation of Air Emissions Factors 1998; 1980. Refer to Attachment A to the Project’s AQA (*Technical Appendix B1*) for Model Data Outputs.

Notes: Emission projections are based on varying time spans to blast 68,877 cubic yards of hard rock. The shorter the time span, the more explosives used daily. Emissions from loading and hauling the blasted material offsite are accounted for in Table 4.3-6, which includes emissions generated from 14 haul truck trips traveling 20 miles per trip each day over the course of three years and a maximum of 4 excavators, 6 dozers, and 8 tractor loaders operating 8 hours per day over the course of site preparation and grading activities.

(ECORP, 2020b, Table 2-7)

In comparison to the emissions projected to be generated under typical construction activities as shown in Table 4.3-6, blasting could be conducted in 10 days (3.44 tons of explosives daily) during the first year of construction without exceeding the SCAQMD significance threshold of 100 pounds per day of NO_x or 550 pounds per day of CO. However, this rate of blasting conducted in any other year of construction would result in the NO_x threshold being exceeded. Additionally, if blasting activities were to occur over only 3.5 days, the Project would exceed the threshold of significance for CO during all years of construction. Accordingly, absent mitigation limiting the duration or timing of blasting activities, Project-related construction emissions under the Primary Land Use Plan have the potential to exceed the SCAQMD Regional Thresholds for CO and NO_x. This is evaluated as a significant impact for which mitigation would be required. (ECORP, 2020b, p. 32)



In addition, it is acknowledged that Project construction may overlap with tenant occupancy and operations of portions of the Project. In other words, after portions of the Project are fully constructed and occupied, construction emissions would continue to be emitted while the remainder of the site is constructed. For instance, while no phasing plan has been developed, in the event that 50 percent of the Specific Plan is constructed and operating while the remainder of construction is still ongoing, daily emissions could be generated at rates of 148.10 pounds per day ROG, 664.00 pounds per day of NO_x, 1,098.89 pounds per day of CO, 6.86 pounds per day of SO_x, 50.10 pounds per day of PM₁₀, and 24.20 pounds per day of PM_{2.5}. These values are calculated by adding the daily 2024 construction emissions shown in Table 4.3-6 (the approximate midpoint of total construction), the daily blasting of 1.72 tons of explosive shown in Table 4.3-7 (consistent with blasting limitations required by Mitigation Measure MM 4.3-1), and half of the predicted operational emissions shown below in Table 4.3-9 (to account for 50 percent operations of the Primary Land Use Plan). Nonetheless, as shown in Table 4.3-4 above, the SCAQMD promulgates thresholds for construction and operations separately. (ECORP, 2020b, p. 34)

Construction-Related Impacts – Alternative Land Use Plan

Predicted maximum daily construction-generated emissions for the Alternative Land Use Plan are summarized in Table 4.3-8, *Alternative Land Use Plan – Construction Related Emissions (Regional Significance)*. Construction-generated emissions are short-term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance. As shown, construction emissions under the Alternative Land Use Plan would be slightly lower than those estimated under the Primary Land Use Plan. This is due to the slightly reduced building square footage that would be constructed under the Alternative Land Use Plan. (ECORP, 2020b, p. 34)

As shown in Table 4.3-8, emissions generated during typical construction under the Alternative Land Use Plan, including the construction of offsite infrastructure, would not exceed the SCAQMD's regional thresholds of significance on their own. Blasting emissions generated under the Alternative Land Use Plan would be identical to those projected in Table 4.3-7. Similar to the Primary Land Use Plan, blasting could be conducted in 10 days (3.44 tons of explosives daily) during the first year of construction without exceeding the SCAQMD significance threshold of 100 pounds per day of NO_x or 550 pounds per day of CO. However, this rate of blasting conducted in any other year of construction would result in the NO_x threshold being exceeded. Additionally, if blasting activities were to occur over only 3.5 days, the Project would exceed the threshold of significance for CO during all years of construction. Accordingly, absent mitigation limiting the duration or timing of blasting activities, Project-related construction emissions under the Primary Land Use Plan have the potential to exceed the SCAQMD Regional Thresholds for CO and NO_x. This is evaluated as a significant impact for which mitigation would be required. (ECORP, 2020b, p. 35)



Table 4.3-8 Alternative Land Use Plan – Construction Related Emissions (Regional Significance)

Construction Year	Pollutant (pounds per day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Construction in 2021 (including material export)	1.97	39.92	46.80	0.08	16.19	9.71
Construction in 2022 (including material export)	3.16	61.75	74.34	0.13	16.19	9.71
Construction in 2023 (including material export)	3.15	61.75	74.29	0.13	9.59	5.48
Construction in 2024	64.62	65.94	84.68	0.17	6.12	4.06
Construction in 2025	64.55	65.76	84.00	0.17	6.12	4.05
Construction in 2026	64.49	65.59	83.41	0.17	6.12	4.05
Construction in 2027	64.44	65.44	82.90	0.17	6.12	4.05
Construction in 2028	64.38	65.31	82.46	0.17	6.12	4.05
Construction in 2029	67.32	65.19	82.05	0.17	6.12	4.05
<i>SCAQMD Regional Significance Threshold</i>	75	100	550	150	150	55
Exceed SCAQMD Regional Threshold?	No	No	No	No	No	No

Source: CalEEMod version 2016.3.2; EMFAC2017. Refer to Attachment A to the Project’s AQA (*Technical Appendix B1*) for Model Data Outputs.

Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: sweeping/cleaning adjacent roadway access areas daily; washing equipment tires before leaving the construction site; water exposed surfaces three times daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. All off-road construction equipment was modeled as CARB Tier 3 Certified engines, consistent with County requirements. All on-road haul trucks were modeled as CARB-approved 2010 engines or newer, consistent with County requirements. Building construction, paving, and painting are assumed to occur simultaneously. Construction emissions taken from the season (summer or winter) with the highest output. (ECORP, 2020b, Table 2-8)

Similar to the Primary Land Use Plan, construction under the Alternative Land Use Plan could overlap with tenant occupancy and operations of portions of the Project. While no phasing plan has been developed, in the event that 50 percent of the Project is constructed and operating while construction is ongoing, daily emissions could be generated at rates of 144.11 pounds per day ROG, 655.78 pounds per day of NO_x, 1,087.83 pounds per day of CO, 6.79 pounds per day of SO_x, 49.31 pounds per day of PM₁₀, and 23.90 pounds per day of PM_{2.5}. These values are calculated by adding the daily 2024 construction emissions shown in Table 4.3-8 (the approximate mid-point of total construction), the daily blasting of 1.72 tons of explosive shown in Table 4.3-7 (consistent with blasting limitations required by Mitigation Measure MM 4.3-1), and half of the predicted operational emissions shown in Table 4.3-10 below (to account for 50 percent operations of the Alternative



Land Use Plan). Nonetheless, as shown in Table 4.3-4 above, the SCAQMD promulgates thresholds for construction and operations separately. (ECORP, 2020b, pp. 35-36)

□ Regional Operational Significance Analysis

As previously indicated in EIR Section 3.0, as part of SP 239A1, Light Industrial land uses are proposed in Planning Areas 1, 2, 3, 4, and 5, with a total maximum of approximately 8,476,776 s.f. of building area under both the Primary Land Use Plan and Alternative Land Use Plan. For purposes of analysis within this Subsection, Light Industrial building area is assumed to consist of approximately 20% high-cube cold storage uses, 35% high-cube fulfillment center uses, 35% high-cube warehouse uses, and 10% manufacturing uses.

Implementation of either the Primary Land Use Plan or Alternative Land Use Plan would result in long-term operational emissions of criteria air pollutants such as PM₁₀, PM_{2.5}, CO, and SO₂ as well as ozone precursors such as ROG and NO_x. Project-generated increases in emissions would be predominantly associated with motor vehicle use. (ECORP, 2020b, p. 36)

As previously described, the County of Riverside Board of Supervisors Good Neighbor Policy for Logistics and Warehouse/Distribution Uses contains several policy provisions that address air pollutant generated during construction of warehouse/distribution projects proposing building space larger than 250,000 square feet in size. These provisions would apply to the operations of the Project under either the Primary Land Use Plan or Alternative Land Use Plan. For instance, Provision 3.3 states that warehouse/distribution facilities must be designed to provide adequate on-site parking for commercial trucks and passenger vehicles and on-site queuing for trucks that is away from sensitive receptors. Such a measure prevents general queuing and spill-over of trucks onto surrounding public streets. This policy provision prohibits commercial trucks from parking in the public road right-of-way or nearby residential areas. Provision 4.1 requires facility operators to maintain records of their fleet equipment and ensure that all diesel-fueled Medium-Heavy Duty Trucks and Heavy-Heavy Duty Trucks accessing the site use year CARB 2010 or newer engines. Thus, older model year trucks, which are less efficient and produce greater air pollutant emissions, would be prohibited from visiting the site. Provision 6.4 would obligate the Project Applicant to provide a supplemental funding contribution based on the Project's level of NO_x emissions. The supplemental funding contribution would be applied to further offset potential air quality impacts to the community and provide a community benefit above and beyond any CEQA-related mitigation measures. These supplemental funds generally would be used for projects that directly benefit the impacted community wherein the project is located. Furthermore, measure R2-CE1 of the County's Climate Action Plan (CAP) Update requires that future implementing building permits that involve more than 100,000 gross square feet of commercial, office, industrial, or manufacturing development shall be required to offset the energy demand through renewable energy production. Renewable energy production shall be onsite generation of at least 20% of energy demand for commercial, office, industrial or manufacturing development. (ECORP, 2020b, p. 36)

As previously described, operational air pollutant emissions were based on the proposed Specific Plan land use plan and the estimated traffic trip generation rates and Project fleet mix based on the Project's Traffic Impact Analysis ("TIA"; EIR *Technical Appendix LI*). Consistent with SCAQMD recommendations, in order



to more accurately account for the trip distribution patterns of freight trucks, the average trip length is calculated at 53.9 miles, which represents the average distance between the Project site and the Port of Los Angeles/Long Beach, the Project site and the Banning Pass, the Project Site and the San Diego County line, the Project site and the Cajon Pass, and the Project site and downtown Los Angeles. (ECORP, 2020b, p. 36)

Operational-Related Impacts – Primary Land Use Plan

Long-term operational emissions attributable to the Primary Land Use Plan are identified in Table 4.3-9, *Primary Land Use Plan Operational-Related Emissions (Regional Thresholds)*, and are compared to the regional operational significance thresholds promulgated by the SCAQMD. As shown in Table 4.3-9, the emissions associated with operations under the Primary Land Use Plan would exceed the SCAQMD significance threshold for ROG, NO_x, and CO. As previously described, ROG and NO_x are precursors of O₃, a pollutant for which the SoCAB is classified nonattainment, while the SoCAB is classified attainment for CO. As such, prior to mitigation, under the Primary Land Use Plan the Project would result in a cumulatively-considerable net increase of criteria pollutants (i.e., ROG and NO_x) for which the Project region is non-attainment under federal and State ambient air quality standards, and impacts would be significant on both a direct and cumulatively-considerable basis. (ECORP, 2020b, pp. 36-37)

Operational-Related Impacts – Alternative Land Use Plan

Long-term operational emissions attributable to the Primary Land Use Plan are identified in Table 4.3-10, *Alternative Land Use Plan Operational-Related Emissions (Regional Thresholds)*, and compared to the regional operational significance thresholds promulgated by the SCAQMD. As shown in Table 4.3-10, the emissions associated with operations under the Alternative Land Use Plan would exceed the SCAQMD significance threshold for ROG, NO_x, and CO. As previously described, ROG and NO_x are precursors of O₃, a pollutant for which the SoCAB is classified nonattainment, while the SoCAB is classified attainment for CO. As such, prior to mitigation, under the Alternative Land Use Plan the Project would result in a cumulatively-considerable net increase of criteria pollutants (i.e., ROG and NO_x) for which the Project region is non-attainment under federal and State ambient air quality standards, and impacts would be significant on both a direct and cumulatively-considerable basis. (ECORP, 2020b, pp. 37-38)

Threshold c.: Would the Project expose sensitive receptors, which are located within one (1) mile of the project site, to substantial pollutant concentrations?

Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The Project has the potential to expose sensitive receptors to substantial pollutant concentrations that could result in cancer risks, non-cancer hazards, and CO “hot spots.” Each is discussed below. (ECORP, 2020b, p. 50)



Table 4.3-9 Primary Land Use Plan Operational-Related Emissions (Regional Thresholds)

Table 2-9. Primary Land Use Plan Operational-Related Emissions (Regional Significance Analysis)						
Emission Source	Pollutant (pounds per day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Area	65.57	0.00	0.98	0.00	0.00	0.00
Energy	3.96	32.39	27.20	0.19	2.46	2.46
Mobile						
<i>Passenger Vehicles</i>	87.93	175.10	1,121.14	1.79	32.06	14.62
<i>Heavy-Duty Trucks</i>	2.10	929.71	854.31	4.47	52.78	23.06
Mobile Source Total	90.03	1,104.81	1,975.45	6.26	84.84	37.68
Total:	159.56	1,137.20	2,003.63	6.48	87.30	40.14
<i>SCAQMD Regional Significance Threshold</i>	55	55	550	150	150	55
Exceed SCAQMD Regional Threshold?	Yes	Yes	Yes	No	No	No

Source: CalEEMod version 2016.3.2; EMFAC2017. Refer to Attachment A to the Project's AQA (*Technical Appendix B1*) for Model Data Outputs.

Notes: Emissions projections account for a trip generation rate and fleet mix identified by the Project's TIA. Specifically, the Project's TIA estimates the generation of 23,894 average vehicle trips daily, 3,916 of which would be heavy-duty trucks, under the Primary Land Use Plan. Heavy-duty trucks are a weighted average of Medium-heavy duty trucks and Heavy-heavy duty trucks as identified by the Project Traffic Assessment. The average trip length is calculated at 53.9 miles, which represents the average distance between the Project site and the Port of Los Angeles/Long Beach, the Project site and the Banning Pass, the Project site and the San Diego County line, the Project site and the Cajon Pass, and the Project site and downtown Los Angeles. Operational emissions taken from the season (summer or winter) with the highest output. (ECORP, 2020b, Table 2-9)



Table 4.3-10 Alternative Land Use Plan Operational-Related Emissions (Regional Thresholds)

Emission Source	Pollutant (pounds per day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Area	65.57	0.00	0.98	0.00	0.00	0.00
Energy	3.96	32.39	27.20	0.19	2.46	2.46
Mobile						
<i>Passenger Vehicles</i>	87.39	174.12	1,115.47	1.78	31.90	14.55
<i>Heavy-Duty Trucks</i>	2.06	914.04	839.91	4.39	51.89	22.68
Mobile Source Total	89.45	1,088.16	1,955.38	6.17	83.79	37.23
Total:	158.98	1,120.55	1,983.56	6.36	86.25	39.69
<i>SCAQMD Regional Significance Threshold</i>	55	55	550	150	150	55
Exceed SCAQMD Regional Threshold?	Yes	Yes	Yes	No	No	No

Source: CalEEMod version 2016.3.2; EMFAC2017. Refer to Attachment A to the Project’s AQA (*Technical Appendix B1*) for Model Data Outputs.

Notes: Emissions projections account for a trip generation rate and fleet mix identified by the Project’s TIA. Specifically, Urban Crossroads estimates the generation of 23,624 average vehicle trips daily, 3,850 of which would be heavy-duty trucks, under the Alternative Land Use Plan. Heavy-duty trucks are a weighted average of medium-heavy duty trucks and heavy-heavy duty trucks as identified by the Project’s TIA. The average trip length is calculated at 53.9 miles, which represents the average distance between the Project site and the Port of Los Angeles/Long Beach, the Project site and the Banning Pass, the Project site and the San Diego County line, the Project site and the Cajon Pass, and the Project site and downtown Los Angeles. Operational emissions taken from the season (summer or winter) with the highest output. (ECORP, 2020b, Table 2-10)

A. LST Analysis for Construction-Generated Air Contaminants

As previously described, in addition to regional significance thresholds, the SCAQMD developed localized significance thresholds (LSTs) for emissions of NO_x, CO, PM₁₀, and PM_{2.5} generated at new development sites (offsite mobile source emissions are not included in the LST analysis protocol). LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative. The SCAQMD Environmental Justice Enhancement Initiative program seeks to ensure that everyone has the right to equal protection from air pollution. The Environmental Justice Program is divided into three categories, with the LST protocol promulgated under Category I: Further-Reduced Health Risk. LST analysis for construction is applicable for all projects that disturb five acres or less on a single day. Nonetheless, applying the one-acre, two-acre, and five-acre LST thresholds to projects disturbing greater acreage is conservative. For instance, the five-acre LST thresholds were developed in part based on the dispersion of pollutants over a five-acre construction area before exposing sensitive receptors. The 5-acre LST lookup tables can be used as a conservative measure to show that even if the daily emissions from all Project construction were emitted on a 5-acre site (and therefore concentrated over a smaller area, resulting in greater site adjacent concentrations), and the level of emissions are below the SCAQMD look-up tables for a 5-acre site, then a more detailed evaluation is not necessary. Therefore, while the proposed Project could potentially disturb 10 acres on a



single day, the LST threshold value for a five-acre site was employed from the LST lookup tables. (ECORP, 2020b, pp. 50-51)

LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. Notwithstanding, the SCAQMD Methodology explicitly states: “It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters.” The nearest sensitive receptor to the site is Lakeside Middle School, located approximately 2,000 feet (610 meters) to the west. However, the installation of the proposed offsite water line would occur just south of the Middle School, largely within the Walnut Avenue right-of-way. It is also noted that while not currently constructed, the approved McCanna Hills development is located directly adjacent to the Project’s western boundary. Once built-out, commercial and residential land uses would exist on what is currently vacant land adjacent to the Project’s western boundary. Additionally, lands to the east of the Project site are designated by the County’s General Plan for future development with residential uses. As such, and in order to provide a conservative analysis, LSTs for receptors located at 25 meters were utilized in the analysis. The SCAQMD’s methodology clearly states that “offsite mobile emissions from a project should not be included in the emissions compared to LSTs.” Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod “onsite” emissions outputs were considered. (ECORP, 2020b, p. 51)

Maximum daily onsite construction emissions would be the same under either the Primary Land Use Plan or Alternative Land Use Plan. As previously stated, the SCAQMD developed LSTs for emissions of NO_x, CO, PM₁₀, and PM_{2.5}. A construction Health Risk Assessment (HRA) has been prepared to evaluate potential health risks associated with the emission of DPM, which includes PM₁₀ and PM_{2.5}, resulting from the construction activities necessary to build the Project (see Attachment B to the Project’s AQA, included as *Technical Appendix B1*). The results of the HRA are discussed below. Table 4.3-11, *Primary and Alternative Land Use Plan Construction-Related Emissions (Localized Significance Analysis)*, presents the results of localized NO_x and CO emissions associated with either the Primary Land Use Plan or Alternative Land Use Plan. Table 4.3-11 shows that the estimated emissions on the peak day of construction for either the Primary Land Use Plan or Alternative Land Use Plan would not surpass NO_x or CO LST thresholds with adherence to Mitigation Measures MM 4.3-1 and MM 4.3-2, which among other measures limit the amount of daily blasting. However, in the absence of mitigation, the Project has the potential to exceed the LSTs for both NO_x and CO. This is evaluated as a significant impact of the proposed Project. (ECORP, 2020b, pp. 51-52)

B. Health Risk Assessment for Construction-Generated Air Contaminants

A construction Health Risk Assessment (HRA) has been prepared to evaluate potential health risks associated with the emission of DPM, which includes exhaust PM₁₀ and PM_{2.5}, resulting from the construction activities necessary to build the Project (see Attachment B to the Project’s AQA, included as *Technical Appendix B1*). The level of construction to construct either the Primary Land Use Plan or Alternative Land Use Plan is largely identical. While the Alternative Land Use Plan would result in less building square footage (9,539,858 square feet compared with 9,668,142 square feet under the Primary Land Use), the calculated annual emission outputs are identical for each scenario. Therefore, the HRA addresses construction DPM generated under both the



Primary Land Use Plan and Alternative Land Use Plan collectively. The following discussion is sourced from the construction related HRA prepared for the Project (Attachment B to the Project’s AQA). (ECORP, 2020b, p. 52)

The air dispersion modeling for the HRA was performed using the USEPA AERMOD dispersion model. AERMOD is a steady-state, multiple-source, Gaussian dispersion model designed for use with emission sources situated in terrain where ground elevations can exceed the stack heights of the emission sources (not a factor in this case). AERMOD requires hourly meteorological data consisting of wind vector, wind speed, temperature, stability class, and mixing height. Surface and upper air meteorological data provided by the SCAQMD. The Perris (237 ½ North D Street, Perris) air quality monitoring station was selected as being the most representative meteorology based on proximity to the Project site (approximately 3.5 miles distant) and the fact that the Perris air quality monitoring station is located in the same SCAQMD Source Receptor Area

Table 4.3-11 Primary and Alternative Land Use Plan Construction-Related Emissions (Localized Significance Analysis)

Construction Activity	Pollutant (pounds per day)	
	NO _x	CO
Site Preparation (offsite, onsite, & blasting)	67.40	57.29
Site Grading (offsite, onsite, & blasting)	89.22	84.81
Building Construction, Paving, Painting, & Blasting	83.02	85.36
<i>SCAQMD Localized Significance Threshold</i>	270	1,577
Exceed SCAQMD Localized Threshold?	No	No

Source: CalEEMod version 2016.3.2; EMFAC2017. Refer to Attachment A of the Project’s AQA (*Technical Appendix B1*) for Model Data Outputs.

Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: sweeping/cleaning adjacent roadway access areas daily; washing equipment tires before leaving the construction site; water exposed surfaces three times daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. All off-road construction equipment was modeled as CARB Tier 3 Certified engines, consistent with County requirements. Building construction, paving, and painting are assumed to occur simultaneously.

(ECORP, 2020b, Table 2-11)

(SRA). SCAQMD SRAs are categorized based on existing ambient pollutant concentrations and meteorological conditions. The SCAQMD divides the Basin into 38 SRAs to forecast and report air quality. Both the Project site and the Perris air quality monitoring station are located in SCAQMD SRA 24, known as the Perris Valley. (ECORP, 2020b, pp. 52-53)



Emissions sources in the model include 245 line-volume sources on the Project site each day of construction, which is estimated to span a nine-year period, to represent construction equipment maneuvering around the construction site. Additionally, emissions sources in the model include four separate line sources (comprised of 155 line-volume sources collectively) representing the material haul truck routes from the Project site 5,000 feet in each direction at the minimum on the Ramona Expressway and 3,000 feet in each direction at the minimum on Nuevo Road. Finally, emissions sources in the model include two separate line sources representing offsite construction, one at the southwest corner of the site and extending westward parallel to Nuevo Road, and the other extending from the northwest corner of the site to Evans Road. These line sources representing offsite construction are comprised of 70 line-volume sources combined (see Attachment B to the Project's AQA). The maximum daily exhaust emissions for all diesel equipment was used to produce an emission rate in terms of grams per second per square meter. Emissions from construction equipment were assigned a release height of 2.5 meters and heavy trucks were assigned a release height of 3.65 meters in order to provide a conservative analysis (i.e., using higher release heights would result in a smaller impact by allowing pollutants to disperse before they affect a receptor). (ECORP, 2020b, p. 54)

Construction equipment emissions were estimated using emission factors for exhaust fine particulate matter less than 2.5 microns in diameter (PM_{2.5}) and exhaust coarse particulate matter spanning between 2.5 and 10 microns in diameter (PM₁₀) combined, as generated by the CARB-approved CalEEMod, version 2016.3.2. Haul truck DPM emissions (also conservatively represented by the combined total of PM₁₀ and PM_{2.5} emissions) were estimated using EMFAC 2017. (ECORP, 2020b, p. 54)

The model was run to obtain the peak one-hour and annual average concentration in micrograms per cubic meter (µg/m³) at nearby sensitive receptors as well as locations where future sensitive receptors are planned for development with sensitive receptors (i.e., residential uses) with 100-meter (328 feet) spacing consistent with SCAQMD guidance. Note that the concentration estimates developed using this methodology is considered conservative and is not a specific prediction of the actual concentrations that would occur as a result of the Project any one point in time. Actual one-hour and annual average concentrations are dependent on many variables, particularly the number and type of equipment working at specific distances during time periods of adverse meteorology. (ECORP, 2020b, p. 54)

A health risk computation was performed to determine the risk of developing an excess cancer risk as a result of the full span of construction. The chronic and carcinogenic health risk calculations are based on the standardized equations contained in the OEHHA Guidance Manual (2015). (ECORP, 2020b, p. 54) The discussion below includes an evaluation of potential cancer and non-cancer health risks associated with the Project, as well as potential cancer and non-cancer health risks that would be associated with routing a portion of the haul truck trip traffic along the Southern Truck Route (refer to EIR Subsection 4.18, *Transportation*, for a discussion of improvements required to implement the Southern Truck Route).



2. Construction-Related Carcinogenic Risk

Construction-Related Carcinogenic Risk – Primary Truck Route

Based on the AERMOD outputs, the expected annual average DPM emission concentrations at the most exposed sensitive receptor resulting from Project construction under either the Primary Land Use Plan or Alternative Land Use Plan would be 0.042 µg/m³ at the greatest and this would occur just to the west of the northwestern boundary of the site at the location of vacant land planned for residential land uses. The calculated carcinogenic risk at this location as well as several other locations in the Project vicinity as a result of the construction allowed under the Specific Plan is depicted in Table 4.3-12, *Maximum Cancer Risk for Project Construction – Primary Truck Route*. As shown, potential cancer risk from Project construction would be below the 10 in one million threshold, which was developed based on the requirements of AB 2588 (Tanner Air Toxics Act & Air Toxics “Hot Spots” Information and Assessment Act) and serves to determine whether or not a given project has a potentially significant development-specific and cumulative impact. As such, localized DPM-related carcinogen health risks during construction would be less than significant for the Primary Truck Route. (ECORP, 2020b, pp. 54-55)

Table 4.3-12 Maximum Cancer Risk for Project Construction – Primary Truck Route

Exposure Scenario	Location	Maximum Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds SCAQMD Significance Threshold?
Construction – Highest Concentration	Just west of the northwestern boundary of the site, vacant land approved for residential land uses	5.12	10	No
Construction	Lakeside Middle School	1.06	10	No
Construction	Sierra Vista Elementary School	1.07	10	No
Construction	Neighborhoods to Southeast	0.58	10	No
Construction	Neighborhoods to South	0.56	10	No
Construction	Neighborhoods to West	0.38	10	No
Construction	Triple Crown Elementary	0.38	10	No
Construction	Avalon Elementary	0.48	10	No
Construction	Neighborhoods to East	0.54	10	No

(ECORP, 2020b, Table 2-12)



Construction-Related Carcinogenic Risk – Southern Truck Route

The Southern Truck Route was modeled to be the route for construction-related haul truck trips. Modeled health risk for the Southern Truck Route is similar to the Primary Truck Route as the risk is primarily driven by onsite activities. The point of maximum impact for the Southern Truck Route is between the Project boundary and future residential area directly west of the Project area. As shown in Table 4.3-13, *Maximum Cancer Risk for Project Construction – Southern Truck Route*, cancer risk associated with haul route activities along the Southern Truck Route would be below the SCAQMD significance threshold of ten in one million. As such, localized DPM-related carcinogen health risks during construction would be less than significant for the Southern Truck Route. (ECORP, 2021a, p. 15)

Table 4.3-13 Maximum Cancer Risk for Project Construction – Southern Truck Route

Exposure Scenario	Location	Southern Truck Route Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds Significance Threshold?
Primary and Alternative Route Construction – Point of Maximum Impact	Northwestern Boundary of the Site, Vacant Land Approved for Residential Land Uses	4.98	10	No
Construction	Lakeside Middle School	0.95	10	No
Construction	Sierra Vista Elementary School	0.98	10	No
Construction	Orange Vista High School	0.37	10	No
Construction	Neighborhoods to Southeast	0.66	10	No
Construction	Neighborhoods to South	0.66	10	No
Construction	Neighborhoods to West	0.44	10	No
Construction	Triple Crown Elementary	0.12	10	No
Construction	Avalon Elementary	0.48	10	No
Construction	Neighborhoods to East	0.66	10	No

(ECORP, 2021a, Table 4-1)

3. Construction-Related Non-Carcinogenic Hazards

The significance thresholds for TAC exposure requires an evaluation of non-cancer risk stated in terms of a hazard index. Non-cancer chronic impacts are calculated by dividing the annual average concentration by the REL for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The potential for acute non-cancer hazards is evaluated by comparing the maximum short-term exposure level to an acute REL. RELs are designed to protect sensitive individuals within the population. The calculation of acute non-cancer impacts is similar to the procedure for chronic non-cancer impacts. (ECORP, 2020b, p. 55)

An acute or chronic hazard index of 1.0 is considered individually significant. The hazard index is calculated by dividing the acute or chronic exposure by the reference exposure level. With implementation of the Primary Truck Route, the highest maximum chronic and acute hazard index would occur just to the west of the northwestern boundary of the site at the location of vacant land planned for residential land uses. Specifically, the highest maximum chronic and acute hazard index would be 0.008 and 0.22, respectively. For the Southern



Truck Route, the highest maximum chronic and acute hazard index would be 0.029 and 0.220, respectively. Therefore, non-carcinogenic hazards are calculated to be within acceptable limits, and construction-related non-carcinogenic hazards would therefore be less than significant. (ECORP, 2020b, pp. 55-56; ECORP, 2021a, Table 4-2)

C. LST Analysis for Operational-Generated Air Contaminants

As previously described, in addition to regional significance thresholds, the SCAQMD developed LSTs for emissions of NO_x, CO, PM₁₀, and PM_{2.5} generated at new development sites (off-site mobile source emissions are not included in the LST analysis protocol). According to the SCAQMD localized significance threshold methodology, LSTs would apply to the operational phase of a proposed project if a project includes stationary sources or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). The Primary Land Use Plan would allow for up to 9,668,142 s.f. of building area and the Alternative Land Use Plan would allow for up to 9,539,858 s.f. of building area. It should be noted that in an effort to be conservative, the building area evaluated as part of the operational LST analysis includes proposed commercial retail building area, in addition to the proposed light industrial and business park building area. Based on the proposed Project's allowable building area, the operational phase LST protocol has been applied. (ECORP, 2020b, p. 56)

The approved McCanna Hills development is located directly adjacent to the Project's western boundary. Once built-out, commercial and residential land uses would exist on what is currently vacant land adjacent to the Project's western boundary. Additionally, lands to the east of the Project site are designated by the County's General Plan for future development with residential uses. The SCAQMD Methodology states: "It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters." Therefore, LSTs for receptors located at 25 meters were utilized in the analysis. (ECORP, 2020b, p. 56)

As previously discussed, the SCAQMD has produced lookup tables for projects that disturb one, two and five acres. While the Project site comprises 582.6 acres, the 5-acre LST lookup tables can be used as a conservative measure to show that even if the daily emissions from all Project operational activities were emitted on a 5-acre site (and therefore concentrated over a smaller area, resulting in greater site adjacent concentrations), and the level of emissions are below the SCAQMD look-up tables for a 5-acre site, then a more detailed evaluation is not necessary. For a worst-case scenario assessment, the emissions shown in Table 4.3-14, *Primary and Alternative Land Use Plan Operational Emissions (Localized Significance Analysis)*, include all "onsite" Project-related stationary (area) sources and 10 percent of the Project-related mobile sources. Considering that the longest weighted trip length used for calculating mobile emissions is approximately 53.9 miles for heavy duty trucks and 16.6 miles for passenger vehicles, 10 percent of this total would represent an onsite travel distance for each truck of approximately 5.4 miles and 1.7 miles for each passenger vehicle; thus, the 10 percent assumption is conservative and would tend to overstate the actual impact. (ECORP, 2020b, p. 56)

Operational LSTs apply to CO, NO₂, PM₁₀, and PM_{2.5}. An operational HRA has been prepared to evaluate potential health risks associated with the emission of DPM, which includes PM₁₀ and PM_{2.5}, resulting heavy-



duty trucks (see Attachment C to the Project’s AQA, included as *Technical Appendix B1*). The results of the Project’s HRA are discussed in the following subsections. Therefore, Table 4.3-14 presents the results of localized NO_x and CO emissions associated with the Primary Land Use Plan and Alternative Land Use Plan. As shown in Table 4.3-14, the Project’s operational-related localized emissions of NO_x and CO would not exceed the LST thresholds for the nearest sensitive receptor. Therefore, on this basis Project-related operational emissions would not expose sensitive receptors to substantial pollutant concentrations, and impacts would be less than significant. (ECORP, 2020b, pp. 56-57)

Table 4.3-14 Primary and Alternative Land Use Plan Operational Emissions (Localized Significance Analysis)

Operations	Pollutant (pounds per day)	
	NO _x	CO
Primary Land Use Plan		
Onsite Emissions	142.87	225.82
Alternative Land Use Plan		
Onsite Emissions	141.20	223.03
<i>SCAQMD Localized Significance Threshold</i>	270	1,577
Exceed SCAQMD Localized Threshold?	No	No

Source: EMFAC2017. Refer to Attachment A of the Project’s AQA (*Technical Appendix B1*) for Model Data Outputs.

Notes: Emissions projections account for a trip generation rate and fleet mix identified by the Project’s Traffic Impact Analysis (“TIA”; *Technical Appendix L1*). Specifically, the Project’s TIA estimates the generation of 23,894 average vehicle trips daily, including 3,916 heavy-duty truck trips, under the Primary Land Use Plan, and 23,624 average vehicle trips daily, including 3,850 heavy-duty truck trips, under the Alternative Land Use Plan. Heavy-duty trucks are a weighted average of Medium-heavy duty trucks and Heavy-heavy duty trucks as identified by the Project’s TIA.

(ECORP, 2020b, Table 2-13)

D. Health Risk Assessment for Operational-Related Air Contaminants

Operation of the proposed Project would result in the development of substantial sources of the air toxin DPM. The Project includes a warehouse facility that would be utilized by heavy- and medium-duty trucks. DPM from trucks idling and accessing the site would be a major source of operational air contaminants. Operational HRAs have been prepared for this Project to evaluate potential DPM risks associated with the Primary Truck Route and Southern Truck Route (as described in EIR subsection 3.6.2.B.2). The HRA analysis for the Primary Truck Route is included as Attachment C to the Project’s AQA (EIR *Technical Appendix B1*), and the HRA analysis for the Southern Truck Route is included as EIR *Technical Appendix B2*. As the Project would accommodate daily visits from heavy-duty diesel trucks during operations, an analysis of DPM was performed using the USEPA-approved AERMOD model. (ECORP, 2020b, pp. 57-58; ECORP, 2021a; ECORP, 2021a)



As the Project would accommodate daily visits from heavy-duty diesel trucks during operations, an analysis of DPM was performed using the USEPA-approved AERMOD model. Surface and upper air meteorological data provided by the SCAQMD for the Perris (237 ½ North D Street, Perris) air quality monitoring station was selected as being the most representative meteorology based on proximity to the Project site (approximately 3.5 miles distant) and the fact that the Perris air quality monitoring station is located in the same SCAQMD SRA. Both the Project site and the Perris air quality monitoring station are located in SCAQMD SRA 24, known as the Perris Valley. (ECORP, 2020b, p. 58)

23 area sources spanning varying dimensions, as provided by the Project Applicant, have been placed throughout the Primary Land Use Plan. Further, emissions sources in the model include a line source (consisting of 101 line-volume sources) representing the onsite truck circulation at the Project site, and a line source (consisting of 84 line-volume sources) representing the offsite truck circulation for the Primary Truck Route extending approximately two miles to the west along Ramona Expressway, where there are many sensitive receptors, and one mile to the east of the Project site along the Ramona Expressway. According to the Project's TIA (*Technical Appendix LI*), under the Primary Land Use Plan and the Primary Truck Route, 98 percent of all truck traffic would travel west on Ramona Expressway and the remainder would travel east. (ECORP, 2020b, p. 58)

Under the Alternative Land Use Plan, 23 area sources spanning varying dimensions, as provided by the Project Applicant, have been placed. Further, emissions sources in the model include a line source (comprised of 95 line-volume sources) representing the onsite truck circulation at the Project site, a line source (comprised of 61 line-volume sources) representing the offsite truck circulation extending approximately two miles to the west of the Project site along the future Mid County Parkway, a line source (comprised of 84 line-volume sources) representing the offsite truck circulation extending approximately three miles to the west on Ramon Expressway, and a line source (comprised of 39 line-volume sources) representing offsite truck traffic extending approximately one mile east of the Project site along the future Mid County Parkway. According to the Project's TIA (*Technical Appendix LI*), under the Alternative Land Use Plan 94 percent of all truck traffic would travel west on the future Mid County Parkway, four percent would travel west on the Ramona Expressway, and two percent would travel east on the future Mid County Parkway. Vehicle DPM emissions were estimated using emission factors for PM₁₀ generated with EMFAC 2017. The estimated number of daily heavy-duty trucks and predicted truck trip distribution patterns for each the Primary Land Use Plan and Alternative Land Use Plan were obtained from the Project's TIA. (ECORP, 2020b, p. 58)

The model was run to obtain the peak one-hour, 24-hour, and annual average concentration in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) at nearby sensitive receptors as well as locations where sensitive receptors (i.e., residential uses) exist or are planned. Note that the concentration estimates developed using this methodology are considered conservative and are not a specific prediction of the actual concentrations that would occur as a result of the Project at any one point in time. Actual one-hour, 24-hour, and annual average and concentrations are dependent on many variables, particularly the number and type of equipment working at specific distances during time periods of adverse meteorology. (ECORP, 2020b, p. 58)



A health risk computation was performed to determine the risk of developing an excess cancer risk calculated on a 70-year lifetime basis, 30-year, and 9-year exposure scenarios. The chronic and carcinogenic health risk calculations are based on the standardized equations contained in the OEHHA Guidance Manual (2015). (ECORP, 2020b, pp. 58-59)

Annual average PM₁₀ emission factors were generated by running EMFAC 2017 for vehicles in the Basin within Riverside County. EMFAC generates emission factors in terms of grams of pollutant emitted per vehicle activity and can calculate a matrix of emission factors at specific values of vehicle speed, temperature, and relative humidity. The model was run for speeds traveled on and within the vicinity of the Project site. The vehicle travel speeds for each segment modeled are summarized below. (ECORP, 2020b, p. 59)

- Idling (15 minutes per truck) – onsite loading/unloading; and
- 15 miles per hour – onsite vehicle movement including driving and maneuvering; and
- 35 miles per hour – offsite vehicle movement including driving and maneuvering.

The average PM₁₀ emission factors for heavy trucks were calculated based on the annual average emission factors for various exposure periods associated with assumptions for evaluating exposure over three different periods (i.e., 70-, 30-, and 9-year exposure scenarios). (ECORP, 2020b, p. 59)

1. Operational-Related Carcinogenic Risk (Primary Land Use Plan)

Primary Truck Route

Based on the AERMOD outputs, for the Primary Truck Route the highest concentration of annual average diesel PM₁₀ emission would be 0.013 µg/m³ occurring approximately 320 feet west the western boundary of the central portion of the Project site, which is vacant land and planned for residential and/or open space. The expected annual average diesel PM₁₀ emission concentrations at the most exposed existing sensitive receptors (residences located on Rider Street and Whieldon Drive) resulting from operation of the Primary Land Use Plan (3,916 daily heavy-duty truck trips) would be 0.006 µg/m³ at the greatest. (ECORP, 2020b, p. 59)

Cancer risk calculations for residences are based on 70-, 30-, and 9-year exposure periods while schools are based on a 9-year exposure period. The calculated carcinogenic risk at the sensitive receptor as a result of the Primary Land Use Plan is depicted in Table 4.3-15, *Maximum Operational Cancer Risk – Primary Land Use Plan/Primary Truck Route*. As shown, impacts related to cancer risk from heavy-duty trucks operating under the Primary Land Use Plan and Primary Truck Route would not exceed the cancer risk threshold at any of the nearest existing residences, planned residences or nearest schools. As such, carcinogenic health risk impacts would be less than significant with implementation of the Primary Land Use Plan and the Primary Truck Route. (ECORP, 2020b, pp. 59, 62)



Table 4.3-15 Maximum Operational Cancer Risk – Primary Land Use Plan/Primary Truck Route

Exposure Scenario	Maximum Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds SCAQMD Significance Threshold?
Highest Concentration Planned McCanna Hills Development to West (Residences and/or Open Space)			
70-Year Exposure	9.81	10	No
30-Year Exposure	8.86	10	No
9-Year Exposure	6.33	10	No
Planned Future Residences to the Northwest (McCanna Hills Development)			
70-Year Exposure	5.28	10	No
30-Year Exposure	4.77	10	No
9-Year Exposure	3.41	10	No
Lakeside Middle School			
9-Year Exposure	2.43	10	No
Sierra Vista Elementary School			
9-Year Exposure	0.97	10	No
Residences on Rider Street			
70-Year Exposure	4.53	10	No
30-Year Exposure	4.09	10	No
9-Year Exposure	2.92	10	No
Residences on Whieldon Drive			
70-Year Exposure	4.53	10	No
30-Year Exposure	4.09	10	No
9-Year Exposure	2.92	10	No
Residences on Reisling Drive			
70-Year Exposure	3.02	10	No
30-Year Exposure	2.73	10	No
9-Year Exposure	1.95	10	No
Avalon Elementary			
9-Year Exposure	0.49	10	No
Residences on Walnut Street			
70-Year Exposure	0.75	10	No
30-Year Exposure	0.68	10	No
9-Year Exposure	0.49	10	No
Residences on Placentia Avenue			
70-Year Exposure	0.75	10	No
30-Year Exposure	0.68	10	No
9-Year Exposure	0.49	10	No
Residences on Foothill Drive			
70-Year Exposure	0.75	10	No
30-Year Exposure	0.68	10	No
9-Year Exposure	0.49	10	No
Residences on Reservoir Drive			
70-Year Exposure	0.75	10	No
30-Year Exposure	0.68	10	No
9-Year Exposure	0.49	10	No
Residences on 12th Street			
70-Year Exposure	0.75	10	No
30-Year Exposure	0.68	10	No



Table 4.3-15 Maximum Operational Cancer Risk – Primary Land Use Plan/Primary Truck Route

Exposure Scenario	Maximum Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds SCAQMD Significance Threshold?
9-Year Exposure	0.49	10	No
Nuview Elementary School			
9-Year Exposure	0.49	10	No
Residences on Jack Circle			
70-Year Exposure	0.75	10	No
30-Year Exposure	0.68	10	No
9-Year Exposure	0.49	10	No
Mountain Shadows Middle School			
9-Year Exposure	0.00	10	No
Planned Residences to Northeast			
70-Year Exposure	1.51	10	No
30-Year Exposure	1.36	10	No
9-Year Exposure	0.97	10	No

(ECORP, 2020b, Table 2-14)

Southern Truck Route

The modeled operational health risk for the Southern Truck Route is similar to the previously modeled health risk for the Project using the Primary Truck Route. Table 4.3-16, *Maximum Operational Cancer Risk – Primary Land Use Plan/Southern Truck Route*, summarizes the cancer risks associated with the Southern Truck Route at representative locations for 9, 30 and 70-year operational scenarios. As shown in Table 4.3-16, cancer risk associated with the Primary Land Use Plan and Southern Truck Route would be below the SCAQMD significance threshold of ten in one million. As such, carcinogenic health risk impacts would be less than significant with implementation of the Primary Land Use Plan and the Southern Truck Route. (ECORP, 2021a, pp. 17-18)

Table 4.3-16 Maximum Operational Cancer Risk – Primary Land Use Plan/Southern Truck Route

Exposure Scenario	Southern Truck Route Maximum Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds SCAQMD Significance Threshold?
Highest Concentration Planned McCanna Hills Development to West (Residences and/or Open Space)			
70-Year Exposure	8.94	10	No
30-Year Exposure	8.08	10	No
9-Year Exposure	5.77	10	No
Planned Future Residences to the Northwest (McCanna Hills Development)			
70-Year Exposure	4.45	10	No
30-Year Exposure	4.02	10	No
9-Year Exposure	2.87	10	No
Lakeside Middle School			
9-Year Exposure	0.93	10	No
Sierra Vista Elementary School			



Table 4.3-16 Maximum Operational Cancer Risk – Primary Land Use Plan/Southern Truck Route

Exposure Scenario	Southern Truck Route Maximum Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds SCAQMD Significance Threshold?
9-Year Exposure	0.83	10	No
Residences on Rider Street			
70-Year Exposure	1.21	10	No
30-Year Exposure	1.09	10	No
9-Year Exposure	0.78	10	No
Residences on Whieldon Drive			
70-Year Exposure	0.83	10	No
30-Year Exposure	0.75	10	No
9-Year Exposure	0.54	10	No
Residences on Reisling Drive			
70-Year Exposure	0.38	10	No
30-Year Exposure	0.34	10	No
9-Year Exposure	0.24	10	No
Avalon Elementary			
9-Year Exposure	0.49	10	No
Residences on Walnut Street			
70-Year Exposure	0.60	10	No
30-Year Exposure	0.55	10	No
9-Year Exposure	0.39	10	No
Residences on Placentia Avenue			
70-Year Exposure	0.53	10	No
30-Year Exposure	0.48	10	No
9-Year Exposure	0.34	10	No
Residences on Foothill Drive			
70-Year Exposure	0.98	10	No
30-Year Exposure	0.89	10	No
9-Year Exposure	0.63	10	No
Residences on Reservoir Drive			
70-Year Exposure	0.23	10	No
30-Year Exposure	0.20	10	No
9-Year Exposure	0.15	10	No
Residences on 12th Street			
70-Year Exposure	0.60	10	No
30-Year Exposure	0.55	10	No
9-Year Exposure	0.39	10	No
Nuview Elementary School			
9-Year Exposure	0.15	10	No
Residences on Jack Circle			
70-Year Exposure	0.23	10	No
30-Year Exposure	0.20	10	No
9-Year Exposure	0.15	10	No
Mountain Shadows Middle School			
9-Year Exposure	0.15	10	No
Planned Residences to Northeast			



Table 4.3-16 Maximum Operational Cancer Risk – Primary Land Use Plan/Southern Truck Route

Exposure Scenario	Southern Truck Route Maximum Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds SCAQMD Significance Threshold?
70-Year Exposure	1.36	10	No
30-Year Exposure	1.23	10	No
9-Year Exposure	0.88	10	No
Orange View High School			
9-Year Exposure	0.39	10	No
E Nuevo Rd and Dunlap Dr			
70-Year Exposure	4.53	10	No
30-Year Exposure	4.09	10	No
9-Year Exposure	2.92	10	No

Note: The elementary schools are only analyzed for nine years of exposure as students are not expected to attend school beyond those years.

(ECORP, 2021a, Table 4-2)

2. Operational-Related Carcinogenic Risk (Alternative Land Use Plan)

The Southern Truck Route is not evaluated for the Alternative Land Use Plan, as it is assumed that a majority of Project truck traffic under the Alternative Land Use Plan would use the future Mid County Parkway to access I-215. Based on the AERMOD outputs, the highest concentration of annual average diesel PM₁₀ emission would be 0.013 µg/m³ occurring within a few feet of the northeast boundary of the Project site, which is vacant land and not planned for any future sensitive receptors. The expected annual average diesel PM₁₀ emission concentrations at the most exposed existing sensitive receptors (residences located on Rider Street and Whieldon Drive) resulting from operation of the Alternative Land Use Plan (3,850 daily heavy-duty truck trips) would be 0.002 µg/m³ at the greatest. (ECORP, 2020b, p. 65)

Cancer risk calculations for residences are based on 70-, 30-, and 9-year exposure periods while schools are based on a 9-year exposure period. The calculated carcinogenic risk at the sensitive receptor as a result of the Alternative Land Use Plan is depicted in Table 4.3-17, *Maximum Operational Cancer Risk – Alternative Land Use Plan*. As shown, impacts related to cancer risk from heavy-duty trucks operating under the Alternative Land Use Plan would not exceed cancer risk thresholds at the nearest existing residences, planned residences or nearest schools. As such, carcinogenic health risk impacts would be less than significant with implementation of the Alternative Land Use Plan. (ECORP, 2020b, pp. 65, 68)

Table 4.3-17 Maximum Operational Cancer Risk – Alternative Land Use Plan

Exposure Scenario	Maximum Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds SCAQMD Significance Threshold?
Highest Concentration Planned McCanna Hills Development to West (Residences and/or Open Space)			
70-Year Exposure	9.81	10	No
30-Year Exposure	8.86	10	No
9-Year Exposure	6.33	10	No



Table 4.3-17 Maximum Operational Cancer Risk – Alternative Land Use Plan

Exposure Scenario	Maximum Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds SCAQMD Significance Threshold?
Planned Future Residences to the Northwest (McCanna Hills Development)			
70-Year Exposure	5.28	10	No
30-Year Exposure	4.77	10	No
9-Year Exposure	3.41	10	No
Lakeside Middle School			
9-Year Exposure	0.97	10	No
Sierra Vista Elementary School			
9-Year Exposure	0.97	10	No
Residences on Rider Street			
70-Year Exposure	1.51	10	No
30-Year Exposure	1.36	10	No
9-Year Exposure	0.97	10	No
Residences on Whieldon Drive			
70-Year Exposure	0.75	10	No
30-Year Exposure	0.68	10	No
9-Year Exposure	0.49	10	No
Residences on Reisling Drive			
70-Year Exposure	0.75	10	No
30-Year Exposure	0.68	10	No
9-Year Exposure	0.49	10	No
Avalon Elementary			
9-Year Exposure	0.49	10	No
Residences on Walnut Street			
70-Year Exposure	0.75	10	No
30-Year Exposure	0.68	10	No
9-Year Exposure	0.49	10	No
Residences on Placentia Avenue			
70-Year Exposure	3.02	10	No
30-Year Exposure	2.73	10	No
9-Year Exposure	1.95	10	No
Residences on Foothill Drive			
70-Year Exposure	0.75	10	No
30-Year Exposure	0.68	10	No
9-Year Exposure	0.49	10	No
Residences on Reservoir Drive			
70-Year Exposure	0.75	10	No
30-Year Exposure	0.68	10	No
9-Year Exposure	0.49	10	No
Residences on 12th Street			
70-Year Exposure	0.75	10	No
30-Year Exposure	0.68	10	No
9-Year Exposure	0.49	10	No
Nuview Elementary School			
9-Year Exposure	0.00	10	No
Residences on Jack Circle			



Table 4.3-17 Maximum Operational Cancer Risk – Alternative Land Use Plan

Exposure Scenario	Maximum Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds SCAQMD Significance Threshold?
70-Year Exposure	0.00	10	No
30-Year Exposure	0.00	10	No
9-Year Exposure	0.00	10	No
Mountain Shadows Middle School			
9-Year Exposure	0.00	10	No
Planned Residences to Northeast			
70-Year Exposure	1.51	10	No
30-Year Exposure	1.36	10	No
9-Year Exposure	0.97	10	No

(ECORP, 2020b, Table 2-16)

3. Operational-Related Non-Carcinogenic Hazards (Primary Land Use Plan)

In addition to cancer risk, the significance thresholds for TAC exposure requires an evaluation of non-cancer risk stated in terms of a hazard index. Non-cancer chronic impacts are calculated by dividing the annual average concentration by the Reference Exposure Level (REL) for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The potential for acute non-cancer hazards is evaluated by comparing the maximum short-term exposure level to an acute REL. RELs are designed to protect sensitive individuals within the population. The calculation of acute non-cancer impacts is similar to the procedure for chronic non-cancer impacts. An acute or chronic hazard index of 1.0 is considered individually significant. The hazard index is calculated by dividing the acute or chronic exposure by the reference exposure level. (ECORP, 2020b, p. 68)

Primary Truck Route

The highest maximum chronic and acute hazard index at a sensitive receptor associated with DPM emissions from the Primary Land Use Plan and assuming the Primary Truck Route is shown in Table 4.3-18, *Maximum Operational Non-Cancer Hazards – Primary Land Use Plan/Primary Truck Route*. As shown, impacts related to non-cancer risk (chronic and acute hazard index) from the Primary Land Use Plan would not surpass significance thresholds at the nearest existing residences, planned residences, or nearest schools. As such, non-carcinogenic impacts would be less than significant with implementation of the Primary Land Use Plan (Primary Truck Route). (ECORP, 2020b, pp. 68, 71)

Table 4.3-18 Maximum Operational Non-Cancer Hazards – Primary Land Use Plan/Primary Truck Route

Exposure Scenario	Maximum Non-Cancer Hazard	Index Significance Threshold	Exceeds SCAQMD Significance Threshold?
Highest Concentration Planned McCanna Hills Development to West (Residences and/or Open Space)			
Chronic Hazard Index	0.026	1	No
Acute Hazard Index	0.068	1	No



Table 4.3-18 Maximum Operational Non-Cancer Hazards – Primary Land Use Plan/Primary Truck Route

Exposure Scenario	Maximum Non-Cancer Hazard	Index Significance Threshold	Exceeds SCAQMD Significance Threshold?
Planned Future Residences to the Northwest (McCanna Hills Development)			
Chronic Hazard Index	0.001	1	No
Acute Hazard Index	0.036	1	No
Lakeside Middle School			
Chronic Hazard Index	0.001	1	No
Acute Hazard Index	0.026	1	No
Sierra Vista Elementary School			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.010	1	No
Residences on Rider Street			
Chronic Hazard Index	0.001	1	No
Acute Hazard Index	0.031	1	No
Residences on Whieldon Drive			
Chronic Hazard Index	0.001	1	No
Acute Hazard Index	0.031	1	No
Residences on Reisling Drive			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.021	1	No
Avalon Elementary			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.005	1	No
Residences on Walnut Street			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.005	1	No
Residences on Placentia Avenue			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.005	1	No
Residences on Foothill Drive			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.005	1	No
Residences on Reservoir Drive			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.005	1	No
Residences on 12th Street			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.005	1	No
Nuview Elementary School			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.000	1	No
Residences on Jack Circle			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.005	1	No
Mountain Shadows Middle School			
Chronic Hazard Index	0.000	1	No



Table 4.3-18 Maximum Operational Non-Cancer Hazards – Primary Land Use Plan/Primary Truck Route

Exposure Scenario	Maximum Non-Cancer Hazard	Index Significance Threshold	Exceeds SCAQMD Significance Threshold?
Acute Hazard Index	0.000	1	No
Planned Residences to Northeast			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.010	1	No

(ECORP, 2020b, Table 2-17)

Southern Truck Route

For the Southern Truck Route, the highest maximum chronic and acute hazard index at nearby sensitive receptors associated with DPM emissions is shown in Table 4.3-19, *Maximum Operational Non-Cancer Hazards – Primary Land Use Plan/Southern Truck Route*. As shown, impacts related to non-cancer risk (chronic and acute hazard index) would not surpass significance thresholds at the nearest existing residences, planned residences or nearest schools. As such, non-carcinogenic impacts would be less than significant with implementation of the Primary Land Use Plan (Southern Truck Route). (ECORP, 2021a, pp. 19-22)

Table 4.3-19 Maximum Operational Non-Cancer Hazards – Primary Land Use Plan/Southern Truck Route

Exposure Scenario	Alternative Route Maximum Non-Cancer Hazard	Significance Threshold (Risk per Million)	Exceeds SCAQMD Significance Threshold?
Highest Concentration Planned McCanna Hills Development to West (Residences and/or Open Space)			
Chronic Hazard Index	0.002	1	No
Acute Hazard Index	0.062	1	No
Planned Future Residences to the Northwest (McCanna Hills Development)			
Chronic Hazard Index	0.001	1	No
Acute Hazard Index	0.031	1	No
Lakeside Middle School			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.010	1	No
Sierra Vista Elementary School			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.009	1	No
Residences on Rider Street			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.008	1	No
Residences on Whieldon Drive			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.006	1	No
Residences on Reising Drive			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.003	1	No



Table 4.3-19 Maximum Operational Non-Cancer Hazards – Primary Land Use Plan/Southern Truck Route

Exposure Scenario	Alternative Route Maximum Non-Cancer Hazard	Significance Threshold (Risk per Million)	Exceeds SCAQMD Significance Threshold?
Avalon Elementary			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.005	1	
Residences on Walnut Street			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.004	1	No
Residences on Placentia Avenue			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.004	1	No
Residences on Foothill Drive			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.007	1	No
Residences on Reservoir Drive			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.002	1	No
Residences on 12th Street			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.004	1	No
Nuview Elementary School			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.002		
Residences on Jack Circle			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.002	1	No
Mountain Shadows Middle School			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.001		
Planned Residences to Northeast			
Chronic Hazard Index	0.001	1	No
Acute Hazard Index	0.009	1	No
Orange View High School			
Chronic Hazard Index	0.001	1	No
Acute Hazard Index	0.032		
E Nuevo Rd and Dunlap Dr			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.004	1	No

Notes: The elementary schools are only analyzed for nine years of exposure as students are not expected to attend school beyond those years.

(ECORP, 2021a, Table 4-4)



4. Operational-Related Non-Carcinogenic Hazards (Alternative Land Use Plan)

In addition to cancer risk, the significance thresholds for TAC exposure requires an evaluation of non-cancer risk stated in terms of a hazard index. Non-cancer chronic impacts are calculated by dividing the annual average concentration by the REL for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The potential for acute non-cancer hazards is evaluated by comparing the maximum short-term exposure level to an acute REL. RELs are designed to protect sensitive individuals within the population. The calculation of acute non-cancer impacts is similar to the procedure for chronic non-cancer impacts. (ECORP, 2020b, p. 68)

An acute or chronic hazard index of 1.0 is considered individually significant. The hazard index is calculated by dividing the acute or chronic exposure by the reference exposure level. The highest maximum chronic and acute hazard index at a sensitive receptor associated with DPM emissions from the Alternative Land Use Plan is shown in Table 4.3-20, *Maximum Operational Non-Cancer Hazards – Alternative Land Use Plan*. As shown, impacts related to non-cancer risk (chronic and acute hazard index) from the Alternative Land Use Plan would not surpass significance thresholds at the nearest existing residences, planned residences or nearest schools. As such, non-carcinogenic impacts would be less than significant with implementation of the Alternative Land Use Plan. (ECORP, 2020b, pp. 68, 71)

Table 4.3-20 Maximum Operational Non-Cancer Hazards – Alternative Land Use Plan

Exposure Scenario	Maximum Non-Cancer Hazard	Index Significance Threshold	Exceeds SCAQMD Significance Threshold?
Highest Concentration Planned McCanna Hills Development to West (Residences and/or Open Space)			
Chronic Hazard Index	0.026	1	No
Acute Hazard Index	0.068	1	No
Planned Future Residences to the Northwest (McCanna Hills Development)			
Chronic Hazard Index	0.001	1	No
Acute Hazard Index	0.036	1	No
Lakeside Middle School			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.010	1	No
Sierra Vista Elementary School			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.010	1	No
Residences on Rider Street			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.010	1	No
Residences on Whieldon Drive			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.005	1	No
Residences on Reisling Drive			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.005	1	No
Avalon Elementary			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.005	1	No



Table 4.3-20 Maximum Operational Non-Cancer Hazards – Alternative Land Use Plan

Exposure Scenario	Maximum Non-Cancer Hazard	Index Significance Threshold	Exceeds SCAQMD Significance Threshold?
Residences on Walnut Street			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.005	1	No
Residences on Placentia Avenue			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.021	1	No
Residences on Foothill Drive			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.005	1	No
Residences on Reservoir Drive			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.005	1	No
Residences on 12th Street			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.005	1	No
Nuview Elementary School			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.000	1	No
Residences on Jack Circle			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.000	1	No
Mountain Shadows Middle School			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.000	1	No
Planned Residences to Northeast			
Chronic Hazard Index	0.000	1	No
Acute Hazard Index	0.010	1	No

(ECORP, 2020b, Table 2-17)

E. Carbon Monoxide Hot Spots

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or “hot spots,” are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. However, transport of this criteria pollutant is extremely limited, and CO disperses rapidly with distance from the source under normal meteorological conditions. Furthermore, vehicle emissions standards have become increasingly more stringent in the last 20 years. In 1993, the SoCAB was designated nonattainment under the CAAQS and NAAQS for CO. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for



passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SoCAB is now designated as attainment, as previously noted in Table 4.3-3. Detailed modeling of Project-specific CO “hot spots” is not necessary and thus this potential impact is addressed qualitatively. (ECORP, 2020b, p. 71)

A CO “hot spot” would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur. The analysis prepared for CO attainment in the SCAQMD’s 1992 Federal Attainment Plan for Carbon Monoxide in Los Angeles County and a Modeling and Attainment Demonstration prepared by the SCAQMD as part of the 2003 AQMP can be used to demonstrate the potential for CO exceedances of these standards. The SCAQMD conducted a CO hot spot analysis as part of the 1992 CO Federal Attainment Plan at four busy intersections in Los Angeles County during the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection evaluated was at Wilshire Boulevard and Veteran Avenue, which has a traffic volume of approximately 100,000 vehicles per day. Despite this level of traffic, the CO analysis concluded that there was no violation of CO standards (SCAQMD 1992). To establish a more accurate record of baseline CO concentrations affecting the SoCAB, a CO “hot spot” analysis was conducted in 2003 at the same four busy intersections in Los Angeles at the peak morning and afternoon time periods. This “hot spot” analysis did not predict any violation of CO standards. The highest one-hour concentration was measured at 4.6 ppm at Wilshire Boulevard and Veteran Avenue and the highest eight-hour concentration was measured at 8.4 ppm at Long Beach Boulevard and Imperial Highway. (ECORP, 2020b, p. 71)

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District (BAAQMD) concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour, or 24,000 vehicles per hour where vertical and/or horizontal air does not mix, in order to generate a significant CO impact. (ECORP, 2020b, p. 72)

The greatest average daily trips on a segment of road under the Primary Land Use Plan would be 15,115 daily trips on the Ramona Expressway between Evans Avenue and Redlands Avenue during the Existing Plus Project condition in the year 2030 and 36,265 daily trips during the Cumulative Plus Project condition in the year 2040. This projected amount of traffic is lower than the highest daily traffic volumes at Wilshire Boulevard and Veteran Avenue of 100,000 vehicles per day. The greatest average daily trips on a segment of road under the Alternative Land Use Plan would be 16,037 daily trips on the Ramona Expressway between Evans Avenue and Redlands Avenue during the Existing Plus Project condition in the year 2030 and 20,456 daily trips on the Ramona Expressway, south of Rider Street, during the Cumulative Plus Project condition in the year 2040. Similar to the Primary Land Use Plan, this projected amount of traffic is lower than the highest daily traffic volumes at Wilshire Boulevard and Veteran Avenue of 100,000 vehicles per day. (ECORP, 2020b, p. 72)



As such, Project-related traffic volumes, under both the Primary Land Use Plan and Alternative Land Use Plan are less than the traffic volumes identified in the 2003 AQMP. The Project considered herein would not produce the volume of traffic required to generate a CO “hot spot” either in the context of the 2003 Los Angeles hot spot study or based on representative BAAQMD CO threshold considerations. Therefore, CO “hot spots” are not an environmental impact of concern for the Project. Project-related localized air quality impacts related to CO “hot spots” would be less than significant. (ECORP, 2020b, p. 72)

F. Air Quality Health Impacts (Friant Ranch)

A recent Supreme Court of California decision, *Sierra Club v. County of Fresno (Friant Ranch)*, states that EIRs should relate a project’s expected significant adverse air quality impacts to likely human health consequences or explain why it is not feasible at the time of preparing the EIR to provide such an analysis. Given that the proposed Project’s implementation would result in a significant direct and cumulatively-considerable impact associated with ROG and NO_x emissions under long-term operating conditions, the potential health consequences associated with these air pollutants, as well as other air pollutants associated with the Project, were considered. Pursuant to Rule 8.520(f) of the Rules of the California Court, the SCAQMD and the San Joaquin Valley Air Pollution Control District (SJVAPCD) filed amicus curiae briefs (“Briefs”) in regard to this case. In both Briefs, SCAQMD and SJVAPCD provided technical explanations as to why it may not be feasible for a project to relate the expected adverse air quality impacts to likely health consequences. As summarized below, for the reasons set forth by the SCAQMD and SJVAPCD, the proposed Project’s significant air quality impacts currently cannot feasibly be related to likely health consequences. (ECORP, 2020b, p. 44)

While the proposed Project’s operational emissions of ROG and NO_x would contribute to ozone (O₃), O₃ is not formed at the location of sources/emissions, which necessitates the use of complex and more sophisticated modeling that is not reasonably feasible at this time. As noted in the Briefs, “For the so-called criteria pollutants, such as O₃, it may be more difficult to quantify health impacts. O₃ is formed in the atmosphere from the chemical reaction of NO_x and VOC in the presence of sunlight. It takes time and the influence of meteorological conditions for these reactions to occur, so O₃ may be formed at a distance downwind from the sources.” (ECORP, 2020b, p. 44)

Additionally, O₃ and secondary PM formation is complex, which necessitates the use of more sophisticated modeling that is not reasonably feasible at this time. The proposed Project, while much smaller in scale to the Friant Ranch project, similarly includes area wide sources and mobile sources. As noted in the Briefs, “Meteorology, the presence of sunlight, and other complex chemical factors all combine to determine the ultimate concentration and location of O₃ or PM. This is especially true for a project like Friant Ranch where most of the criteria pollutant emissions derive not from a single ‘point source,’ but from area wide sources (consumer products, paint, etc.) or mobile sources (cars and trucks) driving to, from and around the site.” (ECORP, 2020b, pp. 44-45)

The quantity of precursor emissions is not proportional to local O₃ and secondary PM concentration, which necessitates the use of complex and more sophisticated modeling that is not reasonably feasible for the



Proposed Project at this time. As noted in the Briefs, “Ground level O₃ (smog) is not directly emitted into the air but is formed when precursor pollutants such as NO_x and VOCs [also referred to as ROG] are emitted into the atmosphere and undergo complex chemical reactions in the process of sunlight. Once formed, O₃ can be transported long distances by wind. Because of the complexity of O₃ formation, a specific tonnage amount of NO_x or VOCs [ROG] emitted in a particular area does not equate to a particular concentration of O₃ in that area.” As further noted in the Briefs, “Secondary PM, like O₃, is formed via complex chemical reactions in the atmosphere between precursor chemicals such as SO_x and NO_x. Because of the complexity of secondary PM formation, the tonnage of PM-forming precursor emissions in an area does not necessarily result in an equivalent concentration of secondary PM in that area.” (ECORP, 2020b, p. 45)

Furthermore, emissions do not cause health effects. Rather, it is the resulting concentration of criteria pollutants, which is influenced by sunlight, complex reactions, and transport, which necessitates the use of complex and more sophisticated modeling that is not reasonably feasible at this time. As noted in the Briefs, “The disconnect between the tonnage of precursor pollutants (NO_x, SO_x, and VOCs [ROG]) and the concentration of O₃ or PM formed is important because it is not necessarily the tonnage of precursor pollutants that causes human health effects, but the concentration of resulting O₃ or PM.” (ECORP, 2020b, p. 45)

Currently available modeling tools are appropriate for regional evaluations, but not individual projects like the proposed Project. As noted in the Briefs:

“For instance, the computer models used to simulate and predict an attainment date for the O₃ or particulate matter NAAQS in the San Joaquin Valley are based on regional inputs, such as regional inventories of precursor pollutants (NO_x, SO_x, and VOCs [ROG]) and the atmospheric chemistry and meteorology of the Valley... the models simulate future O₃ or PM levels based on predicted changes in precursor emissions Valley wide... The goal of these modeling exercises is not to determine whether the emissions generated by a particular factory or development project will affect the date that the Valley attains the NAAQS. Rather, the Air District's modeling and planning strategy is regional in nature and based on the extent to which all of the emission-generating sources in the Valley (current and future) must be controlled in order to reach attainment.” (ECORP, 2020b, p. 45)

“Thus, the CEQA air quality analysis for criteria pollutants is not really a localized, project-level impact analysis but one of regional, "cumulative impacts."” (ECORP, 2020b, p. 46)

“...the currently available modeling tools are equipped to model the impact of all emission sources in the Valley on attainment... Running the photochemical grid model used for predicting O₃ attainment with the emissions solely from the Friant Ranch project (which equate to less than one-tenth of one percent of the total NO_x and VOC [ROG] in the Valley) is not likely to yield valid information given the relative scale involved.” (ECORP, 2020b, p. 46)

The SJVAPCD indicates that it is currently impossible to accurately correlate project-level emissions to specific health impacts. As they noted in their Brief, “...even once a model is developed to accurately ascertain



local increases in concentrations of photochemical pollutants like O₃ and some particulates, it remains impossible, using today's models, to correlate that increase in concentration to a specific health impact. The reason is the same: such models are designed to determine regional, population-wide health impacts, and simply are not accurate when applied at the local level.” (ECORP, 2020b, p. 46)

SCAQMD highlights that CARB indicated that a CARB methodology of analysis for PM_{2.5} health impacts is not suited for small projects. Also, CARB has developed a methodology that can predict expected mortality (premature deaths) from large amounts of PM_{2.5}...SCAQMD used the CARB methodology to predict impacts from three very large power plants (e.g., 731-1,837 pounds/day). Again, this project involved large amounts of additional PM_{2.5} in the District, up to 2.82 tons/day (5,650 pounds/day of PM_{2.5}, or 1,029 tons/year). However, the primary author of the CARB methodology has reported that this PM_{2.5} health impact methodology is not suited for small projects and may yield unreliable results due to various uncertainties.” “Among these uncertainties are the representativeness of the population used in the methodology, and the specific source of PM and the corresponding health impacts.” (ECORP, 2020b, p. 46)

SCAQMD also indicates that the CARB PM_{2.5} methodology would provide unreliable findings for a small project with a small population and that a lead agency should be able to decide if and when it may be appropriate. As noted in the Briefs, “...when SCAQMD prepared a CEQA document for the expansion of an existing oil production facility, with very small PM_{2.5} increases (3.8 pounds/day) and a very small affected population, staff elected not to use the CARB methodology for using estimated PM_{2.5} emissions to derive a projected premature mortality number and explained why it would be inappropriate to do so... SCAQMD staff concluded that use of this methodology for such a small source could result in unreliable findings and would not provide meaningful information.” (ECORP, 2020b, p. 46)

For the reasons set forth above, it is not currently feasible to relate the Proposed Project’s regional ROG and NO_x impacts to likely health consequences. The SCAQMD is responsible for assessing air pollutant impacts regionally, and the potential health consequences from those on a regional basis. The current evaluation on the limitations and uncertainties of existing tools is consistent with SCAQMD findings. Currently available regional modeling tools are not designed to capture changes in pollutant concentrations for the proposed Project that would be meaningful. This is due in part to a relatively coarse spatial resolution (e.g., greater than 4 x 4 kilometers) which makes it speculative to discern regional Project impacts on air quality. (ECORP, 2020b, p. 47)

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

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person’s reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). (ECORP, 2020b, p. 72)



With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity. (ECORP, 2020b, p. 72)

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word “strong” to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human. (ECORP, 2020b, pp. 72-73)

According to the SCAQMD, land uses commonly considered to be potential sources of obnoxious odorous emissions include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The proposed Project does not include any uses identified by the SCAQMD as being associated with odors. 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, use of diesel equipment, and the temporary storage of typical solid waste (refuse) associated with the proposed Project’s long-term operational uses. (ECORP, 2020b, p. 73)

The Project would be subject to standard construction requirements, including the use of low-VOC architectural coatings as required by SCAQMD Rule 1113, *Architectural Coatings*; compliance with low sulfur fuel requirements pursuant to SCAQMD Rule 431.2, *Low Sulfur Fuel*; and compliance with SCAQMD Rule 402, *Nuisance*, which requires that a person shall not discharge air contaminants or other materials that would cause health or safety hazards to any considerable number of persons or the public. Compliance with these standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of construction and is thus considered less than significant.

Potential sources of operational odors generated by the Project would include disposal of miscellaneous commercial refuse and the use of diesel equipment. All Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the County’s solid waste regulations, thereby



precluding substantial generation of odors due to temporary holding of refuse on site. Moreover, mandatory compliance with SCAQMD Rule 402 would prevent occurrences of odor nuisances associated with Project site operations. Furthermore, mitigation measures identified herein to address the Project's operational air quality emissions, which among other measures requires all outdoor cargo handling equipment to be powered by electricity, compressed natural gas, propane, or diesel-fueled engines that comply with the CARB/USEPA Tier 4 Engine standards for off-road vehicles or better (defined as emitting less than or equal to 0.015 grams per brake horsepower-hour [g/bhp-hr] for PM₁₀), also would serve to reduce operational-related odors and would help ensure operational-related odors are less than significant.

Accordingly, Project odor-causing emissions impacts during near-term construction and long-term operational activities would be less than significant.

4.3.5 CUMULATIVE IMPACT ANALYSIS

With exception of the issue of odors, the cumulative study area for air quality includes the County of Riverside and the SoCAB. The SoCAB is designated as a nonattainment area for state standards of O₃, PM₁₀, and PM_{2.5}. The region is also designated as a nonattainment area for federal standards of O₃ and PM_{2.5}. Cumulative growth in population, vehicle use, and industrial activity could inhibit efforts to improve regional air quality and attain the ambient air quality standards. Thus, with exception of odors, the setting for this cumulative analysis consists of the SoCAB and associated growth and development anticipated in the air basin. For the issue of odors, the cumulative study area includes the Project site and lands in close proximity to the Project site, as odors diminish rapidly with distance from the source.

As discussed under the analysis of Threshold a., based on the level of air quality emissions anticipated for the proposed Project, prior to mitigation the Project would conflict with the SCAQMD AQMP. As other developments within the SoCAB also may result in air quality emissions that exceeds the applicable SCAQMD thresholds of significance and thereby result in a conflict with the AQMP, the Project's impact due to a conflict with the 2016 SCAQMD AQMP would be cumulatively considerable.

As previously shown in Table 4.3-3, the CAAQS designate the Project region as nonattainment for O₃, PM₁₀, and PM_{2.5}, while the NAAQS designates the Project region as nonattainment for O₃ and PM_{2.5}. The AQMD has published a report on how to address cumulative impacts from air pollution: *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution*. In this report the AQMD clearly states (Page D-3):

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



the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.

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

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

The Project-specific evaluation of emissions presented under the analysis of Threshold b. demonstrates that Project construction-source NO_x and CO emissions under both the Primary Land Use Plan and Alternative Land Use Plan may exceed the regional thresholds of significance. Therefore, Project construction-source regional emissions of NO_x and CO are considered to be significant on a Project-specific and cumulatively-considerable basis.

As also discussed under the analysis of Threshold b., Project operational-source ROG, CO, and NO_x emissions would exceed applicable SCAQMD regional thresholds of significance. Impacts due to CO emissions would be less than significant on both a direct and cumulatively-considerable basis because the SoCAB is considered to be in “attainment” under both the NAAQS and CAAQS. However, per SCAQMD significance guidance, impacts due to emissions of ROG and NO_x at the Project level are also considered cumulatively-considerable and would persist over the life of the Project. It should be noted that NO_x and ROG emissions are O₃ precursors and would therefore contribute considerably to existing ozone non-attainment conditions within the SoCAB. Therefore, the Project would result in a cumulatively-considerable significant impact persisting over the life of the Project due to regional emissions of ROG and NO_x.

As also discussed under the analysis of Threshold c., Project-related construction and operational activities would not exceed the SCAQMD threshold of significance for cancer risks of 10 per one million, and would not exceed the acute or chronic hazard index of 1.0 for the Primary Truck Route and Southern Truck Route; thus, Project-related air quality emissions would not expose nearby sensitive receptors to substantial pollutant concentrations and impacts would be less-than-cumulatively considerable. Furthermore, the Project has no potential to cause or contribute to CO “hot spots”; thus, Project impacts due to CO “hot spots” would be less-than-cumulatively considerable.

With respect to odors, and as discussed under the analysis of Threshold d., the proposed Project would be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances (including odors)



during both construction and long-term operation, and would be subject to the County's solid waste regulations. Other developments within the cumulative study area similarly would be required to comply with SCAQMD Rule 402 and the solid waste regulations of the applicable jurisdictions. Therefore, Project impacts due to other emissions (such as those leading to odors) would be less-than-cumulatively considerable.

4.3.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a.: Significant Direct and Cumulatively-Considerable Impact. Project-related construction activities have the potential to exceed the SCAQMD Regional Threshold of significance for CO and NO_x, and under long-term operational conditions the Project has the potential to exceed the SCAQMD Regional Thresholds of significance for ROG, NO_x, and CO. Additionally, the Project would not be consistent with the population, housing, and employment growth projections utilized in the preparation of the 2016 AQMP. As such, the Project has the potential to result in a conflict with the SCAQMD 2016 AQMP, and impacts would be significant on both a direct and cumulatively-considerable basis.

Threshold b.: Significant Direct and Cumulatively-Considerable Impact. For both the Primary Land Use Plan and the Alternative Land Use Plan, emissions resulting from the Project construction, including off-site blasting activities, have the potential to exceed the SCAQMD Regional Threshold of 100 pounds per day for NO_x and/or the SCAQMD Regional Threshold of 550 pounds per day of CO. Additionally, operation of either the Primary Land Use Plan or Alternative Land Use Plan would exceed the SCAQMD Regional Thresholds for ROG, NO_x, and CO under long-term operations. As previously described, ROG and NO_x are precursors of O₃, a pollutant for which the SoCAB is classified nonattainment, while the SoCAB is classified attainment for CO. As such, prior to mitigation, the Project would result in a cumulatively-considerable net increase of criteria pollutants (i.e., ROG and NO_x) for which the Project region is non-attainment under federal and State ambient air quality standards, and impacts would be significant on both a direct and cumulatively-considerable basis

Threshold c.: Less-than-Significant Impact. The Project, including the Primary and Southern Truck Routes, would not expose sensitive receptors to cancer risks exceeding 10 per one million or non-carcinogenic hazards exceeding a chronic hazard index of 1.0 during either construction or long-term operation. Additionally, the Project would not cause or contribute to any CO "hot spots." Accordingly, the Project would not expose sensitive receptors, which are located within one (1) mile of the Project site, to substantial pollutant concentrations, and impacts would be less than significant.

Threshold d.: Less-than-Significant Impact. The Project does not propose land uses typically associated with emitting objectionable odors. Standard construction requirements would minimize odor impacts from construction. The 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. Additionally, it is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the County's solid waste regulations. The proposed Project also would be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances.



Therefore, odors associated with the proposed Project construction and operations would be less than significant and no mitigation is required.

4.3.7 COUNTY REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

Applicable County Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

- The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 403, "Fugitive Dust" by implementing the following dust control measures during construction activities, such as earth moving activities, grading, and equipment travel on unpaved roads. Prior to grading permit issuance, the County shall verify that the following notes are included on the grading plan. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by County of Riverside staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors.
 - All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 miles per hour (mph) per SCAQMD guidelines in order to limit fugitive dust emissions.
 - The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the midmorning, afternoon, and after work is done for the day.
 - The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 mph or less.
- The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 1113, *Architectural Coatings*, by requiring that all architectural coatings must consist of low VOCs (i.e., VOCs of less than 50 grams per liter [g/L]) unless otherwise specified in the Rule 1113.
- The Project is required to comply with applicable SCAQMD rules for construction activities on the Project site. In addition to the SCAQMD requirements listed above, additional SCAQMD Rules that are currently applicable during construction activity for this Project include but are not limited to: Rule 1403 (Asbestos); Rule 431.2 (Low Sulfur Fuel); and Rule 1186 / 1186.1 (Street Sweepers).
- The Project is required to comply with the provisions of SCAQMD Rule 402, "Nuisance" which requires that a person shall not discharge air contaminants or other materials that would cause health or safety hazards to any considerable number of persons or the public.



Mitigation

MM 4.3-1 As part of the permits for construction-related blasting activities, the County shall condition the blasting activities as follows:

- a. During blasting activities, the construction contractor shall implement all feasible engineering controls to control fugitive dust including exhaust ventilation, blasting cabinets and enclosures, vacuum blasters, drapes, water curtains or wet blasting. Watering methods, such as water sprays and water applications shall be implemented during blasting or any activity that would release dust particles to reduce fugitive dust emissions.
- b. Daily blasting activity shall be limited to the use of 1.72 tons of explosives daily.

Contract specifications shall be included in project construction documents, which shall be reviewed by the County of Riverside prior to the issuance of a blasting permit. The blasting contractor shall maintain records demonstrating compliance with these requirements, which shall be made available to Riverside County upon request.

MM 4.3-2 All future construction activities associated with the Project shall be subject to adherence with the Riverside County Board of Supervisors Policy F-3 (“Good Neighbor Policy” for Logistics and Warehouse/Distribution Uses), regardless as to the size of proposed buildings. The following provisions shall apply to all future construction activities on site:

- a. During all construction activities, all heavy-duty haul trucks accessing the site shall have CARB-approved 2010 engines or newer approved CARB engine standards.
- b. All excavators, graders, rubber-tired dozers, and similar “off-road” construction equipment shall be CARB Tier 3 Certified engines or better.
- c. The maximum daily disturbance area (actively graded area) shall not exceed 10 acres per day.
- d. Construction contractors shall utilize construction equipment, with properly operating and maintained mufflers, consistent with manufacturers’ standards.
- e. The surrounding streets shall be swept on a regular basis to remove any construction related debris and dirt.
- f. Appropriate dust control measures that meet the SCAQMD standards shall be implemented for grading and construction activity.
- g. Construction Contractors shall prohibit truck drivers from idling more than five (5) minutes and require operators to turn off engines when not in use, in compliance with the California Air Resources Board regulations.

Project contractors shall be required to ensure compliance with these requirements and permit periodic inspection of the construction site by County of Riverside staff or its designee to



confirm compliance. These requirements also shall be specified in bid documents issued to prospective construction contractors.

- MM 4.3-3 Prior to issuance of building permits for Tenant Improvements involving cold storage warehouse uses, Riverside County shall review the plans to ensure that electrical hookups are provided to eliminate idling of main and auxiliary engines during the loading and unloading process and provide for transport refrigeration units. Riverside County shall verify the installation of electrical hookups prior to final building inspection.
- MM 4.3-4 The minimum number of automobile electric vehicle (EV) charging stations required by the California Code of Regulations Title 24 shall be provided. In addition, and to facilitate the possible future installation of infrastructure that would charge the batteries that power the motors of electric-powered trucks, the following shall be installed:
- a. At Shell building permit, an electrical room(s) and/or exterior area(s) of the site shall be designated where future electrical panels would be located for the purpose of supplying power to on-site charging facilities for electric powered trucks. Conduit shall be installed from this designated area where the panel would be located to the on-site location where the charging facilities would be located where electric-powered trucks would park and connect to charging facilities to charge the batteries that power the motors of the electric-powered trucks.
 - b. At issuance of a building permit for Tenant Improvements, if the tenant is served by electric trucks, the electrical panel and charging units shall be installed, and the electrical wiring connections shall be made from the electrical panel to the charging units. If the tenant is not served by electric trucks, this requirement shall not apply.
- MM 4.3-5 All on-site outdoor cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) shall be required to be powered by electricity, compressed natural gas, propane, or diesel-fueled engines that comply with the CARB/USEPA Tier 4 Engine standards for off-road vehicles or better (defined as emitting less than or equal to 0.015 grams per brake horsepower-hour [g/bhp-hr] for PM₁₀) and all indoor cargo handling equipment shall be required to be powered by electricity, compressed natural gas, or propane. Use of indoor diesel-fueled equipment shall be prohibited. Developer and all successors also shall include these obligations in all building leases. The building owner and occupant shall allow periodic inspection of the site by the County of Riverside or its designee to confirm compliance. Electrical panels should be appropriately sized to allow for future expanded use.
- MM 4.3-6 In order to promote alternative fuels, and help support “clean” truck fleets, as part of future lease agreements the developer/successor-in-interest shall be required to provide building occupants with information related to SCAQMD’s Carl Moyer Program, or other such



programs that promote truck retrofits or “clean” vehicles and information including, but not limited to, the health effect of diesel particulates, benefits of reduced idling time, CARB regulations, and importance of not parking in residential areas. Tenants shall be notified about the availability of: 1) alternatively fueled cargo handling equipment; 2) grant programs for diesel-fueled vehicle engine retrofit and/or replacement; 3) designated truck parking locations in the project vicinity; 4) access to alternative fueling stations proximate to the site that supply compressed natural gas; and 5) the United States Environmental Protection Agency’s SmartWay program.

MM 4.3-7 All future operations on site shall adhere to the germane policy provisions in the Riverside County Board of Supervisors Policy F-3 (“Good Neighbor Policy” for Logistics and Warehouse/Distribution Uses). Applicable requirements of Policy F-3 shall be specified in future lease agreements with all future tenants, and future tenants shall be required to permit periodic inspection by Riverside County to ensure compliance. In addition, buildings smaller than 250,000 square feet shall comply with applicable policy provisions of the Good Neighbor Policy except as indicated below. Applicable feasible provisions of the Good Neighbor Policy that would serve to measurably reduce Project-related operational emissions include, but are not limited to, the following:

- a. Warehouse/distribution facilities greater than 250,000 square feet shall be designed to provide adequate on-site parking for commercial trucks and passenger vehicles and on-site queuing for trucks that is away from sensitive receptors. The general queuing and spill-over of trucks onto surrounding public streets shall be prevented. Commercial trucks shall not be parked in the public road right-of-way or nearby residential areas.
- b. Facility operators shall maintain records of their fleet equipment and ensure that all diesel-fueled Medium-Heavy Duty Trucks (“MHDT”) and Heavy-Heavy Duty Trucks (“HHD”) accessing the site use year CARB 2010 or newer engines. The records shall be maintained on-site and be made available for inspection by the County.
- c. Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel trucks to restrict idling to no more than five minutes; and 3) telephone numbers of the building facilities manager and CARB to report violations.
- d. Facility operators shall train their managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.
- e. Signs shall be posted in the appropriate locations and/or handouts should be provided that show the locations of nearest food options, fueling, truck maintenance services, and other similar convenience services.



- f. Each Facility shall designate a Compliance Officer responsible for implementing the measures described herein and/or in the project conditions of approval and mitigation measures. Contact information shall be provided to the County and updated annually, and signs shall be posted in visible locations providing the contact information for the Compliance Officer to the surrounding community.
- g. The future applicants for any new facility larger than 250,000 square feet shall be required to enter into agreement with the County of Riverside to provide a supplemental funding contribution, which would be applied to further offset potential air quality impacts to the community and provide a community benefit. Said financial contribution will be determined by the Transportation and Land Management Agency based on the level of NO_x emissions estimated to be generated. Said supplemental funding contribution will be collected on a one-time basis. Funds collected under said supplemental funding program will be subject to designation for use by the Board of Supervisors and will generally be used for projects that directly benefit the impacted community wherein the project is located. The types of projects that the Board of Supervisors may designate for use of these funds include, but are not limited to (1) projects that directly offset NO_x reductions above and beyond what is required by existing air quality regulations, (2) projects that generally improve air quality such as paving of dirt roads, installation of additional trees and landscaping, (3) projects that provide an enhanced buffer between the new facility and sensitive receptors, and (4) Projects that lead to reduced emissions by promoting alternate forms of transportation such as bicycle lanes, new sidewalks, bus turnouts, or other transit-related uses.

4.3.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a.: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. As discussed below under the discussion of Threshold b., implementation of Mitigation Measures MM 4.3-1 and MM 4.3-2 would reduce the Project's construction-related air quality emissions to below the SCAQMD Regional Thresholds. However, even with implementation of Mitigation Measures MM 4.3-3 through MM 4.3-7, the Project's long-term operational emissions of ROG_s and NO_x, both of which also are ozone precursors, would remain above the SCAQMD Regional Thresholds. As such, the Project would potentially delay the timely attainment of the O₃ air quality standard and/or the AQMP emission reduction requirements. Additionally, the Project's proposed land uses are not consistent with the growth forecasts included in the 2016 SCAQMD AQMP. Thus, Project direct and cumulatively-considerable impacts due to a conflict with or obstruction of the SCAQMD 2016 AQMP would be significant and unavoidable.

Threshold b.: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. Implementation of Mitigation Measures MM 4.3-1 and MM 4.3-2 would ensure that daily blasting activities are limited to a maximum of 1.72 tons of explosives and that other measures are implemented to reduce NO_x and CO emissions during construction activities. As previously shown in Table 4.3-7, limiting blasting activities to a maximum of 1.72 tons of explosives per day, requiring approximately 20 days to complete blasting activities,



would ensure that blasting-related emissions of NO_x would be limited to 29.27 pounds per day and blasting-related emissions of CO would be limited to 11.37 pounds per day. As previously shown in Table 4.3-6, worst-case non-blasting related construction emissions of NO_x and CO would occur during construction activities in 2024, when non-blasting related construction emissions of NO_x would be approximately 66.13 pounds per day and non-blasting related construction emissions of CO would be approximately 85.71 pounds per day. Thus, with implementation of the required mitigation, the Project's maximum construction-related emissions of NO_x for both general construction and blasting activities would be approximately 95.40 pounds per day (66.13 pounds per day + 29.27 pounds per day = 95.40 pounds per day), which would be below the SCAQMD Regional Threshold of 100 pounds per day for this pollutant. Additionally, with implementation of the required mitigation the Project's maximum construction-related emissions of CO for both general construction and blasting activities would be approximately 97.08 pounds per day (85.71 pounds per day + 11.37 pounds per day = 97.08 pounds per day), which would be below the SCAQMD Regional Threshold of 550 pounds per day for this pollutant. With implementation of mitigation, Project construction-related emissions would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or State ambient air quality standard, and impacts would be reduced to less-than-significant levels.

Implementation of Mitigation Measures MM 4.3-3 through MM 4.3-7 would reduce the Project's anticipated emissions of ROG_s and NO_x, but would not reduce emissions of these pollutants to below the SCAQMD Regional Thresholds. While these measures would reduce air pollutant emissions attributable to the Project, the exact reduction amount cannot be quantified for most. For some measures it would be overly speculative to quantify resulting emissions reductions. For instance, while the Project would install passenger car EV charging stations it cannot be determined how many zero emission vehicles would replace gasoline-fueled vehicles as a result. Additionally, in order to promote alternative fuels, and help support "clean" truck fleets, the developer/successor-in-interest at the Project must provide building occupants with information related to SCAQMD's Carl Moyer Program, or other such programs that promote truck retrofits or "clean" vehicles. Yet it cannot be reasonably predicted how many clean trucks would replace diesel-fueled trucks as a result. With other measures the reduction values cannot be quantified due to limitation in the modeling software, such as the requirement that all future cold storage warehousing be equipped with electrical hookups to eliminate idling of main and auxiliary engines during the loading and unloading process. The requirement that Facility operators must maintain records of their fleet equipment and ensure that all diesel-fueled Medium-Heavy Duty Trucks ("MHDT") and Heavy-Heavy Duty Trucks ("HHD") accessing the site use year CARB 2010 or newer engines can be quantified and has been accounted for in Table 4.3-9 and Table 4.3-10 since the requirement is also mandated by Provision 4.1 of the County of Riverside Board of Supervisors' *Good Neighbor Policy for Logistics and Warehouse/Distribution Uses*.

As indicated in Table 4.3-9 and Table 4.3-10, the majority of emissions associated with Project operations would result from vehicular traffic, and in particular truck traffic. Mobile source emissions are regulated by standards imposed by federal and State agencies, not local governments. No other mitigation measures related to vehicle tailpipe emissions are available that are within Riverside County's jurisdictional authority and that are feasible for Riverside County to enforce and have a proportional nexus to the Project's level of impact. As



such, it is concluded that operation of the Project would generate ROG and NO_x emissions that would exceed the applicable SCAQMD regional air quality threshold on a daily basis. The Project's operational-related NO_x and ROG emissions would cumulatively contribute to an existing air quality violation in the SoCAB (i.e., ozone concentrations), as well as cumulatively contribute to the net increase of a criteria pollutant for which the SCAB is non-attainment (i.e., federal and State ozone concentrations). Accordingly, the Project's long-term operational-related emissions of ROG and NO_x are concluded to result in a significant and unavoidable impact on both a direct and cumulatively-considerable basis. This impact would occur with implementation of either the Primary Land Use Plan or Alternative Land Use Plan.



4.4 BIOLOGICAL RESOURCES

The analysis in this Subsection is based, in part, on information from the report titled “Biological Technical Report for Stoneridge Commerce Center and Off-Site Truck Route Road Improvements Southerly of the Project Site” (herein, “BTR”), prepared by Glenn Lukos Associates, Inc. (herein, “GLA”), and dated February 24, 2022 (GLA, 2022a). This report is included as *Technical Appendix C1* to this EIR. The Project’s BTR addresses potential impacts associated with development of the Project as proposed, as well as potential impacts associated with improvements needed to implement the Southern Truck Route, as described in EIR subsection 3.6.2.B. This Subsection also is based, in part, on a jurisdictional delineation prepared for the Project site and off-site improvement areas, entitled, “Jurisdictional Delineation of the Stoneridge Commerce Center and the Northerly and Southerly Offsite Truck Route Road Improvements and Use Project, prepared by GLA, dated February 4, 2022, and included as *Technical Appendix C2* to this EIR (GLA, 2022b). For purposes of discussion within this subsection, the term “Study Area” refers to areas both on and off site that would be subject to disturbance with implementation of the Project, regardless as to which truck route ultimately is implemented and regardless as to which land use plan (Primary Land Use Plan or Alternative Land Use Plan) is implemented. The term “Off-Site Improvement Areas” refers to the proposed use of existing roadways as well as roadway improvements needed to off-site roadways to accommodate Project traffic in the event the Mid-County Parkway (MCP) is not constructed (i.e., the Primary Land Use Plan), as well as roadway improvements needed to accommodate Project traffic in the event the Southern Truck Route is implemented. None of the improvements associated with the Off-Site Improvement Areas would occur with implementation of the Alternative Land Use Plan, with exception of off-site impact areas included within the Study Area.

4.4.1 EXISTING CONDITIONS

Study Area Conditions

The Project site occurs between Ramona Expressway to the north and Nuevo Road to the south; the San Jacinto River, River Park Mitigation Bank, and agricultural lands occur to the east; and undeveloped land occurs to the west, with existing residential development beyond. Based on historical aerial photography dating back to the 1960s, the Project site has been developed for agricultural uses resulting in extensive ground disturbances and hydrologic alterations. Existing conditions have varied over the last few years as the northern half of the Project site has mainly been utilized for agriculture, while the southern half is maintained by regular mowing and disking. (GLA, 2022a, p. 30)

The topography within the Project site slopes downward from the northwest to southeast from 1,695 feet to 1,425 feet above mean sea level (amsl). Soils on-site include a majority of sandy loam to course loam soils including Greenfield sandy loam, Hanford course sandy loam, and Ramona sandy loam. Smaller areas of silty clay and Riverwash soils occur within the eastern and southeastern Project boundaries, and are associated with the San Jacinto River historic flood plain. A depiction of soils found throughout the Project site can be found on Exhibit 8A of the Project’s BTR (*Technical Appendix C1*). (GLA, 2022a, pp. 30-31)

Due to the decades of agriculture practices and disturbances throughout the Project site, hydrology has been modified as a result. However, the topography conveys storm flows in a general west to east direction,



depending on rainfall amounts, through the site towards the San Jacinto River channel. A portion of the San Jacinto River occurs within the eastern and southeastern Project boundaries and is an ephemeral-to-intermittent drainage, only flowing directly following storm events, and with the discharge of municipal water for groundwater recharge, flowing in a southwesterly direction through the southeastern portion of the Project site and under the Nuevo Road Bridge adjacent to Eastern Municipal Water District (EMWD) property. No other blue-line drainages occur within the Study area, but the Project site does support non-riparian earthen ephemeral drainages. (GLA, 2022a, p. 31)

Off-Site Improvement Areas Conditions

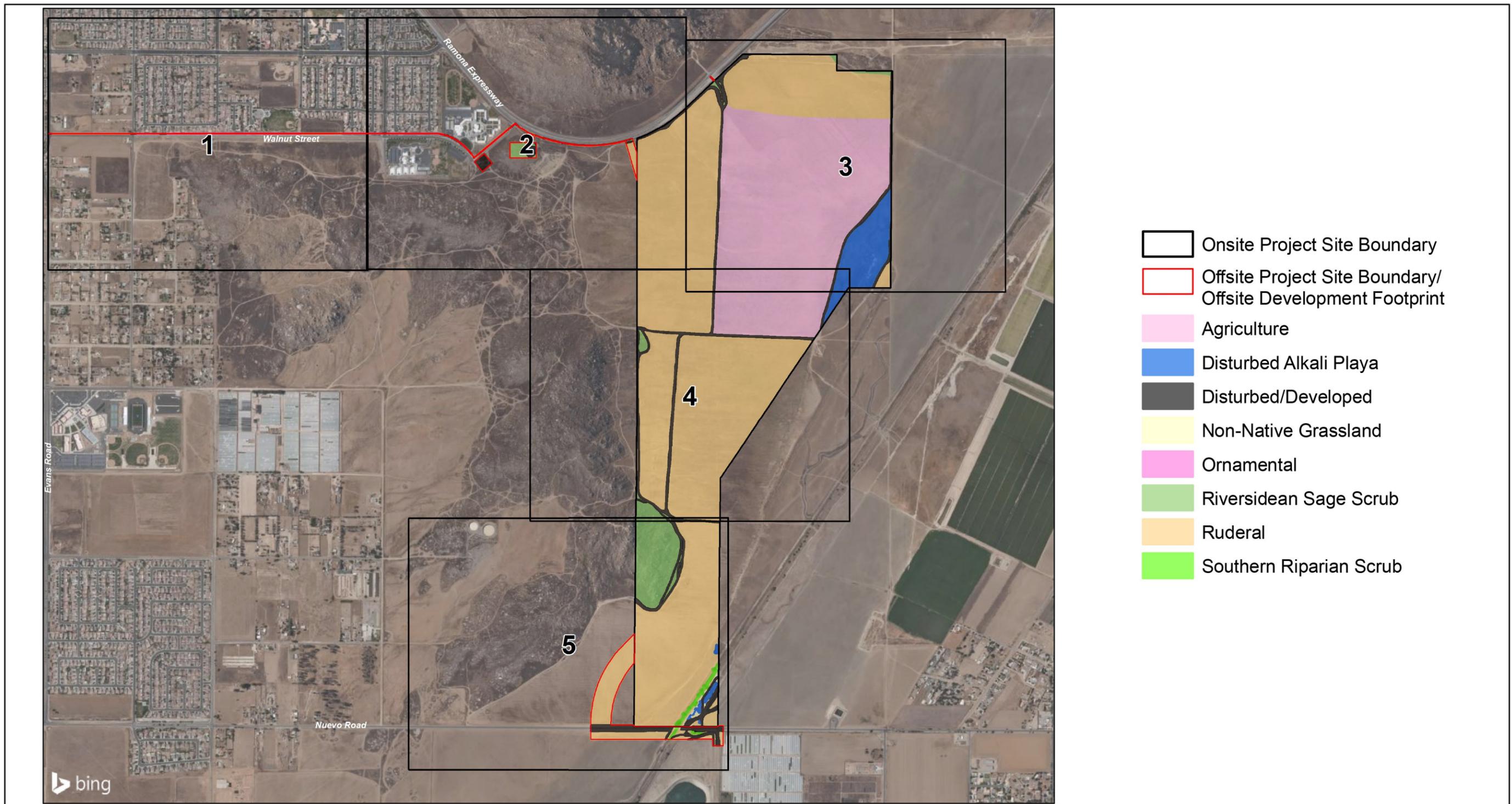
Roadways planned for improvement as part of the Primary Truck Route and/or Southern Truck Route (“Off-Site Improvement Areas”) consist of improvements to Dunlap Drive to the east, San Jacinto Avenue to the south, Nuevo Road to the north, and Redlands Avenue to the west within the existing paved portion of each roadway, with exception of a small expansion of roadway at the intersection of Nuevo Road and Dunlap Drive and improvements at the intersection of Dunlap Drive and San Jacinto Avenue. The northerly off site areas would consist of the use of existing roadways within the existing paved roads along Perris Boulevard from Placentia Avenue to Morgan Street, Morgan Street from Perris Boulevard to Indian Avenue, Indian Avenue from Morgan Street to Placentia Avenue, and Placentia Avenue from Indian Avenue to Perris Boulevard. One additional segment of Perris Boulevard would be utilized from just north of Iris Avenue to Harley Knox Boulevard, and Harley Knox Boulevard from Perris Boulevard to the Interstate 215 Freeway. The eastern boundary of the Off-Site Improvement Areas contain a roadside ditch adjacent to Dunlap Drive. This feature only flows directly following storm events. No blue-line drainage occurs within the Southerly Off-Site Area. A depiction of soils found throughout the Off-Site Improvement Areas are shown on Exhibit 8B of the Project’s BTR (*Technical Appendix CI*). (GLA, 2022a, pp. 2, 31-32)

A. Vegetation Mapping

Study Area

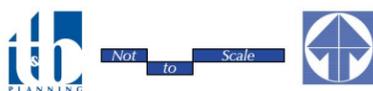
The Project site and off-site improvement areas (herein, “Study Area”) supports the following vegetation/land cover types: agriculture, disturbed alkali playa, disturbed/developed, non-native grassland, ornamental, Riversidean sage scrub, ruderal, and southern riparian scrub, as depicted on Figure 4.4-1 through Figure 4.4-6, *Study Area Vegetation Map*. Table 4.4-1, *Summary of Study Area Vegetation/Land Use Types*, provides a summary of the vegetation/land cover types and their corresponding acreage. Descriptions of each vegetation/land cover type is provided below. Photographs depicting the Project site are shown in Exhibit 12 of the Project’s BTR (*Technical Appendix CI*). (GLA, 2022a, p. 32)

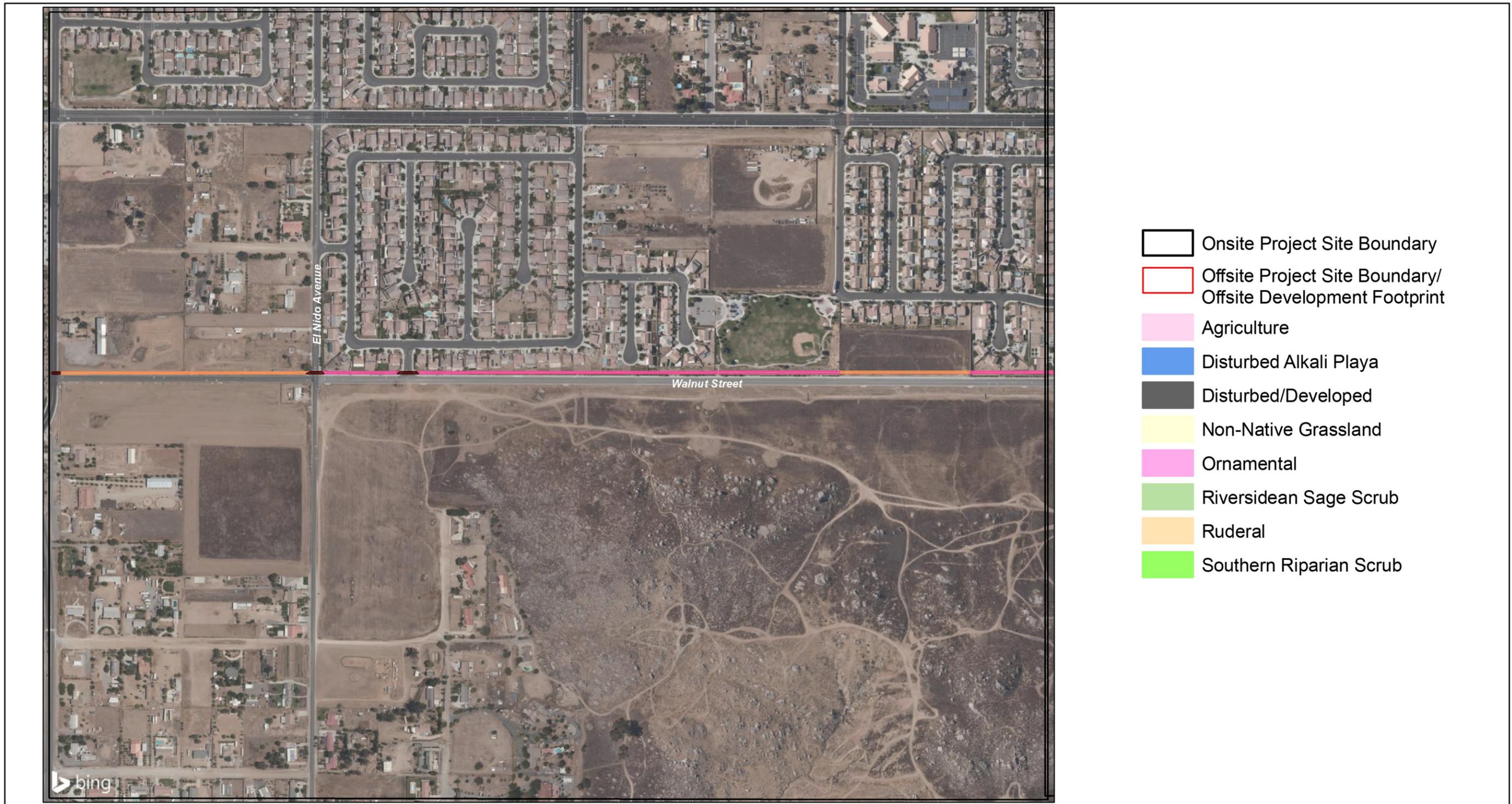
- **Agriculture:** The Study Area supports 176.82 acres of active agriculture, located within the northeastern portion of the Project site. During the September 2020 site visit, GLA biologists observed an actively cultivated watermelon (*Citrullus lanatus*) field being actively managed on the Project site. Agriculture practices have been noted on the Project site historically and are subject to varying crop types and acreages. (GLA, 2022a, p. 33)



Source(s): Glen Lukos Associates Inc (02-24-2022)

Figure 4.4-1

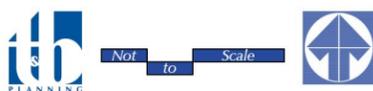




- Onsite Project Site Boundary
- Offsite Project Site Boundary/
Offsite Development Footprint
- Agriculture
- Disturbed Alkali Playa
- Disturbed/Developed
- Non-Native Grassland
- Ornamental
- Riversidean Sage Scrub
- Ruderal
- Southern Riparian Scrub

Source(s): Glen Lukos Associates Inc (02-24-2022)

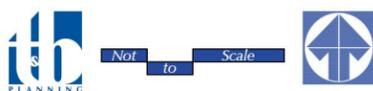
Figure 4.4-2





Source(s): Glen Lukos Associates Inc (02-24-2022)

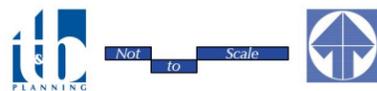
Figure 4.4-3

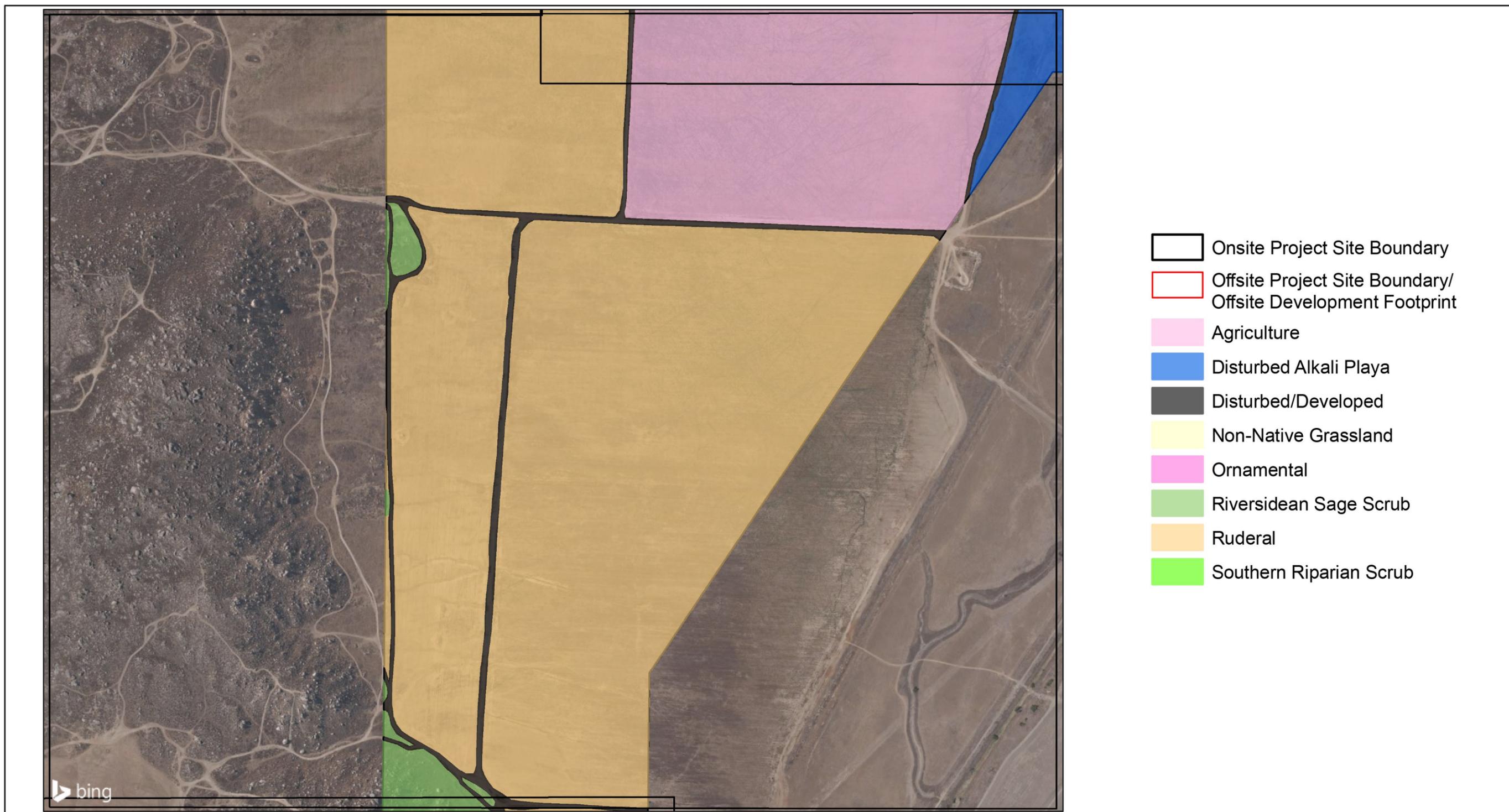




Source(s): Glen Lukos Associates Inc (02-24-2022)

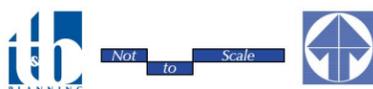
Figure 4.4-4

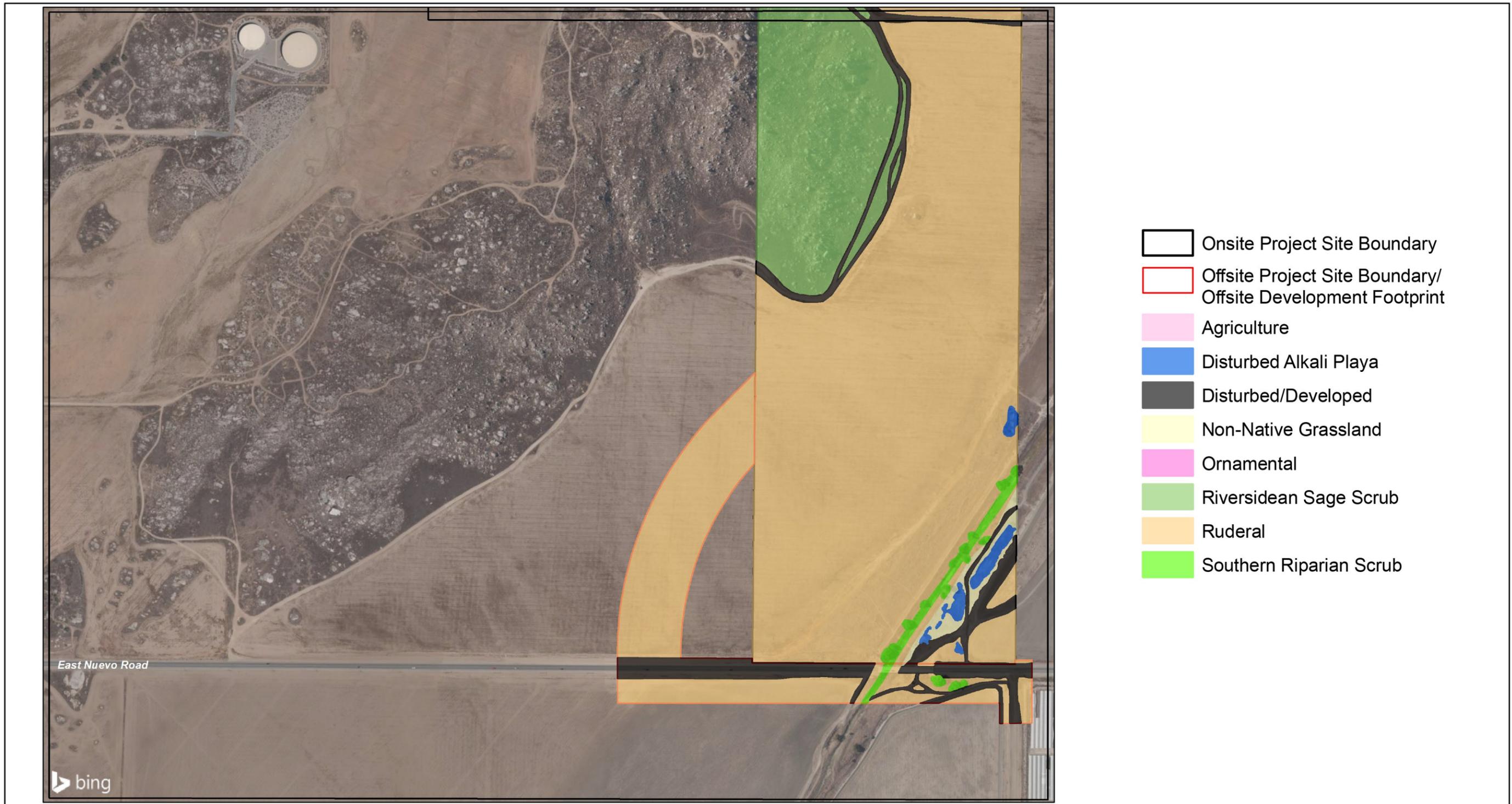




Source(s): Glen Lukos Associates Inc (02-24-2022)

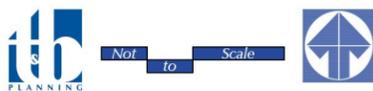
Figure 4.4-5





Source(s): Glen Lukos Associates Inc (02-24-2022)

Figure 4.4-6



Study Area Vegetation Map (5 of 5)



Table 4.4-1 Summary of Study Area Vegetation/Land Use Types

VEGETATION/LAND USE TYPE	PROJECT SITE (acres)
Agriculture	176.82
Disturbed Alkali Playa	21.30
Disturbed/Developed	21.19
Non-Native Grassland	2.92
Ornamental	0.97
Riversidean Sage Scrub	26.36
Ruderal	362.82
Southern Riparian Scrub	1.50
Total	613.89

(GLA, 2022a, Table 4-1)

- Disturbed Alkali Playa.** The Study Area supports 21.30 acres of disturbed alkali playa, with the largest area occurring along the northeastern Project boundary, and several smaller patches occurring within the southern portion of the Project site. Each of these areas exhibits sign of temporary inundation and is within the historic floodplain of the San Jacinto River. The disturbed alkali playas include a mosaic of alkali adapted species including silverscale saltbush (*Atriplex argentea*), alkali weed (*Cressa truxillensis*), bush seepweed (*Suaeda nigra*), salt heliotrope (*Heliotropium curassavicum*), alkali mallow (*Malvella leprosa*), and special-status San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*; federally Endangered [FE], California Rare Plant Rank [CRPR] 1B.1) and smooth tarplant (*Centromadia pungens* ssp. *laevis*; CRPR 1B.1). However, dense patches of non-native species also occur within these areas, including foxtail barley (*Hordeum murinum*), summer mustard (*Hirschfeldia incana*), prickly lettuce (*Lactuca serriola*), and saltcedar (*Tamarix ramosissima*). Native ground cover species within these areas included Jimsonweed (*Datura wrightii*) and doveweed (*Croton setiger*). (GLA, 2022a, p. 33)
- Disturbed/Developed.** Approximately 21.19 acres of disturbed/developed areas occur throughout the Study Area in the form of unpaved access roads, paved vehicular roads, and developed infrastructure such as the San Jacinto River levee. These areas are routinely maintained and are primarily unvegetated. (GLA, 2022a, p. 33)
- Non-Native Grasslands.** The Study Area contains 2.92 acres of non-native grassland in two discrete areas within the Project site. The non-native grassland areas were differentiated from the ruderal vegetation classification as they are not as routinely maintained and were allowed to develop into a functioning grassland ecosystem. Dominant species found within the non-native grassland areas were common fiddleneck (*Amsinckia menziesii*), ripgut grass (*Bromus diandrus*), red brome (*Bromus madritensis* ssp. *rubens*), tocalote (*Centaurea melitensis*), Russian thistle (*Salsola tragus*), and barbwire Russian thistle (*Salsola australis*). (GLA, 2022a, pp. 33-34)



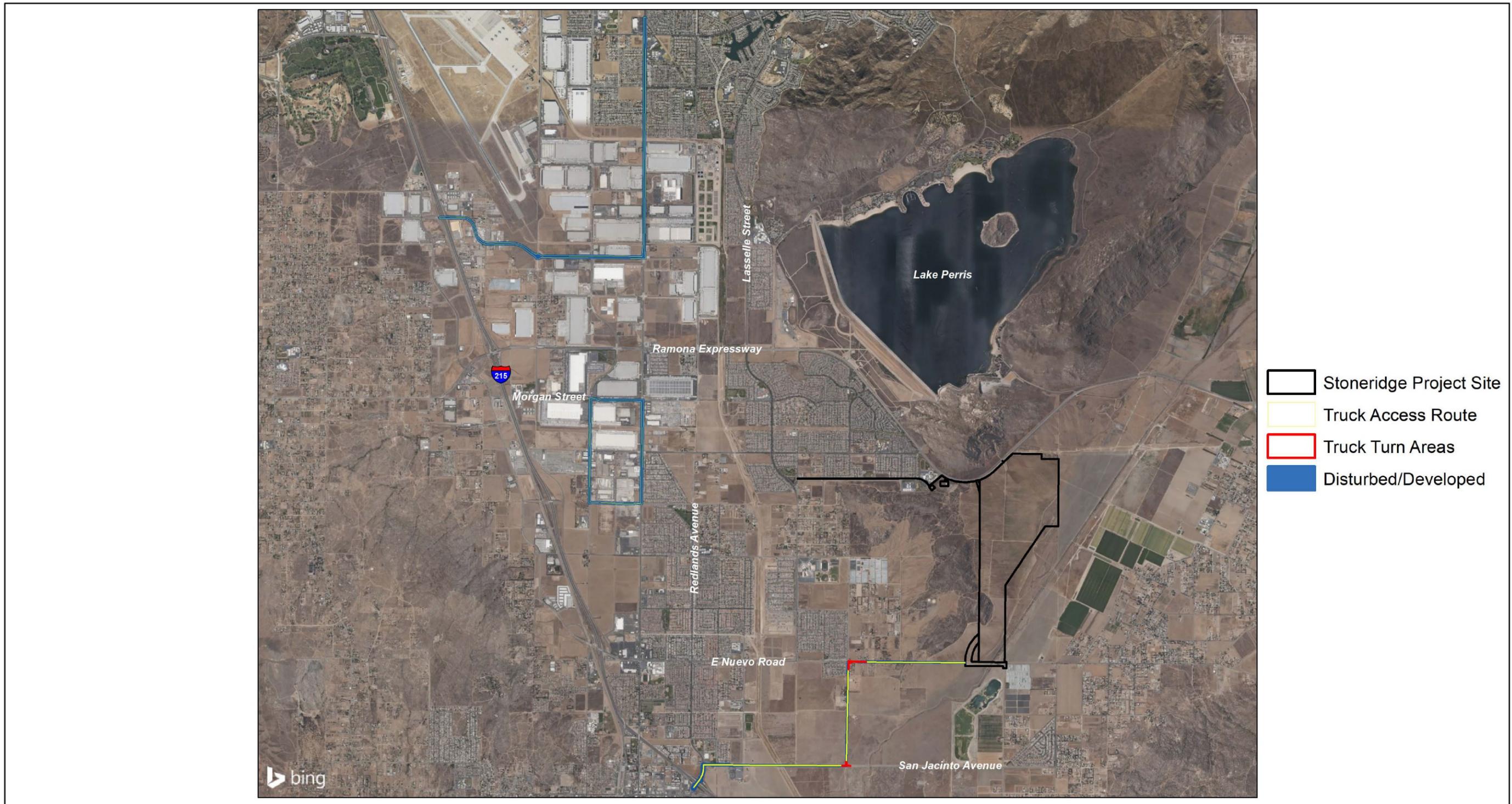
- **Ornamental.** Approximately 0.97 acre of ornamental plantings occur along the northern portion of the Study Area, associated with residential land use adjacent to proposed off-site impacts. (GLA, 2022a, p. 34)
- **Riversidean Sage Scrub.** Approximately 26.36 acres of Riversidean sage scrub occurs sporadically throughout the Study Area, with the largest area occurring along the southwestern Project site boundary. While the majority of these areas have been disturbed due to off-road vehicles, the largest area on-site has remained primarily undisturbed due to the steepness of the terrain and large boulders that occur throughout. These areas are dominated with California buckwheat (*Eriogonum fasciculatum* var. *polifolium*), California sagebrush (*Artemisia californica*), sticky monkeyflower (*Diplacus aurantiacus*), brittlebush (*Encelia farinosa*), ripgut brome, and red brome. (GLA, 2022a, p. 34)
- **Ruderal.** Ruderal vegetation covers the majority of the Study Area, accounting for approximately 362.82 acres. These areas are routinely disked for weed abatement, as was the case during the biological study. Dominant plant species observed included stinknet (*Oncosiphon piluliferum*), puncture vine (*Tribulus terrestris*), London rocket (*Sisymbrium irio*), red-stemmed filaree (*Erodium cicutarium*), cheeseweed (*Malva parviflora*), common fiddleneck, ripgut grass, red brome, tocalote, Russian thistle, barbwire Russian thistle, and doveweed. (GLA, 2022a, p. 34)
- **Southern Riparian Scrub.** The Study Area supports 1.50 acres of Southern Riparian Scrub within and along the banks of the San Jacinto River, which traverses the southeastern portion of the Project site. This area is primarily dominated with riparian species including Goodding's black willow (*Salix gooddingii*), saltcedar, and mulefat (*Baccharis salicifolia*), with herbaceous species including common spikerush (*Eleocharis palustris*) and toothed dock (*Rumex dentatus*). Non-native species such as summer mustard, foxtail barley, and annual brome grasses are also dominant along the banks of the river. (GLA, 2022a, p. 34)

Off-Site Roadway Improvement Areas

The Off-Site Improvement Areas support only one vegetation/land cover type: disturbed/developed, as depicted on Figure 4.4-7, *Off-Site Improvement Areas Vegetation Map*. Approximately 96.69 acres of disturbed/developed areas occur throughout the Off-Site Improvement Areas in the form of paved roads and disturbed land, which is typically farmed. These areas are routinely maintained and are primarily unvegetated. Photographs depicting the Off-Site Improvement Areas are shown in Exhibit 12 of the Project's BTR (*Technical Appendix C1*). (GLA, 2022a, p. 34)

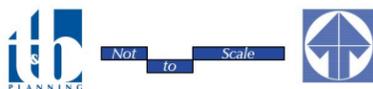
B. Special Status Vegetation Communities

The California Natural Diversity Database (CNDDDB) identifies the following four special-status vegetation communities for the Perris, California and surrounding quadrangle maps: Southern Coast Live Oak Riparian



Source(s): Glenn Lukos Associates Inc (02-24-2022)

Figure 4.4-7





Forest, Southern Cottonwood Willow Riparian Forest, Southern Riparian Scrub, and Southern Sycamore Alder Riparian Woodland. The Off-Site Improvement Areas do not contain special-status vegetation types. (GLA, 2022a, p. 35)

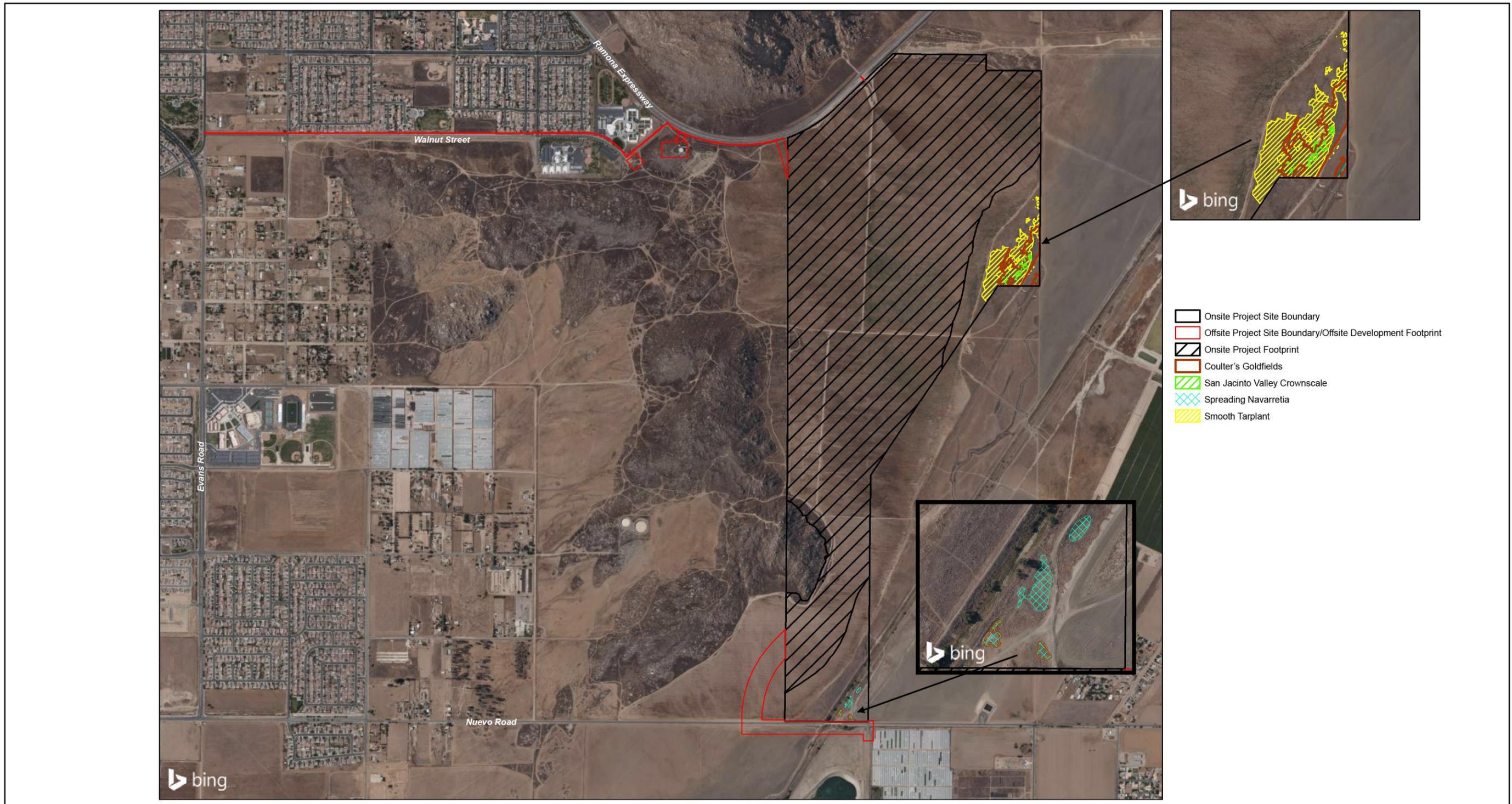
C. ***Special-Status Plants***

The Study Area and Off-Site Improvement Areas occur within Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Narrow Endemic Plant Species Survey Area (NEPSSA) designated Survey Areas 3 and/or 10, as well as Criteria Area Plant Species Survey Area (CAPSSA) designated Survey Area 3; therefore, pursuant to the MSHCP, the following target species were evaluated: San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*), Parish's brittle scale (*Atriplex parishii*), Davidson's salt scale (*Atriplex serenana* var. *davidsonii*), thread-leaved brodiaea (*Brodiaea filifolia*), round-leaved filaree (*California macrophylla*), smooth tarplant (*Centromadia pungens* ssp. *laevis*), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), little mousetail (*Myosurus minimus* ssp. *apus*), mud nama (*Nama stenocarpa*), Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis*), California orcutt grass (*Orcuttia californica*), Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*), Hammitt's clay cress (*Sibarpis hammittii*), and San Miguel savory (*Clinopodium chandleri*), along with other special-status plants that could cause a potential constraint to the Project under CEQA. Table 4-3 of the Project's BTR (*Technical Appendix CI*) provides a list of special-status plants evaluated for the Study Area and Off-Site Improvement Areas through general biological surveys, habitat assessments, and focused surveys. Species were evaluated based on the following factors: 1) species identified by the CNDDDB and California Native Plant Society (CNPS) as occurring (either currently or historically) on or in the vicinity of the Project site, 2) applicable MSHCP Survey Areas, and 3) any other special-status plants that are known to occur within the vicinity of the Project site, or for which potentially suitable habitat occurs within the site. The following special-status plants were detected within the Study Area and are described in detail in BTR Table 4-3: Coulter's goldfields (CRPR 1B.1), San Jacinto Valley crownscale (federally-endangered, CRPR 1B.1), smooth tarplant (CRPR 1B.1), and spreading navarretia (federally-threatened, CRPR 1B.1). No special-status plants were detected within the Off-Site Improvement Areas. (GLA, 2022a, p. 35)

1. ***Special-Status Plants Detected Within the Study Area and/or the Off-Site Improvement Areas***

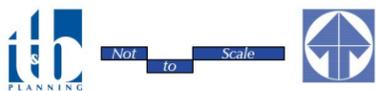
Several special-status plants were identified within the Study Area, as described below. Figure 4.4-8, *Rare Plants Map*, depicts the locations of the special-status plants within the Study Area. No special-status plants were identified within the Off-Site Improvement Areas. (GLA, 2022a, p. 35)

- **Coulter's Goldfields (*Lasthenia glabrata* ssp. *coulteri*)**. This species is a member of the sunflower family (Asteraceae) and is designated as a CNPS List 1B.1 species but is not a State- or federally-listed species. This annual herb is known to occur in marshes and swamps, as well as playas and vernal pools below 4,000 feet (1,220 meters) above mean sea level (amsl). Coulter's goldfields is known to occur



Source(s): Glenn Lukos Associates Inc (02-24-2022)

Figure 4.4-8





from San Luis Obispo, Santa Barbara, Ventura, Los Angeles, San Bernardino, Riverside, Orange, and San Diego Counties. It is known to bloom from February through June. As depicted on Figure 4.4-8, a large population of Coulter's goldfields was observed near the northeastern Project boundary, as well as two smaller populations near the southern Project boundary, all of which occur within the disturbed alkali playa vegetation community. The large population, estimated in the thousands, of Coulter's goldfields in the northeastern portion of the Project site extends outside the Project boundary, both east and south toward the San Jacinto River. Each of the three documented populations of Coulter's goldfields on-site were initially observed in flower during the focused rare plant survey visit conducted by GLA on March 26, 2019; however, fruiting individuals and vegetative remains also were observed throughout the duration of the field surveys. (GLA, 2022a, pp. 40-41)

- **San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*)**. This species is a member of the amaranth family (Amaranthaceae) and is designated as a federally endangered species, as well as a CNPS List 1B.1 species. This annual herb is known to occur in playas, valley and foothill grasslands, and alkaline vernal pools from 456 to 1,640 feet (139 to 500 meters) amsl. San Jacinto valley crownscale is known to occur from Kern and Riverside Counties and is known to bloom from April through August. As depicted on Figure 4.4-8, an estimated 700 San Jacinto Valley crownscale individuals were observed and documented within the disturbed alkali playa which occurs along the northeastern Project boundary. The population occurs in multiple discrete patches and was initially observed during the focused rare plant survey visit conducted by GLA on March 26, 2019. (GLA, 2022a, p. 41)
- **Smooth Tarplant (*Centromadia pungens* ssp. *laevis*)**. This species is a member of the sunflower family and is designated as a CNPS List 1B.1 species but is not a State or federally listed species. This annual herb is known to occur in chenopod scrub, meadows and seeps, playas, riparian woodland and saline valley and foothill grasslands below 2,100 feet (640 meters) amsl. Smooth tarplant is known to occur from Riverside, San Bernardino, and San Diego Counties and is known to bloom from April through September. As depicted on Figure 4.4-8, an estimated 143,000 smooth tarplant individuals were observed and documented within the disturbed alkali playa which occurs along the northeastern Project boundary. The population of smooth tarplant on-site is dense and extends outside the Project boundary, both east and south toward the San Jacinto River. The smooth tarplant individuals were detected primarily in flower; however, vegetative and fruiting individuals were also observed throughout the duration of field surveys, as well as vegetative remains of past season individuals. (GLA, 2022a, p. 41)
- **Spreading Navarretia (*Navarretia fossalis*)**. This species is a member of the phlox family (Polemoniaceae) and is designated as a federally threatened species, as well as a CNPS List 1B.1 species. This annual herb is known to occur in chenopod scrub, marshes, and swamps, as well as playas and vernal pools from 30 to 4,265 feet (1,300 meters) amsl. Spreading navarretia is known to occur from San Luis Obispo, Los Angeles, Riverside, and San Diego Counties, and is known to bloom from April through June. As depicted on Figure 4.4-8, an estimated 1,450 spreading navarretia individuals



in multiple patches near the northeastern and southern Project boundaries were observed and documented, all occurring within the disturbed alkali playa vegetation community. The population in the northeastern portion of the property extends outside the Project boundary, south toward the San Jacinto River. Spreading navarretia on-site were observed both vegetatively and flowering during the focused rare plant surveys conducted in spring of 2019. (GLA, 2022a, p. 41)

2. *Special-Status Plants Not Detected but with a Potential to Occur within the Study Area and/or the Off-Site Improvement Areas*

In addition to the plant species described above, the following MSHCP target species were also evaluated: Parish's brittlescale, Davidson's saltscale, thread-leaved brodiaea, round-leaved filaree, little mousetail, mud nama, Munz's onion, San Diego ambrosia, many-stemmed dudleya, California orcutt grass, and Wright's trichocoronis. Of these, many-stemmed dudleya, Munz's onion, round-leaved filaree, and other special-status plant species with potential to cause a constraint to development were confirmed absent through the focused rare plant surveys, as noted in Table 4-3 of the Project's BTR (*Technical Appendix C1*). (GLA, 2022a, p. 42)

D. *Special-Status Animals*

Study Area

The following special-status animals were detected within the Study Area: ferruginous hawk (*Buteo regalis*, California Department of Fish and Wildlife [CDFW] – Species of Special Concern [SSC]), northern harrier (*Circus cyaneus*, CDFW – SSC), white-tailed kite (*Elanus leucurus*, CDFW – FP), loggerhead shrike (*Lanius ludovicianus*, CDFW – SSC), Los Angeles pocket mouse ("LAPM"; *Perognathus longimembris brevinasus*, CDFW – SSC), northwestern San Diego pocket mouse (*Chaetodipus fallax*, CDFW – SSC), San Diego desert woodrat (*Neotoma lepida intermedia*, CDFW – SSC), Stephens' kangaroo rat (*Dipodomys stephensi*, ST, FE), and San Diego black-tailed jackrabbit (*Lepus californicus sandiogensis*, CDFW – SSC). Table 4-4 of the Project's BTR (*Technical Appendix C1*) provides a list of special-status animals evaluated for the Study Area through general biological surveys, habitat assessments, and focused surveys. Species were evaluated based on the following factors, including: 1) species identified by the CNDDDB as occurring (either currently or historically) on or in the vicinity of the Project site, 2) applicable MSHCP Survey Areas, and 3) any other special-status animals that are known to occur within the vicinity of the Project site, for which potentially suitable habitat occurs on the site. (GLA, 2022a, p. 42)

Off-Site Improvement Areas

No special-status animals were detected within the Off-Site Improvement Areas, nor are any special-status animals expected to be present within this area due to the paved condition of the roadways and the disturbed condition of areas adjacent to the roadways. Table 4-4 of the Project's BTR (*Technical Appendix C1*) provides a list of special-status animals evaluated for the Off-Site Improvement Areas through general biological surveys, habitat assessments, and focused surveys. Species were evaluated based on the following factors, including: 1) species identified by the CNDDDB as occurring (either currently or historically) on or in the vicinity of the Project site, 2) applicable MSHCP Survey Areas, and 3) any other special-status animals that



are known to occur within the vicinity of the Project site, for which potentially suitable habitat occurs on the site. (GLA, 2022a, p. 42)

1. **Special-Status Wildlife Species Observed within the Study Area and Off-Site Improvement Areas**

Several special-status wildlife species were identified within the Study Area, as described below. No special-status wildlife species were identified within the Off-Site Improvement Areas, as these areas mainly consist of paved roads and do not contain suitable habitat for special-status wildlife species.

Special-Status Birds

- **Ferruginous Hawk (*Buteo regalis*).** The ferruginous hawk does not have a federal or State designation, however this species is considered locally rare when wintering and is a California Species of Special Concern (SSC). The species winters west of the Great Plains, throughout California, and southward to Baja California and northern mainland Mexico. The ferruginous hawk is a fairly common winter resident of grassland and agricultural areas in southwestern California. The ferruginous hawk breeds in northern Nevada, eastern Oregon and Washington, and eastward to the western Dakotas. Threats to the ferruginous hawk include habitat destruction and fragmentation throughout its range. A single ferruginous hawk was observed foraging over the Project site in March of 2019 during general habitat surveys by GLA biologists. This species is not expected to nest within the Project site as it is located outside of the breeding range for this species. It also is not expected to occur within the Off-Site Improvement Areas as this area mainly consists of paved roads. (GLA, 2022a, p. 53)
- **Loggerhead Shrike (*Lanius ludovicianus*).** The loggerhead shrike is designated as a SSC when nesting and is a covered species under the MSHCP. The loggerhead shrike is found throughout the foothills and lowlands of California as a resident. The loggerhead shrike is known to forage over open ground within areas of short vegetation, pastures with fence rows, grasslands, riparian areas, open woodland, agricultural fields, desert washes, and desert scrub. This species commonly nests within dense, mainly thorny, vegetation and may use areas where tumbleweed has concentrated. Displacement of habitat through urban development, the use of pesticides, and competition with species that are more tolerant of human-induced changes may be resulting in population declines. Individual loggerhead shrikes were observed multiple times foraging near the San Jacinto River and off-site areas adjacent to the Eastern Municipal Water District (EMWD) lands to the south on separate occasions by GLA biologists during general and focused surveys in 2019 and 2020. The loggerhead shrike is expected to forage on site and has a low to moderate potential to nest within the limited suitable nesting habitat associated with the San Jacinto River. It is not expected to occur within the Off-Site Improvement Areas as this area mainly consists of paved roads. (GLA, 2022a, p. 53)
- **Northern Harrier (*Circus cyaneus*).** The northern harrier is designated as a SSC when nesting and is a covered species under the MSHCP. The northern harrier frequents open wetlands, upland prairies, mesic grasslands, drained marshlands, croplands, shrub-steppe, meadows, grasslands, desert sinks,



fresh and saltwater emergent wetlands, and is seldom found in wooded areas. Harriers nest on the ground in marshland habitats and prefer dense areas of grasses, willows, and cattails. Threats to northern harriers include conversion of native grassland to agriculture, habitat fragmentation, and loss of wetland/marsh habitats. GLA biologists observed an individual northern harrier foraging on three separate visits to the Project site in 2019. It is unknown if the same individual was observed on each occasion. This species is expected to forage on-site and has low potential to nest within the limited suitable habitat along the southeast Project boundary near the San Jacinto River. It is not expected to occur within the Off-Site Improvement Areas as this area mainly consists of paved roads. (GLA, 2022a, pp. 53-54)

- **White-Tailed Kite (*Elanus leucurus*).** The white-tailed kite does not have a federal or State designation; however, this species is considered locally rare when nesting and is a California Fully Protected (CFP) species and is a covered species under the MSHCP. The white-tailed kite inhabits low elevation, open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Riparian areas and forest edges adjacent to open areas are used for nesting. Threats to the white-tailed kite include conversion of natural or agricultural lands to urban or commercial property, clean farming techniques that leave few residual vegetation areas for prey abundance; and degradation of habitat, especially the loss of nest trees and foraging habitat. GLA biologists observed multiple individual white-tailed kites foraging on separate visits to the Project site. This species is expected to forage on site and has moderate potential to nest within the limited suitable habitat along the southeast Project boundary associated with the San Jacinto River. It is not expected to occur within the Off-Site Improvement Areas as this area mainly consists of paved roads. (GLA, 2022a, p. 54)

Special-Status Mammals

- **Los Angeles Pocket Mouse (*Perognathus longimembris brevinasus*).** The Los Angeles pocket mouse (LAPM) is designated as a SSC and is a covered species under the MSHCP. The LAPM prefers fine, sandy soils and may utilize these soil types for burrowing. Vegetation communities associated with LAPM habitat include non-native grassland, Riversidean sage scrub, Riversidean alluvial fan sage scrub, and chaparral. Urbanization, agriculture, sand and gravel mining, and flood control projects are serious threats to the LAPM. Loss of and disruptions in the continuity of drainages and alluvial fan habitats that support patchy distributions of the species probably results in isolation of local populations and preclude or limit the amount of genetic exchange between populations. Such isolation can result in loss of genetic drift resulting in loss of heterogeneity in the populations, leaving small local populations at high risk of extirpation. ENVIRA Consulting performed protocol trapping for the LAPM, as required by the MSHCP Mammal Survey Area, over eight nights from June 27 to July 5, 2020. Fourteen (14) LAPM individuals were captured during the survey. Presence of this species is confirmed on the Project site with most captures occurring along the edges of the dirt roads and berms throughout the Project site. See Appendix C-1, *LAPM Trapping Report*, of the Project's BTR (*Technical Appendix C1*) for more details. ENVIRA also conducted a habitat assessment for the LAPM within the Off-Site Improvement Areas on August 1, 2021. ENVIRA determined that no suitable



habitat for the LAPM was present. A copy of this Habitat Assessment letter is attached as Appendix C-2 to the Project's BTR. (GLA, 2022a, p. 54)

- **Northwestern San Diego Pocket Mouse (*Chaetodipus fallax fallax*).** The northwestern San Diego pocket mouse is designated as a SSC and is a covered species under the MSHCP. The northwestern San Diego pocket mouse inhabits coastal sage scrub, sage scrub/grassland ecotones, and chaparral communities. It inhabits open, sandy areas of both the Upper and Lower Sonoran life-zones of southwestern California and northern Baja California. Like other small mammals in the area, the San Diego pocket mouse is threatened with habitat fragmentation, degradation, and development. During LAPM protocol surveys performed by ENVIRA Consulting, 27 northwestern San Diego pocket mice were captured during the surveys. Presence of this species is confirmed on the Project site. See Appendix C-1, *LAPM Trapping Report*, of the Project's BTR (*Technical Appendix C1*) for more details. As noted above, ENVIRA also conducted a habitat assessment for the LAPM within the Off-Site Improvement Areas on August 1, 2021. ENVIRA determined that no suitable habitat for the LAPM was present. This determination would also be valid for the Northwestern San Diego Pocket Mouse as they occupy similar habitats. A copy of this Habitat Assessment letter is attached as Appendix C-2 to the Project's BTR. (GLA, 2022a, pp. 54-55)
- **San Diego Black-Tailed Jackrabbit (*Lepus californicus bennettii*).** The San Diego blacktailed jackrabbit is designated as a SSC and is a covered species under the MSHCP. The blacktailed-jackrabbit occupies many diverse habitats, but primarily is found in arid regions supporting short-grass habitats. Jackrabbits typically are not found in high grass or dense brush where movement is difficult, and the openness of open scrub habitat probably is preferred over dense chaparral. Black-tailed jackrabbits are found in most areas that support annual grassland, Riversidean sage scrub, alluvial fan sage scrub, Great Basin sagebrush, chaparral, disturbed habitat, and agriculture. Urban development, habitat loss, habitat fragmentation, and isolation of populations are all potential long-term risks to jackrabbits. Individual black-tailed jackrabbits were observed within the Project site on multiple occasions during general and focused surveys. This species is expected to occur on the marginal areas between the Riversidean sage scrub in the western portion of the Project site and to the east near the open non-native grasslands and San Jacinto River banks where the vegetation is not disturbed as frequently. This species does not occur within the Off-Site Improvement Areas as this area mainly consists of paved roads. (GLA, 2022a, p. 55)
- **San Diego Desert Woodrat (*Neotoma lepida intermedia*).** The San Diego desert woodrat is designated as a SSC and is a covered species under the MSHCP. The San Diego desert woodrat is a sub-species of the desert woodrat (*N. lepida*); which is more widespread and found throughout central and Southern California and the Great Basin, Mojave, and Colorado deserts. Woodrats are noted for their flexibility or plasticity in utilizing various materials, such as twigs and other debris (sticks, rocks, dung), to build elaborate homes or "middens," which typically include several chambers for nesting and food, as well as several entrances. Middens may be used by several generations of woodrats. The most common natural habitats utilized by the San Diego sub-species are chaparral, coastal sage scrub



(including Riversidean sage scrub and Diegan coastal sage scrub) and grassland. Where substantial patches of these habitats are still intact, San Diego desert woodrats should still occur. Threats to the San Diego desert woodrat include loss of habitat through development, farming practices (disking), and frequent wildfires that impact historic stands of cactus. This species is relatively sedentary and may not be capable of dispersing long distances between suitable habitat patches. Isolation may also result in loss of genetic diversity because of impediments to dispersal and genetic exchange. During LAPM protocol surveys performed by ENVIRA Consulting, one (1) San Diego desert woodrat was captured during the surveys. Presence of this species is confirmed on the Project site with the one capture occurring along the western edges of the Project site. See Appendix C-1, *LAPM Trapping Report*, of the Project's BTR (*Technical Appendix C1*) for more details. ENVIRA also conducted a habitat assessment for the LAPM within the Off-Site Improvement Areas on August 1, 2021. ENVIRA determined that no suitable habitat for the LAPM was present. This determination would also be valid for the San Diego Desert Woodrat as they occupy similar habitats. A copy of this Habitat Assessment letter is attached as Appendix C-2 to the Project's BTR. (GLA, 2022a, pp. 55-56)

- **Stephens' Kangaroo Rat (*Dipodomys stephensi*)**. The Stephens' kangaroo rat (SKR) is designated as a federally endangered (FE) species, a State threatened (ST) species, and is a covered species under the USFWS Habitat Conservation Plan (HCP). The SKR is found almost exclusively in open grasslands or sparse shrublands with cover of less than 50 percent during the summer. As a fossorial (burrowing) animal, SKR typically is found in sandy and sandy loam soils with a low clay to gravel content, although there are exceptions where they can utilize the burrows of Botta's pocket gopher (*Thomomys bottae*) and California ground squirrel (*Otospermophilus beecheyi*). Historically, conversion of habitat to agricultural uses was the main threat to the SKR. However, kangaroo rats can rapidly colonize farm land left fallow. Over the last decades, permanent loss and severe fragmentation of habitat to urban development has emerged as the more serious threat to the species. During LAPM protocol surveys performed by ENVIRA Consulting within the Study Area, five SKR individuals were captured. Presence of this species is confirmed on the Project site with most captures occurring along the edges of the dirt roads and berms throughout the Project site. See Appendix C-1, *LAPM Trapping Report*, of the Project's BTR (*Technical Appendix C1*) for more details. ENVIRA also conducted a habitat assessment for the LAPM and the Stephens' Kangaroo Rat (SKR) within the Off-Site Improvement Areas on August 1, 2021. ENVIRA determined that no suitable habitat for the LAPM or SKR was present. A copy of this Habitat Assessment letter is attached as Appendix C-2 to the Project's BTR. (GLA, 2022a, p. 56)

2. **Special-Status Wildlife Species Not Observed but with a Potential to Occur within the Study Area and Off-Site Improvement Areas**

Special-status wildlife species that were not observed within the Study Area or Off-Site Improvement Areas but have the potential to occur are discussed below.



Special-Status Amphibians with a Potential to Occur

- **Western Spadefoot (*Spea hammondi*)**. The western spadefoot is designated as a CDFW SSC and is a covered species under the MSHCP. Western spadefoots require temporary rain pools with water temperatures of greater than 9°C and less than 30°C in which to reproduce and that last more than 3 weeks in order to metamorphose successfully. Rain pools in which western spadefoots reproduce and from which they are able to metamorphose successfully lack fishes, bullfrogs, and crayfishes; many indications exist that the western spadefoot cannot recruit successfully in the presence of exotic predators, primarily introduced fishes, but also bullfrogs and crayfishes. These non-native/invasive aquatic predators are the main cause to the western spadefoot's decline throughout its range, as well as hydrological modification and loss of aquatic habitat. This species is known to occur within seasonal pools in the vicinity of the Project site and has low to moderate potential to occur within the historic floodplain and of the San Jacinto River. This species does not occur within the Off-Site Improvement Areas due to a lack of suitable habitat and the fact that a majority of this off-site area consists of paved roads. (GLA, 2022a, pp. 56-57)

Special-Status Reptiles with a Potential to Occur

- **California glossy snake (*Arizona elegans occidentalis*)**. The California glossy snake is designated as a SSC and is a covered species under the MSHCP. The California glossy snake ranges throughout southern California especially in desert regions, but also occurs in chaparral, sagebrush, pine-juniper woodlands, and annual grasslands. Primarily nocturnal, glossy snakes spend periods of inactivity during the day and winter months within mammal burrows and rock outcrops. Threats to the California glossy snake include habitat modification through development, fragmentation, and on- and off-road vehicle collisions. In review of the CNDDDB's element occurrences, this species is known to occur within the northwestern Project boundary within the Riversidean sage scrub and rock outcrops. This species does not occur within the Off-Site Improvement Areas due to a lack of suitable habitat and the fact that a majority of this off-site area consists of paved roads. (GLA, 2022a, p. 57)
- **Coast Horned Lizard (*Phrynosoma blainvilli*)**. The coast horned lizard is designated as a SSC and is a covered species under the MSHCP. In California, the coast horned lizard ranges from the Transverse Ranges south to the Mexican border west of the deserts, although the taxon occurs on scattered sites along the extreme western desert slope of the Peninsular Ranges. The known elevation range of this species is from 33 feet (10 meters) to approximately 7,000 feet (2,130 meters) in the San Jacinto Mountains, in Riverside County. This species is found in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland, and coniferous forest. In inland areas, this species is restricted to areas with pockets of open microhabitat, created by disturbance (e.g., floods, fire, roads, grazed areas, fire breaks). Extensive habitat loss from agriculture and urbanization, have been the main reasons cited for the decline of this species. In review of the CNDDDB's element occurrences, this species has been known to occur within the vicinity of the Project site and it has a low to moderate potential to occur within the Riversidean sage scrub and rock outcrops.



This species does not occur within the Off-Site Improvement Areas due to a lack of suitable habitat and the fact that a majority of this off-site area consists of paved roads. (GLA, 2022a, pp. 57-58)

- **Coastal Whiptail (*Aspidoscelis tigris stejnegeri*)**. The coastal whiptail is designated as a SSC and is a covered species under the MSHCP. The coastal whiptail ranges through the semi-arid lowlands of coastal southern California. The coastal whiptail is often found open areas of grassland, sage scrub, chaparral, and alluvial wash habitats. Threats to the coastal whiptail include habitat loss due to development, widespread use of insecticides, off-road vehicle use, and genetic isolation. This species is known to occur in the vicinity of the Project site and has low to moderate potential to occur within the Riversidean sage scrub and non-native grasslands. This species does not occur within the Off-Site Improvement Areas due to a lack of suitable habitat and the fact that a majority of this off-site area consists of paved roads. (GLA, 2022a, p. 58)
- **Red-Diamond Rattlesnake (*Crotalus ruber*)**. The red-diamond rattlesnake is designated as a SSC and is a covered species under the MSHCP. From an ecological standpoint, this rattlesnake species has a wide tolerance for varying environments. Although this species is recorded from a number of vegetation types, it is most commonly associated with heavy brush with large rocks or boulders. Threats to the red-diamond rattlesnake include habitat loss due to development, fragmentation, off-road vehicle use, and the deliberate removal of individuals near residential and recreational lands. This species is known to occur in the vicinity of the Project and has a moderate potential to occur within the rock outcrops, Riversidean sage scrub, and non-native grasslands within the Project site. This species does not occur within the Off-Site Improvement Areas due to a lack of suitable habitat and the fact that a majority of this off-site area consists of paved roads. (GLA, 2022a, p. 58)

Special-Status Birds with a Potential to Occur

- **Coastal California Gnatcatcher (*Poliioptila californica californica*)**. The coastal California gnatcatcher (gnatcatcher) is designated as a federally threatened (FT) species, a California SSC, and is a covered species under the MSHCP. Historically, gnatcatchers occurred from southern Ventura County southward through Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties, and into Baja California, Mexico. The gnatcatcher is a small member of the thrush family (Muscicapidae). The gnatcatcher typically occurs in or near sage scrub habitat, which is a broad category of vegetation that includes the following plant communities: Venturan coastal sage scrub, Diegan coastal sage scrub, maritime succulent scrub, Riversidean sage scrub, Riversidean alluvial fan sage scrub, southern coastal bluff scrub, and coastal sage-chaparral scrub. Declines in numbers and distribution of the gnatcatcher resulted from numerous factors, habitat destruction, fragmentation and adverse modification are the principal reasons for the gnatcatcher's current threatened status. This species has a low to moderate potential to occur within the Riversidean sage scrub within the western portions of the Project boundary. This species does not occur within the Off-Site Improvement Areas due to a lack of suitable habitat and the fact that a majority of this off-site area consists of paved roads. (GLA, 2022a, pp. 58-59)



- **Tricolored Blackbird (*Agelaius tricolor*)**. The tricolor blackbird is designated as a Federal Species of Concern, a California SSC when associated with a nesting colony, and is a covered species under the MSHCP. The tricolored blackbird forms the largest colonies of any North American passerine bird. Breeding colonies may attract thousands of birds to a single site. These colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat composed of grassland, woodland, or agricultural cropland. In winter, they often form single-species, and sometimes single-sex, flocks, but they also flock with other blackbird species. The tricolored blackbird breeds near fresh water, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, tall herbs and forages in grassland and cropland habitats. Core areas have been identified as the San Jacinto Valley, considered the floodplain of the San Jacinto River, Mystic Lake/San Jacinto Wildlife Area, based on recent surveys within the MSHCP area. Other Core Areas that have been important in the past and may continue to provide important core nesting areas include Collier Marsh, Alberhill, and Vail Lake/Wilson Valley/eastern Temecula Creek. The MSHCP species-specific conservation objectives include suitable primary habitat for the blackbird, including freshwater marsh and cismontane alkali marsh habitats within the Riverside Lowlands and Foothills Bioregions. In addition, the objectives include secondary habitat, including playa and vernal pool, grasslands, agriculture land, and riparian scrub, woodland, and forest. Objective 5 specifically targets the San Jacinto River floodplain and the Mystic Lake/San Jacinto Wildlife Area, with the specific objectives of ensuring that habitat support functions by maintaining, preserving, and/or if feasible, restoring hydrological processes and habitat suitable for tricolored blackbird breeding. The Project site does not contain suitable breeding habitat for the tricolored blackbird, although the species has the potential to forage throughout the site within the disturbed alkali playas, nonnative grasslands, and San Jacinto River floodplain. This species does not occur within the Off-Site Improvement Areas due to a lack of suitable habitat and the fact that a majority of this off-site area consists of paved roads. (GLA, 2022a, pp. 59-60)

Special-Status Mammals with a Potential to Occur

- **Pocketed Free-Tailed Bat (*Nyctinomops femorosaccus*)**. The pocketed free-tailed bat is designated as a CDFW SSC and WBWG medium priority. The pocketed free-tailed bat ranges from southern California (Constantine 1998), central Arizona, southern New Mexico, and western Texas, south to western Mexico; and also Baja California. The pocketed free-tailed bat is usually associated with rugged canyons, high cliffs, and rock outcroppings. Roosts in rock crevices and caves during the day; this species may also roost in buildings or under roof tiles. Threats to this species include habitat modification, pesticide use, and human disturbances of roosting colonies. The Project site is within the known range of this species; therefore, it has a low to moderate potential to forage within the Project site, but no suitable habitat is present for roosting. This species does not occur within the Off-Site Improvement Areas due to a lack of suitable habitat and the fact that a majority of this off-site area consists of paved roads. (GLA, 2022a, p. 60)
- **Western Mastiff Bat (*Eumops perotis californicus*)**. The western mastiff bat is designated as a CDFW SSC and WBWG high priority. The western mastiff bat ranges from central California



southeastward to southern Nevada, central Arizona, and west Texas, and south through northern Baja California, northern Sinaloa, and Zacatecas. The western mastiff bat is apparently a permanent resident in the U.S. This species mainly roosts in crevices and shallow caves on the sides of cliffs and rock walls, and occasionally buildings. Roosts usually high above the ground with unobstructed approach. Most roosts are not used throughout the year and individuals may alternate between different day roosts. This species is known to occur in the vicinity of the Project site and is expected to forage over the Project site, but no suitable habitat is present for roosting. This species does not occur within the Off-Site Improvement Areas due to a lack of suitable habitat and the fact that a majority of this off-site area consists of paved roads. (GLA, 2022a, p. 60)

3. ***Special-Status Wildlife Species Confirmed Absent Through Focused Surveys within the Study Area and Off-Site Improvement Areas***

The following special-status wildlife species were confirmed absent through focused surveys conducted within the Project's Study Area and Off-Site Improvement Areas.

Special-Status Bird Species Confirmed Absent from Study Area

- **Burrowing Owl (*Athene cunicularia*)**. The burrowing owl is designated as a SSC and requires surveys if within a designated survey area under the MSHCP. The burrowing owl occurs in shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), prairies, coastal dunes, desert floors, and some artificial, open areas as a year-long resident. They may also use golf courses, cemeteries, road allowances within cities, airports, vacant lots in residential areas and university campuses, fairgrounds, abandoned buildings, and irrigation ditches. They may also occur in forb and open shrub stages of pinyon-juniper and ponderosa pine habitats. They require large open expanses of sparsely vegetated areas on gently rolling or level terrain with an abundance of active small mammal burrows. As an essential habitat feature, they require the use of rodent or other burrows for roosting and nesting cover. The mammal burrows are modified and enlarged. One burrow is typically selected for use as the nest; however, satellite burrows are usually found within the immediate vicinity of the nest burrow within the defended territory of the owl. The Project site occurs within the MSHCP Burrowing Owl Survey Area. As such, focused surveys were performed in 2019 (on-site) and 2020 (off-site) (refer to Exhibit 6 of the Project's BTR, included as *Technical Appendix C1*). Burrowing owls were not detected during the focused surveys. The Project site supports potential habitat (ruderal and non-native grassland) for burrowing owl, and pursuant to the MSHCP a pre-construction burrowing owl survey would be required within 30 days prior to project construction activities. This species does not occur within the Off-Site Improvement Areas due to a lack of suitable habitat and the fact that a majority of this off-site area consists of paved roads. (GLA, 2022a, pp. 60-61)

Special-Status Mammal Species Confirmed Absent from Study Area

- **Dulzura Pocket Mouse (*Chaetodipus californicus femoralis*)**. The Dulzura pocket mouse is designated as a SSC; however, it is not covered under the MSHCP. The Dulzura pocket mouse ranges from southwestern California south to north-central Baja California, Mexico. The Dulzura pocket



mouse is found primarily on slopes with chaparral and grassland edges. During focused surveys for the LAPM in July 2020, this species was not detected and is considered absent from the Project site. ENVIRA conducted a habitat assessment for the LAPM within the Off-Site Improvement Areas on August 1, 2021. ENVIRA determined that no suitable habitat for the LAPM was present. This determination would also be valid for the Dulzura Pocket Mouse as they occupy similar habitats. A copy of this Habitat Assessment letter is attached as Appendix C-2 to the Project's BTR (*Technical Appendix C1*). (GLA, 2022a, p. 61)

- **San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*)**. The San Bernardino kangaroo rat (SBKR) is designated as a federally endangered species, a SCC, and is a covered species under the MSHCP and requires surveys when the project is located within the MSHCP Mammal Survey Area for SBKR. The SBKR is a subspecies of the Merriam's kangaroo rat (*Dipodomys merriami*) and is typically found in Riversidean alluvial fan sage scrub and sandy loam soils, alluvial fans, flood plains, and along washes with nearby sage scrub. Soil texture is a primary factor in this subspecies' occurrence. Sandy loam substrates allow for the digging of simple, shallow burrows. During focused surveys for the LAPM in July 2020, this species was not detected and is considered absent from the Project site. ENVIRA conducted a habitat assessment for the LAPM within the Off-Site Improvement Areas on August 1, 2021. ENVIRA determined that no suitable habitat for the LAPM was present. This determination would also be valid for the San Bernardino Kangaroo Rat. A copy of this Habitat Assessment letter is attached as Appendix C-2 to the Project's BTR (*Technical Appendix C1*). (GLA, 2022a, pp. 61-62)
- **Southern Grasshopper Mouse (*Onychomys torridus ramona*)**. The southern grasshopper mouse is designated as a SSC and is not covered by the MSHCP. The southern grasshopper mouse is found in hot, arid valleys and scrub deserts of Lower Sonoran life zone, with sparse and scattered vegetation such as mesquite, huisache, creosote bush, cholla, yucca, and various short grasses. Young are born in underground burrow systems that may have been abandoned by other small mammals. During focused surveys for the LAPM in July 2020, this species was not detected and is considered absent from the Project site. ENVIRA also conducted a habitat assessment for the LAPM within the Off-Site Improvement Areas on August 1, 2021. ENVIRA determined that no suitable habitat for the LAPM was present. This determination would also be valid for the Southern Grasshopper Mouse. A copy of this Habitat Assessment letter is attached as Appendix C-2 to the Project's BTR (*Technical Appendix C1*). (GLA, 2022a, p. 62)

E. Raptor Use

The Project site provides suitable foraging and low-quality breeding habitat for a number of raptor species, including special-status raptors (GLA, 2022a, p. 62).

Southern California holds a diversity of birds of prey (raptors), and many of these species are in decline. For most of the declining species, foraging requirements include extensive open, undisturbed, or lightly disturbed areas, especially grasslands. This type of habitat has declined severely in the region, affecting many species,



but especially raptors. A few species, such as red-tailed hawk (*Buteo jamaicensis*) and American kestrel (*Falco sparverius*), are somewhat adaptable to low-level human disturbance and can be readily observed adjacent to neighborhoods and other types of development. These species still require appropriate foraging habitat and low levels of disturbance in vicinity of nesting sites. (GLA, 2022a, p. 62)

Many of the raptors that would be expected to forage and nest within western Riverside are fully covered species under the MSHCP with the MSHCP providing the necessary conservation of both foraging and nesting habitats. Some common raptor species (e.g., American kestrel and red-tailed hawk) are not covered by the MSHCP but are expected to be conserved with implementation of the Plan due to the parallel habitat needs with those raptors covered under the Plan. (GLA, 2022a, p. 62)

It is important to understand that the MSHCP does not provide Fish and Game Code take for raptors covered under the Plan. (GLA, 2022a, p. 62)

Appendix B (faunal compendium) of the Project's BTR (*Technical Appendix C1*) provides a list of the hawks, falcons, and owls detected over the course of the field studies. These species were Cooper's hawk, red-tailed hawk, ferruginous hawk, northern harrier, white-tailed kite, American kestrel, and great horned owl (*Bubo virginianus*). The ferruginous hawk migrates through the region in spring/fall and may over winter in the area. However, the Project site is outside of the known nesting range for this raptor species. The northern harrier was observed foraging on-site and has a low potential to nest within the limited suitable habitat along the southeast Project boundary near the San Jacinto River. For the other raptor species observed, the Project site lacks potential nesting habitat (e.g., mature trees, shrubs) but is expected to provide foraging habitat for all of these species in the form of insects, spiders, lizards, snakes, small mammals, and other birds. It should also be noted that raptors are not expected to nest or forage within the Off-Site Improvement Areas due to a lack of suitable habitat and the fact that a majority of the off-site area consists of existing paved roadways. (GLA, 2022a, p. 63)

F. Nesting Birds

The Project site contains trees, shrubs, and ground cover that provide suitable habitat for nesting native birds. Mortality of native birds (including eggs) is prohibited under the California Fish and Game Code. The Project site supports suitable ground nesting habitat within the ruderal vegetation and disturbed areas. The San Jacinto River, adjacent to the Project site, does not exhibit a dense canopy of riparian or old growth trees that would be utilized by larger raptors such as Cooper's hawk or red-tailed hawk. However, these areas may provide nesting habitat for smaller bird species. The Off-Site Improvement Areas does not contain suitable habitat for nesting birds as a majority of this area consists of existing paved roadways. (GLA, 2022a, p. 63)

G. Wildlife Linkages/Corridors and Nursery Sites

Habitat linkages are areas which provide a communication between two or more other habitat areas which are often larger or superior in quality to the linkage. Such linkage sites can be quite small or constricted, but may



can be vital to the long-term health of connected habitats. Linkage values are often addressed in terms of “gene flow” between populations, with movement taking potentially many generations. (GLA, 2022a, p. 63)

Corridors are similar to linkages but provide specific opportunities for individual animals to disperse or migrate between areas, generally extensive but otherwise partially or wholly separated regions. Adequate cover and tolerably low levels of disturbance are common requirements for corridors. Habitat in corridors may be quite different than that in the connected areas, but if used by the wildlife species of interest, the corridor will still function as desired. (GLA, 2022a, pp. 63-64)

Wildlife nurseries are sites where wildlife concentrate for hatching and/or raising young, such as rookeries, spawning areas, and bat colonies. Nurseries can be important to both special-status species as well as commonly occurring species. No wildlife nurseries or maternity bat colony roosts exist within the Study Area or the Off-Site Improvement Areas. (GLA, 2022a, p. 64)

Study Area

The Project site is located within the proposed extension of Existing Core 4 within MSHCP Cell Groups C, D, E, F, and G. The proposed extension of Existing Core 4 is composed of the middle reach of the San Jacinto River and is contiguous with Core Area in Lake Perris Recreation Area to the north of the Project site. It provides habitat for a number of Narrow Endemic Plant Species and movement for species connecting to Lake Perris and areas downstream of the San Jacinto River in Canyon Lake. Planning Species within this proposed Extension of Existing Core include San Jacinto Valley crowscale, thread-leaved brodiaea, arroyo toad, and Los Angeles pocket mouse. More specifically, the San Jacinto River drainage, to the south and east of the Project site, would provide a movement corridor for medium to small mammals such as coyote, bobcat, and racoon between the adjacent open space associated with the Lake Perris reserve to the north and open space to the southwest of the Project site. The river drainage also would provide an aerial corridor for various bird and bat species moving through the landscape. (GLA, 2022a, p. 64)

Off-Site Improvement Areas

A majority of the Off-Site Improvement Areas is located within existing roadway right-of-way for General Plan Roads covered under the MSHCP. These roadways include Nuevo Road, Dunlap Drive, San Jacinto Avenue, and Redlands Avenue. Portions of the Off-Site Improvement Areas are located within the Mead Valley Area Plan of the MSHCP and are included within the MSHCP Criteria Area. Specifically, the site falls within portions of Criteria Cells: 2969 and 3069 in Cell Group G (refer to Exhibit 5C of the Project’s BTR, included as *Technical Appendix CI*). Portions of the Off-Site Improvement Areas are located within the MSHCP CAPSSA, NEPSSA, Mammal Survey Area for the Los Angeles pocket mouse (*Perognathus longimembris brevinasus*; LAPM), and Burrowing Owl (*Athene cunicularia*) Survey Area (refer to Exhibit 5B of the Project’s BTR). The following CAPSSA target species were evaluated through habitat assessments and focused surveys (if suitable habitat is present): San Jacinto Valley crowscale (*Atriplex coronata* var. *notatior*), Parish's brittlescale (*Atriplex parishii*), Davidson's saltscale (*Atriplex serenana* var. *davidsonii*), thread-leaved brodiaea (*Brodiaea filifolia*), round-leaved filaree (*California macrophylla*), smooth tarplant (*Centromadia*



pungens ssp. *laevis*), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), little mousetail (*Myosurus minimus* ssp. *apus*), and mud nama (*Nama stenocarpa*). No suitable habitat for the CAPSSA is present within the Off-Site Improvement Areas. (GLA, 2022a, p. 64)

The Off-Site Improvement Areas occurs within or portions of NEPSSA 3 and 10. The following target species were evaluated through habitat assessments and focused surveys (if suitable habitat is present): Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis*), California orcutt grass (*Orcuttia californica*), Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*), Hammitt's clay cress (*Sibaropsis hammittii*), many-stemmed dudleya (*Dudleya multicaulis*), and San Miguel savory (*Clinopodium chandleri*). The Project site is not located within the MSHCP Amphibian Survey Area, or Core and Linkage areas. No suitable habitat for NEPSSA is present within the Off-Site Improvement Areas. The Off-Site Improvement Areas is also located within the LAPM Survey Area and burrowing owl survey area. Neither species was identified on site during either focused surveys and/or habitat assessments. (GLA, 2022a, p. 65)

H. Critical Habitat

A 55.56-acre portion of the Study Area is located within USFWS Designated Critical Habitat for spreading navarretia (*Navarretia fossalis*) in the eastern and southeastern portions of the Study Area boundary within the floodplain of the San Jacinto River. Spreading navarretia was observed on the Project site within the disturbed alkali playa. MSHCP Sections 6.1.3 and 6.3.2 require that 90% of areas designated as critical habitat be conserved as open space. No Critical Habitat is present within the Off-Site Improvement Areas. (GLA, 2022a, p. 65)

I. Jurisdictional Waters

1. U.S. Army Corps of Engineers Jurisdictional Waters

Study Area

Potential Corps jurisdiction within the Study Area is limited to eight features, referenced in the Project's BTR as the San Jacinto River, Disturbed Alkali Playa, and Drainages A-F. Refer to Subsection 4.9 of the Project's BTR (*Technical Appendix CI*) for a detailed discussion of these features. Potential Corps jurisdiction within the Study Area is shown on Figure 4.4-9, *Corps Jurisdictional Delineation Map*. These features are considered ephemeral-to-intermittent features that are subject to Corps jurisdiction under Section 404 of the Clean Water Act (CWA). Corps jurisdiction within the Study Area totals approximately 23.27 acres, of which 22.45 acres consist of federal wetland waters of the U.S. and 0.82 acre consists of non-wetland waters of the U.S. A total of 8,314 linear feet of stream is present. This includes 1,394 linear feet of wetland stream and 6,920 linear feet of ephemeral, non-wetland stream. The Project site also contains two roadside ditches and two erosional features. The ditches were excavated wholly in and drain only upland areas and the erosional features lack an Ordinary High-Water Mark (OHWM) and are characterized by infrequent duration flow. As these features do not carry a relatively permanent flow of water, they are not subject to Corps jurisdiction under Section 404 of the CWA. Table 4.4-2, *Corps Jurisdiction (Study Area)*, summarizes the potential Corps jurisdiction within the Study Area. (GLA, 2022a, p. 65)



- Onsite Project Site Boundary
- Offsite Project Site Boundary
- Non-Wetland Waters of the U. S.
- Wetland Waters of the U. S.
- ³ Width of OHWM in Feet

Source(s): Glenn Lukos Associates Inc (02-24-2022)

Figure 4.4-9

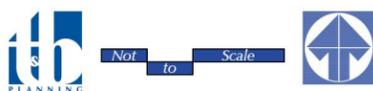




Table 4.4-2 Corps Jurisdiction (Study Area)

Drainage Name	Corps Non-Wetland Waters (Acres)	Corps Wetland Waters (Acres)	Total Corps Jurisdiction (Acres)	Total Length (Linear Feet)
Waters of the U.S.				
San Jacinto River	0	1.15	1.15	1,394
Disturbed Alkali Playa	0	21.30	21.30	N/A
Drainage A	0.06	0	0.06	640
Drainage B	0.29	0	0.29	1,482
Drainage C	0.16	0	0.16	1,626
Drainage D	0.01	0	0.01	70
Drainage E	0.03	0	0.03	477
Drainage F	0.27	0	0.27	2,625
TOTAL	0.82	22.45	23.27	8,314

(GLA, 2022a, Table 4-5)

Off-Site Improvement Areas

No Corps jurisdiction is present within the Off-Site Improvement Areas (GLA, 2022a, p. 66).

2. Regional Water Quality Control Board (RWQCB) Jurisdictional Waters

Study Area

As more fully discussed in Subsection 4.9 of the Project’s BTR (*Technical Appendix C1*), potential Regional Water Quality Control Board (RWQCB) jurisdiction within the Study Area includes 11 features, referenced herein as the San Jacinto River, Disturbed Alkali Playa, Ditch A, and Drainages A-H, as depicted on Figure 4.4-10, *RWQCB Jurisdictional Delineation Map*. The San Jacinto River, Disturbed Alkali Playa, and Drainages A-F are considered Waters of the United States (WoUS) and are subject to Corps jurisdiction under Section 404 of the CWA. Since these features are considered WoUS, they are also subject to Regional Board jurisdiction under Section 401 of the CWA. Potential RWQCB jurisdiction in the Study Area totals approximately 23.301 acres, of which 22.45 acres consist of State wetlands and 0.851 acre consists of non-wetland waters. A total of 8,857 linear feet of stream is present. This includes 1,394 linear feet of wetland WoUS/Waters of the State (WoS) and 7,463 linear feet of ephemeral, non-wetland stream. Of the total 23.301 acres, 23.27 acres comprise RWQCB WoUS and the remaining 0.031 acre represents RWQCB WoS. Table 4.4-3, *RWQCB Jurisdiction (Study Area)*, summarizes the potential RWQCB jurisdiction at the Project site. (GLA, 2022a, pp. 70-71)



Source(s): Glenn Lukos Associates Inc (02-24-2022)

Figure 4.4-10

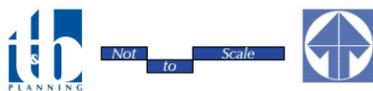




Table 4.4-3 RWQCB Jurisdiction (Study Area)

Drainage Name	Regional Board Non-Wetland Waters (Acres)	Regional Board State Wetland Waters (Acres)	Total Regional Board Jurisdiction (Acres)	Total Length (Linear Feet)
Waters of the U.S.				
San Jacinto River	0	1.15	1.15	1,394
Disturbed Alkali Playa	0	21.30	21.30	N/A
Drainage A	0.06	0	0.06	640
Drainage B	0.29	0	0.29	1,482
Drainage C	0.16	0	0.16	1,626
Drainage D	0.01	0	0.01	70
Drainage E	0.03	0	0.03	477
Drainage F	0.27	0	0.27	2,625
Sub-Total	0.82	22.45	23.27	8,314
Waters of the State Only				
Ditch A	0.02	0	0.02	214
Drainage G	0.01	0	0.01	300
Drainage H	0.001	0	0.001	29
Ditch 1	0.01	0	0.01	285
Sub-Total	0.041	0	0.041	828
TOTAL*	0.861	22.45	23.311	9,142

*Total may not equal sum of individual parts due to rounding error
(GLA, 2022a, Table 4-6)

Off-Site Improvement Areas

Regional Board jurisdiction at the Off-Site Improvement Areas, identified in the Project’s BTR as Ditch 1, totals approximately 0.01 acre and 285 linear feet, none of which consists of State wetlands. All Regional Board jurisdiction would be considered waters of the State only and is limited to Ditch 1. Ditch 1 enters the Off-Site Improvement Areas through a two-foot-wide corrugated metal pipe at the intersection of Dunlap Drive and Nuevo Road. The ditch extends for 285 linear feet adjacent to the eastern road edge of Dunlap Drive before flowing off site and entering the underground storm drain system. The roadside ditch is approximately two feet wide and 285 feet in length. The roadside ditch is ephemeral and generally unvegetated, although the upper bank of the ditch contains disturbed/ruderal vegetation such as brome grass (*Bromus* sp.), mustard (*Brassica nigra*), and stinknet (*Oncosiphon pilulifer*). (GLA, 2022a, p. 77)



3. California Department of Fish and Wildlife (CDFW) Jurisdictional Waters

Study Area

The Study Area contains 11 drainage features, referenced herein as the San Jacinto River, Disturbed Alkali Playa, Ditch A, and Drainages A-H. Drainages A through H and Ditch A are ephemeral drainage features that accept nuisance flow and storm water runoff from the surrounding areas. The San Jacinto River is an ephemeral-to-intermittent stream and is hydrologically connected to the Disturbed Alkali Playa, which is located just west of the river and is tributary. These features exhibit the presence of a bed and bank, evidence of concentrated surface flow, and/or contain jurisdictional riparian habitat. These features are subject to CDFW jurisdiction under Section 1602 of the Fish and Game Code. CDFW jurisdiction totals approximately 26.141 acres, and includes all areas within Corps and/or Regional Board jurisdiction. Of this total, 22.95 acres consist of riparian stream, and 3.191 acres consist of non-riparian stream. A total of 8,857 linear feet of stream is present. This includes 2,034 linear feet of riparian stream and 6,823 linear feet of ephemeral, non-riparian stream. Table 4.4-4, *CDFW Jurisdiction*, summarizes the potential CDFW jurisdiction within the Study Area, which are graphically depicted on Figure 4.4-11, *CDFW Jurisdictional Delineation Map*. (GLA, 2022a, p. 77)

Table 4.4-4 CDFW Jurisdiction

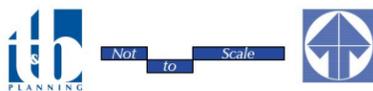
Drainage Name	Total CDFW Non-Riparian Stream (Acres)	Total CDFW Riparian Stream (Acres)	Total CDFW Jurisdiction (Acres)	Total Length (Linear Feet)
San Jacinto River	2.14	1.51	3.65	1,394
Disturbed Alkali Playa	0	21.30	21.30	N/A
Drainage A	0.07	0.14	0.21	640
Ditch A	0.02	0	0.02	214
Drainage B	0.37	0	0.37	1,482
Drainage C	0.22	0	0.22	1,626
Drainage D	0.01	0	0.01	70
Drainage E	0.03	0	0.03	477
Drainage F	0.31	0	0.31	2,625
Drainage G	0.02	0	0.02	300
Drainage H	0.001	0	0.001	29
Ditch I	0.01	0	0.01	285
Total	3.201	22.95	26.151	9,142

(GLA, 2022a, Table 4-7)



Source(s): Glenn Lukos Associates Inc (02-24-2022)

Figure 4.4-11





Off-Site Improvement Areas

CDFW jurisdiction at the Off-Site Improvement Areas totals approximately 0.01 acre and 258 linear feet, none of which is riparian. Ditch 1 enters the Off-Site Improvement Areas through a two-foot-wide corrugated metal pipe at the intersection of Dunlap Drive and Nuevo Road. The ditch extends for 258 linear feet adjacent to the eastern road edge of Dunlap Drive before flowing offsite and entering the underground storm drain system. The roadside ditch is ephemeral and generally unvegetated, although the upper bank of the ditch contains disturbed/ruderal vegetation such as brome grass (*Bromus* sp.), mustard (*Brassica nigra*), and stinknet (*Oncosiphon pilulifer*). (GLA, 2022a, p. 82)

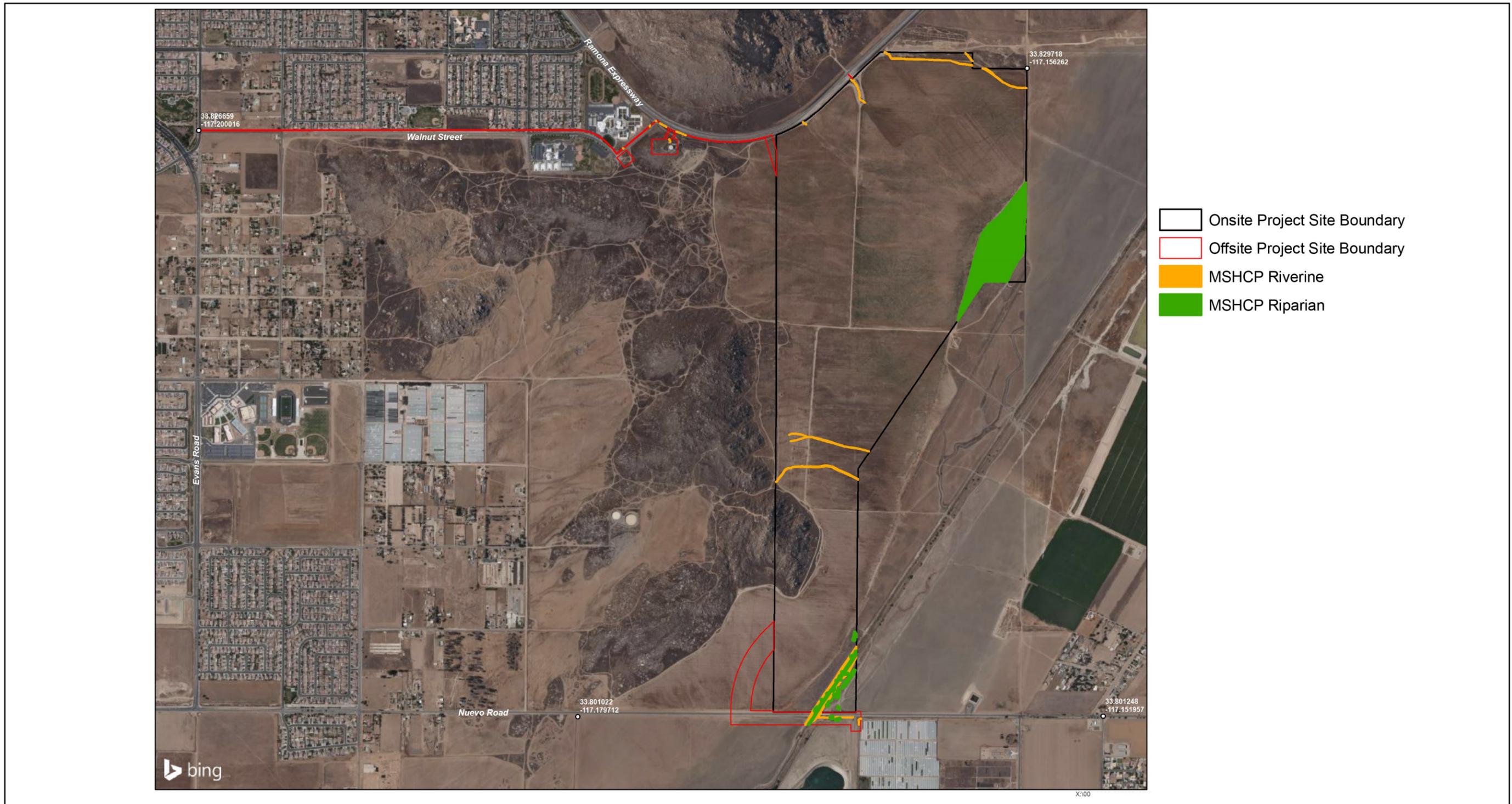
J. MSHCP Riparian/Riverine Areas and Vernal Pools

Vegetation communities associated with riparian systems are considered special-status natural vegetation communities because, similar to coastal sage scrub, they have declined throughout southern California during past decades. In addition, they can support a large variety of special-status wildlife species. Most special-status species directly associated with MSHCP riparian/riverine resources are covered species under Section 6.1.2 of the MSHCP. The MSHCP has specific policies and procedures regarding the evaluation and conservation of riparian/riverine resources (including riparian vegetation) because it supports MSHCP covered species. Specifically, the MSHCP states that “riparian/riverine areas are natural lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.” Thus, the MSHCP classification of riparian/riverine includes both riparian (depleted natural vegetation communities) as well as ephemeral drainages that are natural in origin but may lack riparian vegetation. For purposes of analysis, all features that qualify as State streambeds are considered MSHCP riparian/riverine resources. (GLA, 2022a, pp. 82-83)

Study Area

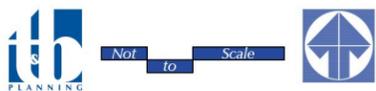
For purposes of analysis, all features that qualify as CDFW jurisdiction are considered MSHCP riparian/riverine resources. MSHCP riparian/riverine resources within the Study Area totals approximately 26.141 acres. Of this total, 22.95 acres consist of riparian stream, and 3.191 acres consist of non-riparian (riverine) stream. A total of 8,857 linear feet of stream is present. This includes 1,476 linear feet of riparian stream and 7,381 linear feet of ephemeral, non-riparian stream. (GLA, 2022a, p. 83)

The majority of the Study Area consists of ruderal, agricultural, and non-native grasslands that are subjected to seasonal grading, disking, and modifications that leave the site disturbed. Although no vernal pools were observed within the Project site, the San Jacinto River and terraces that are subject to flooding exhibit topography that may support vernal pools. Similarly, the adjacent uplands also exhibit topography that would support vernal pools. Figure 4.4-12, *MSHCP Riparian/Riverine Map*, depicts the limits of MSHCP riparian/riverine areas, and site photographs are provided as Exhibit 12 of the Project’s BTR (*Technical Appendix CI*). (GLA, 2022a, p. 83)



Source(s): Glenn Lukos Associates Inc (02-24-2022)

Figure 4.4-12





Off-Site Improvement Areas

For purposes of analysis, all features that qualify as CDFW jurisdiction are considered MSHCP riparian/riverine resources. MSHCP riparian/riverine jurisdiction within the Off-Site Improvement Areas totals approximately 0.01 acre, none of which consists of riparian stream. A total of 285 linear feet of ephemeral ditch is present. Ditch 1 enters the off-site area through a two-foot-wide corrugated metal pipe at the intersection of Dunlap Drive and Nuevo Road. The ditch extends for 285 linear feet adjacent to the eastern road edge of Dunlap Drive. After flowing southerly for 285 linear feet, the ditch enters the storm drain system and is no longer visible. The roadside ditch is ephemeral and generally unvegetated, although the upper bank of the ditch contains disturbed/ruderal vegetation such as brome grass (*Bromus* sp.), mustard (*Brassica nigra*), and stinknet (*Oncosiphon pilulifer*). (GLA, 2022a, pp. 83-84)

4.4.2 APPLICABLE REGULATORY REQUIREMENTS

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

A. Federal Regulations

1. Endangered Species Act (ESA)

The purpose of the federal Endangered Species Act (ESA) is to protect and recover imperiled species and the ecosystems upon which they depend. It is administered by the U.S. Fish and Wildlife Service (USFWS) and the Commerce Department's National Marine Fisheries Service (NMFS). The USFWS has primary responsibility for terrestrial and freshwater organisms, while the responsibilities of NMFS are mainly marine wildlife such as whales and anadromous fish such as salmon. Under the ESA, species may be listed as either endangered or threatened. "Endangered" means a species is in danger of extinction throughout all or a significant portion of its range. "Threatened" means a species is likely to become endangered within the foreseeable future. All species of plants and animals, except pest insects, are eligible for listing as endangered or threatened. (USFWS, 2013)

The ESA makes it unlawful for a person to take a listed animal without a permit. Take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." Through regulations, the term "harm" is defined as "an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering." Listed plants are not protected from take, although it is illegal to collect or maliciously harm them on federal land. Protection from commercial trade and the effects of federal actions do apply for plants. (USFWS, 2013)

Section 7 of the ESA requires federal agencies to use their legal authorities to promote the conservation purposes of the ESA and to consult with the USFWS and NMFS, as appropriate, to ensure that effects of actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of listed species. During consultation, the "action" agency receives a "biological opinion" or concurrence letter addressing the



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

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

2. Clean Water Act Section 401

Clean Water Act (CWA) § 401 water quality certification provides states and authorized tribes with an effective tool to help protect water quality, by providing them an opportunity to address the aquatic resource impacts of federally issued permits and licenses. Under § 401, a federal agency cannot issue a permit or license for an activity that may result in a discharge to waters of the U.S. until the state or tribe where the discharge would originate has granted or waived § 401 certification. The central feature of CWA § 401 is the state or tribe’s ability to grant, grant with conditions, deny, or waive certification. Granting certification, with or without conditions, allows the federal permit or license to be issued consistent with any conditions of the certification. Denying certification prohibits the federal permit or license from being issued. Waiver allows the permit or license to be issued without state or tribal comment. States and tribes make their decisions to deny, certify, or condition permits or licenses based in part on the proposed project’s compliance with Environmental Protection Agency (EPA)-approved water quality standards. In addition, states and tribes consider whether the activity leading to the discharge will comply with any applicable effluent limitations guidelines, new source performance standards, toxic pollutant restrictions, and other appropriate requirements of state or tribal law. (EPA, 2019)

Many states and tribes rely on § 401 certification to ensure that discharges of dredge or fill material into a water of the U.S. do not cause unacceptable environmental impacts and, more generally, as their primary regulatory tool for protecting wetlands and other aquatic resources. However, § 401 is limited in scope and application to situations involving federally-permitted or licensed activities that may result in a discharge to a water of the U.S. If a federal permit or license is not required, or would authorize impacts only to waters that are not waters of the U.S., the activity is not subject to the CWA § 401. (EPA, 2019)

3. Clean Water Act Section 404

Section 404 of the CWA establishes a program to regulate the discharge of dredged or fill material into waters of the United States, including wetlands. Wetlands subject to Clean Water Act Section 404 are defined as



“areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.” Activities in waters of the United States regulated under this program include fill for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports) and mining projects. Section 404 requires a permit before dredged or fill material may be discharged into waters of the United States, unless the activity is exempt from Section 404 regulation (e.g. certain farming and forestry activities). (EPA, n.d.)

The basic premise of the program is that no discharge of dredged or fill material may be permitted if: (1) a practicable alternative exists that is less damaging to the aquatic environment; or (2) the nation’s waters would be significantly degraded. Applications for permits must, to the extent practicable: (1) demonstrate steps have been taken to avoid wetland impacts; (2) demonstrate that potential impacts on wetlands have been minimized; and (3) provide compensation for any remaining unavoidable impacts. Proposed activities are regulated through a permit review process. (EPA, n.d.)

An individual permit is required for potentially significant impacts. Individual permits are reviewed by the U.S. Army Corps of Engineers (ACOE), which evaluates applications under a public interest review, as well as the environmental criteria set forth in the CWA Section 404(b)(1) Guidelines. However, for most discharges that will have only minimal adverse effects, a general permit may be suitable. General permits are issued on a nationwide, regional, or State basis for particular categories of activities. The general permit process eliminates individual review and allows certain activities to proceed with little or no delay, provided that the general or specific conditions for the general permit are met. States also have a role in Section 404 decisions, through state program general permits, water quality certification, or program assumption. (EPA, n.d.)

4. Executive Order 11990 – Protection of Wetlands

The purpose of Executive Order (EO) 11990 is to "minimize the destruction, loss or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands." To meet these objectives, the Order requires federal agencies, in planning their actions, to consider alternatives to wetland sites and limit potential damage if an activity affecting a wetland cannot be avoided. (FEMA, 2019) The Order applies to:

- Acquisition, management, and disposition of federal lands and facilities construction and improvement projects which are undertaken, financed, or assisted by federal agencies;
- Federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulation, and licensing activities. (FEMA, 2019)

The procedures require the determination of whether or not the proposed project will be in or will affect wetlands. If so, a wetlands assessment must be prepared that describes the alternatives considered. The procedures include a requirement for public review of assessments. (FEMA, 2019)



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

The Migratory Bird Treaty Act (MBTA) makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to federal regulations. The migratory bird species protected by the MBTA are listed in 50 CFR 10.13. The USFWS has statutory authority and responsibility for enforcing the MBTA (16 U.S.C. 703-712). The MBTA implements Conventions between the United States and four countries (Canada, Mexico, Japan, and Russia) for the protection of migratory birds. (USFWS, 2018)

B. *State Regulations*

1. *California Endangered Species Act (CESA)*

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

Section 2081 subdivision (b) of the California Fish and Game Code (CFGC) allows CDFW to authorize take of species listed as endangered, threatened, candidate, or a rare plant, if that take is incidental to otherwise lawful activities and if certain conditions are met. These authorizations are commonly referred to as incidental take permits (ITPs). (CDFW, n.d.)

If a species is listed by both the federal ESA and CESA, CFGC Section 2080.1 allows an applicant who has obtained a federal incidental take statement (federal Section 7 consultation) or a federal incidental take permit (federal Section 10(a)(1)(B)) to request that the Director of CDFW find the federal documents consistent with CESA. If the federal documents are found to be consistent with CESA, a consistency determination (CD) is issued and no further authorization or approval is necessary under CESA. (CDFW, n.d.)

A Safe Harbor Agreement (SHA) authorizes incidental take of a species listed as endangered, threatened, candidate, or a rare plant, if implementation of the agreement is reasonably expected to provide a net conservation benefit to the species, among other provisions. SHAs are intended to encourage landowners to voluntarily manage their lands to benefit CESA-listed species. California SHAs are analogous to the federal safe harbor agreement program and CDFW has the authority to issue a consistency determination based on a federal safe harbor agreement. (CDFW, n.d.)



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

CDFW's Natural Community Conservation Planning (NCCP) program takes a broad-based ecosystem approach to planning for the protection and perpetuation of biological diversity. The NCCP program began in 1991 as a cooperative effort to protect habitats and species. It is broader in its orientation and objectives than the California and Federal Endangered Species Acts, as these laws are designed to identify and protect individual species that have already declined in number significantly. (CDFW, n.d.)

An NCCP identifies and provides for the regional protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity. Working with landowners, environmental organizations, and other interested parties, a local agency oversees the numerous activities that compose the development of an NCCP. CDFW and the U.S. Fish and Wildlife Service provide the necessary support, direction, and guidance to NCCP participants. (CDFW, n.d.)

There are currently 13 approved NCCPs (includes 6 subarea plans) and 22 NCCPs in the active planning phase (includes 10 subarea plans), which together cover more than 7 million acres and will provide conservation for nearly 400 special status species and a wide diversity of natural community types throughout California. (CDFW, n.d.)

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

CFGC section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or (3) deposit debris, waste or other materials that could pass into any river, stream, or lake. The CFGC indicates that "any river, stream or lake" includes those that are episodic (they are dry for periods of time) as well as those that are perennial (they flow year round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water. (CDFW, n.d.)

CDFW requires a Lake and Streambed Alteration (LSA) Agreement when it determines that the activity, as described in a complete LSA Notification, may substantially adversely affect existing fish or wildlife resources. An LSA Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify a project that would eliminate or reduce harmful impacts to fish and wildlife resources. Before issuing an LSA Agreement, CDFW must comply with CEQA. (CDFW, n.d.)

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

The Native Plant Protection Act (NPPA) was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. There are 64 species, subspecies, and varieties of plants that are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations; emergencies; and after properly notifying CDFW for



vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations. (CDFW, n.d.)

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

Section 3503.5 of the CFGC specifically protects birds of prey, stating: “It is unlawful to take, possess, or destroy any . . . [birds-of-prey] or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Section 3513 of the CFGC duplicates the federal protection of migratory birds, stating: “It is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act.” (CA Legislative Info, n.d.)

6. *Porter-Cologne Water Quality Act*

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

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

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

The Regional Water Boards regulate discharges under the Porter-Cologne Act primarily through issuance of National Pollutant Discharge Elimination System (NPDES) permits for point source discharges and waste discharge requirements (WDRs) for NPS discharges. Anyone discharging or proposing to discharge materials that could affect water quality (other than to a community sanitary sewer system regulated by an NPDES permit) must file a report of waste discharge. The SWRCB and the RWQCBs can make their own investigations or may require dischargers to carry out water quality investigations and report on water quality



issues. The Porter-Cologne Act provides several options for enforcing WDRs and other orders, including cease and desist orders, cleanup and abatement orders, administrative civil liability orders, civil court actions, and criminal prosecutions. (SWRCB, 2014)

The Porter-Cologne Act also requires adoption of water quality control plans that contain the guiding policies of water pollution management in California. A number of statewide water quality control plans have been adopted by the State Water Board. In addition, regional water quality control plans (basin plans) have been adopted by each of the Regional Water Boards and get updated as necessary and practical. These plans identify the existing and potential beneficial uses of waters of the State and establish water quality objectives to protect these uses. The basin plans also contain implementation, surveillance, and monitoring plans. Statewide and regional water quality control plans include enforceable prohibitions against certain types of discharges, including those that may pertain to nonpoint sources. Portions of water quality control plans, the water quality objectives and beneficial use designations, are subject to review by the EPA, when approved they become water quality standards under the CWA. (SWRCB, 2014)

C. Local and Regional Plans and Regulations

1. Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

The continued loss of habitat to new development and the cumbersome process of environmental review and habitat mitigation on a project-by-project basis led to preparation of the MSHCP. The MSHCP is a multi-jurisdictional accomplishment that provides a regional conservation solution to species and habitat issues. The primary intent of the MSHCP is to provide for the conservation of a range of plants and animals within natural communities characteristic of western Riverside County and in return, provide take coverage and mitigation for projects throughout the plan area to avoid the cost and delays of mitigating biological impacts on a project-by-project basis. (Riverside County, 2015, p. 4.8-49)

The MSHCP was adopted by Riverside County on June 17, 2003, and is a comprehensive, multijurisdictional Habitat Conservation Plan (HCP) pursuant to Section 10(a)(1)(B) of FESA, as well as an NCCP pursuant to the California Fish and Game Code. The USFWS issued a Biological Opinion and Federal ESA Section 10 permit for the MSHCP on June 22, 2004, and CDFW issued a Natural Community Conservation Planning (NCCP) Approval and Take Authorization on the same date. As long as adherence to the policies and requirements of the MSHCP is maintained, participants in the MSHCP, which include the County of Riverside and 18 cities, are allowed to authorize ‘incidental take’ of covered plant and wildlife species. (Riverside County, 2015, p. 4.8-49)

The MSHCP provides for the long-term survival of protected and sensitive species by designating a contiguous system of habitat to be added to existing public/quasi-public lands. The Plan includes an impact fee collected by the permittees and used in part to acquire these lands. Depending on the location of the private or public development project, certain biological studies are required for Plan compliance. These studies may identify the need for specific measures to avoid, minimize and reduce impacts to covered species and their habitat. (Riverside County, 2015, pp. 4.8-49 and 4.8-50)



The MSHCP defines two distinct consistency processes for development projects based on their location within the MSHCP's coverage area, with separate processes for projects located outside of Criteria Areas and those within a Criteria Area. Criteria Areas consist of 160-acre 'cells' with identified conservation objectives. (Riverside County, 2015, p. 4.8-50)

2. *Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP)*

The Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP) was prepared under the direction of the Riverside County Habitat Conservation Agency (RCHCA) Board of Directors, in consultation with USFWS and CDFW. The County of Riverside is a member agency of the RCHCA. The 30-year SKR HCP was designed to acquire and permanently conserve, maintain, and fund the conservation, preservation, restoration, and enhancement of Stephens' kangaroo rat-occupied habitat. The SKR HCP covers approximately 534,000 acres within the member jurisdictions and includes an estimated 30,000 acres of occupied Stephens' kangaroo rat habitat. The SKR HCP requires members to preserve and manage 15,000 acres of occupied habitat in seven Core Reserves encompassing over 41,000 acres. (Riverside County, 2015, p. 4.8-52)

On May 3, 1996, the USFWS issued a permit to the Riverside County Habitat Conservation Agency to incidentally take the federally endangered Stephens' kangaroo rat (*Dipodomys stephensi*). Similarly, the CDFW issued a California Endangered Species Act Management Authorization for Implementation of the Stephens' kangaroo rat on May 6, 1996. As of 2015, more than \$50 million had been dedicated to the establishment and management of a system of regional preserves designed to ensure the survival of SKR in the plan area. This effort resulted in the permanent conservation of approximately 50% of the SKR-occupied habitat remaining in the HCP area. Through direct funding and in-kind contributions, SKR habitat in the regional reserve system is managed to ensure its continuing ability to support the species. Core reserves were deemed complete in December of 2003. (Riverside County, 2015, p. 4.8-52)

3. *Riverside County Oak Tree Management Guidelines*

In March 1993, the County of Riverside issued Oak Tree Management Guidelines to address the treatment of oak woodlands in areas where zoning and/or General Plan density restrictions allow the effective use of clustering. The guidelines are generally considered to be the most effective where minimum lot sizes are 2.5 acres or larger, or where oak woodlands are concentrated in a relatively small portion of a project site. The guidelines include recommendations for oak inventories, land use designs to cluster home sites in order to reduce impacts to oaks and mitigation measures for oak conservation. (Riverside County, 2015, p. 4.8-53)

4. *Riverside County Ordinance No. 559 – Regulating the Removal of Trees*

Riverside County Ordinance No. 559 regulates the removal of living native trees on parcels of property greater than one-half acre, located above 5,000 feet within the unincorporated area of Riverside County without first obtaining a permit to do so. The purpose of the ordinance is to ensure that the timberlands of Riverside County are protected and the ecological balance of such timberlands is preserved. (Riverside County, 2015, p. 4.8-53)



4.4.3 BASIS FOR DETERMINING SIGNIFICANCE

Section IV of Appendix G to the State CEQA Guidelines addresses typical adverse effects to biological resources, and includes the following threshold questions to evaluate the Project's impacts to biological resources (OPR, 2018a):

- *Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*
- *Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?*
- *Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*
- *Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*
- *Would the Project Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*
- *Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, are derived from Section IV of Appendix G to the State CEQA Guidelines (listed above), and state that the proposed Project would have a significant impact on biological resources if construction and/or operation of the Project would:

- *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan;*
- *Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12);*



- *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U. S. Wildlife Service;*
- *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;*
- *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 Game or U. S. Fish and Wildlife Service;*
- *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; or*
- *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*

The significance thresholds set forth in Riverside County’s Environmental Assessment Checklist were used to evaluate the significance of the proposed Project’s impacts to biological resources.

4.4.4 IMPACT ANALYSIS

Threshold a: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan?

The Project area is subject to two separate habitat conservation plans: the Stephens’ Kangaroo Rat HCP and the Western Riverside County MSHCP. Each is discussed below.

A. Project Consistency with the SKR HCP

As previously noted, the SKR HCP was prepared under the direction of the RCHCA Board of Directors, in consultation with USFWS and CDFW. Riverside County is a member agency of the RCHCA. According to Figure S-1 of the SKR HCP, the Study Area and Off-Site Improvement Areas are not located within or adjacent to any SKR core reserve areas. Additionally, the Project Applicant would be required to contribute fees towards the establishment and long-term maintenance of the SKR HCP core reserve pursuant to Riverside County Ordinance No. 663. The Project would not conflict with any provisions of the SKR HCP; thus, a less-than-significant impact would occur.

B. Project Consistency with the MSHCP

Provided below is an evaluation of the Project’s consistency with MSHCP Reserve assembly requirements, Section 6.1.2 (Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools), Section 6.1.3



(Protection of Narrow Endemic Plant Species), Section 6.1.4 (Guidelines Pertaining to the Urban/Wildlands Interface), and Section 6.3.2 (Additional Survey Needs and Procedures). (GLA, 2022a, p. 100)

1. Project Relationship to MSHCP Reserve Assembly

The Project development footprint, minus its off-site improvements, was previously determined to be consistent with the MSHCP as part of Joint Project Review (JPR) 06-08-18-01, dated September 15, 2006. This JPR required the conservation of 80 acres of land along the San Jacinto River as part of future development within the Project site. A Habitat Acquisition and Negotiation Strategy (HANS) determination letter, HANS 269, also was approved for the Project site, dated September 18, 2006. This letter determined that the Regional Conservation Authority (RCA) concurred with the partial site conservation documented in the JPR. It is expected that amendments to the HANS and/or JPR may be needed to cover off-site roadway and/or utility improvements. A copy of the HANS determination letter is attached as Exhibit 13 of the Project's BTR (*Technical Appendix CI*) and a copy of the JPR approval letter is attached as Exhibit 14 to the BTR. (GLA, 2022a, p. 100)

The proposed activities (roadway and utility improvements) within the Off-Site Improvement Areas are identified as Covered Activities in MSHCP Section 7.3.5. The Off-Site Improvement Areas are located in Criteria Cells and are therefore subject to the HANS process; however, since the Project is a Covered Activity and has been designed to avoid development of sensitive areas, conservation towards Reserve Assembly is not expected to be required. It should also be noted that a HANS determination, HANS 269, was already completed in September 2006 for the on-site portion of the Project. If necessary, a HANS amendment will only be required for the off-site improvement areas only as the on-site development footprint limits have not changed. The County as the MSHCP Permittee is responsible for making that determination through coordination with the RCA as part of the JPR process. The off-site portions of the Project would need to complete the JPR process through the RCA in order for the off-site portion of the Project to be deemed consistent with the MSHCP. This may require an amendment to the JPR. A copy of the HANS determination letter is attached as Exhibit 13 of the Project's BTR (*Technical Appendix CI*) and a copy of the JPR letter is attached as Exhibit 14 of the BTR. The need to complete an amendment to the approved JPR represents a potential conflict with the MSCHP Reserve Assembly requirements. Accordingly, prior to mitigation, the Project's potential conflict with the MSCHP Reserve Assembly requirements represents a significant impact for which mitigation would be required. (GLA, 2022a, p. 100)

2. Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools

The Project would impact 1.701 acres of MSCHP riparian/riverine habitat within the Study Area and an additional 0.01 acre of MSHCP riparian/riverine habitat within the Off-Site Improvement Areas. No vernal pools were observed onsite, although several special-status plant species (Coulter's goldfields, San Jacinto Valley crownscale, smooth tarplant, and spreading navarretia) associated with vernal pools and alkali playas were observed within the Study Area but not within the Off-Site Improvement Areas. However, the Disturbed Alkali Playas mapped within the Study Area are outside of the proposed direct impacts and would be avoided and conserved as natural open space as part of the Project. Furthermore, prior to construction these areas would



be delineated with fencing and/or rope to demarcate the limits of disturbance and avoidance of these areas during construction. Notwithstanding, Project impacts to 1.701 acres of MSCHP riparian/riverine habitat (1.711 acres of MSHCP riparian/riverine habitat if the Southerly Truck Route is implemented) would represent a potential conflict with Section 6.1.2 of the MSHCP. This is evaluated as a significant impact for which mitigation would be required. (GLA, 2022a, pp. 100-101)

3. *Protection of Narrow Endemic Plants*

Volume I, Section 6.1.3 of the MSHCP requires that within identified Narrow Endemic Plant Species Survey Areas (NEPSSA), site-specific focused surveys for Narrow Endemic Plants Species will be required for all public and private projects where appropriate soils and habitat are present. (GLA, 2022a, p. 101)

The Study Area and Off-Site Improvement Areas are located within the MSHCP NEPSSA designated Survey Area 3 and/or 10, which targets the following species: Munz's onion, San Diego ambrosia, many-stemmed dudleya, spreading navarretia, California Orcutt grass, Wrights's trichocoronis, Hammitt's clay cress, and San Miguel savory. The Project site was found to support spreading navarretia; however, the areas in which these species were observed occur within areas planned for long-term conservation as open space as part of the Project. Thus, the Project would achieve the MSHCP requirement to avoid 90 percent of any population of these species located within the Project site. In addition, the Project site was found to support suitable habitat for San Diego ambrosia, California Orcutt grass, and Wright's trichocoronis; however, these species were confirmed absent through focused plant surveys conducted by GLA. No sensitive plants were identified within the Off-Site Improvement Areas. As such, the proposed Project would be consistent with Volume I, Section 6.1.3 of the MSHCP, and impacts would be less than significant. (GLA, 2022a, p. 101)

4. *Guidelines Pertaining to the Urban/Wildland Interface*

The MSHCP Urban/Wildland Interface Guidelines are intended to address indirect effects associated with locating development in proximity to the MSHCP Conservation Area. As the MSHCP Conservation Area is assembled, development is expected to occur adjacent to the Conservation Area. Future development in proximity to the MSHCP Conservation Area may result in edge effects with the potential to adversely affect biological resources within the Conservation Area. To minimize such edge effects, the guidelines shall be implemented in conjunction with review of individual public and private development projects in proximity to the MSHCP Conservation Area and address the following: (GLA, 2022a, pp. 101-102)

- Drainage;
- Toxics;
- Lighting;
- Noise;
- Invasive species;
- Barriers;
- Grading/Land Development.



Drainage

Proposed projects located in proximity to the MSHCP Conservation Area are required to incorporate measures, including measures required through the National Pollutant Discharge Elimination System (NPDES) requirements, to ensure that the quantity and quality of runoff discharged to the MSHCP Conservation Area is not altered in an adverse way when compared with existing conditions. In particular, measures are required to be put in place to avoid discharge of untreated surface runoff from developed and paved areas into the MSHCP Conservation Area. Stormwater systems are required to be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the MSHCP Conservation Area. This can be accomplished using a variety of methods including natural detention basins, grass swales, or mechanical trapping devices. Regular maintenance also is required to ensure effective operations of runoff control systems. The Project's construction contractor also would be required to develop a Stormwater Pollution Prevention Plan (SWPPP) to address potential runoff and water quality effects during construction. Following the completion of activities, and pursuant to the Project's Water Quality Management Plan ("WQMP"; EIR *Technical Appendix H2*) the Project's drainage system would provide detention and water quality treatment to ensure runoff from the site does not result in increased drainage to the Santa Ana River, or affect the water quality of the river. Mandatory compliance with the future-required SWPPP during construction and the Project's WQMP under long-term operations would ensure that the Project does not conflict with the MSHCP provisions related to indirect drainage impacts. Accordingly, impacts would be less than significant. (GLA, 2022a, pp. 96-97)

Toxics

Land uses proposed in proximity to the MSHCP Conservation Area that use chemicals or generate bioproducts such as manure that are potentially toxic or may adversely affect wildlife species, habitat, or water quality are required incorporate measures to ensure that application of such chemicals does not result in discharge to the MSHCP Conservation Area. As noted above, near-term construction activities would be subject to compliance with a SWPPP and long-term operations would be subject to compliance with the Project's WQMP, both of which would preclude the discharge of toxics from the Project site that could adversely affect the MSHCP Conservation Area. As such, the Project would not conflict with the MSHCP provisions related to toxics, and impacts would be less than significant. (GLA, 2022a, p. 97)

Lighting

Night lighting is required to be directed away from the MSHCP Conservation Area to protect species within the MSHCP Conservation Area from direct night lighting. There is a potential that future implementing developments within the Project may require nighttime lighting during construction activities, particularly during night-time concrete pouring activities. Thus, during Project construction activities the Project has the potential to conflict with the lighting provisions of the MSHCP, resulting in a near-term significant impact. (GLA, 2022a, p. 97)

Under long-term operating conditions, future development on site would be subject to compliance with Riverside County Ordinance No. 655 (Mt. Palomar Observatory), Riverside County Ordinance No. 915



(Regulating Outdoor Lighting), and the lighting requirements of the proposed Stoneridge Commerce Center Specific Plan (SP 239A1). In particular, Section 5 of Riverside County Ordinance No. 915 requires that “[a]ll outdoor luminaires in shall (*sic*) be located, adequately shielded, and directed such that no direct light falls outside the parcel of origin, or onto the public right-of-way.” Riverside County would review future implementing projects (i.e., plot plans, building permits, etc.) to ensure compliance with Riverside County Ordinance Nos. 655 and 915 and the lighting provisions of the proposed Stoneridge Commerce Center Specific Plan, which would ensure that long-term operational lighting does not adversely affect the MSHCP Conservation Area. As such, under long-term conditions the Project would not conflict with the lighting provisions of the MSHCP, and impacts would be less than significant.

Noise

The MSHCP requires that proposed noise-generating land uses affecting the MSHCP Conservation Area shall incorporate setbacks, berms, or walls to minimize the effects of noise on MSHCP Conservation Area resources pursuant to applicable rules, regulations and guidelines related to land use noise standards. For planning purposes, wildlife within the MSHCP Conservation Area should not be subject to noise that would exceed residential noise standards. (GLA, 2022a, p. 97) The currently-proposed Project consists of planning-level approvals, and no site-specific development plans are available. Site-specific development plans would be identified in the future in association with implementing developments. Accordingly, any analysis of potential indirect noise impacts affecting the MSHCP would be speculative. Notwithstanding, and to provide a conservative assessment of Project impacts, it is conservatively assumed that long-term operation of the Project would have the potential to expose the MSHCP Conservation Area to noise levels exceeding residential noise standards (i.e., 65 dBA CNEL). This is evaluated as a significant impact for which mitigation would be required.

Invasive Species

Projects adjacent to the MSHCP Conservation Area are required to avoid the use of invasive plant species in landscaping, including invasive, non-native plant species listed in Volume I, Table 6-2 of the MSHCP (GLA, 2022a, p. 97). Future development on site would be subject to compliance with the proposed Stoneridge Commerce Center Specific Plan (SP 239A1). Section 4.7.2 of proposed SP 239A1 addresses prohibited plants, and includes a listing of prohibited plant species within Table 4-2, *Prohibited Plant Species*. Table 4-2 was added to SP 239A1 to specifically address the list of prohibited plant species included in MSHCP Volume I, Table 6-2. Riverside County would review future implementing developments (i.e., plot plans, building permits, etc.) to ensure compliance with all applicable provisions of proposed SP 239A1, thereby ensuring that future landscaping on site does not include any of the prohibited plant species listed in Volume I, Table 6-2 of the MSHCP. Accordingly, indirect impacts due to invasive species would be less than significant.

Barriers

Proposed land uses adjacent to the MSHCP Conservation Area are required to incorporate barriers, where appropriate in individual project designs, to minimize unauthorized public access, domestic animal predation, illegal trespass or dumping in the MSHCP Conservation Area. Such barriers may include native landscaping,



rocks/boulders, fencing, walls, signage and/or other appropriate mechanisms. (GLA, 2022a, p. 98) Proposed SP 239A1 includes a conceptual wall and fence plan, which requires the installation of tubular steel fencing or steel rod fencing along all proposed open space areas on site, including areas proposed to be added to the MSHCP Conservation Area. Riverside County would review future implementing developments (i.e., plot plans, building permits, etc.) to ensure compliance with all applicable provisions of proposed SP 239A1, including the requirement to provide fencing along the MSHCP Conservation Area. As such, the Project would not conflict with the MSHCP requirements related to barriers, and impacts would be less than significant.

Grading/Land Development

The MSHCP states that manufactured slopes associated with development shall not extend into the MSHCP Conservation Area (GLA, 2022a, p. 98). Proposed SP 239A1 includes a conceptual grading plan, which was previously depicted on EIR Figure 3-10. As shown on Figure 3-10, no grading is proposed within areas proposed to be conserved as natural open space, including areas that are proposed to be added to the MSHCP Conservation Area. Riverside County would review future implementing developments (i.e., plot plans, building permits, etc.) to ensure compliance with all applicable provisions of proposed SP 239A1, including compliance with the SP 239A1 conceptual grading plan. As such, the Project would not conflict with the MSHCP requirements related to grading and land development, and impacts would be less than significant.

5. Additional Survey Needs and Procedures

Pursuant to Volume I, Section 6.3.2 of the MSHCP, focused surveys were completed for Criteria Area Plants. The MSHCP requires that projects avoid 90% of areas providing long-term conservation value for applicable species when NEPSSA and/or CAPSSA species are detected. If avoidance is infeasible, then mitigation must be provided and a Determination of Biologically Equivalent or Superior Preservation (DBESP) is required. Where potentially significant, impacts to special-status plants are reduced to below a level of significance through compliance with the biological requirements of the MSHCP. The portions of the Study Area where these NEPSSA and CAPSSA species occur would be avoided and conserved, as these areas are all occur within areas planned for long-term conservation as open space as part of the Project. No sensitive plants were identified within the Off-Site Improvement Areas. As such, the Project would not conflict with MSHCP requirements related to NEPSSA and CAPSSA species, and impacts would be less than significant. (GLA, 2022a, p. 102)

As noted above, MSHCP Objective 6 for burrowing owls requires pre-construction surveys prior to site grading. Although focused surveys conducted for the proposed Project determined that the burrowing owl is absent from the Study Area and Off-Site Improvement Areas, there is nonetheless a potential for the site to become occupied with burrowing owls prior to construction activities. This is evaluated as a potentially significant impact for which mitigation, in the form of pre-construction burrowing owl surveys, would be required. (GLA, 2022a, p. 102)

Pursuant to Volume I, Section 6.3.2 of the MSHCP, focused surveys were completed for the LAPM within the Study Area and a habitat assessment was conducted for the Off-Site Improvement Areas. Based on the results



of the habitat assessment, it was determined that no suitable habitat for this species was present within the Off-Site Improvement Areas. Although a total of 14 LAPM individuals were detected during focused surveys within the Study Area, it was previously determined by the County of Riverside Environmental Programs Division (County EPD) that there would be no significant impact to the LAPM as the Project site does not contain long-term conservation value for this species. With implementation and coverage of the Project under the MSHCP conservation goals, the Project would have a less-than-significant impact on special-status small mammal species, including the LAPM. (GLA, 2022a, p. 102)

Threshold b: *Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12)?*

Threshold c: *Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U. S. Wildlife Service?*

The following discussion examines the potential impacts to plant and wildlife resources that would occur as a result of the proposed Project.

A. Impacts to Special Status Plants

Four special-status plant species were observed within the Study Area within the disturbed alkali playa areas, including: Coulter's goldfields, San Jacinto Valley crownscale, smooth tarplant, and spreading navarretia. However, and as previously depicted on Figure 4.4-1, all areas containing alkali playa areas that could provide habitat for these plant species occur in areas planned for long-term conservation as open space. These areas also are expected to be dedicated to the RCA for long-term management. Accordingly, the Project would not adversely affect any special status plant species, and impacts would be less than significant. (GLA, 2022a, p. 86)

Sections 6.1.3 and 6.3.2 of the MSHCP require that development projects avoid 90% of areas providing long-term conservation value for applicable species when NEPSSA and/or CAPSSA species are detected. If avoidance is infeasible, then mitigation must be provided and a DBESP is required. Where potentially significant, impacts to special-status plants are reduced to below a level of significance through compliance with the biological requirements of the MSHCP. As previously indicated, the Project occurs within a NEPSSA and CAPSSA. Four special-status plant species, Coulter's goldfields, San Jacinto Valley crownscale, smooth tarplant, and spreading navarretia, were observed within the Study Area during the 2019 focused-plant surveys. However, the disturbed alkali playas where the four special-status plant species have been observed would be avoided and conserved as natural open space as part of the Project. These areas also are expected to be dedicated to the RCA for long-term management. The Off-Site Improvement Areas does not support sensitive plant species, including NEPSSA or CAPSSA species; therefore, no temporary or permanent impact to special-status plants would occur in these areas. Therefore, the Project would meet the MSHCP requirement for



avoidance of the NEPSSA and CAPSSA species, and impacts would be less than significant. (GLA, 2022a, p. 86)

B. Impacts to Special Status Animals Observed Within the Study Area

Study Area

The proposed Project would result in the loss of habitat that supports special-status species, including the following: ferruginous hawk, northern harrier, white-tailed kite, loggerhead shrike, LAPM, northwestern San Diego pocket mouse, San Diego desert woodrat, Stephens' kangaroo rat, and San Diego black-tailed jackrabbit. Each is discussed below. (GLA, 2022a, p. 87)

1. Impacts to Birds

Of the four special-status (non-listed) bird species known to occur within the Project site, the northern harrier and loggerhead shrike have a low to moderate potential to nest within areas that would be directly impacted by the Project. Impacts to these species may be significant under CEQA; however, each of these species is covered under the MSHCP conservation goals and therefore, Project impacts to suitable nesting habitat are addressed through consistency with the MSHCP. However, there is a potential for nesting birds to occur within areas planned for development as part of the Project during the breeding season (February 1 to August 31). This is evaluated as a significant impact for which mitigation would be required. (GLA, 2022a, p. 87)

2. Impacts to Small Mammals

Five special-status small mammal species are known to occur within the Project site. The Project would directly impact approximately 500 acres of small mammal habitat. Impacts to these species may be significant under CEQA; however, each of these special-status small mammal species observed on site are covered under the MSHCP conservation goals and therefore, these impacts would be addressed through consistency with the MSHCP. Project impacts to small mammal suitable habitat, including the LAPM and SKR, would be offset through participation in the SKR HCP and compliance with the MSHCP (as discussed under Threshold a.). Although the Project is within the MSHCP Mammal Survey Area for LAPM and LAPM were detected during focused surveys, it was previously determined by the County of Riverside Environmental Programs Division (County EPD) that there would be no significant impact to the LAPM as the Project site does not contain long-term conservation value for this species, and the conservation area supporting the LAPM was offered to the RCA for long-term conservation of the species, but the RCA was not interested in conserving this area for the long-term conservation of the LAPM. With implementation and coverage of the Project under the SKR HCP and MSHCP conservation goals, the Project would have a less-than-significant impact on special-status small mammal species. (GLA, 2022a, pp. 87-88)

Southerly Off-Site Area

The Off-Site Improvement Areas would not result in the loss of habitat supporting special-status wildlife species as a majority of the off-site area contains paved roadways. Accordingly, no impacts to special-status



animals would occur with planned improvements associated with the Off-Site Improvement Areas. (GLA, 2022a, p. 88)

C. Impacts to Special-Status Wildlife Species Not Observed but with a Potential to Occur

Study Area

The Project has the potential to impact special-status species that were unable to be confirmed as occurring within the Study Area. Special-status species that have the potential to occur in a foraging roll only include: the golden eagle, tricolor blackbird, pocketed free-tailed bat, and western mastiff bat. The proposed Project would result in the loss of approximately 500 acres of foraging habitat for these species; however, the MSHCP has been designed to provide adequate coverage of conserved lands that will provide sufficient foraging habitat to provide for the long-term conservation of these species. With mitigation, the Project would be fully consistent with the MSHCP. Therefore, Project impacts to approximately 500 acres of foraging habitat for the golden eagle, tricolor blackbird, pocketed free-tailed bat, and western mastiff bat would be less than significant. (GLA, 2022a, p. 88)

Special-status species that were unable to be confirmed as occurring on the Project site, but have the potential to occur within live-in habitat include: coastal California gnatcatcher, California glossy snake, coast horned lizard, costal whiptail, and red-diamond rattlesnake. (GLA, 2022a, p. 88)

The Project would impact 10.37 acres of Riversidean sage scrub, which would potentially support live-in habitat for the coastal California gnatcatcher. Although Riversidean sage scrub habitats are declining at a regional level, the MSHCP has been designed to conserve/preserve adequate Riversidean sage scrub habitat to provide for the long-term conservation of this species. With mitigation, the proposed Project would be fully consistent with the MSHCP. Therefore, Project impacts to coastal California gnatcatcher would be less than significant. (GLA, 2022a, p. 88)

The Project would impact potential live-in habitat for several special-status reptiles, including the California glossy snake, coast horned lizard, costal whiptail, and red-diamond rattlesnake. Although continued loss of rock outcrops, non-native grasslands, and riparian areas is occurring at a regional level, each of these reptile species are adequately covered under the MSHCP and through the conservation goals of the MSHCP, which would ensure that live-in habitat for these species is adequately preserved to provide for the long-term conservation of these species. With mitigation, the proposed Project would be fully consistent with the MSHCP. Therefore, Project impacts to the California glossy snake, coast horned lizard, costal whiptail, and red-diamond rattlesnake would be less than significant. (GLA, 2022a, p. 88)

Off-Site Improvement Areas

The Project would not impact special-status species within the Off-Site Improvement Areas due to a lack of suitable habitat present; therefore, the disturbance to approximately 96.69 acres of off-site land which generally consists of existing paved roadways, would not be significant under CEQA. Additionally, adequate coverage of conserved lands through the conservation goals of the MSHCP would further reduce the Project's impact to



foraging habitat to less than a significant level. With mitigation, the proposed Project would be fully consistent with the MSHCP. Therefore, Project impacts to special-status wildlife species within the Off-Site Improvement Areas would be less than significant. (GLA, 2022a, p. 89)

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

Wildlife nurseries are sites where wildlife concentrate for hatching and/or raising young, such as rookeries, spawning areas, and bat colonies. Nurseries can be important to both special-status species as well as commonly occurring species. No wildlife nurseries or maternity bat colony roosts exist within the Study Area or Off-Site Improvement Areas. As such, the Project would not result in any impacts to native wildlife nursery sites. (GLA, 2022a, p. 91)

Study Area

The eastern and southern portions of the Project site are located within the proposed extension of Existing Core 4 within MSHCP Cell Groups C, D, E, F, and G, while the remaining portions of the Study area are not located within any MSHCP Criteria Cells or Cell Groups. The proposed extension of Existing Core 4 is composed of the middle reach of the San Jacinto River and is contiguous with Core Area in Lake Perris Recreation Area to the north of the Project site. The San Jacinto River drainage, to the south and east of the Project site, would provide a movement corridor for medium to small mammals such as coyote, bobcat, and racoon between the adjacent open space associated with the Lake Perris reserve to the north and open space to the southwest of the Project site. The river drainage would also provide an aerial corridor for various bird and bat species moving through the landscape. (GLA, 2022a, p. 91)

The Project has been specifically designed to conserve areas within each of the Criteria Cells that apply to the Project site, including the majority of the San Jacinto River and the adjacent areas. As such, the Project would contribute to the establishment of the proposed extension of Existing Core 4, thereby providing for a localized wildlife movement in the local area that would connect to the adjacent open space associated with the Lake Perris reserve to the north and open space to the southwest of the Project site. Furthermore, the proposed Project's potential off-site improvements to the Nuevo Road Bridge over the San Jacinto River is a covered activity under the MSHCP (Section 2.3.7.4). Temporary disturbances to wildlife movement may occur during construction; however, these disturbances would be limited to day-time hours during construction activities and would not interfere significantly with wildlife movement on a landscape level. The Project's consistency with the MSHCP would ensure that the Project's potential impacts to wildlife movement would be less than significant. (GLA, 2022a, p. 91)

Off-Site Improvement Areas

A majority of the Off-Site Improvement Areas are located within existing roadway right-of-way for General Plan Roads covered under the MSHCP. These roadways include Nuevo Road, Dunlap Drive, San Jacinto



Avenue, and Redlands Avenue. Portions of the Off-Site Improvement Areas are located within the Mead Valley Area Plan of the MSHCP and are included within the MSHCP Criteria Area. Specifically, the site falls within portions of Criteria Cells: 2969 and 3069 in Cell Group G (refer to Exhibit 5C of the Project’s BTR, included as EIR *Technical Appendix C1*). Although within these criteria cells, the Off-Site Improvement Areas consist of existing paved roadways or areas immediately adjacent to these roadways containing compacted soil. (GLA, 2022a, p. 91)

This activity is considered a covered activity under the MSHCP (Section 2.3.7.4). Temporary disturbances to wildlife movement may occur during construction; however, these disturbances would be limited to day-time hours during construction activities and would not interfere significantly with wildlife movement on a landscape level. The Project’s consistency with the MSHCP would reduce impacts to wildlife movement to a level of less than significant under CEQA. (GLA, 2022a, p. 91)

Threshold e: Would the 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 Game or U. S. Fish and Wildlife Service?

Study Area

Table 4.4-5, *Summary of Vegetation/Land Use Impacts – Study Area*, provides a summary of the Project’s anticipated impacts to the various vegetation communities that occur within the Study Area. Of the vegetation/land use types shown in Table 4.4-5, only Southern Riparian Scrub is considered a sensitive vegetation community, as this community is classified as “G3-Vulnerable” by the CNDDDB. Southern Riparian Scrub also is considered riparian habitat. As shown in Table 4.4-5, implementation of the Project would result in impacts to 0.29 acre of Southern Riparian Scrub. This is evaluated as a significant impact for which mitigation would be required. The Project would not result in impacts to any other sensitive natural community or riparian habitat types. (GLA, 2022a, p. 89)

Table 4.4-5 Summary of Vegetation/Land Use Impacts – Study Area

Vegetation/Land Use Type	Onsite Impacts (acres)	Offsite Impacts (acres)	Total Impacts (acres)	Avoided Areas (acres)
Agriculture	155.52	-	155.52	21.29
Disturbed Alkali Playa	-	-	-	21.30
Disturbed/Developed	10.72	6.11	16.83	3.58
Non-Native Grassland	0	0.01	0.01	1.39
Ornamental	0	0.97	0.97	0
Riversidean Sage Scrub	8.33	2.04	10.37	16.17
Ruderal	310.32	17.80	328.12	32.62
Southern Riparian Scrub	0	0.29	0.29	1.20
Total	484.89	27.22	512.11	97.55

(GLA, 2022a, Table 5-1)



Off-Site Improvement Areas

The Off-Site Improvement Areas do not support suitable habitat for special-status vegetation communities as all 96.69 acres of this area contain disturbed/developed habitats. As such, there would be no impacts to riparian habitat or other sensitive natural communities within the Off-Site Improvement Areas. (GLA, 2022a, pp. 89-90)

Threshold f: *Would the Project have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

The Project would result in impacts to federally-protected wetlands, and also would result in impacts to jurisdictional waters, as discussed below.

A. Project Impacts to Wetlands

Study Area

Approximately 22.45 acres of wetlands occur within the Study Area within the disturbed alkali playa on site (21.30 acres) and the on-site portions of the San Jacinto River (1.15 acres). The Project would avoid all impacts to the disturbed alkali playa, which would be dedicated as conservation land to the RCA for long-term management. However, development related to utility installation and roadway improvements along the southern boundary of the Project site would impact 0.16 acre of wetlands within the San Jacinto River and associated floodplain. This is evaluated as a significant impact for which mitigation would be required. (GLA, 2022a, p. 90)

Off-Site Improvement Areas

There are no wetlands present within the Off-Site Improvement Areas; thus, no impacts to wetlands would occur within the Off-Site Improvement Areas. (GLA, 2022a, p. 90)

B. Project Impacts to Jurisdictional Waters

1. Impacts to Corps Jurisdiction

Study Area

Under the proposed Project, a total of 0.97 acre of Corps jurisdiction would be permanently impacted (0.15 acre of wetland waters and 0.82 non-wetland waters). Table 4.4-6, *Summary of Corps Jurisdictional Impacts – Study Area*, summarizes the impacts to each Corps jurisdictional feature. Accordingly, Project impacts to 0.97 acre of Corps jurisdiction represent a significant impact of the proposed Project for which mitigation would be required. (GLA, 2022a, p. 93)



Table 4.4-6 Summary of Corps Jurisdictional Impacts – Study Area

Drainage Name	Corps Impacts Non-Wetland Waters (Acres)	Corps Impacts Wetland Waters (Acres)	Total Corps Impacts (Acres)	Total Corps Impacts (Linear Feet)
San Jacinto River	0	0.15	0.15	242
Drainage A	0.06	0	0.06	640
Drainage B	0.29	0	0.29	1,482
Drainage C	0.16	0	0.16	1,626
Drainage D	0.01	0	0.01	70
Drainage E	0.03	0	0.03	477
Drainage F	0.27	0	0.27	2,625
Total	0.82	0.15	0.97	7,162

(GLA, 2022a, Table 5-3)

Off-Site Improvement Areas

The Off-Site Improvement Areas does not support Corps jurisdiction; therefore, there would be no impact to Corps jurisdiction associated with this off-site area (GLA, 2022a, p. 95).

2. Impacts to RWQCB Jurisdiction

Study Area

Under the proposed Project, a total of 0.981 acre of State waters under RWQCB jurisdiction would be permanently impacted (0.15 acre wetland waters and 0.831 acre non-wetland waters). Several ephemeral features that occur on the Project site are not included within Corps jurisdiction, would be subject to the RWQCB jurisdiction as State Waters. Table 4.4-7, *Summary of RWQCB Jurisdictional Impacts – Study Area*, summarizes the impacts to each RWQCB jurisdictional feature. Accordingly, Project impacts to 0.981 acre of State waters under RWQCB jurisdiction represent a significant impact of the proposed Project for which mitigation would be required. (GLA, 2022a, p. 93)

Off-Site Improvement Areas

Impacts within the Off-Site Improvement Areas would result in permanent impact to 0.01 acre and 285 linear feet of a roadside ditch along the eastern edge of Dunlap Drive. Table 4.4-8, *Summary of RWQCB Jurisdiction – Off-Site Improvement Areas*, summarizes the impacts to RWQCB jurisdiction. Accordingly, Project impacts to 0.01 acre of State waters under RWQCB jurisdiction within the Off-Site Improvement Areas represent a significant impact of the proposed Project for which mitigation would be required. (GLA, 2022a, p. 95)



Table 4.4-7 Summary of RWQCB Jurisdictional Impacts – Study Area

Drainage Name	Regional Board Impacts Non-Wetland Waters (Acres)	Regional Board Impacts State Wetland Waters (Acres)	Total Regional Board Impacts (Acres)	Total Regional Board Impacts (Linear Feet)
Waters of the U.S.				
San Jacinto River	0	0.15	0.15	242
Drainage A	0.06	0	0.06	640
Drainage B	0.29	0	0.29	1,482
Drainage C	0.16	0	0.16	1,626
Drainage D	0.01	0	0.01	70
Drainage E	0.03	0	0.03	477
Drainage F	0.27	0	0.27	2,625
Sub-Total	0.82	0.15	0.97	7,162
Waters of the State				
Ditch A	0.01	0	0.01	126
Drainage G	0.01	0	0.01	300
Drainage H	0.001	0	0.001	29
Sub-Total	0.021	0	0.021	455
Total	0.841	0.15	0.991	7,617

(GLA, 2022a, Table 5-4)

Table 4.4-8 Summary of RWQCB Jurisdiction – Off-Site Improvement Areas

Drainage Name	Regional Board Impacts Non-Wetland Waters (Acres)	Regional Board Impacts State Wetland Waters (Acres)	Total Regional Board Impacts (Acres)	Total Regional Board Impacts (Linear Feet)
Waters of the State				
Ditch 1	0.01	0	0.01	285
Total	0.01	0	0.01	285

(GLA, 2022a, Table 5-6)

3. Impacts to CDFW Jurisdiction

Study Area

Under the proposed Project, a total of 1.701 acres of CDFW jurisdiction would be permanently impacted (1.411 acres non-riparian streambed and 0.29 acre riparian streambed). Table 4.4-9, *Summary of CDFW Jurisdictional Impacts – Study Area*, summarizes the impacts to each CDFW jurisdictional feature. Accordingly, Project impacts to 1.701 acres of CDFW jurisdiction represent a significant impact for which mitigation would be required. (GLA, 2022a, p. 94)



Table 4.4-9 Summary of CDFW Jurisdictional Impacts – Study Area

Drainage Name	CDFW Impacts Non-Riparian Stream (Acres)	CDFW Impacts Riparian Stream (Acres)	Total CDFW Impacts (Acres)	Total CDFW Impacts (Linear Feet)
San Jacinto River	0.37	0.15	0.52	242
Drainage A	0.07	0.14	0.21	640
Ditch A	0.01	0	0.01	126
Drainage B	0.37	0	0.37	1,482
Drainage C	0.22	0	0.22	1,626
Drainage D	0.01	0	0.01	70
Drainage E	0.03	0	0.03	477
Drainage F	0.31	0	0.31	2,625
Drainage G	0.02	0	0.02	300
Drainage H	0.001	0	0.001	29
Total	1.411	0.29	1.701	7,617

(GLA, 2022a, Table 5-5)

Off-Site Improvement Areas

Impacts associated with the Off-Site Improvement Areas would result in permanent impact to 0.01 acre and 285 linear feet of a roadside ditch along the eastern edge of Dunlap Drive. Table 4.4-10, *Summary of CDFW Jurisdictional Impacts – Off-Site Improvement Areas*, summarizes the impacts to CDFW jurisdiction. Accordingly, Project impacts to 0.01 acre and 285 linear feet of CDFW jurisdiction within the Off-Site Improvement Areas represent a significant impact for which mitigation would be required. (GLA, 2022a, p. 95)

Table 4.4-10 Summary of CDFW Jurisdictional Impacts – Off-Site Improvement Areas

Drainage Name	CDFW Impacts Non-Riparian Stream (Acres)	CDFW Impacts Riparian Stream (Acres)	Total CDFW Impacts (Acres)	Total CDFW Impacts (Linear Feet)
Ditch I	0.01	0	0.01	285
Total	0.01	0	0.01	285

(GLA, 2022a, Table 5-7)

4. Impacts to MSHCP Riparian/Riverine Areas

Study Area

The Project’s impacts to MSHCP riparian/riverine areas are identical to impacts to CDFW, as summarized in Table 4.4-9. Under the proposed Project, a total of 1.701 acres of MSHCP Riparian/Riverine areas would be impacted within the Study Area (consisting of 1.411 acres riverine and 0.29 acre riparian). The riparian areas within the Project site do not contain suitable habitat for riparian-associated birds including least Bell’s vireo, southwestern willow flycatcher, and western yellow-billed cuckoo. However, these drainages still support hydrological and biological functions and values including water transport, flood attenuation, groundwater recharge, and providing habitat for downstream aquatic resources. In accordance with MSHCP requirements, a Project-specific DBESP is required to address the Project’s impacts to 1.701 acres of MSHCP



Riparian/Riverine areas. The DBESP, which would be prepared in conjunction with future implementing developments (i.e., plot plans), would be required to demonstrate that with mitigation, Project impacts to MSHCP Riparian/Riverine areas would provide for a biologically equivalent or superior preservation of Riparian/Riverine resources. Accordingly, Project impacts to up to 1.701 acres of MSHCP Riparian/Riverine areas within the Study Area are evaluated as a significant impact. (GLA, 2022a, p. 94)

Off-Site Improvement Areas

Impacts to MSHCP riparian/riverine areas associated with the Off-Site Improvement Areas would be identical to impacts to CDFW jurisdictional areas, as summarized above. A total of 0.01 acre of MSHCP Riverine areas would be impacted. This riverine habitat area does not contain suitable habitat for riparian-associated birds including least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo. However, this feature still supports hydrological and biological functions and values including water transport, flood attenuation, groundwater recharge, and providing habitat for downstream aquatic resources. In accordance with MSHCP requirements, a Project-specific DBESP is required to address the Project's impacts to 0.01 acre of MSHCP Riparian/Riverine areas. The DBESP, which would be prepared in conjunction with future implementing developments (i.e., plot plans), would be required to demonstrate that with mitigation, Project impacts to MSHCP Riparian/Riverine areas would provide for a biologically equivalent or superior preservation of Riparian/Riverine resources. Accordingly, Project impacts to up to 0.01 acre of MSHCP Riparian/Riverine areas within the Off-Site Improvement Areas are evaluated as a significant impact. (GLA, 2022a, pp. 95-96)

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

Aside from the SKR HCP and the MSHCP, which are addressed under the analysis of Threshold a., the only other local policies or ordinances protecting biological resources are the Riverside County Oak Tree Management Guidelines and Riverside County Ordinance No. 559 (Regulating the Removal of Trees). As previously indicated in Table 4.4-5, the Project site and off-site improvement areas do not contain any oak trees or vegetation communities containing oak trees, and no oak trees or vegetation containing oak trees occur within the Off-Site Improvement Areas. As such, the Project has no potential to result in a conflict with the County's Oak Tree Management Guidelines. Additionally, Riverside County Ordinance No. 559 applies to properties located above 5,000 feet above mean sea level (amsl) in elevation, while the maximum elevation at the Project site is approximately 1,865 feet amsl; thus, Riverside County Ordinance No. 559 is not applicable to the proposed Project. Accordingly, and aside from potential impacts due to a conflict with the MSHCP (as addressed under the analysis of Threshold a.), the Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and no impact would occur. (GLA, 2022a, pp. 89-90)



4.4.5 CUMULATIVE IMPACT ANALYSIS

The cumulative impact analysis considers development of the Project in conjunction with other development projects located within the purview of the Western Riverside County MSHCP. This study area for cumulatively-considerable impacts to biological resources is appropriate because the MSHCP encompasses a large area surrounding the Project site, and provides for the long-term protection of sensitive plant, animal, and plant communities throughout the MSHCP area. Additionally, most cumulative development projects within the Project vicinity would be subject to the provisions of the MSHCP, and the general range of habitats, species, climate, etc. are fairly consistent throughout the MSHCP.

As discussed under the analysis of Threshold a., the Project would preserve as open space areas identified by the MSHCP for long-term conservation. However, portions of the required improvements within the Off-Site Improvement Areas (i.e., improvements required for the Southern Truck Route) would traverse MSHCP Cells 2969 and 3069. As such, a JPR process through the RCA would be required in order to deem the improvements along the Southern Truck Route consistent with the MSHCP. As other cumulative developments also may require a JPR process through the RCA, impacts would be cumulatively considerable. Project impacts to 1.701 acres of MSCHP riparian/riverine habitat within the Study Area and 0.01 acre of MSHCP riparian/riverine habitat within the Off-Site Improvement Areas would represent a potential conflict with Section 6.1.2 of the MSHCP. As other developments within the region also have the potential to impact MSHCP riparian/riverine habitat, Project impacts to up to 1.7111 acres of MSCHP riparian/riverine habitat represent a cumulatively-considerable impact. The Project would, however, conserve the portions of the Project site that support spreading navarretia within planned open space areas, while the Project site and Off-Site Improvement Areas do not contain any San Diego ambrosia, California Orcutt grass, and Wright's trichocoronis; thus, Project impacts to narrow endemic plants would be less-than-cumulatively considerable. Additionally, the Project has the potential to result in indirect noise and lighting impacts to MSHCP conservation areas, and also may result in potential impacts to burrowing owls if the site becomes occupied prior to the commencement of construction. As other cumulative developments in the region also have the potential to result in indirect impacts to MSHCP conservation areas, the Project's indirect impacts to MSHC conservation areas represents a cumulatively-considerable impact.

As discussed under the analysis of Thresholds b. and c., the Project would not result in any impacts to any special status plants, and cumulatively-considerable impacts would not occur. Although the Project would result in less-than-significant impacts to most special status animals observed within the Study Area and Off-Site Improvement Areas, there is a potential that the site may be occupied by nesting birds prior to the commencement of construction. As other cumulative developments within the region also have the potential to result in impacts to nesting birds, the Project's impacts would be cumulatively considerable.

As indicated under the analysis of Threshold d., the Project site and off-site improvement areas do not contain any wildlife nursery sites; thus, cumulatively-considerable impacts to wildlife nursery sites would not occur. As previously indicated, the eastern and southern portions of the Project site are located within the proposed extension of Existing Core 4 within MSHCP Cell Groups C, D, E, F, and G, while the remaining portions of the Study Area are not located within any MSHCP Criteria Cells or Cell Groups. The Project has been



specifically designed to conserve areas within each Criteria Cell, including the majority of the San Jacinto River and the adjacent areas. As such, the Project would contribute to the establishment of the proposed extension of Existing Core 4, thereby providing for a localized wildlife movement in the local area that would connect to the adjacent open space associated with the Lake Perris reserve to the north and open space to the southwest of the Project site. Although the Project could require the widening of the Nuevo Road bridge crossing over the San Jacinto River, such improvements are planned as part of the County's TUMF program, Nuevo Road is an MSHCP-Covered Road, and wildlife movement still would be facilitated beneath the widened bridge crossing. Roadway improvements associated with the Off-Site Improvement Areas are covered activities under the MSHCP, and such improvements would not adversely affect wildlife movement as wildlife movement areas are accommodated by the MSHCP. As other cumulative developments within the region also would be required to comply with MSHCP conservation requirements, which were designed, in part, to facilitate regional wildlife movement corridors, the Project's impacts to wildlife movement corridors would be less-than-cumulatively considerable.

As discussed under the analysis of Threshold e., the Project would result in impacts to 0.29 acre of Southern Riparian Scrub, all of which would occur in off-site areas within the Study Area. As other cumulative developments within the region also have the potential to result in impacts to sensitive natural communities and riparian habitats, the Project's impacts to 0.29 acre of Southern Riparian Scrub would be cumulatively considerable.

As indicated in the analysis of Threshold f., the Project would impact 0.16 acre of wetlands within the San Jacinto River and associated floodplain off-site within the Study Area, while no impacts to wetlands would occur within the Off-Site Improvement Areas. The Project also would result in impacts to a total of 0.97 acres of Corps jurisdiction, a total of 0.981 acre of State waters under RWQCB jurisdiction, a total of 1.691 acres of CDFW jurisdiction, and a total of 1.691 acres of MSHCP Riparian/Riverine areas within the Study Area. Improvements within the Off-Site Improvement Areas would impact an additional 0.01 acre of RWQCB jurisdiction, 0.01 acre of CDFW jurisdiction, and 0.01 acre of MSHCP Riparian/Riverine areas. As other cumulative developments within the region also have the potential to impact wetlands, Corps jurisdictional areas, RWQCB jurisdictional areas, CDFW jurisdictional areas, and MSHCP Riparian/Riverine areas, the Project's impacts to wetlands and jurisdictional areas would be cumulatively considerable.

As indicated under the analysis of Threshold g., aside from the SKR HCP and MSHCP (which are addressed under the analysis of Threshold a.), the only other local policies or ordinances protecting biological resources are the Riverside County Oak Tree Management Guidelines and Riverside County Ordinance No. 559 (Regulating the Removal of Trees). However, the Study Area and Off-Site Improvement Areas do not contain any oak trees that would be subject to the County's Oak Tree Management Guidelines, and Riverside County Ordinance No. 559 applies only to properties located above 5,000 feet amsl. Accordingly, Project impacts due to a conflict with local policies or ordinances protecting biological resources would be less-than-cumulatively considerable.



4.4.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a.: Significant Direct and Cumulatively-Considerable Impact. The proposed Project would not conflict with the Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP), with the mandatory payment of fees pursuant to Riverside County Ordinance No. 663. Although on-site impacts to the MSHCP Reserve Assembly requirements were previously addressed as part of HANS 269, portions of the Off-Site Improvement Areas (i.e., within improvement areas associated with the Southern Truck Route) traverse MSHCP Criteria Cells 2969 and 3069, and these improvements were not addressed as part of HANS 269. Accordingly, prior to mitigation, the Project's potential conflict with the MSCHP Reserve Assembly requirements represents a significant impact for which mitigation would be required. Additionally, Project impacts to 1.691 acres of MSCHP riparian/riverine habitat (1.701 acre of riparian resources if the Southern Truck Route is implemented) would represent a potential conflict with Section 6.1.2 of the MSHCP, and impacts would therefore be significant. The Project would not result in impacts to narrow endemic plants, and thus would be consistent with Volume I, Section 6.1.3 of the MSHCP. However, Project-related lighting and noise has the potential to result in indirect impacts to the MSHCP Conservation Area, representing a potential conflict with the MSHCP Urban/Wildland Interface requirements. In addition, although focused surveys conducted for the proposed Project determined that the burrowing owl is absent from the Study Area and Off-Site Improvement Areas, there is nonetheless a potential for the site to become occupied with burrowing owls prior to construction activities. This is evaluated as a potentially significant impact due to a conflict with MSHCP Objective 6 for burrowing owls, for which mitigation would be required in the form of pre-construction surveys and avoidance of any nesting burrowing owls. Project impacts due to a potential conflict with the MSHCP would be significant on both a direct and cumulatively-considerable basis.

Thresholds b. and c.: Significant Direct and Cumulatively-Considerable Impact. Special-status plant species observed within the Study Area would be preserved in areas planned for long-term conservation as open space as part of the Project, while no special-status plant species occur within the Off-Site Improvement Areas; thus, Project impacts to special status plants would be less than significant. Although most impacts to special status animals would be less than significant with the planned on-site open space areas and Project compliance with the MSHCP, there is a potential for nesting birds to occur within areas planned for development as part of the Project if construction activities were to occur during the breeding season (February 1 to August 31); thus, Project impacts to nesting birds would be potentially significant prior to mitigation.

Threshold d.: Less-than-Significant Impact. The Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites, and impacts would be less than significant.

Threshold e.: Significant Direct and Cumulatively-Considerable Impact. Implementation of the Project would result in impacts to 0.29 acre of Southern Riparian Scrub, all of which would occur off-site within the Study Area), which is the only sensitive natural community that occurs within the Study Area or within the Off-Site Improvement Areas; thus, Project impacts to 0.29 acre of Southern Riparian Scrub would be significant prior to mitigation.



Threshold f.: Significant Direct and Cumulatively-Considerable Impact. The Project would avoid all impacts to the disturbed alkali playa on site, which comprises the only areas of wetlands on site; however, development related to off-site utility installation and roadway improvements along the southern boundary of the Project would impact 0.16 acre of wetlands within the San Jacinto River and associated floodplain, thereby resulting in a significant impact. The Project also would result in impacts to a total of 0.97 acre of Corps jurisdiction, a total of 0.981 acre of State waters under RWQCB jurisdiction, a total of 1.691 acres of CDFW jurisdiction, and a total of 1.691 acres of MSHCP Riparian/Riverine areas within the Study Area. Additional to impacts to 0.01 acre of RWQCB jurisdiction, 0.01 acre of CDFW jurisdiction, and 0.01 acre of MSHCP Riparian/Riverine areas would occur within the Off-Site Improvement Areas (specifically, within areas planned for disturbance as part of the Southern Truck Route). Project impacts to wetlands and jurisdictional areas within the Study Area and within the Southerly Off-Ste Area would be significant prior to mitigation.

Threshold g.: No Impact. Aside from the SKR HCP and MSHCP, which are addressed under the analysis of Threshold a., the only other local policies or ordinances protecting biological resources are the Riverside County Oak Tree Management Guidelines and Riverside County Ordinance No. 559 (Regulating the Removal of Trees). However, the Project site does not contain any oak trees subject to the Riverside County Oak Tree Management Guidelines. Additionally, the Project site does not occur at an elevation exceeding 5,000 feet amsl; thus, Riverside County Ordinance No. 559 is not applicable to the proposed Project. Therefore, and aside from potential impacts due to a conflict with the MSHCP (as addressed under the analysis of Threshold a.), the Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and no impact would occur.

4.4.7 COUNTY REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

Applicable County Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

- Prior to issuance of grading permits, the Project Applicant shall make payment of Western Riverside County MSHCP fees pursuant to Riverside County Ordinance No. 810, *Establishing an Interim Open Space Mitigation Fee*.
- Prior to issuance of grading permits, the Project Applicant shall make payment of fees pursuant to the Stephen's Kangaroo Rat Habitat Conservation Plan and Riverside County Ordinance No. 663, *Establishing the Riverside County Stephens' Kangaroo Rat Habitat Conservation Plan and Setting Mitigation Fees*.
- As a condition of approval for future grading and building permits, the County of Riverside shall require that the Project Applicant must delineate areas planned for long-term conservation as open space (i.e., open space within Planning Areas 10 and 11 of the Stoneridge Commerce Center Specific



Plan No. 239, Amendment No. 1) with construction fencing in order to preclude direct and indirect impacts to sensitive biological resources within the open space areas.

Mitigation Measures

MM 4.4-1 Prior to approval of any implementing developments within the Project site (e.g., plot plans, conditional use permits), the Project Applicant shall contract with a qualified biologist to prepare a Determination of Biologically Equivalent or Superior Preservation (DBESP), in accordance with Section 6.1.2 of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The required DBESP shall address Project impacts to 1.691 acres of riverine riparian/jurisdictional features (including impacts to 0.29 acre of Southern Riparian Scrub habitat) that comprise MSCHP riparian/riverine habitat, California Department of Fish and Wildlife (CDFW) jurisdiction, Regional Water Quality Control Board (RWQCB) jurisdiction, and/or U.S. Army Corps of Engineers jurisdiction. In the event that the Southern Truck Route is implemented (as described in EIR subsection 3.6.2), then the required DBESP also shall address impacts to an additional 0.01 acre of MSHCP riparian/riverine habitat, CDFW jurisdiction, and RWQCB jurisdiction. The required DBESP shall identify compensatory mitigation for the loss of up to 1.691 acres of riparian/riverine resources (1.701 acre of riparian resources if the Southern Truck Route is implemented) at a minimum 3:1 ratio, and the required mitigation shall consist of the following:

- Purchase of 2.536 acres of rehabilitation credits at the Riverpark Mitigation Bank (2.551 acres of rehabilitation credits are required if the Southern Truck Route is implemented); and
- Purchase of 2.537 acres of re-establishment credits at the Riverpark Mitigation Bank (2.552 acres of rehabilitation credits are required if the Southern Truck Route is implemented).

Prior to approval of the implementing development(s), the required DBESP shall be subject to review and approval by the Riverside County Environmental Programs Department (EPD), and also shall be subject to a 60-day review period by the Wildlife Agencies as required by the MSHCP. Following approval of the DBESP by County EPD and the Wildlife Agencies, and prior to issuance of grading permits, the Project Applicant shall provide evidence to Riverside County that the required compensatory mitigation has been achieved in accordance with the approved DBESP. Should compensatory mitigation credits be unavailable at the Riverpark Mitigation Bank, the Project Applicant shall coordinate with the regulatory agencies, Riverside County, and MSHCP Wildlife Agencies to secure alternate mitigation totaling a minimum of 5.073 acres (5.103 acres if the Southern Truck Route is implemented) at another approved mitigation bank or in-lieu fee program.

MM 4.4-2 In the event that nighttime construction is proposed as part of future building permits, Riverside County shall review the plans to ensure the following note is included on the plans. This note also shall be specified in bid documents issued to prospective construction contractors.



- “During any nighttime construction activities, all lighting shall direct lighting away from the MSHCP conserved lands located along the San Jacinto River in the eastern and southeastern portions of the Project site (i.e., within Planning Areas 10 and 11 of the Stoneridge Commerce Center Specific Plan No. 239, Amendment No. 1).”

Project contractors shall be required to ensure compliance with this note and permit periodic inspection of the construction site by Riverside County staff or its designee to confirm compliance.

MM 4.4-3 Prior to approval of implementing developments (i.e., plot plans, building permits, etc.) affecting lands adjacent to the on-site MSHCP Conservation Areas (i.e., proposed Conservation Areas within Planning Areas 10 and 11 of the Stoneridge Commerce Center Specific Plan No. 239, Amendment No. 1), the Project Applicant shall prepare and Riverside County shall review and approve an acoustical analysis to determine whether long-term operational noise associated with the implementing development would expose the proposed MSHCP Conservation Areas to noise levels exceeding 65 dBA CNEL. In the event that the analysis shows that future site operations would expose the Conservation Areas to noise levels exceeding 65 dBA CNEL, the required acoustical analysis shall incorporate recommendations to reduce Project-related operational noise affecting the Conservation Areas to below 65 dBA CNEL. Noise attenuation measures may include, but are not necessarily limited to, the incorporation of screen walls or other barriers (such as berms). Prior to issuance of building permits, the Riverside County Building and Safety Department shall ensure that any required noise attenuation measures have been incorporated into the plans, and shall verify that the noise attenuation measures have been implemented prior to final building inspection.

MM 4.4-4 In accordance with MSHCP Objective 6, prior to issuance of grading permits or other permits authorizing ground disturbance or discing, the Project Applicant shall retain a qualified biologist to perform a burrowing owl survey at all potentially suitable habitat sites within the Project’s limits of disturbance within 30 days of the commencement of any ground-disturbing activities at the Project site, as discussed below.

- Pre-Construction Survey: The pre-construction survey shall be performed by a qualified biologist that will survey the site for the presence/absence of burrowing owls within 30 days prior to commencement of ground-disturbing activities at the Project site. If burrowing owls are detected on-site during the pre-construction survey, the owls shall be relocated/excluded from the site outside of the breeding season following accepted protocols, and subject to the approval of the RCA and Wildlife Agencies (i.e., CDFW and/or USFWS).
- Burrowing Owl Management Plan: In the event that burrowing owl is determined to be present, or in the event that an assumption is made that the burrowing owl occurs on-site,



a burrowing owl management plan shall be prepared and implemented in coordination with the Western Riverside County Regional Conservation Authority (RCA) and CDFW that shall detail the relocation of owls from the Project site, passively and/or actively. If additional site visits determine the species is absent, then the pre-construction survey (as discussed above) shall instead be implemented.

A copy of the results of the pre-construction survey (and all additional surveys), as well as copies of the Burrowing Owl Management Plan, if required, shall be provided to the County of Riverside Planning Department for review and approval (in the case of the Burrowing Owl Management Plan) prior to any vegetation clearing and ground disturbance activities.

- MM 4.4-5 Prior to the issuance of grading permits, Riverside County shall ensure that the following note is included on the Project's grading plans. Project contractors shall be required to ensure compliance with this note and permit periodic inspection of the construction site by Riverside County staff or its designee to confirm compliance. This note also shall be specified in bid documents issued to prospective construction contractors.

“Vegetation clearing shall be conducted outside of the bird nesting season (February 1 to August 31) to the extent feasible. If avoidance of the nesting season is not feasible, a nesting bird survey shall be conducted by a qualified biologist within no more than 72 hours of such scheduled disturbance, to determine the presence of nests or nesting birds. If active nests are identified, the biologist shall establish appropriate buffers around the vegetation (typically 500 feet for raptors and sensitive species, 200 feet for non-raptors/non-sensitive species). All work within these buffers shall be halted until the nesting effort is finished (i.e., the juveniles are surviving independent from the nest). The biologist shall review and verify compliance with these nesting boundaries and shall verify the nesting effort has finished. Work may resume within the buffer area when no other active nests are found. Alternatively, a qualified biologist may determine that construction can be permitted within the buffer areas and would develop a monitoring plan to prevent any impacts while the nest continues to be active (eggs, chicks, etc.). Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to Riverside County for mitigation monitoring compliance record keeping. If vegetation removal is not completed within 72 hours of a negative survey during nesting season, the nesting survey must be repeated to confirm the absence of nesting birds.”

- MM 4.4-6 Prior to approval of grading permits or improvement plans for the Southern Truck Route, and if required by the Regional Conservation Authority (RCA), the Project Applicant shall prepare a HANS application to amend the previously-approved HANS 269 determination to include required improvements to Dunlap Drive and San Jacinto Avenue, which traverse MSHCP Criteria Cells 2969 and 3069 in Cell Group G. The HANS application shall be submitted to



the RCA and shall be subject to the Western Multiple Species Habitat Conservation Plan (MSHCP) Joint Project Review (JPR) process. Prior to issuance of grading permits or improvement plans for the Southern Truck Route, the Project Applicant shall provide a copy of the approved amended HANS 269 determination. These requirements shall not apply in the event that the RCA does not require an amendment to HANS 269 for the Southern Truck Route, or in the event that the Southern Truck Route is not implemented.

4.4.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a.: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.4-1 would require the preparation of a DBESP and compensatory mitigation for Project impacts to 1.691 acres of MSCHP riparian/riverine habitat (1.701 acre of riparian/riverine habitat with implementation of the Southern Truck Route) at a minimum 3:1 ratio, which would ensure Project consistency with Section 6.1.2 of the MSHCP. Implementation of Mitigation Measure MM 4.4-2 would ensure that measures are incorporated into the Project's construction phase to preclude significant construction-related nighttime lighting impacts affecting the proposed on-site MSHCP Conservation Area, while Mitigation Measure MM 4.4-3 would ensure that measures are incorporated into future development plans for the site, if necessary, to ensure that future on-site operations do not expose the proposed on-site MSHCP Conservation Area to noise levels exceeding 65 dBA CNEL. Thus, with implementation of Mitigation Measures MM 4.4-2 and MM 4.4-3, the Project would be fully consistent with Section 6.1.4 of the MSHCP. In addition, implementation of Mitigation Measure MM 4.4-4 would ensure that appropriate pre-construction surveys are conducted prior to ground disturbing activities, in accordance with MSHCP Objective 6 for the burrowing owl. With implementation of the required mitigation, the Project would be fully consistent with all applicable MSHCP requirements, and impacts would be reduced to below a level of significance. Implementation of Mitigation Measure MM 4.4-6 would ensure that required improvements associated with the Southern Truck Route, if implemented, would be subject to a HANS and JPR process, if required by the RCA.

Thresholds b. and c.: Less-than-Significant Impact with Mitigation Incorporated. In the event that Project construction activities occur during the nesting season for birds (February 1 to August 31), Mitigation Measure MM 4.4-5 would ensure pre-construction nesting surveys are conducted prior to commencement of construction activities, and further requires appropriate avoidance of any active nests that may be identified. Implementation of the required mitigation would reduce Project impacts to nesting birds to below a level of significance.

Threshold e.: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.4-1 would require compensatory mitigation for Project impacts to 0.29 acre of Southern Riparian Scrub at a minimum 3:1 ratio, and would reduce Project impacts to below a level of significance.

Threshold f.: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.4-1 would require compensatory mitigation at a minimum 3:1 ratio for Project impacts to 0.16 acre of wetlands, 0.97 acre of Corps jurisdiction, 0.981 acre of State waters under RWQCB jurisdiction (0.991 acre if the Southern Truck Route is implemented), 1.691 acres of CDFW jurisdiction (1.701 acres if the



Southern Truck Route is implemented), and 1.691 acres of MSHCP Riparian/Riverine areas (1.701 acres if the Southern Truck Route is implemented). Implementation of the required mitigation would reduce Project impacts to below a level of significance.



4.5 CULTURAL RESOURCES

The analysis in this subsection is based on a site specific Cultural Resources Assessment (herein, “CRA”) prepared by ECORP Consultants, Inc. (“ECORP”), entitled “*Phase I Cultural Resources Assessment for the Stoneridge Project, Riverside County, California*” and dated July 2019 (ECORP, 2019), and a survey of off-site impact areas (herein, “Off-Site CRA”), entitled “*Addendum Phase I Cultural Resources Assessment for the Stoneridge Project, Offsite Limits of Disturbance, Riverside County, California*” and dated February 2020 (ECORP, 2020a). The Project’s CRA and Off-site CRA are included as *Technical Appendix D1* and *Technical Appendix D2* to this EIR, respectively. The analysis in this section also is based on a Phase II Cultural Resources Assessment (herein, “Phase II CRA”) conducted by Brian F. Smith and Associates (BFSA), entitled, “*A Phase II Cultural Resources Significance Evaluation Program for the Stoneridge Commerce Center Project,*” dated August 6, 2020, and included as *Technical Appendix D3* to this EIR (BFSA, 2020). In addition, a supplemental cultural resources report was prepared by BFSA to evaluate additional resources within proposed Planning Area 9 of SP 239A1, which is entitled, “*Archaeological Site Inventory of Planning Area 9 of the Stoneridge Commerce Center Project (GPA190008; CZ1900024; SP239A1), County of Riverside, California,*” is dated June 14, 2021, and is included as *Technical Appendix D4* to this EIR (BFSA, 2021). Additionally, ECORP prepared a supplemental report to evaluate potential impacts to cultural resources associated with improvements required for the Southern Truck Route, which is entitled, “*Addendum Phase I Cultural Resources Assessment for the Stoneridge Project, Offsite Intersection Improvement Areas, Riverside County, California,*” is dated May 2021, and is included as *Technical Appendix D5* to this EIR (ECORP, 2021b). All references used in this Subsection are included in EIR Section 7.0, References.

It should be noted that confidential information has been redacted from *Technical Appendix D1* through *D5* for purposes of public review. In addition, much of the written and oral communication between Native American tribes, the County of Riverside, and ECORP/BFSA is considered confidential in respect to places that have traditional tribal cultural significance (Gov. Code § 65352.4), and although relied upon in part to inform the preparation of this EIR Subsection, those communications are treated as confidential and are not available for public review. Under existing law, environmental documents must not include information about the location of archeological sites or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records Act (Cal. Code Regs. § 15120(d)).

4.5.1 EXISTING CONDITIONS

A. Cultural Setting

The Project site is located in unincorporated western Riverside County, California. The following provides a brief discussion on the prehistoric and historic context of the Project area for better understanding the relevance of resources identified within its proximity. Refer to Section II of the Project’s CRA (*Technical Appendix D1*) for a complete discussion of the prehistoric and historic setting.



1. Prehistoric Period Setting

Paleo-Indian Period/Terminal Pleistocene (12,000 to 10,000 Before Present [BP])

The first inhabitants of southern California were big game hunters and gatherers exploiting extinct species of Pleistocene megafauna (e.g., mammoth and other Rancholabrean fauna). Local fluted point assemblages composed of large spear points or knives are stylistically and technologically similar to the Clovis Paleo-Indian cultural tradition dated to this period elsewhere in North America. Archaeological evidence for this period in southern California is limited to a few small temporary camps with fluted points found around late Pleistocene lake margins in the Mojave Desert and around Tulare Lake in the southern San Joaquin Valley. Single points are reported from Ocotillo Wells and Cuyamaca Pass in eastern San Diego County and from the Yuha Desert in Imperial County. (ECORP, 2019, p. 5)

Early Archaic Period/Early Holocene (10,000 to 8,500 BP)

Approximately 10,000 years ago at the beginning of the Holocene, warming temperatures and the extinction of the megafauna resulted in changing subsistence strategies with an emphasis on hunting smaller game and increasing reliance on plant gathering. Southern California Early Holocene sites have been found along the Santa Barbara Channel, in western Riverside County. The San Dieguito Complex was defined based on material found at the Harris site on the San Dieguito River near Lake Hodges in San Diego County. San Dieguito artifacts include large leaf shaped points; leaf-shaped knives; large ovoid, domed, and rectangular end and side scrapers; engraving tools; and crescentics. The San Dieguito Complex at the Harris site dates to 9,000 to 7,500 BP. However, sites from this time period in coastal San Diego County have yielded artifacts and subsistence remains characteristic of the succeeding Encinitas Tradition, including manos, metates, core-cobble tools, and marine shell. (ECORP, 2019, p. 5)

Encinitas Tradition or Milling Stone Period/Middle Holocene (8,500 to 3,500 BP)

The Encinitas Tradition and the Milling Stone Period refer to a long period of time during which small mobile bands of people who spoke an early Hokan language foraged for a wide variety of resources including hard seeds, berries, and roots/tubers (yucca in inland areas), rabbits and other small animals, and shellfish and fish in coastal areas. Sites from the Encinitas Tradition consist of residential bases and resource acquisition locations. Residential bases have hearths and fire-affected rock indicating overnight stays and food preparation. Residential bases along the coast have large amounts of shell and are often termed shell middens. The resource acquisition locations have no evidence for overnight stays. (ECORP, 2019, p. 5)

The Encinitas Tradition in inland areas east of the Topanga Pattern (southwestern San Bernardino County and western Riverside County) is the Greven Knoll Pattern. Greven Knoll I (9,400 to 4,000 BP) has abundant manos and metates. Projectile points are few and are mostly Pinto points. Greven Knoll II (4,000-3,000 BP) has abundant manos and metates and core tools. Projectile points are mostly Elko points. The Elsinore site on the east shore of Lake Elsinore was occupied during Greven Knoll I and Greven Knoll II. The recovered archaeological material suggests that a highly mobile population visited the site at a specific time each year. Tools were mostly manos, metates, and hammerstones. Scraper planes were absent. Flaked stone tools consisted mostly of utilized flakes used as scrapers. The Elsinore site during the Middle Holocene was a



“recurrent extended encampment” which could have been occupied during much of the year. (ECORP, 2019, p. 6)

The Encinitas Tradition lasted longer in inland areas because Takic speakers did not move east into these areas until circa 1,000 BP. Greven Knoll III (3,000 to 1,000 BP) is present at the Liberty Grove site in Cucamonga and at sites in Cajon Pass that were defined as part of the Sayles Complex. Greven Knoll III sites have a large proportion of manos and metates and core tools as well as scraper planes. Kowta (1969) suggested the scraper planes may have been used to process yucca and agave. The faunal assemblage consists of large quantities of lagomorphs (rabbits and hares) and lesser quantities of deer, rodents, birds, carnivores, and reptiles. (ECORP, 2019, p. 6)

Del Rey Tradition/Late Holocene (3,500 to 150 BP)

The native people of southern California (north of a line from Agua Hedionda to Lake Henshaw in San Diego County) spoke Takic languages that form a branch or subfamily of the Uto-Aztecan language family. The material culture of the ancestors of the Gabrielino is termed the Del Rey Tradition (3,500 to 150 BP). With the arrival of the Takic speakers, settlement and subsistence systems changed. Mobility was greatly decreased compared to the Encinitas Tradition and small groups of related people lived in semipermanent residential bases near a water source. Subsistence changed from a mobile foraging pattern to a collector pattern. People collected resources and brought them back to the residential base. People stayed overnight in temporary camps when away from the residential base. (ECORP, 2019, pp. 6-7)

One of the most important food resources for inland groups was acorns gathered from oak groves in canyons, drainages, and foothills. Acorn processing was labor intensive, requiring grinding in a mortar and leaching with water to remove tannic acid. Many of the mortars are bedrock mortars. Seeds from sage and grasses, goosefoot, and California buckwheat were collected and ground into meal with manos and metates. Seeds were used as the storable staple in areas which lacked acorn-producing oak groves. Protein was supplied through the meat of deer, rabbits, and other animals, hunted with bow and arrow or trapped using snares, nets, and deadfalls. Trade among local groups and inland and coastal groups was important as a means of obtaining resources from outside the local group’s territory. (ECORP, 2019, p. 6)

Palomar Tradition (1,250 to 150 BP)

Takic people moved inland from southern Orange County about 1,000 BP, becoming the ancestors of the Luiseño, Cupeño, and Cahuilla. At the same time, Takic people from the Kitanemuk area moved east along the northern slopes of the San Gabriel Mountains and spread into the San Bernardino Mountains and along the Mojave River, becoming the ancestors of the Serrano and the Vanyume. The material culture of the inland areas where Takic languages were spoken at the time of Spanish contact is part of the Palomar Tradition. San Luis Rey, I Phase (1,000 BP to 500 BP) and San Luis Rey II Phase (500 BP to 150 BP) pertain to the area occupied by the Luiseño at the time of Spanish contact. The Peninsular I (1,000 BP to 750 BP), II (750 BP to 300 BP), and III (300 BP to 150 BP) Phases are used in the areas occupied by the Cahuilla and Serrano. San Luis Rey I was characterized by Cottonwood Triangular arrow points, use of bedrock mortars, stone pendants,



shell beads, quartz crystals, and bone tools. San Luis Rey II sees the addition of ceramics, including ceramic cremation urns, red pictographs on boulders in village sites, and steatite arrow straighteners. San Luis Rey II represents the archaeological manifestation of the antecedents of the historically known Luiseño. There were a series of small permanent residential bases at water sources during San Luis Rey I, each occupied by a kin group (probably a lineage). During San Luis Rey II, people from several related residential bases moved into a large village located at the most reliable water source. Each village had a territory that included acorn harvesting camps at higher elevations. Villages have numerous bedrock mortars, large dense midden areas with a full range of flaked and ground stone tools, rock art, and a cemetery. (ECORP, 2019, p. 8)

Summary of Known Archaeology in the Project area

The records search indicated that there are nine previously recorded resources within or adjacent to the Project area consisting of seven pre-contact milling feature sites, one ground stone isolated find, and the historic-period San Jacinto Levee. Based on the available literature, it appears that only one of these sites, a bedrock milling site, has been tested for the presence of subsurface resources. As a result, no subsurface deposits were identified. Over 100 previously recorded cultural resources are located within the vicinity of the Project area. These consist of a mix of prehistoric (pre-contact) and historic-period sites; however, the majority consist of precontact milling sites located within the Bernasconi hills to the north and west of the Project area. Precontact occupation sites are also present within the vicinity, as are sites containing rock art and a rock shelter site. One occupation site (P-33-00111), located near Lakeview Hot Springs to the northeast of the Project area, contained multiple milling features, cupules, a surface artifact scatter, and subsurface. (ECORP, 2019, p. 8)

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2. *Ethnographic Setting*

The Project area is located within the territory known to have been occupied by the Serrano group of Native Americans, and near territory occupied the Gabrielino group of Native Americans, at the time of contact with Europeans, around A.D. 1769. The Project area also is located in the traditional territory of the Luiseño and Gabrielino.

Luiseño

When contacted by the Spanish in the sixteenth century, the Luiseño occupied a territory bounded on the west by the Pacific Ocean, on the east by the Peninsular Ranges mountains at San Jacinto (including Palomar



Mountain to the south and Santiago Peak to the north), on the south by Agua Hedionda Lagoon, and on the north by Aliso Creek in present-day San Juan Capistrano. The Luiseño were a Takic-speaking people more closely related linguistically and ethnographically to the Cahuilla, Gabrielino, and Cupeño to the north and east rather than the Kumeyaay who occupied territory to the south. The Luiseño differed from their neighboring Takic speakers in having an extensive proliferation of social statuses, a system of ruling families that provided ethnic cohesion within the territory, a distinct worldview that stemmed from the use of datura (a hallucinogen), and an elaborate religion that included the creation of sacred sand paintings depicting the deity Chingichngish.

Cahuilla

At the time of Spanish contact in the sixteenth century, the Cahuilla occupied territory that included the San Bernardino Mountains, Orocopia Mountain, and the Chocolate Mountains to the west, Salton Sea and Borrego Springs to the south, Palomar Mountain and Lake Mathews to the west, and the Santa Ana River to the north. The Cahuilla are a Takic-speaking people closely related to their Gabrielino and Luiseño neighbors, although relations with the Gabrielino were more intense than with the Luiseño. They differ from the Luiseño and Gabrielino in that their religion is more similar to the Mohave tribes of the eastern deserts than the Chingichngish religious group of the Luiseño and Gabrielino.

Serrano

At contact, the Serrano occupied an area in and around the San Bernardino Mountains and northward into the Mojave Desert. Their territory also extended west along the north slope of the San Gabriel Mountains, east as far as Twentynine Palms, north into the Victorville and Lucerne Valley areas, and south to the Yucaipa Valley and San Jacinto Valley. The Serrano speakers in the Mojave Desert who lived along the Mojave River were known as Vanyume. Serrano is a language within the Takic family of the Uto-Aztecan language stock. The Serrano were mainly hunters and gatherers who occasionally fished. Settlement locations were determined by water availability, and most Serranos lived in villages near water sources. Partly due to their mountainous and desert inland territory, contact between Serrano and European-Americans was minimal prior to the early 1800s. In 1819, an asistencia (mission outpost) was established near present-day Redlands and was used to help relocate many Serrano to Mission San Gabriel. However, small groups of Serrano remained in the area northeast of the San Gorgonio Pass and were able to preserve some of their native culture. Today, most Serrano live either on the Morongo or San Manuel reservations. (ECORP, 2019, p. 9)

Gabrielino

Ethnographic accounts of Native Americans indicate that the Gabrielino occupied a region near the Project area. At the time of contact with Europeans, the Gabrielino were the main occupants of the southern Channel Islands, the Los Angeles basin, much of Orange County, and extended as far east as the western San Bernardino Valley. The Gabrielino are believed to have been one of the most populous and wealthy Native American tribes in southern California prior to European contact. The Gabrielino occupied villages located along rivers and at the mouths of canyons. Settlement patterns varied according to the availability of floral and faunal resources. By the late eighteenth century, the Gabrielino population had significantly dwindled due to introduced European diseases and dietary deficiencies. Gabrielino communities disintegrated as families were



taken to the missions. However, current descendants of the Gabrielino are preserving Gabrielino culture. (ECORP, 2019, p. 10)

3. Historic Setting

Early Southern California History

Colonization of California began with the Spanish Portolá land expedition. The expedition, led by Captain Gaspar de Portolá of the Spanish army and Father Junipero Serra, a Franciscan missionary, explored the California coast from San Diego to the Monterey Bay Area in 1769. As a result of this expedition, Spanish missions to convert the native population, presidios (forts), and towns were established. The purpose of the missions and presidios was to establish Spanish economic, military, political, and religious control over the Alta California territory. (ECORP, 2019, p. 10)

An asistencia (mission outpost) of Mission San Luis Rey, known as San Antonio de Pala, was built in Luiseño territory along the upper San Luis Rey River near Mount Palomar in 1810. A chapel administered by Mission San Gabriel Archangel was established in the San Bernardino area in 1819. The present asistencia within the western outskirts of present-day Redlands was built circa 1830. The missions sustained themselves through cattle ranching and traded hides and tallow for supplies brought by ship. The Spanish also constructed presidios, or forts, at San Diego and Santa Barbara, and a pueblo, or town, was established at Los Angeles. The Spanish period in California began in 1769 with the Portolá expedition and ended in 1821 with Mexican independence. (ECORP, 2019, pp. 10-11)

After Mexico became independent from Spain in 1821, what is now California became the Mexican province of Alta California. The Mexican government closed the missions in the 1830s and former mission lands were granted to retired soldiers and other Mexican citizens for use as cattle ranches. Much of the land along the coast and in the interior valleys became part of Mexican land grants or ranchos. The Mexican Period includes the years 1821 to 1848. The American Period began when the Treaty of Guadalupe Hidalgo was signed between Mexico and the United States in 1848. As a result of the treaty, Alta California became part of the United States as the territory of California. Rapid population increase occasioned by the Gold Rush of 1849 allowed California to become a state in 1850. Most Mexican land grants were confirmed to the grantees by U.S. courts, but usually with more restricted boundaries which were surveyed by the U.S. Surveyor General's office. Land that was not part of a land grant was owned by the U.S. government until it was acquired by individuals through purchase or homesteading. Floods and drought in the 1860s greatly reduced the cattle herds on the ranchos, making it difficult to pay the new American taxes on the thousands of acres they owned. Many Mexican-American cattle ranchers borrowed money at usurious rates from newly arrived Anglo-Americans. The resulting foreclosures and land sales transferred most of the land grants into the hands of Anglo-Americans. (ECORP, 2019, p. 11)

Perris History

The City of Perris is located on a portion of the land known during the Spanish Period and the Mexican Period as both Rancho San Jacinto and Rancho San Jacinto Nuevo y Potrero. The patent for Rancho San Jacinto



Nuevo y Potrero issued in 1883 to Thomas W. Sutherland, legal guardian of Pedrorena's widow and children, excluded the land later occupied by Perris. Alternate sections of the public land outside the land grant boundaries were granted to the Southern Pacific Company to subsidize construction of the Southern Pacific Railroad. Settlers bought land from the Southern Pacific Company and homesteaders obtained public land. (ECORP, 2019, p. 11)

In 1882 and 1883, the California Southern Railroad, a subsidiary of the Atchison, Topeka, & Santa Fe Railroad, was established and built from National City, south of San Diego, to San Bernardino. A small settlement called Pinacate was established in 1885 along the San Jacinto River as settlers came into the area to start homesteads. Disputes over land title soon led to a large number of Pinacate residents relocating about two miles north, where a well was dug to start a new settlement. The new community was named Perris, in honor of Frederick Thomas Perris, the chief engineer and supervisor of the California Southern Railroad. When the northern portion of the county was split off to form Riverside County in 1893, Perris became one of the new county's original towns. The City of Perris was incorporated on May 16, 1911. (ECORP, 2019, pp. 11-12)

By 1887, six passenger trains and two freight trains stopped at Perris daily, and numerous houses and businesses had been built during the real estate boom. Growth of the town slowed when heavy storms repeatedly washed out the railroad tracks in the Temecula Gorge in the early 1890s, causing the Atchison, Topeka & Santa Fe Railroad to abandon service to San Diego by way of the California Southern Railroad line through Perris after 1892. (ECORP, 2019, p. 12)

Once it became clear that Perris would need more than the railroad to support it, residents turned to agriculture for the future development of the town. Because of limited groundwater, dry grain farming and wool from sheep were the main agricultural enterprises before water was brought to the valley from Bear Valley Reservoir (Big Bear Lake) by the Perris Irrigation District, organized in 1890. Soon, however, the Bear Valley Water Company became unable to supply the Perris Irrigation District with the water it had promised. By 1895, the supply was completely cut off, and Perris farmers began to replace their lost supply of imported water by digging wells. By 1905, wells and pumping plants were located throughout the valley, and agriculture began to flourish. An improved, more reliable water supply was brought to the San Jacinto Valley by the Eastern Municipal Water District in the early 1950s. With the construction of Lake Perris in the late 1960s and early 1970s, Perris has become, in addition to an agricultural center, a popular recreational area. (ECORP, 2019, p. 12)

Historic-Period Native American Settlement

The Luiseño occupied sedentary villages most often located in sheltered areas in valley bottoms, along streams, or along coastal strands near mountain ranges. Villages were located near water sources to facilitate acorn leaching and in areas that offered thermal and defensive protection. Inland groups had fishing and gathering sites along the coast that were intensively used from January to March when inland food resources were scarce. During October and November, most of the village would relocate to mountain oak groves to harvest acorns. The Luiseño remained at village sites for the remainder of the year, where food resources were within a day's travel.



Cahuilla villages were typically permanent and located on low terraces within canyons in proximity to water sources. These locations proved to be rich in food resources and also afforded protection from prevailing winds. Villages had areas that were publicly owned and areas that were privately owned by clans, families, or individuals. Each village was associated with a particular lineage and series of sacred sites that included unique petroglyphs and pictographs. Villages were occupied throughout the year; however, during a several-week period in the fall, most of the village members relocated to mountain oak groves to take part in acorn harvesting

Serrano villages were spread across a variety of environmental zones, but typically located in the foothill Upper Sonoran life-zone, with a few on the desert floor near permanent water sources. Gabrielino villages were likewise spread across a variety of environmental zones. Gabrielino settlements in the areas flanking interior mountains and foothills consisted of primary and secondary subsistence villages near watercourses or springs. The immediate Project area does not retain documentation of any protohistoric villages; however, the presence of many bedrock milling features in the area is testament to the history of food processing and habitation activity in the area. The intensive ownership of land by Euro-Americans from the Spanish Period through the Mexican Period to the American Period reduced the footprint of many Serrano and Gabrielino villages in historic times. (ECORP, 2019, p. 12)

Land Granting and Modern Use of the Area

Rancho San Jacinto was first granted to José Antonio Estudillo in 1842, subsequently being split in half three years later with Estudillo's son forming Rancho San Jacinto Nuevo y Potrero. Private lands gradually shrank during the latter half of the nineteenth century and the early twentieth century due to increased railroad and economic activity and the sale of land for new settlements and homesteads. Agriculture remained a staple of the region with periodic downturns due to variability in access to water. The earliest available aerial photos of the Project area date to 1938. Aerial photographs from the 1930s through the present show that the Project area was used for agriculture. Available topographical maps do not record any structures on the property since at least 1901. No buildings appear on the Project area in any of the aerial photographs, although the San Jacinto Levee was constructed sometime in the 1940s or early 1950s. Roads have existed for some time around the perimeter of the Project area, and the increase in residential and commercial development in the region can be seen through time to the present day. (ECORP, 2019, pp. 12-13)

B. Methods

A records search at the Eastern Information Center (EIC) at the University of California, Riverside (UCR) was completed by ECORP Consulting, Inc. and is included as Appendix D to the Project's CRA (*Technical Appendix D1*) and Appendix D to the Project's Off-Site CRA (*Technical Appendix D2*). The records search consisted of a check for previously recorded archaeological resource sites and isolates and previous studies on or within a one-mile radius of the Project site. The records search also included a review of the NRHP, Archaeological Determinations of Eligibility (ADOE), and the OHP Historic Property Data File (HPDF). ECORP Consulting, Inc. also reviewed information available from the Bureau of Land Management (BLM), including maps and General Land Office (GLO) records pertinent to the Project site. Archival topographic



maps and aerial photographs containing the Project site were also reviewed. Documents available from the State Historic Preservation Office (SHPO), including California Historic Landmarks (CHL), California Points of Historical Interest (CPHI), and the National Register of Historic Places (NRHP), also were reviewed. Refer to Section IV of the Project's CRA and Section IV of the Project's Off-Site CRA for a detailed description of the methodology employed to conduct records searches for the Project site and surrounding areas. (ECORP, 2019, p. 13)

In addition, archaeological field work was conducted by ECORP archaeologists on April 29 and 30, May 28, June 17 through 21, June 24 through 28, and July 1 and 2, 2019, and consisted of an intensive systematic pedestrian survey of the Project site. Archaeological field work for the off-site improvement areas was conducted on January 9 and 10, 2020. Areas on site and within off-site improvement areas were examined for the presence of cultural artifacts and features by walking the area using parallel transects at 15-meter intervals. An attempt was made to relocate all previously recorded resources that were within or adjacent to the Project area. Refer to Section IV of the Project's CRA (*Technical Appendix D1*) and the Off-Site CRA (*Technical Appendix D2*) for a detailed description of the field survey methods. (ECORP, 2019, p. 14; ECORP, 2020a, pp. 17, 20)

Additionally, an archaeological testing program was conducted by BFSa for Sites SR-001 and SR-002. The archaeological test program was conducted by BFSa on July 15, 2020. The testing program consisted of the detailed recordation of the bedrock milling features and collection of any surface artifacts, completion of subsurface investigations, and significance evaluations. Refer to Section 3.0 of the Project's Phase II CRA (*Technical Appendix D3*) for a complete description of the methodology utilized as part of the Phase II CRA. (BFSa, 2020, p. 3.0-2)

A supplemental archaeological site inventory also was conducted by BFSa within proposed Planning Area 9 of SP 239A1. In accordance with County of Riverside requests, an updated pedestrian survey of Planning Area 9 and the surrounding area was conducted by BFSa on April 20, 2021. Tribal representatives from the Soboba Band of Luiseño Indians and a tribal representative from the Cahuilla Band of Indians were present to observe and participate in the survey. The survey employed a series of parallel survey transects spaced at 10-meter intervals to locate archaeological sites within Planning Area 9. The entirety of Planning Area 9 was covered by the survey process. Detailed recordation of the resources identified within and directly adjacent to Planning Area 9 took place on May 27, 2021. All milling features within Planning Area 9 were mapped using a Trimble Geo XT Global Positioning System (GPS) unit equipped with TerraSync software. Documentation of milling features included mapping each feature with the GPS instrument and recording the measurements of each bedrock feature and milling surface. The attributes of each surface were recorded on data forms developed specifically for the recordation of milling surfaces; the length, width, and depth of each surface was noted, in addition to the general overall characteristic of the surface (i.e., slick, oval, mortar, etc.). The features were sketched and photographed as part of the recordation process. No archaeological testing or evaluation program occurred as part of the supplemental investigation conducted by BFSa. (BFSa, 2021, pp. 2-3)



In addition, ECORP conducted a supplemental evaluation for the Southern Truck Route (as described in EIR subsection 3.6.2.B.2). Implementation of the Southern Truck Route would require several improvements to accommodate Project-related truck traffic, including widening of the intersection of Nuevo Road at Dunlap Drive and widening the intersection of Dunlap Drive at San Jacinto Avenue. As part of the analysis, ECORP conducted records searches using the California Historical Resources Information System at the Eastern Information Center (EIC), which occurred on April 17 and April 18, 2019, January 6, 2020, and March 8, 2021. The purpose of the records searches was to determine the extent and location of previous surveys, previously identified pre-contact or historic archaeological site locations, architectural resources, historic properties, cultural landscapes, or ethnic resources within a 0.5-mile radius of the off-site improvement areas for the Southern Truck Route. In addition to the record search, ECORP Consulting, Inc. contacted the California Native American Heritage Commission (NAHC) on March 8, 2021, to request a search of the Sacred Lands File for the off-site improvement areas associated with the Southern Truck Route. (ECORP, 2021b, pp. 12-13)

C. Results

Provided below is a summary of the results of the cultural resources investigations conducted for the Project site and off-site improvement areas. Refer to Section V of the Project's CRA (*Technical Appendix D1*), Section V of the Project's Off-Site CRA (*Technical Appendix D2*), Section 4.0 of the Phase II CRA (*Technical Appendix D3*), the supplemental investigation report prepared by BfSA for Planning Area 9 (*Technical Appendix D4*), and Section V of the ECORP supplemental investigation for the Southern Truck Route (*Technical Appendix D5*) for a detailed description of the results of the archaeological/historical records search.

1. Records Search Results

On-Site Records Search Results

Forty-one cultural resource investigations have been conducted within the one-mile records search radius between 1953 and 2017. Of these studies, 11 investigations took place within 0.5 mile of the Project site between 1979 and 2006, nine investigations took place within a 0.25 mile of the Project site between 1974 and 2014, and five investigations overlapped the Project site from between 1989 and 2014. The records search indicated that approximately 95 percent of the Project site had been previously surveyed for cultural resources. The Historic Property Data File for Riverside County was searched and revealed that there are no resources listed on the NRHP, CRHR, and there are no California Points of Historical Interest, California Historical Landmarks, or National Historic Landmarks within the Project site or within the one-mile record search radius. (ECORP, 2019, p. 15)

Nine cultural resources have been recorded within or adjacent to the Project site, of which five cultural resources sites occur within the Project site boundaries. Resources within the Project site include seven pre-contact milling sites, an isolated pre-contact metate, and a segment of the historic-period San Jacinto levee. In addition, 105 previously recorded cultural resources are located within one mile of the Project site. Of these 105 previously recorded resources, 25 are located within 0.5 mile of the Project site, and thirty-six are located within 0.25 mile of the Project site. Documented resources are a mix of pre-contact and historic-period sites,



with the majority of sites being pre-contact resources. In total, previously recorded pre-contact sites include 74 milling feature sites, two occupation sites, one rock art site, three rock art sites with milling features, one rock shelter/occupation site, one ground stone scatter, and seven isolated finds consisting of four flakes, one biface, metate fragments, and ground stone. (ECORP, 2019, p. 20)

In total, historic-period sites include nine building/residence resources, one ranch, three irrigation/water conveyance resources, one reservoir, Perris Dam, two roads, the San Jacinto River levees, one USGS marker, one railroad segment, two refuse deposits, and two isolated finds consisting of a sun-colored amethyst glass fragment and a bottle fragment. One multi-component site consisting of a pre-contact milling feature and a historic-period benchmark is located within 0.25 mile of the off-site improvement areas. The presence of more than 70 sites containing bedrock milling features, seven of which are located within the vicinity of the Project site, supports a pattern of pre-contact land use centered on the processing of local plant materials. (ECORP, 2019, p. 20)

Refer to Tables 1 and 2 of the Project's CRA (*Technical Appendix D1*) for a detailed discussion of the on-site records search.

Off-Site Records Search Results

Seventy-two cultural resource investigations have been conducted within the one-mile records search radius for the Project's off-site improvement areas between 1974 and 2019. Of these studies, 12 investigations took place within 0.25 mile of the off-site improvement areas between 1979 and 2016, 15 investigations took place within a 0.5 mile of the off-site improvement areas between 1980 and 2017, and two investigations overlapped the off-site improvement areas from between 2005 and 2014. Details of all 72 investigations are presented in Table 3 of the Project's Off-Site CRA (*Technical Appendix D2*). The records search indicated that approximately 95 percent of the off-site improvement areas had been previously surveyed for cultural resources. (ECORP, 2019, p. 21)

A total of 112 previously recorded cultural resources are located within one mile of the offsite improvement areas. Of these 112 previously recorded resources, 36 are located within the 0.25 mile of the off-site improvement areas, and 33 are located within the 0.5 mile of the off-site improvement areas. One previously recorded resource, a section of the Lakeview Line of the California Southern Railway (P33-26835) was mapped by the information center as crossing the off-site improvement areas. However, the original site record for that resource notes that the tracks were removed in the 1930s and the railway location is based historic aerial photographs with little to no remnants of the railroad features remaining on the ground. In addition, three cultural resources have been recorded adjacent or in the near vicinity to the offsite improvement areas; all are precontact Native American milling features and were confirmed to be outside of the proposed off-site improvement areas during the survey. (ECORP, 2020a, p. 27)

In total historic-period sites include 19 building/residence resources, one ranch, one residential site, three irrigation/water conveyance resources, one isolate find consisting of amethyst glass fragment, one refuse deposit, one barracks, one road, and one USGS survey marker. One multi-component site consisting of a pre-contact milling feature and a historic-period benchmark is located within 1 mile of the off-site improvement



areas. The presence of more than 61 sites containing bedrock milling features, three of which are located adjacent to the off-site improvement areas, supports a pattern of pre-contact land use centered on the processing of local plant materials. (ECORP, 2020a, p. 27)

Refer to Tables 3 and 4 of the Project's Off-Site CRA (*Technical Appendix D2*) for a detailed discussion of the off-site records search.

Southern Truck Route Records Search Results

Seven cultural resource investigations have been conducted between 1989 and 2019 within the 0.5-mile records search radius of the offsite intersection improvement areas associated with the Southern Truck Route. The results also indicated that 114 previously recorded cultural resources have been identified within the 0.5-mile radius; however, no cultural resources are located within the intersection improvement areas. Details of the seven investigations are presented in Table 2 to the supplemental Southern Truck Route cultural resources assessment (*Technical Appendix D5*). The records search indicated that at least 95 percent of the off-site improvement areas associated with the Southern Truck Route had been previously surveyed for cultural resources. (ECORP, 2021b, pp. 13-14)

On-Site NAHC Sacred Lands File Search Results

A search of the Sacred Lands File was conducted by the NAHC in Sacramento, California. The search was requested to determine whether there are sensitive or sacred Native American resources in the vicinity of the Project site that could be affected by the proposed Project. The NAHC Sacred Lands File search failed to indicate the presence of Native American sacred lands in the vicinity of the Project site. The NAHC provided ECORP with a list of 15 Native American individuals and organizations with traditional ties to the Project site. Letters were sent by U.S. Postal Service and by email (if listed in the NAHC database) on June 26, 2018, inquiring as to the interest various tribal organizations may have in the proposed Project. Responses received by Native American individuals and organizations at the time of writing may be found in Appendix F to the Project's CRA (*Technical Appendix D1*). (ECORP, 2019, p. 29)

Off-Site NAHC Sacred Lands File Search Results

The results of the search of the Sacred Lands File conducted by the NAHC were received by ECORP on January 13, 2020. The search was requested to determine whether there are sensitive or sacred Native American resources in the vicinity of the off-site improvement areas that could be affected by the proposed Project. The NAHC Sacred Lands File search did not identify the presence of Native American sacred lands in the vicinity of the off-site improvement areas. The NAHC provided ECORP with a list of 17 Native American individuals and organizations with traditional ties to the off-site improvement areas. Letters were sent by U.S. Postal Service and by email (if listed in the NAHC database) on January 14 and 15, 2020, inquiring as to the interest various tribal organizations may have in the proposed Project. Responses received by Native American individuals and organizations may be found in Appendix F to the Project's Off-Site CRA (*Technical Appendix D2*). (ECORP, 2020a, p. 34)



Southern Truck Route NAHC Sacred Lands File Search Results

The results of the search of the Sacred Lands File conducted by the NAHC for the Southern Truck Route were received by ECORP on March 17, 2021. The NAHC Sacred Lands File search failed to indicate the presence of Native American sacred lands in the vicinity of the intersections that would require improvement as part of the Southern Truck Route. However, the NAHC provided a list of 21 Native American tribal entities that may be culturally affiliated with the Project Area. A copy of correspondence with the NAHC is provided as Appendix D to the supplemental analysis prepared for the Southern Truck Route (*Technical Appendix D5*). (ECORP, 2021b, p. 15)

2. Field Survey Results

On-Site Field Survey Results

Previously recorded resources were updated as part of the current on-site survey and several newly recorded resources were identified during the survey. Previously recorded sites consisted of four bedrock milling features (P-33-003742, P-33-003743, P-33-003744, and P-33-003745), and the San Jacinto River Levee (P-33-026833). As a result of the field survey, four new sites (Sites SR-001, SR-002, Temp-1, and Temp-2) and one isolated find (SR-005-I) were identified. Three of the newly-recorded sites consist of bedrock milling feature sites, with one site (Site Temp-2) identified as a mortar feature. The isolated find is a historic-period bottle base fragment located north of Nuevo Road near the junction of the Nuevo Road and the San Jacinto River Levee (P-33-026833). These resources are described in greater detail below. Surface visibility during the surveys conducted by ECORP and BFSA ranged from poor to nonexistent throughout the entire Project site. Due to poor ground visibility, additional resources may be present within the Project site. Photos of the study area can be found in Appendix C of the Project's CRA. (ECORP, 2019, p. 29)

Previously-Recorded Resources On-Site

- P-33-003742/CA-RIV-3742. This site was originally recorded in 1989 and was described as two bedrock mortars on a granitic outcrop. The site was revisited by ECORP archaeologists on April 30, 2019 and by BFSA archaeologists on April 20, 2021. Despite intensive searching the crews were unable to find the site. After examining the recorded location of the site and examining all boulders in the general area, the crews were unable to identify any features associated with this site. Boulders within the area exhibit signs of extreme weathering and it is possible the surfaces could have spalled off of the boulders since it was originally recorded in 1989. Also, at the time of 2019 and 2021 surveys of the area, the area was overgrown with tall, dense brush that may have obscured the location of the feature. It is also possible that the location information provided in the original site record may be incorrect. (ECORP, 2019, p. 29; BFSA, 2021, p. 2)
- P-33-003743/CA-RIV-3743. This site was originally recorded in 1989 and was described as a milling slick on a granitic boulder. The site was revisited by ECORP archaeologists on June 20, 2019. Despite intensive searching within the recorded area, the ECORPT crew was unable to find the site. Site conditions are similar to those described above for P-33-003742. However, on April 20, 2021, BFSA



archaeologists identified features associated with Site RIV-3743. Detailed recordation of the resources by BFSa took place on May 27, 2021. The resources identified included three bedrock milling features, inclusive of features previously identified by ECORP as comprising a portion of Site SR-003. As a result of BFSa's supplemental investigation, Site SR-003 was incorporated into the expanded boundary of Site RIV-3743. As described by ECORP, the features previously identified in association with Site SR-003 included bedrock milling features composed of a large granitic boulder on the east-facing slope of the Bernasconi Hills. The boulder measures 3.3 meters east to west by 2.2 meters north to south. The boulder contains a well-formed milling slick measuring 30 centimeters by 20 centimeters near the western edge of the boulder. BFSa identified two additional bedrock milling features associated with Site CA-RIV-3743, measuring between 30.0 cm to 66.0 cm in length and between 28.0 and 35.0 cm in width. No archaeological testing or evaluation program occurred as part of the supplemental investigation conducted by BFSa, as Site CA-RIV-3743 occurs within areas planned for open space as part of the Project and would not be disturbed as part of site development. (ECORP, 2019, pp. 29, 31; BFSa, 2021, pp. 2-3)

- P-33-003744/CA-RIV-3744. This site was originally recorded in 1989 and was described as two milling slicks on two boulders. The site was revisited by ECORP archaeologists on June 20, 2019. Despite intensive searching within the recorded area, the crew was unable to find the site. However, on April 20, 2021, BFSa archaeologists identified features associated with Site RIV-3743. Detailed recordation of the resources by BFSa took place on May 27, 2021. As recorded by BFSa, Site CA-RIV-3744 consists of six bedrock milling features with nine surface features (slicks) varying in length from 15.0 cm to 66.0 cm and varying in width from 11.0 cm to 35.0 cm. No archaeological testing or evaluation program occurred as part of the supplemental investigation conducted by BFSa, as Site CA-RIV-3744 occurs within areas planned for open space as part of the Project and would not be disturbed as part of site development. (ECORP, 2019, pp. 29-30; BFSa, 2021, pp. 2-3)
- P-33-003745/CA-RIV-3745. This site was originally recorded in 1989 and was described as a single bedrock milling slick on a granitic boulder outcrop. The site was revisited by ECORP archaeologists on June 20, 2019 and by BFSa archaeologists on April 20, 2021. Despite intensive searching within the recorded area, the crews were unable to find the site. Site conditions are similar to those described above for P-33-003742. (ECORP, 2019, p. 30; BFSa, 2021, p. 2)
- P-33-026833. This site was originally recorded in 2017 and was described as two approximately 10-mile-long earthen levees along the eastern and western sides of the San Jacinto River. A 0.24-mile segment of the levee along the western edge of the San Jacinto River was revisited by ECORP archaeologists in June 2019. The site description, condition, and location information were found to be consistent with the previous site record. (ECORP, 2019, p. 30)

Newly-Recorded Resources On-Site

- SR-001. This pre-contact site consists of a bedrock milling feature. The bedrock milling feature is composed of a granitic boulder measuring 4.87 meters east to west by 2.11 meters north to south. A



well-formed milling slick measuring 31 centimeters east to west by 13 centimeters north to south is located near the center of the boulder. The feature is located along the western edge of the Bernasconi Hills. (ECORP, 2019, p. 30)

- SR-002. This pre-contact site consists of a bedrock milling feature. The bedrock milling feature is composed of a deeply embedded boulder east of a large bedrock outcrop. The exposed surface of the boulder measures 1.2 meters east to west by 3.4 meters north to south. A discolored area near the western edge of the boulder contains an area exhibiting evidence of grinding. The milling slick area measures 20 centimeters east to west by 40 centimeters north to south. (ECORP, 2019, pp. 30-31)
- Site Temp-1. Site Temp-1 was identified by BFSAs as part of the supplemental site investigations on April 20, 2021 and May 27, 2021. As identified by BFSAs, Site Temp-1 consists of two bedrock milling features containing a total of 3 slicks varying in length between 14.0 cm and 54.0 cm and varying in width between 11.0 cm and 45.0 cm. No archaeological testing or evaluation program occurred as part of the supplemental investigation conducted by BFSAs, as Site Temp-1 occurs within areas planned for open space as part of the Project and would not be disturbed as part of site development.
- Site Temp-2. This pre-contact site is a bedrock milling feature identified by ECORP and subsequently evaluated by BFSAs. The bedrock milling feature is composed of an embedded granitic boulder with an incipient mortar located near the western edge. The exposed surface of the boulder measures 2.4 meters north to south by 1.9 meters east to west. The mortar measures 14.0 cm in length, 14.0 cm wide, and 2.0 centimeters deep. The boulder is located on the east-facing slope of the Bernasconi Hills. This site was initially labelled Site SR-004 by ECORP, but was re-labeled by BFSAs as Site Temp-2. No archaeological testing or evaluation program occurred as part of the supplemental investigation conducted by BFSAs, as Site Temp-2 occurs within areas planned for open space as part of the Project and would not be disturbed as part of site development. (ECORP, 2019, pp. 2-3; BFSAs, 2021)
- SR-005-I. This historic-period isolated find consists of a historic-period bottle base fragment embedded in a berm north of Nuevo Road. The isolated find is an amber glass bottle base fragment embossed with an Obear-Nester Glass Company maker's mark. The base contains stippling consistent with bottles produced in the 1960s. (ECORP, 2019, p. 31)

In summary, ECORP and BFSAs determined the following for the on-site areas:

- 2 previously recorded pre-contact archaeological sites that could not be found (P-33-03742 and P-33-03745)
- 2 previously recorded pre-contact archaeological sites that were identified as part of the current surveys (P-33-003743 and P-33-003744)
- 1 previously recorded historic-era site that was confirmed inside the Project site (P-33-026833).



- 4 newly recorded pre-contact archaeological sites inside the Project site (SR-001, SR-002, Site Temp-1, and Site Temp-2).
- 1 newly recorded historic-era isolate inside the Project site (SR-005-I).

Off-Site Field Survey Results

ECORP conducted a supplemental evaluation for the Southern Truck Route (as described in EIR subsection 3.6.2.B.2) to determine whether areas off-site requiring improvements to implement the Southern Truck Route contain cultural resources; however, the results of the analysis determined that there were no known cultural resources sites located within off-site improvement areas associated with the Southern Truck Route (ECORP, 2021b). However, as a result of the field survey for the off-site improvement areas associated with the Project (irrespective of which truck route ultimately is implemented), seven new sites (SR-006 through SR-012) were identified and one previously recorded site was updated. These resources consist of one previously recorded railroad alignment, one survey marker, two culverts, a historic-period bridge, and section of three historic-period roads. These resources are described in greater detail below; DPR 523 records for all resources are located in Confidential Appendix D to the Project's Off-Site CRA (*Technical Appendix D2*). A confidential site location map illustrating the location of these resources may be found in Confidential Appendix E to the Off-Site CRA. (ECORP, 2020a, pp. 34-35)

Surface visibility during the off-site survey ranged from good (100%) to poor (10%) across the offsite disturbance off-site improvement areas. Due to poor ground visibility in some portions of the offsite disturbance areas, additional resources may be present within these areas. Photos of the study area can be found in Appendix C of the Project's CRA. (ECORP, 2020a, p. 35)

Previously-Recorded Resources Off-Site

- P-33-26835. This site consists of a section of the Lakeview Line of the California Southern Railway. Historic period maps and photographs show the railroad crossing the southern portion of the off-site improvement areas. However, the original site record notes that the tracks were removed in the 1930s and little of the railroad features remain today. No sign of the railroad alignment or its associated features were observed within the off-site improvement areas. (ECORP, 2020a, p. 35)

Newly-Recorded Resources Off-Site

- SR-006. This historic-period brass survey marker is embedded in a large granite boulder located at the peak of a hill to the west of a water tower. The inscription on the marker reads, "State of California Department of Water Resources, GNAT, 1961." The marker is located at the center of a white "X" that has been painted on the boulder for use in aerial photography and siting. (ECORP, 2020a, p. 35)
- SR-007. This historic-period culvert comprised of two corrugated steel drainage pipes running along an east-west orientation on the southern side of Nuevo Road and extending underneath Menifee Road.



A concrete wingwall exists between the Nuevo Road in order to direct water flow toward the entrance to the pipes. The pipes each measure 62 cm (approximately two feet) in diameter, with a height of 56 cm and a length of 344 cm. (ECORP, 2020a, p. 36)

- SR-008. This historic-period culvert consisting of two corrugated steel pipes, on an east-west orientation and extending under Pico Avenue at the intersection of Pico Avenue and Nuevo Road. The pipes are each three feet in diameter and located on the southern side of Nuevo Road. The pipes and associated ditch were partially filled with water at the time of documentation. (ECORP, 2020a, p. 36)
- SR-009. This historic-period bridge is located at the point where Nuevo Road crosses the San Jacinto River. The bridge first appears in the historic record on historic aerial photographs from 1953 and 1966. The bridge is oriented east-to-west across the river. The bridge is constructed of concrete and steel and appeared in good condition at the time of the survey. At the time of this report, the bridge is surrounded by flowing water, riparian vegetation, and modern debris. (ECORP, 2020a, p. 36)
- SR-010. SR-010 is a 1.17-mile section of Walnut Street. This section was historically a minor unpaved agricultural road, which can be seen on historic USGS maps from 1953. It is currently a two-lane paved road that runs between Ramona Expressway in the east to old Evans Road in the west. (ECORP, 2020a, p. 38)
- SR-011. SR-011 is a 0.35-mile-long section of the Ramona Expressway. This section was originally called Martin Road, which can be seen on historic USGS maps from 1967. The road in this location is currently two to four lane divided highway that serves as the main artery between State Route 79 in the east and Interstate 215 (I-215) in the west. (ECORP, 2020a, p. 38)
- SR-012. SR-012 is a 1.6-mile-long section of Nuevo Road. This section was historically an unpaved road, which can be seen on historic USGS maps from 1953 and may date back as early as 1901 based on historic-period maps. Nuevo road is currently a rural two-lane paved road that runs between the City of Perris in the west and the Community of Nuevo in the East. (ECORP, 2020a, p. 38)

In summary, ECORP determined the following for the off-site improvement areas associated with the Project (regardless as to which truck route ultimately is implemented):

- One previously recorded historic-period railroad alignment (P-33-026835) was not relocated within the off-site improvement areas.
- Seven newly recorded historic-period sites inside the off-site improvement area limits (SR-006, SR-007, SR-008, SR-009, SR-010, SR-011, and SR-012).



4.5.2 APPLICABLE REGULATORY REQUIREMENTS

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

A. Federal Regulations

1. *National Historic Preservation Act*

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

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

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

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

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



commensurate with their missions and the effects of their authorized programs on historic properties. (NPS, n.d.)

2. National Register of Historic Places (NRHP)

The National Register of Historic Places is the official list of the Nation's historic places worthy of preservation. Authorized by the National Historic Preservation Act of 1966, the NPS's National Register of Historic Places (NRHP) is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeological resources. (NPS, 2020a)

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

- **Age and Integrity.** Is the property old enough to be considered historic (generally at least 50 years old) and does it still look much the way it did in the past?
- **Significance.** Is the property associated with events, activities, or developments that were important in the past? With the lives of people who were important in the past? With significant architectural history, landscape history, or engineering achievements? Does it have the potential to yield information through archeological investigation about our past? (NPS, 2020a)

Nominations can be submitted to a SHPO from property owners, historical societies, preservation organizations, governmental agencies, and other individuals or groups. The SHPO notifies affected property owners and local governments and solicits public comment. If the owner (or a majority of owners for a district nomination) objects, the property cannot be listed but may be forwarded to the National Park Service (NPS) for a Determination of Eligibility (DOE). Listing in the National Register of Historic Places provides formal recognition of a property's historical, architectural, or archeological significance based on national standards used by every state. (NPS, 2020a)

Under Federal Law, the listing of a property in the National Register places no restrictions on what a non-federal owner may do with their property up to and including destruction, unless the property is involved in a project that receives Federal assistance, usually funding or licensing/permitting. National Register listing does not lead to public acquisition or require public access. (NPS, 2020a)

3. National Historic Landmarks Program

National Historic Landmarks (NHLs) are nationally significant historic places designated by the Secretary of the Interior because they possess exceptional value or quality in illustrating or interpreting the heritage of the United States. Today, just over 2,500 historic places bear this national distinction. Working with citizens throughout the nation, the National Historic Landmarks Program draws upon the expertise of National Park Service staff who guide the nomination process for new Landmarks and provide assistance to existing Landmarks. (NPS, 2020b)



4. *American Indian Religious Freedom Act*

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

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

The Native American Graves Protection and Repatriation Act (NAGPRA; Public Law 101-601; 25 U.S.C. 3001-3013) describes the rights of Native American lineal descendants, Indian tribes, and Native Hawaiian organizations with respect to the treatment, repatriation, and disposition of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony, referred to collectively in the statute as cultural items, with which they can show a relationship of lineal descent or cultural affiliation. (NPS, 2020c)

One major purpose of this statute is to require that federal agencies and museums receiving Federal funds inventory holdings of Native American human remains and funerary objects and provide written summaries of other cultural items. The agencies and museums must consult with Indian Tribes and Native Hawaiian organizations to attempt to reach agreements on the repatriation or other disposition of these remains and objects. Once lineal descent or cultural affiliation has been established, and in some cases the right of possession also has been demonstrated, lineal descendants, affiliated Indian Tribes, or affiliated Native Hawaiian organizations normally make the final determination about the disposition of cultural items. Disposition may take many forms from reburial to long term curation, according to the wishes of the lineal descendent(s) or culturally affiliated Tribe(s). (NPS, 2020c)

The second major purpose of the statute is to provide greater protection for Native American burial sites and more careful control over the removal of Native American human remains, funerary objects, sacred objects, and items of cultural patrimony on Federal and tribal lands. NAGPRA requires that Indian tribes or Native Hawaiian organizations be consulted whenever archeological investigations encounter, or are expected to encounter, Native American cultural items or when such items are unexpectedly discovered on Federal or tribal lands. Excavation or removal of any such items also must be done under procedures required by the Archaeological Resources Protection Act. This NAGPRA requirement is likely to encourage the in-situ preservation of archaeological sites, or at least the portions of them that contain burials or other kinds of cultural items. (NPS, 2020c)

Other provisions of NAGPRA: (1) stipulate that illegal trafficking in human remains and cultural items may result in criminal penalties; (2) authorizes the Secretary of the Interior to administer a grants program to assist



museums and Indian Tribes in complying with certain requirements of the statute; (3) requires the Secretary of the Interior to establish a Review Committee to provide advice and assistance in carrying out key provisions of the statute; (4) authorizes the Secretary of the Interior to penalize museums that fail to comply with the statute; and, (5) directs the Secretary to develop regulations in consultation with this Review Committee. (NPS, 2020c)

6. Federal Antiquities Act

The Antiquities Act is the first law to establish that archeological sites on public lands are important public resources. It obligates federal agencies that manage the public lands to preserve for present and future generations the historic, scientific, commemorative, and cultural values of the archaeological and historic sites and structures on these lands. It also authorizes the President of the United States to protect landmarks, structures, and objects of historic or scientific interest by designating them as National Monuments. (NPS, 2020d)

B. State Regulations

1. California Administrative Code, Title 14, Section 4308

Section 4308, *Archaeological Features*, of Title 14 of the California Administrative Code provides that: “No person shall remove, injure, disfigure, deface, or destroy any object of archaeological, or historical interest or value.” (CA State Parks, 2020)

2. California Code of Regulations Title 14, Section 1427

California Code of Regulations Title 14, Section 1427 provides that: “No person shall collect or remove any object or thing of archeological or historical interest or value, nor shall any person injure, disfigure, deface or destroy the physical site, location or context in which the object or thing of archeological or historical interest or value is found.” (NAHC, 2020)

3. California Register of Historic Resources

The State Historical Resources Commission has designed this program for use by state and local agencies, private groups, and citizens to identify, evaluate, register, and protect California's historical resources. The Register is the authoritative guide to the state's significant historical and archeological resources. The California Register program encourages public recognition and protection of resources of architectural, historical, archeological, and cultural significance; identifies historical resources for state and local planning purposes; determines eligibility for state historic preservation grant funding; and affords certain protections under CEQA. (OHP, 2020)

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

- Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States (Criterion 1).



- Associated with the lives of persons important to local, California or national history (Criterion 2).
- Embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic values (Criterion 3).
- Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation (Criterion 4). (OHP, 2020)

For resources included on the Register of Historic Resources, environmental review may be required under CEQA if property is threatened by a project. Additionally, local building inspectors must grant code alternatives provided under State Historical Building Code. Further, the local assessor may enter into contract with property owner for property tax reduction pursuant to the Mills Act. A property owner also may place his or her own plaque or marker at the site of the resource. (OHP, 2020)

Consent of owner is not required, but a resource cannot be listed over an owner's objections. The State Historical Resources Commission (SHRC) can, however, formally determine a property eligible for the California Register if the resource owner objects. (OHP, 2020)

4. *Traditional Tribal Cultural Places Act (Senate Bill 18, "SB 18")*

Senate Bill 18 (SB 18) requires local (city and county) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places ("cultural places") through local land use planning. SB 18 also requires the Governor's Office of Planning and Research (OPR) to include in the General Plan Guidelines advice to local governments for how to conduct these consultations. (OPR, 2005)

The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. The purpose of involving tribes at these early planning stages is to allow consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level land use decisions are made by a local government. (OPR, 2005)

SB 18 requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code § 65300 et seq.) and specific plans (defined in Government Code § 65450 et seq.). Although SB 18 does not specifically mention consultation or notice requirements for adoption or amendment of specific plans, existing state planning law requires local governments to use the same processes for adoption and amendment of specific plans as for general plans (see Government Code § 65453). Therefore, where SB 18 requires consultation and/or notice for a general plan adoption or amendment, the requirement extends also to a specific plan adoption or amendment. (OPR, 2005)



5. *Assembly Bill 52 (AB 52)*

California Assembly Bill 52 (AB 52) (2014) Chapter 532 amended Section 5097.94 of, and added Sections 21073, 21074, 21080.3.1, 21080.3.2, 21802.3, 21083.09, 21084.2 and 21084.3 to the California Public Resources Code, relating to Native Americans. AB 52 was approved on September 25, 2014. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process. (OPR, 2017a)

The Public Resources Code now establishes that “[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.” (Pub. Resources Code, § 21084.2.) To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. (Pub. Resources Code, § 21080.3.1.) (OPR, 2017a)

If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact. Public Resources Code § 20184.3 (b)(2) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to tribal cultural resources. These rules apply to projects that have a notice of preparation for an environmental impact report or negative declaration or mitigated negative declaration filed on or after July 1, 2015. (OPR, 2017a)

§ 21074 of the Public Resources Code defines “tribal cultural resources.” In brief, in order to be considered a “tribal cultural resource,” a resource must be either:

- (1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or
- (2) a resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource. (OPR, 2017a)

In the latter instance, the lead agency must determine that the resource meets the criteria for listing in the state register of historic resources. In applying those criteria, a lead agency must consider the value of the resource to the tribe. (OPR, 2017a)



6. State Health and Safety Code

California Health and Safety Code (HSC) § 7050.5(b) requires that excavation and disturbance activities must cease “In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery...” until the coroner can determine regarding the circumstances, manner, and cause of any death. The coroner is then required to make recommendations concerning the treatment and disposition of the human remains. Further, this section of the code makes it a misdemeanor to intentionally disturb, mutilate or remove interred human remains. § 7051 specifies that the removal of human remains from “internment or a place of storage while awaiting internment” with the intent to sell them or to dissect them with “malice or wantonness” is a public offense punishable by imprisonment in a state prison. Lastly, HSC §§ 8010-8011 establish the California Native American Graves Protection and Repatriation Act consistent with the federal law addressing the same. The Act stresses that “all California Indian human remains and cultural items are to be treated with dignity and respect.” It encourages voluntary disclosure and return of remains and cultural items by publicly funded agencies and museums in California. It also outlines the need for aiding California Indian tribes, including non-federally recognized tribes, in filing repatriation claims. (CA Legislative Info, n.d.)

7. California Code of Regulations Section 15064.5

The California Code of Regulations, Title 14, Chapter 3, § 15064.5 (the State CEQA Guidelines) establishes the procedure for determining the significance of impacts to archeological and historical resources, as well as classifying the type of resource. Cultural resources are aspects of the environment that require identification and assessment for potential significance. The evaluation of cultural resources under CEQA is based upon the definitions of resources provided in State CEQA Guidelines § 15064.5, as follows: (Westlaw, 2020)

- *A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4850 et seq.).*
- *A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.*
- *Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4852) including the following:*
 - *Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;*



- *Is associated with the lives of persons important in our past;*
- *Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or*
- *Has yielded, or may be likely to yield, information important in prehistory or history.*
- *The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.*

4.5.3 BASIS FOR DETERMINING SIGNIFICANCE

Section V of Appendix G to the State CEQA Guidelines addresses typical adverse effects to cultural resources, and includes the following threshold questions to evaluate the Project's impacts on cultural resources (OPR, 2018a):

- Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?
- Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?
- Would the Project disturb any human remains, including those interred outside of formal cemeteries?

Significance thresholds set forth in the Riverside County's Environmental Assessment Checklist form, are derived from Section V of Appendix G to the State CEQA Guidelines (listed above), as modified by the 2018 updates to the State CEQA Guidelines, and state that the proposed Project would have a significant impact on cultural resources if construction and/or operation of the Project would:

- a. *Alter or destroy an historic site;*
- b. *Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, § 15064.5;*
- c. *Alter or destroy an archaeological site;*
- d. *Cause a substantial adverse change in the significance of an archaeological resource, pursuant to California Code of Regulations, § 15064.5; or*
- e. *Disturb any human remains, including those interred outside of formal cemeteries.*



The significance thresholds set forth in the Riverside County's Environmental Assessment Checklist form, as modified by the 2018 updates to the State CEQA Guidelines, were used to evaluate the significance of the proposed Project's impacts on cultural resources.

4.5.4 IMPACT ANALYSIS

Threshold a.: Would the Project alter or destroy an historic site?

Threshold b.: Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to California Code of Regulations, Section 15064.5?

Based on an evaluation of the potential historical resource sites within the Project site boundaries, ECORP determined that the Project site contains one historic-period isolated find (SR-005-I) and the historic-period San Jacinto River levee (P-33-026833). Refer to Subsection V.e of the Project's CRA for a discussion of criteria used to determine the significance of the historical resources, based on criteria identified by the California Register of Historical Resources (CRHR).

Isolates are artifacts that are not associated with other artifacts or features and are not connected with the human activity that produced them. Isolates do not individually contribute to the broad patterns of history because they cannot be connected to a particular historical event (CRHR Criterion 1). Isolates are similarly difficult to associate with specific individuals due to their lack of association with archaeological or historical sites, and generally no information exists in the archival record to associate isolates with important individuals in history (CRHR Criterion 2). Isolates do not embody the distinctive characteristics of a type, period, region, or method of construction, represent the work of an important creative individual, or possess high artistic values (CRHR Criterion 3). Finally, isolates in general do not provide important information in history or prehistory (CRHR Criterion 4). Isolated finds do not meet the eligibility criteria for inclusion in the CRHR as individual resources, and therefore, the isolated find SR-005-I is not a Historical Resource under CEQA. As such, proposed on-site impacts to the isolated find SR-005-I would be less than significant. (ECORP, 2019, pp. 33-34)

The significance of the historic-period San Jacinto River levee (P-33-026833) cannot be determined based on survey data alone and additional information is needed to determine whether this site meets the criteria of a Historical Resource as defined by CEQA. However, no improvements are proposed as part of the Project that would affect the San Jacinto River levee. While the widening of the existing bridge crossing along Nuevo Road over the San Jacinto River levee is anticipated, such improvements would be conducted as part of the County's Transportation Uniform Mitigation Fee (TUMF) program and is not proposed as part of the Project. As noted in the Project's Traffic Impact Analysis (EIR *Technical Appendix LI*), no widening of Nuevo Road is needed to accommodate Project traffic with buildout of the Project; thus, any impacts associated with the widening of this bridge would not be attributable to the proposed Project. As such, the Project would not result in any impacts to the San Jacinto River levee (P-33-026833). (ECORP, 2019, p. 34)



For the off-site improvement areas, one previously-recorded site and seven historic sites were identified. Site P-33-26835 consists of a section of the Lakeview Line of the California Southern Railway, a subsidiary of the AT&SF Railroad. This railroad alignment shows up on historic-period maps from 1901 but is gone by 1942. The original site record notes that the tracks were removed in the 1930s. No features associated with the railroad were observed within the off-site improvement areas. The majority of the historic-period railroad alignments in Southern California are considered significant for their associations with the early development of the area and the population growth and movement within the region. Thus, this historic-period railroad alignment may be eligible under CRHR Criterion 1, for its association with significant events in the region. It does not appear to be associated with a significant individual and is not eligible under Criterion 2. The tracks were removed in the 1930s and no features remain within the Project Area. Therefore, it does not represent the work of a master or display any unique characteristics and is not eligible under Criterion 3. The alignment is wholly represented by its representation on historic period maps and does not contain the potential to contain additional information to aid in understanding of the region's history. Thus, it is not eligible under Criterion 4. The integrity of the site is extremely poor, and the site lacks all integrity of location, design, setting, materials, workmanship, feeling, and association. Thus, even if the site may be eligible under Criterion 1, the site lacks enough integrity to be considered eligible for the CRHR. As such, Project impacts to Site P-33-26835 would be less than significant. (ECORP, 2020a, p. 40)

Site SR-006 occurs within the off-site improvement areas, and is described as historic-period State of California Department of Water Resources brass survey marker that was installed in 1961. Although the site is associated with land surveys in the region, this marker postdates the early survey and sectioning of the area and was likely associated with the installation of a water tower located within 50 feet of it. Thus, the site is not associated with any significant event in the region; nor is it associated with a specific important person in history. Therefore, it is not eligible under CRHR Criteria 1 or 2. The site does not contain any structures or features that display unique characteristics, represent the work of a master, or display innovative technologies and are not eligible under CRHR Criterion 3. The limited data potential of this site has been nearly exhausted by the level of recordation that has already been conducted and the site is highly unlikely to yield any additional information to aid our understanding of the region's history. Thus, SR-006 is not eligible under Criterion 4. As a result, this site is not recommended eligible for the CRHR under any criteria. As such, Project impacts to Site SR-006 would be less than significant. (ECORP, 2020a, p. 40)

Sites SR-007 and SR-008 consist of historic period culverts that occur within the off-site improvement areas. SR-007 is a historic-period culvert comprised of two corrugated steel drainage pipes running along an east-west orientation on the southern side of Nuevo Road and extending underneath Menifee Road. SR-008 is a historic-period culvert consisting of two corrugated steel pipes, on an east-west orientation and extending under Pico Avenue at the intersection of Pico Avenue and Nuevo Road. Both culverts are situated along an east-west-trending drainage that runs along the southern side of Nuevo Road. Both sites function to allow water runoff to run underneath road crossings, thereby protecting the roads from damage. Both culverts were likely constructed at the time when Menifee Road and Pico Road were paved, and both serve a utilitarian function in minor flood control. Neither site is associated with any significant event in the region, nor are they associated with a specific important person in history. Therefore, they are not eligible under CRHR Criteria 1 or 2. The



sites are entirely utilitarian and are composed of common corrugated metal and concrete. They do not contain any structures or features that display unique characteristics, represent the work of a master, or display innovative technologies and are not eligible under CRHR Criterion 3. The limited data potential of these sites has been nearly exhausted by the level of recording that has already been conducted and the sites are highly unlikely to yield any additional information to aid our understanding of the region's history. Thus, SR-007 and SR-008 are not eligible under CRHR Criterion 4. As such, the two sites are not recommended eligible for the CRHR under any criteria. Accordingly, Project impacts to Sites SR-007 and SR-008 would be less than significant. (ECORP, 2020a, p. 41)

Site SR-009 consists of a historic-period bridge that is located at the point where Nuevo Road crosses the San Jacinto River. The bridge appears on historic aerial photographs from 1953 and 1966. The bridge is associated with Nuevo Road, a minor rural road that runs between the City of Perris and the Community of Nuevo. This road is a minor rural road and the bridge functioned as a crossing of this road over the San Jacinto River. Thus, the site is not associated with any significant event in the region, nor is it associated with a specific important person in history. Therefore, it is not eligible under CRHR Criteria 1 or 2. The bridge is of a common, utilitarian design and does not contain any structures or features that display unique characteristics, represent the work of a master, or display innovative technologies and is not eligible under CRHR Criterion 3. The limited data potential of this site has been nearly exhausted by the level of recordation that has already been conducted and the site is highly unlikely to yield any additional information to aid our understanding of the region's history. Thus, SR-009 is not eligible under Criterion 4. As a result, this site is not recommended eligible for the CRHR under any criteria. Furthermore, improvements to the Nuevo Road bridge crossing are anticipated to occur as part of the County's TUMF program, and would not occur as part of the proposed Project. Thus, Project impacts to Site SR-009 would be less than significant. (ECORP, 2020a, p. 41)

Rural Historic-Period Roads (SR-010, SR-011, SR-012) consist of three rural roads that were identified within the offsite improvement areas. These consist of sections of Walnut Road, Ramona Expressway, and Nuevo Road. A review of historic period USGS topographic maps has revealed that Walnut Avenue is first depicted as an unnamed, unpaved road on the 1942 USGS 7.5-minute Perris, California map. The road served as an east-west route through the vicinity in the 1940s and 1950s. However, with the construction of the Ramona Expressway in 1967, the route fell out of favor and into disuse. On photographs from the 1970s, portions of the road to the east are barely visible, and on the western end the road is an unpaved road demarcating agricultural fields. The road was finally paved between 2005 and 2009. The Ramona Expressway was constructed in 1967 and was originally called Martin Street. Although the Ramona Expressway currently acts as a major thoroughfare between State Route 79 and I-215, this was not associated with the early growth of the region or early transportation through the region. Nuevo Road runs between the community of Nuevo in the east to the City of Perris in the west. A road following roughly its current alignment is present on historic maps from 1901, photographs from 1953 show that the road was, at that time, still unpaved and was likely considered a rural light duty road. (ECORP, 2020a, pp. 41-42)

All three of the roads that cross the offsite improvement areas were historically minor, rural roads that provided limited access between small sections of the San Jacinto Valley. As such, they do not appear to have any



significant historical associations. The roads were originally developed for access to rural lands with no other significant purpose. The roads do not demonstrate any association with the lives of persons significant in history and are, therefore, not eligible under CRHR Criterion 2. All three roads are currently paved roads that follow the same historical alignment as when they were originally constructed. The roads are not uniquely artistic or designed with any distinctive engineering characteristics. Therefore, these roads do not embody any distinctive characteristics of a type, period, or method of road construction, nor do they possess any artistic value. Therefore, these roads are not eligible under CRHR Criterion 3. The information potential in historic roads lies in its alignment and route. These three roads have been recorded relatively accurately in historical topographic maps and thus the information regarding their historical routes is provided in the archival record. The roads do not possess the potential to yield any additional information regarding the relationship or functionality of roads or provide any information that isn't already represented in the archival record and, therefore, they are not eligible under CRHR Criterion 4. In conclusion, SR-010, SR-011, and SR-12, do not meet the eligibility criteria for inclusion in the CRHR under any Criteria; thus, Project impacts to these sites would be less than significant. (ECORP, 2020a, p. 42)

Accordingly, and based on the analysis presented in the Project's CRA and Off-Site CRA, implementation of the proposed Project would not alter or destroy an historic site or cause a substantial adverse change in the significance of a historical resource pursuant to California Code of Regulations Section 15064.5, either on site or off site within proposed improvement areas. However, the potential for the Project Area to contain unidentified subsurface resources is considered high. Thus, there is a potential that historical resources may be uncovered during on- or off-site grading or ground-disturbing activities. This is evaluated as a potentially significant impact for which mitigation would be required.

Threshold c.: Would the Project alter or destroy an archaeological site?

Threshold d.: Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations, Section 15064.5?

There were no prehistoric resources identified within the off-site improvement areas either as a result of the records search or field surveys conducted by ECORP. The archaeological sites identified as part of the current archaeological surveys within and adjacent to the Project site consist of 2 previously-recorded pre-contact bedrock milling feature sites (Sites P-33-003743 and P-33-003744) and four newly-recorded bedrock milling feature sites (Sites SR-001, SR-002, Temp-1, and Temp-2). Based on the Project's conceptual grading plan (previously depicted on EIR Figure 3-10), Sites P-33-003743, P-33-003744, Temp-1, and Temp-2 occur within areas planned for long-term conservation as open space as part of the Project, and Project-related grading activities would not impact these sites. Accordingly, the Project would result in no impacts to Sites P-33-003743, and P-33-003744, Temp-1, and Temp-2, and mitigation for these sites is not required. Notwithstanding, mitigation has been identified to further ensure direct and indirect impacts to Sites P-33-003743, P-33-003744, Temp-1, and Temp-2 would not occur (refer to Mitigation Measure MM 4.5-1).

Sites SR-001 and SR-002 occur within or immediately adjacent to areas proposed for grading as part of the Project. In order to evaluate the significance of these sites, the sites were subject to a Phase II Cultural



Resources Assessment (Phase II CRA), which is included as *Technical Appendix D3*. The results of the Phase II CRA are presented below. Refer to Section 3.0 of the Phase II CRA for a discussion of the methodology utilized to evaluate the significance of Sites SR-001 and SR-002, and refer to Section 4.0 of the Phase II CRA for a detailed discussion of the field investigations, surface recordation, and subsurface excavations conducted for these sites.

- Site SR-001: The investigation of Site SR-001 revealed that the site was a minimally used bedrock milling site. The identified features indicate that site activities primarily focused upon floral and/or faunal food processing. No surface artifacts were identified and the shovel test investigations did not identify any subsurface deposits. Although bedrock milling is typically associated with the Late Prehistoric occupation of the area, since no diagnostic artifacts were recovered, no definite cultural affiliation could be assigned to the resource. The bedrock milling feature has been drawn, photographed, and measured. The site exhibits no significant artifacts, artifact assemblages, or subsurface features, and the documentation of the milling feature has exhausted its research potential. A significance assessment of the site according to the criteria listed in Section 15064.5 of the State CEQA Guidelines clarifies that the site does not qualify as a significant archaeological resource under any of the stated criteria. No further archaeological investigations are recommended for Site SR-001. (BFSA, 2020, p. 4.0-8)
- Site SR-002: The investigation of Site SR-002 revealed that the site was a minimally used bedrock milling site. The identified feature indicates that site activities primarily focused upon floral and/or faunal food processing. One surface artifact was recovered from within highly disturbed contexts, and shovel test investigations did not identify any subsurface deposits. Although bedrock milling is typically associated with the Late Prehistoric occupation of the area, since no diagnostic artifacts were recovered, no definite cultural affiliation could be assigned to the resource. The bedrock milling feature has been drawn, photographed, and measured. The site exhibits no significant artifact assemblages, or subsurface features, and the documentation of the site has exhausted its research potential. A significance assessment of the site according to the criteria listed in Section 15064.5 of the State CEQA Guidelines clarifies that the site does not qualify as a significant archaeological resource under any of the stated criteria. No further archaeological investigations are recommended for Site SR-002. (BFSA, 2020, p. 4.0-14)

As indicated above, Sites SR-001 and SR-002 do not qualify as significant archaeological resources based on the criteria listed in Section 15064.5 of the State CEQA Guidelines. Notwithstanding, as part of the Project's Native American consultation processes pursuant to AB 52 and SB 18, the Project Applicant has agreed to a requirement to design future grading plans to completely avoid disturbance to Site SR-001. This requirement has been included as part of the Project's mitigation for potential impacts to cultural resources in subsection 4.5.7 (refer to Mitigation Measure MM 4.5-1). Based on the location of Site SR-002 within the Project site, impacts to Site SR-002 cannot be avoided with future implementation of the Project; however, as noted above, and based on the criteria listed in Section 15064.5 of the State CEQA Guidelines, Site SR-002 does not comprise a significant archaeological resource. Accordingly, Project impacts to Sites SR-001 and SR-002



would be less than significant and would be further reduced to less-than-significant levels with implementation of Mitigation Measure MM 4.5-1 requiring avoidance of physical impacts to Site SR-001. Therefore, the Project would not alter or destroy any previously-identified archaeological sites and would not cause a substantial adverse change in the significance of a previously-discovered archaeological resource pursuant to Section 15064.5 of the California Code of Regulations, and impacts to previously-discovered archaeological resources would be less than significant.

Although impacts to known archaeological resources on the Project site and off-site improvement areas would be less than significant, both the Project site and off-site improvement areas have the potential to contain unidentified resources on the surface that were obscured by dense vegetation during the surveys conducted by ECORP. The records search revealed that the majority of the Project site has been surveyed in the past, with the majority covered during surveys in 1988 and 1989. As a result of those surveys, archaeological sites were limited to bedrock outcrops near the base and on the slopes of the Bernasconi Hills. No artifact scatters were identified within the flat, plowed land that makes up most of the Project Area. However, after a review of the reports associated with these surveys conducted by ECORP, the surveys consisted of either reconnaissance level surveys or pedestrian surveys with transect intervals that are much larger than the current established standards. As such, the absence of sites within the flat portion of the Project Area during these earlier surveys cannot be used to determine the presence or absence of sites within this portion of the Project Area. Given the presence of many milling and occupation sites within the immediate Project vicinity, the potential for the Project site or off-site improvement areas to contain unidentified surface or subsurface archaeological resources or sites is considered high. Therefore, Project impacts to previously-undiscovered archaeological resources that may occur in the on- or off-site impact areas of the proposed Project would be significant prior to mitigation. (ECORP, 2019, pp. 31-32)

Threshold e.: Would the Project disturb any human remains, including those interred outside of formal cemeteries?

The Project site does not contain a cemetery and no known cemeteries are located within the immediate site vicinity. Field surveys conducted on the Project site and off-site improvement areas by ECORP did not identify the presence of any human remains and no human remains are known to exist beneath the surface of the site. Nevertheless, the remote potential exists that human remains may be unearthed during grading and excavation activities associated with Project construction. If human remains are unearthed during Project construction, the construction contractor would be required by law to comply with California Health and Safety Code, § 7050.5, “Disturbance of Human Remains.” According to § 7050.5(b) and (c), if human remains are discovered, the County Coroner must be contacted and if the Coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, the Coroner is required to contact the Native American Heritage Commission (NAHC) by telephone within 24 hours. Pursuant to California Public Resources Code § 5097.98, whenever the NAHC receives notification of a discovery of Native American human remains from a county coroner, the NAHC is required to immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may inspect the site of the discovery of the Native American human remains and may recommend



to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. According to Public Resources Code § 5097.94(k), the NAHC is authorized to mediate disputes arising between landowners and known descendants relating to the treatment and disposition of Native American human burials, skeletal remains, and items associated with Native American burials. Notwithstanding the requirements of California Health and Safety Code § 7050.5 and California Public Resources Code § 5097.98, due to the potential to discover buried human remains during Project construction activities (i.e., grading), a potentially significant impact would occur and mitigation would be required.

4.5.5 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development within western Riverside County. This study area was selected for evaluation because it encompasses a broad region with similar geological, biological, and climatic conditions.

As noted above under Thresholds a. and b., no resources were identified on site or within the off-site improvement areas that meet the CEQA or CRHR definitions. As such, the Project would not result in any cumulatively-considerable impacts to known historical resources. However, there is a possibility that subsurface historical resources may be impacted by development of the Project as proposed. Other developments envisioned with buildout of the Riverside County General Plan and the general plans of cities within the County also have the potential to result in impacts to historical sites or resources, including sites or resources that may be buried beneath the ground surface. As such, the Project's potential impacts to previously-discovered historical resources on the Project site would be cumulatively considerable prior to mitigation.

As discussed under the analysis of Thresholds c. and d., several archaeological sites or resources were identified on site based on the evaluation conducted by ECORP. Based on the Project's conceptual grading plan (previously depicted on EIR Figure 3-10), Sites P-33-003743, P-33-003744, Temp-1, and Temp-2 occur within areas planned for long-term conservation as open space as part of the Project, and Project-related grading activities would not impact these sites. As previously indicated, the results of the Project's Phase II CRA (*Technical Appendix D3*) determined that Sites SR-001 and SR-002 do not comprise significant archaeological resources based on the criteria listed in Section 15064.5 of the State CEQA Guidelines. Furthermore, as part of the Project's Native American consultation processes pursuant to AB 52 and SB 18, the Project Applicant has agreed to a requirement to design future grading plans to completely avoid disturbance to Site SR-001. This requirement has been included as part of the Project's mitigation for potential impacts to cultural resources in subsection 4.5.7 (refer to Mitigation Measure MM 4.5-1). Notwithstanding, because Sites SR-001 and SR-002 do not comprise significant archaeological resources, and because Sites P-33-003743, and P-33-003744, Temp-1, and Temp-2 are located in areas planned for long-term conservation of open space, Project impacts to previously-discovered archaeological resources would be less than significant. However, there is a possibility that previously-undiscovered subsurface archaeological resources may be



impacted by development of the Project as proposed. Other cumulative developments resulting from buildout of the Riverside County General Plan and the general plans of cities within the County also have the potential to result in impacts to archaeological sites or resources, including sites or resources that may be buried beneath the ground surface. As such, the Project's potential impacts to archaeological sites or resources would be cumulatively considerable prior to mitigation.

As discussed under Threshold e., although the Project would be subject to compliance with the provisions of California Health and Safety Code § 7050.5 as well as Public Resources Code § 5097 et. seq., there is a potential that buried human remains could be uncovered during construction of the proposed Project. Other cumulative developments similarly would have the potential to uncover buried human remains. Accordingly, the Project's potential impacts to human remains would be cumulatively considerable prior to mitigation.

4.5.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Thresholds a. & b.: Significant Direct and Cumulatively-Considerable Impact. Although no significant historical resources, as defined by the CRHR and CEQA, were identified on site or within the off-site impact areas, there is a potential for previously-undiscovered historical resources to occur on the site surface or beneath the surface of areas planned for physical impact (i.e., grading) as part of the Project. Potential impacts to previously-undiscovered historical resources on site or within the off-site improvement areas would be significant on both a direct and cumulatively-considerable basis prior to mitigation.

Threshold c. & d.: Significant Direct and Cumulatively-Considerable Impact. Based on the Project's conceptual grading plan (previously depicted on EIR Figure 3-10), Sites P-33-003743, P-33-003744, Temp-1, and Temp-2 occur within areas planned for long-term conservation as open space as part of the Project, and Project-related grading activities would not impact these sites. Although Sites SR-001 and SR-002 occur within or immediately adjacent to areas planned for grading and development as part of the Project, the results of the Project's Phase II CRA determined that these sites do not comprise significant archaeological resources based on the criteria listed in Section 15064.5 of the State CEQA Guidelines. Furthermore, although impacts to Site SR-001 would be less than significant, the Project Applicant has agreed to a requirement to design future grading plans to completely avoid disturbance to Site SR-001 (refer to Mitigation Measure MM 4.5-1). Additionally, Mitigation Measure MM 4.5-1 requires controlled grading at Site SR-002 and the relocation of features associated with Site SR-002 to on-site open space areas. Although Project impacts to previously discovered archaeological resources would be less than significant, given the presence of so many milling and occupation sites within the immediate Project vicinity, the potential for the Project site or off-site improvement areas to contain unidentified surface or subsurface archaeological resources is considered high. Therefore, Project impacts to previously-undiscovered archaeological resources that may occur in the on- or off-site impact areas of the proposed Project would be significant prior to mitigation.

Threshold e.: Significant Direct and Cumulatively-Considerable Impact. The Project site does not contain a cemetery and no known cemeteries are located within the immediate site vicinity. Although the Project Applicant would be required to comply with the applicable provisions of California Health and Safety Code



§ 7050.5 and California Public Resources Code § 5097 et. seq., the Project's potential impacts to buried human remains would be significant on a direct and cumulatively-considerable basis prior to mitigation.

4.5.7 COUNTY REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

Applicable County Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

- Unless otherwise required by law, the site of any reburial of Native American human remains or associated grave goods shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, pursuant to the specific exemption set forth in California Government Code Section 6254 (r), parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code 6254 (r).

Mitigation

MM 4.5-1 Prior to the issuance of a grading permit, the Project Applicant shall retain a qualified Project Archaeologist to prepare and implement a Cultural Resource Monitoring Program (CRMP). The CRMP shall be developed in coordination with the consulting Tribe(s) that addresses the details of all activities and provides procedures that must be followed in order to reduce any impacts to cultural and historic resources to a level that is less than significant as well as address potential impacts to undiscovered buried archaeological resources associated with this Project. This document shall be provided to the County Archaeologist for review and approval prior to issuance of the grading permit. The Archaeological Monitor and the Native American Monitor shall be provided with the CRMP to be used as reference in the field. The CRMP shall contain at a minimum the following:

- a. Archaeological Monitor. An adequate number of qualified archaeological monitors shall be onsite to ensure all earth moving activities are observed for areas being monitored. This includes all grubbing, grading, and trenching onsite and for all offsite improvements. Inspections will vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The Project Archaeologist in conjunction with the Native American Monitor(s) have the authority to temporarily divert, redirect, or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources. The CRMP shall require the Project Applicant to provide written verification that a Riverside County-certified archaeologist has been retained. This verification shall be presented in a letter from the Archaeologist to the Riverside County Planning Department.



- b. Native American Monitoring. The CRMP shall require that prior to the issuance of a grading permit, the Project Applicant shall enter into a monitoring agreement with a Native American Monitor. In conjunction with the Project Archaeologist, the CRMP shall require the Native American Monitor to attend the pre-grading meeting with the contractors to provide Cultural Sensitivity Training for all construction personnel. In addition, the CRMP shall require that an adequate number of Native American Monitor(s) must be on-site during all initial ground disturbing activities and excavation of each portion of the Project site including clearing, grubbing, tree removals, grading and trenching. The CRMP shall require the Project Applicant to submit a fully executed copy of the agreement to the Riverside County Planning Department to ensure compliance.
- c. Cultural Sensitivity Training. The Project Archaeologist and a representative designated by the consulting Tribe(s) shall attend the pre-grading meeting with the contractors to provide Cultural Sensitivity Training for all construction personnel. Training shall include a brief review of the cultural sensitivity of the Project and the surrounding area; the areas to be avoided during grading activities; what resources could potentially be identified during earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event unanticipated cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. This is a mandatory training and all construction personnel must attend prior to beginning work on the Project site. A sign in sheet for attendees of this training shall be included in a Phase IV Monitoring Report.
- d. Temporary Construction Fencing. The CRMP shall require that prior to issuance of grading permits, the County shall review the proposed grading plans to ensure that a note is included on the plans requiring the provision of temporary fencing for the protection of cultural Sites P-33-003743, P-33-003744, SR-001, Temp-1, and Temp- 2 during grading activities. In addition, the CRMP shall require that sites located adjacent to the Project boundaries shall have temporary fencing placed to protect them during construction activities. These include Sites P-33-019862 (CA-RIV-10108); P-33-016072 and P-33-016036. Prior to commencement of grading or brushing, the CRMP shall require the Project Archaeologist to confirm the site boundaries and determine an adequate buffer for protection of the site(s). The CRMP shall further require the Project Applicant to direct the installation of fencing under the supervision of the archaeologist and Native American Monitor(s). The CRMP shall require that the fencing can be removed only after grading operations have been completed.
- e. Site SR-001 Avoidance. The CRMP shall require complete avoidance of disturbance to Site SR-001, and Riverside County shall require that the site be appropriately treated so as to discourage human intrusion (i.e., through fencing or landscape treatments, such as the planting of cactus). Prior to final grading inspection, Riverside County shall ensure that this measure has been implemented to the satisfaction of the County Archaeologist.



- f. Site SR-002 Relocation. The CRMP shall require that prior to commencement of grading activities, the feature associated with Site SR-002 must be relocated to the planned open space area identified as Planning Area 9 of Specific Plan No. 239, Amendment No. 1. As a component of the relocation and prior to commencement of construction activities in the affected area, any visible artifacts shall be recovered and recorded and the features recorded using professional archeological methods. The current Department of Parks and Recreation forms for the sites shall be updated, detailing which feature was relocated, the process taken, and updated maps using sub-meter GIS technology to document the new location of the feature. The CRMP shall require the preparation of a Phase IV Monitoring Report, which shall document the relocation of Site SR-002 and shall clearly indicate that the feature is not in the original location and why it was relocated.
- g. Controlled Grading. A controlled grading plan for areas surrounding Site SR-002 shall be developed in coordination with the consulting Tribes and included in the CRMP by the Project Archaeologist. The controlled grading plan shall require, without limitation, the systematic, slow, and deliberate removal of the ground surface to allow for the identification, documentation, and recovery of any subsurface cultural deposits using light scrapers (for example, Caterpillar 623 or 627), dozers (for example D6, D8), and/or front-end loaders. Results of the controlled grading program shall be included in a Phase IV monitoring report.
- h. Preservation Plan. The Project Archaeologist, with input from the consulting Tribes, shall develop a Preservation Plan for the long-term care and maintenance of Sites P-33-003743, P-33-003744, SR-001, Temp-1, and Temp-2. The plan shall indicate at a minimum, access rights for the Consulting Tribe(s) for educational, cultural, and ceremonial practices, and for the gathering of native plant species, the specific areas to be included in and excluded from long-term maintenance, prohibited activities, methods of preservation to be employed, the party responsible for the long-term maintenance, appropriate protocols, monitoring and necessary emergency protocols. Specifically, the Consulting Tribes shall have access to the Preservation Area, identified as Planning Area 9 of Specific Plan No. 239, Amendment No. 1, for ongoing educational, cultural, and religious practices and gathering of native plant species as defined by the Consulting Tribes. The preservation and maintenance plan shall describe the process for access, including notification timelines, for all such practices and activities. In the event the Project requires creation of a Property Owner's Association, the Association shall include within its Covenants, Conditions, and Restrictions (CC&Rs) the right of the Consulting Tribe to access the Preservation Area for the intended practices and gathering of plant resources. The Project Applicant shall provide the approved CC&R language if required, developed in consultation with the Consulting Tribe(s). The preservation and maintenance plan shall be binding on and inure to the benefit of successor owners and assignees. The preservation and maintenance plan shall be included as an appendix to the CRMP.



- i. Previously-Undiscovered Resources. In the event that previously unidentified archaeological or historical resources are discovered, the CRMP shall require the Project Archaeologist to contact the Lead Agency (Riverside County) at the time of discovery. The CRMP shall require that the Project Archaeologist, in consultation with the County Archaeologist and Tribal Monitors, shall determine the significance of the discovered resources. The CRMP shall indicate that the Lead Agency must concur with the evaluation before construction activities will be allowed to resume in the affected area. For significant cultural resources, the CRMP shall require a Research Design and Data Recovery Program to mitigate impacts shall be prepared by the Project Archaeologist and approved by the County Archaeologist before being carried out using professional archaeological methods. Before construction activities are allowed to resume in the affected area, the CRMP shall require that the artifacts shall be recovered and features recorded using professional archaeological methods, and shall require that the Project Archaeologist determine the amount of material to be recovered for an adequate artifact sample for analysis. Isolates and clearly non-significant deposits will be minimally documented in the field so the monitored grading can proceed. The CRMP shall require that evidence of compliance with the Research Design and Data Recovery Program, if a significant archaeological resource is found, shall be provided to Riverside County upon the completion of a treatment plan as part of a Phase IV Monitoring Report detailing the significance and treatment finding.
- j. Artifact Disposition. The landowner(s) shall relinquish ownership of all cultural resources that are unearthed on the Project site during any ground disturbing activities, including previous investigations and/or Phase III data recovery.
- k. Phase IV Monitoring Report. The CRMP shall require that prior to final grading inspection, in the event any resources are found on-site during construction activities, a final report documenting the field and analysis results, and interpreting the artifact and research data within the research context, shall be completed and submitted to the satisfaction of Riverside County. The report shall include (at a minimum) the following: a discussion of the monitoring methods and techniques used; the results of the monitoring program including any artifacts recovered; an inventory of any resources recovered; updated Department of Parks and Recreation Primary and Archaeological Site Forms for any new resources identified, and all sites affected by the development; final disposition of the resources including GPS data; artifact catalog; and any additional recommendations as may be determined by Riverside County. A final copy shall be submitted to the Riverside County Planning Department, the Project Applicant, the Eastern Information Center, and the affected Tribe (if Native American resources are uncovered).
- l. Reduced Monitoring. The Project Archaeologist may submit a detailed letter to the County of Riverside during grading requesting a modification to the monitoring program if circumstances are encountered that reduce the need for archaeological and tribal monitoring. The County shall consult with the consulting tribe(s) prior to determining the need for reduced archeological and tribal monitoring.



MM 4.5-2 In the event that human remains are discovered, pursuant to California Health and Safety Code § 7050.5, as well as the Public Resources Code § 5097 et. seq., the Project Archaeologist shall have the authority to divert or temporarily halt ground disturbance operation within 100 feet the area of discovery to allow for the evaluation of the human remains and the surrounding vicinity. If any human remains are discovered, the County Coroner and lead agency shall be contacted. The County Coroner shall determine that no investigation of the cause of death is required, and determine if the remains are of Native American origin. In the event that the remains are determined to be of Native American origin, the NAHC shall be contacted within 24 hours of the discovery. The Most Likely Descendant, as identified by the NAHC, shall be contacted in order to determine proper treatment and disposition of the remains. If the NAHC is unable to identify a Most Likely Descendant, or if the Most Likely Descendant failed to make a recommendation within 48 hours after being notified by the NAHC, or the Project Applicant rejects the recommendation of the Most Likely Descendant; the Project Applicant shall rebury the Native American human remains and associated grave goods on the property in a location not subject to further ground disturbance. Evidence of compliance with this mitigation measure, if human remains are found, shall be provided to Riverside County upon the completion of a treatment plan and final report detailing the significance and treatment finding.

4.5.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Thresholds a. & b.: Less-than-Significant Impact with Mitigation. Implementation of the Project has the potential to uncover previously-unknown historical resources both on site and within the off-site improvement areas. Implementation of Mitigation Measure MM 4.5-1 would ensure that a Project Archaeologist would be present during ground-disturbing activities, and would ensure that any significant historical resources that may be uncovered are appropriately treated as recommended by the Project Archaeologist. With implementation of the required mitigation, impacts would be reduced to less-than-significant levels.

Thresholds c. & d.: Less-than-Significant Impact with Mitigation. Mitigation Measure MM 4.5-1 would ensure that any previously-undiscovered archaeological sites or resources identified on site or within the off-site improvement areas during ground-disturbing activities are appropriately treated as directed by the Project Archaeologist, County Archaeologist, and Native American Monitor. Implementation of the required mitigation would reduce the Project's potential impacts to subsurface archaeological sites or resources to below a level of significance.

Threshold e.: Less-than-Significant Impact with Mitigation. In the event that human remains are discovered during construction activities, Mitigation Measure MM 4.5-2 would require the Project Applicant to comply with the applicable provisions of California Health and Safety Code § 7050.5 and California Public Resources Code § 5097 et. seq. Mandatory compliance with Mitigation Measure MM 4.5-2, State law, and applicable regulatory requirements would reduce the Project's potential impacts to buried human remains to less-than-significant-levels.



4.6 ENERGY

This Subsection is based in part on the information contained in the Project's Energy Analysis Report ("Energy Analysis"), titled "Stoneridge Commerce Center Specific Plan (SP No. 239, A1) Energy Analysis," dated December 28, 2020, and appended to this EIR as *Technical Appendix E* (Urban Crossroads, 2020a). Refer to Section 7.0, *References*, for a complete list of reference sources.

4.6.1 EXISTING CONDITIONS

A. Overview

The most recent data for California's estimated total energy consumption is from 2017 and natural gas consumption is from 2018, released by the United States (U.S.) Energy Information Administration's (EIA) California State Profile and Energy Estimates in 2020, indicates that (Urban Crossroads, 2020a, p. 12):

- Approximately 7,881 trillion British Thermal Unit (BTU) of energy was consumed;
- Approximately 683 million barrels of petroleum;
- Approximately 2,137 billion cubic feet of natural gas; and
- Approximately 1 million short tons of coal was consumed.

The California Energy Commission's (CEC) Transportation Energy Demand Forecast 2018-2030 was released in order to support the 2017 Integrated Energy Policy Report. The Transportation Energy Demand Forecast 2018-2030 lays out graphs and data supporting their projections of California's future transportation energy demand. The projected inputs consider expected variable changes in fuel prices, income, population, and other variables. Predictions regarding fuel demand include: (Urban Crossroads, 2020a, p. 12):

- Gasoline demand in the transportation sector is expected to decline from approximately 15.8 billion gallons in 2017 to between 12.3 billion and 12.7 billion gallons in 2030.
- Diesel demand in the transportation sector is expected to rise, increasing from approximately 3.7 billion diesel gallons in 2015 to approximately 4.7 billion in 2030.
 - Data from the Department of Energy states that approximately 3.9 billion gallons of diesel fuel were consumed in 2017.

The most recent data provided by the EIA for energy use in California by demand sector is from 2017 and is reported as follows (Urban Crossroads, 2020a, p. 12):

- Approximately 40.3% transportation;
- Approximately 23.1% industrial;
- Approximately 18.0% residential; and
- Approximately 18.7% commercial.



In 2018, total system electric generation for California was 285,488 gigawatt hours (GWh). California's massive electricity in-state generation system generated approximately 194,842 GWh which accounted for approximately 68% of the electricity it uses; the rest was imported from the Pacific Northwest (14%) and the U.S. Southwest (18%). Natural gas is the main source for electricity generation at 47% of the total in-state electric generation system power as shown in Table 4.6-1, *Total Electricity System Power (California 2018)*. (Urban Crossroads, 2020a, p. 12)

Table 4.6-1 Total Electricity System Power (California 2018)

Fuel Type	California In-State Generation	Percent of California In-State	Northwest Imports (GWh)	Southwest Imports (GWh)	California Power Mix (GWh)	Percent California Power Mix
Coal	294	0.15%	399	8,740	9,433	3.30%
Large Hydro	22,096	11.34%	7,418	985	30,499	10.68%
Natural Gas	90,691	46.54%	49	8,904	99,644	34.91%
Nuclear	18,268	9.38%	0	7,573	25,841	9.05%
Oil	35	0.02%	0	0	35	0.01%
Other	430	0.22%	0	9	439	0.15%
Renewables	63,028	32.35%	14,074	12,400	89,502	31.36%
Biomass	5,909	3.03%	772	26	6,707	2.35%
Geothermal	11,528	5.92%	171	1,269	12,968	4.54%
Small Hydro	4,248	2.18%	334	1	4,583	1.61%
Solar	27,265	13.99%	174	5,094	32,533	11.40%
Wind	14,078	7.23%	12,623	6,010	32,711	11.46%
Unspecified Sources of Power	N/A	N/A	17,576	12,519	30,095	10.54%
Total	194,842	100%	39,517	51,130	285,488	100%

(Urban Crossroads, 2020a, Table 2-1)

An updated summary of, and context for energy consumption and energy demands within the State is presented in “U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts” excerpted below (Urban Crossroads, 2020a, p. 13):

- California was the seventh-largest producer of crude oil among the 50 states in 2018, and, as of January 2019, it ranked third in oil refining capacity.
- California is the largest consumer of jet fuel among the 50 states and accounted for one-fifth of the nation’s jet fuel consumption in 2018.



- California's total energy consumption is second highest in the nation, but, in 2018, the state's per capita energy consumption was the fourth-lowest, due in part to its mild climate and its energy efficiency programs.
- In 2018, California ranked first in the nation as a producer of electricity from solar, geothermal, and biomass resources and fourth in the nation in conventional hydroelectric power generation.
- In 2018, large- and small-scale solar photovoltaic (PV) and solar thermal installations provided 19% of California's net electricity generation.

As indicated above, California is one of the nation's leading energy-producing states, and California's per capita energy use is among the nation's most efficient. Given the nature of the Project, the remainder of this discussion will focus on the three sources of energy that are most relevant to the project: namely, electricity, natural gas, and transportation fuel for vehicle trips associated with the uses planned for the Project. (Urban Crossroads, 2020a, p. 14)

B. Electricity

The Southern California region's electricity reliability has been of concern for the past several years due to the planned retirement of aging facilities that depend upon once-through cooling technologies, as well as the June 2013 retirement of the San Onofre Nuclear Generating Station. While the once-through cooling phase-out has been ongoing since the May 2010 adoption of the State Water Resources Control Board's once-through cooling policy, the retirement of San Onofre complicated the situation. California Independent Service Operator (ISO) studies had revealed the extent to which the South Coast Air Basin (SCAB) region was vulnerable to low-voltage and post-transient voltage instability concerns. A preliminary plan to address these issues was detailed in the 2013 Integrative Energy Policy Report (2013 IEPR) after a collaborative process with other energy agencies, utilities, and air districts. If the resource development outlined in the preliminary plan continues as detailed, reliability in Southern California would likely be assured; however, tight resource margins have led energy agencies and the Air Resources Board (ARB) to develop a contingency plan. This contingency plan was discussed at a public workshop in Los Angeles on August 20, 2014 and is detailed herein. Similarly, the 2019 and 2019 IEPR's identify broad strategies that are aimed at maintaining electricity system reliability. (Urban Crossroads, 2020a, p. 14)

California's electricity industry is an organization of traditional utilities, private generating companies, and state agencies, each with a variety of roles and responsibilities to ensure that electrical power is provided to consumers. The California ISO is a nonprofit public benefit corporation and is the impartial operator of the State's wholesale power grid and is charged with maintaining grid reliability, and to direct uninterrupted electrical energy supplies to California's homes and communities. While utilities still own transmission assets, the ISO routes electrical power along these assets, maximizing the use of the transmission system and its power generation resources. The ISO matches buyers and sellers of electricity to ensure that sufficient power is available to meet demand. To these ends, every five minutes the ISO forecasts electrical demands, accounts for operating reserves, and assigns the lowest cost power plant unit to meet demands while ensuring adequate system transmission capacities and capabilities. (Urban Crossroads, 2020a, p. 14)



Part of the ISO’s charge is to plan and coordinate grid enhancements to ensure that electrical power is provided to California consumers. To this end, transmission owners (investor-owned utilities such as Southern California Edison [SCE]) file annual transmission expansion/modification plans to accommodate the State’s growing electrical needs. The ISO reviews and either approves or denies the proposed additions. In addition, and perhaps most importantly, the ISO works with other areas in the western United States electrical grid to ensure that adequate power supplies are available to the State. In this manner, continuing reliable and affordable electrical power is assured to existing and new consumers throughout the State. (Urban Crossroads, 2020a, p. 14)

Electricity is provided to the Project by SCE. SCE derives electricity from varied sources including natural gas, coal, nuclear, biomass, geothermal, solar, wind, and hydroelectric. Table 4.6-2, *SCE 2018 Power Content Mix*, identifies SCE’s specific proportional shares of electricity sources in 2018. As indicated in Table 4.6-2, the 2018 SCE Power Mix lists renewable energy as 36% of the overall energy resources. Power content mixes are generally released in July each year, though 2019 data is not available at this time. (Urban Crossroads, 2020a, p. 15)

Table 4.6-2 SCE 2018 Power Content Mix

Energy Resources	2018 SCE Power Mix
<i>Eligible Renewable</i>	36%
Biomass & waste	1%
Geothermal	8%
Eligible Hydroelectric	1%
Solar	13%
Wind	13%
<i>Coal</i>	0%
<i>Large Hydroelectric</i>	4%
<i>Natural Gas</i>	17%
<i>Nuclear</i>	6%
<i>Other</i>	0%
Unspecified Sources of power*	37%
Total	100%

* "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources
(Urban Crossroads, 2020a, Table 2-2)

C. Natural Gas

Natural gas service to the Project site would be provided by SoCalGas. The following summary of natural gas resources and service providers, delivery systems, and associated regulation is excerpted from information provided by the California Public Utilities Commission (CPUC). (Urban Crossroads, 2020a, pp. 15-17)



“The CPUC regulates natural gas utility service for approximately 10.8 million customers that receive natural gas from Pacific Gas and Electric (PG&E), Southern California Gas (SoCalGas), San Diego Gas & Electric (SDG&E), Southwest Gas, and several smaller natural gas utilities. The CPUC also regulates independent storage operators: Lodi Gas Storage, Wild Goose Storage, Central Valley Storage and Gill Ranch Storage. (Urban Crossroads, 2020a, p. 15)

The vast majority of California’s natural gas customers are residential and small commercial customers, referred to as “core” customers, who accounted for approximately 32% of the natural gas delivered by California utilities in 2012. Large consumers, like electric generators and industrial customers, referred to as “noncore” customers, accounted for approximately 68% of the natural gas delivered by California utilities in 2012. (Urban Crossroads, 2020a, p. 15)

The CPUC regulates the California utilities’ natural gas rates and natural gas services, including in-state transportation over the utilities’ transmission and distribution pipeline systems, storage, procurement, metering and billing. Most of the natural gas used in California comes from out-of-state natural gas basins. In 2012, California customers received 35% of their natural gas supply from basins located in the Southwest, 16% from Canada, 40% from the Rocky Mountains, and 9% from basins located within California. California gas utilities may soon also begin receiving biogas into their pipeline systems. (Urban Crossroads, 2020a, p. 16)

Natural gas from out-of-state production basins is delivered into California via the interstate natural gas pipeline system. The major interstate pipelines that deliver out-of-state natural gas to California consumers are the Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, Ruby Pipeline, Questar Southern Trails and Mojave Pipeline. Another pipeline, the North Baja – Baja Norte Pipeline, takes gas off the El Paso Pipeline at the California/Arizona border, and delivers that gas through California into Mexico. While the Federal Energy Regulatory Commission (FERC) regulates the transportation of natural gas on the interstate pipelines, the PUC often participates in FERC regulatory proceedings to represent the interests of California natural gas consumers. (Urban Crossroads, 2020a, p. 16)

Most of the natural gas transported via the interstate pipelines, as well as some of the California-produced natural gas, is delivered into the PG&E and SoCalGas intrastate natural gas transmission pipeline systems (commonly referred to as California’s “backbone” natural gas pipeline system). Natural gas on the utilities’ backbone pipeline systems is then delivered into the local transmission and distribution pipeline systems, or to natural gas storage fields. Some large noncore customers take natural gas directly off the high-pressure backbone pipeline systems, while core customers and other noncore customers take natural gas off the utilities’ distribution pipeline systems. The PUC has regulatory jurisdiction over 150,000 miles of utility-owned natural gas pipelines, which transported 82% of the total amount of natural gas delivered to California’s gas consumers in 2012. (Urban Crossroads, 2020a, p. 16)



SDG&E and Southwest Gas' southern division are wholesale customers of SoCalGas, and currently receive all of their natural gas from the SoCalGas system (Southwest Gas also provides natural gas distribution service in the Lake Tahoe area). Some other municipal wholesale customers are the cities of Palo Alto, Long Beach, and Vernon, which are not regulated by the CPUC. (Urban Crossroads, 2020a, p. 16)

Some of the natural gas delivered to California customers may be delivered directly to them without being transported over the regulated utility systems. For example, the Kern River/Mojave pipeline system can deliver natural gas directly to some large customers, "bypassing" the utilities' systems. Much of California-produced natural gas is also delivered directly to large consumers. (Urban Crossroads, 2020a, p. 16)

RPU and SoCalGas own and operate several natural gas storage fields that are located in northern and southern California. These storage fields, and four independently owned storage utilities – Lodi Gas Storage, Wild Goose Storage, Central Valley Storage, and Gill Ranch Storage – help meet peak seasonal natural gas demand and allow California natural gas customers to secure natural gas supplies more efficiently. (A portion of the Gill Ranch facility is owned by PG&E). (Urban Crossroads, 2020a, pp. 16-17)

California's regulated utilities do not own any natural gas production facilities. All of the natural gas sold by these utilities must be purchased from suppliers and/or marketers. The price of natural gas sold by suppliers and marketers was deregulated by the FERC in the mid-1980's and is determined by "market forces." However, the PUC decides whether California's utilities have taken reasonable steps in order to minimize the cost of natural gas purchased on behalf of their core customers." (Urban Crossroads, 2020a, p. 17)

As indicated in the preceding discussions, natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the state in response to market supply and demand. Complementing available natural gas resources, biogas may soon be available via existing delivery systems, thereby increasing the availability and reliability of resources in total. The CPUC oversees utility purchases and transmission of natural gas to ensure reliable and affordable natural gas deliveries to existing and new consumers throughout the State. (Urban Crossroads, 2020a, p. 17)

D. Transportation Energy Resources

The Project would generate additional vehicle trips with resulting consumption of energy resources, predominantly gasoline and diesel fuel. In March 2019, the Department of Motor Vehicles (DMV) identified 36.4 million registered vehicles in California, and those vehicles consume an estimated 17.8 billion gallons of fuel each year. Gasoline (and other vehicle fuels) are commercially provided commodities and would be available to the Project patrons and employees via commercial outlets. (Urban Crossroads, 2020a, p. 17)



California's on-road transportation system includes 394,383 land miles, more than 27.5 million passenger vehicles and light trucks, and almost 8.1 million medium- and heavy-duty vehicles. While gasoline consumption has been declining since 2008 it is still by far the dominant fuel. Petroleum comprises about 91% of all transportation energy use, excluding fuel consumed for aviation and most marine vessels. Nearly 17.8 billion gallons of on-highway fuel are burned each year, including 14.6 billion gallons of gasoline (including ethanol) and 3.2 billion gallons of diesel fuel (including biodiesel and renewable diesel). In 2019, Californians also used 194 million cubic feet of natural gas as a transportation fuel, or the equivalent of 183 billion gallons of gasoline. (Urban Crossroads, 2020a, p. 17)

4.6.2 APPLICABLE REGULATORY REQUIREMENTS

The following is a brief description of the federal, State, and local environmental laws and related regulations related to energy use and conservation.

A. Federal Regulations

1. ***Intermodal Surface Transportation Efficiency Act (ISTEA)***

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions. The applicable MPO for the County of Riverside is the Southern California Association of Governments (SCAG). SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is the applicable planning document for the area. (FHWA, n.d.)

B. State Regulations

1. ***Integrated Energy Policy Report***

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing California's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the State's economy; and protect public health and safety (Public Resources Code § 25301a). The CEC prepares these assessments and associated policy recommendations every two years, with updates on alternate years, as part of the Integrated Energy Policy Report (IEPR). (CEC, n.d.)

The 2017 IEPR focuses on next steps for transforming transportation energy use in California. The 2017 IEPR addresses the role of transportation in meeting state climate, air quality, and energy goals; the transportation fuel supply; the Alternative and Renewable Fuel and Vehicle Technology Program; current and potential funding mechanisms to advance transportation policy; transportation energy demand forecasts; the status of statewide plug-in electric vehicle infrastructure; challenges and opportunities for electric vehicle infrastructure



deployment; measuring success and defining metrics within the Alternative and Renewable Fuel and Vehicle Technology Program; market transformation benefits resulting from Alternative and Renewable Fuel and Vehicle Technology Program investments; the state of hydrogen, zero-emission vehicle, biofuels, and natural gas technologies over the next ten years; transportation linkages with natural gas infrastructure; evaluation of methane emissions from the natural gas system and implications for the transportation system; changing trends in California's sources of crude oil; the increasing use of crude-by-rail in California; the integration of environmental information in renewable energy planning processes; an update on electricity reliability planning for Southern California energy infrastructure; and an update to the electricity demand forecast. (CEC, n.d.)

2. California Code Title 24, Part 6, Energy Efficiency Standards

California Code Title 24, Part 6 (also referred to as the California Energy Code) was promulgated by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption. To these ends, the California Energy Code provides energy efficiency standards for residential and nonresidential buildings. California's building efficiency standards are updated on an approximately three-year cycle. The 2019 Standards for building construction, which went into effect on January 1, 2020, improved upon the former 2016 Standards for residential and nonresidential buildings. The CEC anticipates that single-family homes built with the 2019 standards will use approximately 7% less energy compared to the residential homes built under the 2016 standards. Additionally, after implementation of solar PV systems, homes built under the 2019 standards will about 53% less energy than homes built under the 2016 standards. Nonresidential buildings will use approximately 30% less energy due to lighting upgrades compared to the prior code. (CEC, n.d.)

3. California Renewable Portfolio Standards (RPS)

The California Energy Commission (CEC) implements and administers portions of California's Renewables Portfolio Standard (RPS). Under the existing RPS, 25% of retail sales are required to be from renewable sources by December 31, 2016, 33% by December 31, 2020, 40% by December 31, 2024, 45% by December 31, 2027, and 50% by December 31, 2030. SB 100 raises California's RPS requirement to 50% renewable resources target by December 31, 2026, and to achieve a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045, and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural Resources Agency (CNRA), California Environmental Protection Agency (CalEPA), the Department of Food and Agriculture (CDFA), and CARB to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal. (CEC, n.d.)



4. Pavley Fuel Efficiency Standards (AB 1493)

In California, AB 1493 establishes fuel efficiency ratings for model year 2009-2016 passenger cars and light trucks. (CARB, n.d.)

5. Senate Bill 350 (SB 350) – Clean Energy and Pollution Reduction Act of 2015

In October 2015, the legislature approved, and the Governor signed, SB 350, which reaffirms California’s commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the renewables portfolio standard (RPS), higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Specifically, SB 350 requires the following to reduce statewide GHG emissions: (Urban Crossroads, 2020a, p. 16)

- 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 (CPUC), the CEC, and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electrify transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

C. Local Regulations

1. Riverside County Climate Action Plan (CAP)

The County of Riverside’s most current Climate Action Plan, updated in November 2019 uses several methods to promote renewable energy and energy efficiency. The regulation most relevant to the project is R2-CE1: Clean Energy, which states: (Urban Crossroads, 2020a, p. 21)

- On-site renewable energy production (including but not limited to solar) shall apply to any tentative tract map, plot plan, or conditional use permit that proposes to add more than 75 new dwelling units of residential development or one or more new buildings totaling more than 100,000 gross square feet of commercial, office, industrial, or manufacturing development.
- Renewable energy production shall be onsite generation of at least 20 percent of energy demand for commercial, office, industrial or 27 Partial Settlement Agreement, 2017. Petitioners: Sierra Club, Center for Biological Diversity, San Bernardino Audubon Society and Respondents: County of Riverside and Riverside County Board of Supervisors. County of Riverside Climate Action Plan Update 4-12 November 2019 manufacturing development, meet or exceed 20 percent of energy demand for multi-family residential development, and meet or exceed 30 percent of energy demand for single-family residential development. These renewable energy requirements should be updated with every CAP Update by the County based on most recent technology advancements.



The County of Riverside also has several other non-mandatory regulations that would serve to benefit the Project. For example, CAP measure R2-L1, *Tree Planting for Shading and Energy Saving*, encourages residents and developers to plant trees to lower outdoor summer temperatures. CAP measure R2-L2, *Light Reflecting Surfaces for Energy Saving*, advocates for coating surfaces such as roofs and asphalt with substances that reflect sunlight, for example by painting them white or installing rooftop gardens. Other potential measures from the CAP Screening Tables are listed in Table 4.6-3, *Potential CAP Update Screening Table Measures*.

Table 4.6-3 Potential CAP Update Screening Table Measures

Feature	Description
EE10.A.1 Insulation	Enhanced Insulation (rigid wall insulation R-13, roof/attic R-38)
EE10.A.2 Windows	Greatly Enhanced Window Insulation (0.28 or less U-factor, 0.22 or less Solar Heat Gain Coefficient [SHGC])
EE10.A.3 Cool Roofs	Modest Cool Roof (Cool Roof Rating Council [CRRC] Rated 0.15 aged solar reflectance, 0.75 thermal emittance)
EE10.A.4 Air Infiltration	Blower Door Home Energy Rating System (HERS) Verified Envelope Leakage of equivalent
EE10.B.1 Heating/Cooling Distribution System	Model Duct Insulation (R-6)
EE10.B.2 Space Heating/Cooling Equipment	Improved Efficiency Heating, Ventilation, and Air Conditioning (HVAC) (Energy Efficiency Ratio [EER] 14/78% Annual Fuel Utilization Efficiency [AFUE] or 8 Heating Seasonal Performance Factor [HSPF])
EE10.B.4 Water Heaters	High Efficiency Water Heater (0.72 Energy Factor)
EE10.B.5 Daylighting	All rooms daylighted
EE10.B.6 Artificial Lighting	High Efficiency Lights (50% of in-unit fixtures are high efficiency)
W2.E.2 Toilets	Water Efficient Toilets/Urinals (1.5 gallons per minute [gpm])
W2.E.3 Faucets	Water Efficient faucets (1.2 gpm)
T4.B.1 Electric Vehicle (EV) Recharging	Install EV charging stations in garages/parking areas

4.6.3 BASIS FOR DETERMINING SIGNIFICANCE

Section VI of Appendix G to the State CEQA Guidelines addresses typical adverse effects due to energy consumption, and includes the following threshold questions to evaluate the Project’s impacts on energy resources (OPR, 2018a):

- Would the Project result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?



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

4.6.4 IMPACT ANALYSIS

A. Methodology for Calculating Project Energy Demands

Information from the CalEEMod 2016.3.2 outputs for the Project’s Air Quality Assessment (EIR *Technical Appendix B*) was utilized in this analysis, detailing Project related construction equipment, transportation energy demands, and facility energy demands for both the Primary Land Use Plan and Alternative Land Use Plan. (Urban Crossroads, 2020a, p. 25)

On October 17, 2017, the SCAQMD, in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the California Emissions Estimator Model (CalEEMod) v2016.3.2. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}) and GHG emissions from direct and indirect sources as well as energy usage. Accordingly, the latest version of CalEEMod has been used to determine the proposed Project’s anticipated transportation and facility energy demands. Output from the model runs for construction and operational activity for the Primary and Alternative Land Use Plans are provided in Appendices 5.1 and 6.1 to the Project’s Energy Analysis (*Technical Appendix E*). (Urban Crossroads, 2020a, p. 25)

On August 19, 2019, the EPA approved the 2017 version of the Emission Factor model (EMFAC) web database for use in State Implementation Plan and transportation conformity analyses. EMFAC2017 is a mathematical model that was developed to calculate emission rates, fuel consumption, and Vehicle Miles Travelled (VMT) from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the CARB to project changes in future emissions from on road mobile sources. The Project’s Energy Analysis utilizes summer, winter, and annual EMFAC2017 emission factors in order to derive vehicle emissions associated with Project operational activities, which vary by season. (Urban Crossroads, 2020a, pp. 25-26)

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

A. Primary Land Use Plan

As evaluated herein, buildout of the Primary Land Use Plan would result in the construction of 8,476,776 s.f. of light industrial uses, 1,069,398 s.f. of business park uses, and 121,968 s.f. of commercial retail uses. Specific land uses were evaluated consistent with the Project’s Traffic Impact Analysis (“TIA”; EIR *Technical Appendix LI*), and include the following: (Urban Crossroads, 2020a, p. 26)

- 2,966,871 sf of Unrefrigerated Warehouse- No Rail



- 2,966,871 of Unrefrigerated Warehouse- No Rail
- 427,759 sf of Unrefrigerated Warehouse- No Rail
- 1,695,355 sf of Refrigerated Warehouse- No Rail
- 641,638 sf of Industrial Park
- 847,677 sf of Manufacturing
- 21,968 sf of Strip Mall
- 1,624,788 sf of Other Asphalt Surfaces
- 1,367,784 sf of Other Non-Asphalt Surfaces
- 100,000 sf of Free-Standing Discount Superstore

Provided below is a summary of the projected energy demands during construction and operation for the Primary Land Use Plan.

1. Construction-Related Energy Demand – Primary Land Use Plan

Construction related energy usage is expected from the following construction activities (Urban Crossroads, 2020a, p. 26):

- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

Construction worker vehicles traveling to and from the Project site, as well as vendor trips (construction materials delivered to the Project site) were estimated based on information from CalEEMod defaults. The number of worker, vendor, and hauling trips are presented in Table 4.6-4, *Construction Trip Assumptions – Primary Land Use Plan*. (Urban Crossroads, 2020a, p. 27)

Construction is expected to commence in July 2021 and would last through November 2029 as shown in Table 5-2 of the Project’s Energy Analysis (*Technical Appendix E*). The duration of construction activity represents a reasonable approximation as required per State CEQA Guidelines. The duration of construction activity was based on information provided by the Project Applicant. The Project is anticipated to be fully built and occupied in 2030. (Urban Crossroads, 2020a, p. 27)

Site specific construction fleet may vary due to specific project needs at the time of construction. The associated construction equipment by phase is detailed in Table 5-3 of the Project’s Energy Analysis (*Technical Appendix E*). The associated equipment represents a reasonable approximation of the expected construction fleet as required per State CEQA Guidelines and was provided by the Project Applicant. (Urban Crossroads, 2020a, p. 27)



Table 4.6-4 Construction Trip Assumptions – Primary Land Use Plan

Phase Name	Trips			Trip Length		
	Worker (Trips/Day)	Vendor (Trips/Day)	Hauling (Total)	Worker	Vendor	Hauling
Site Preparation	35	0	0	14.7	6.9	20
Grading	40	0	0	14.7	6.9	20
Building Construction	257	180	14	14.7	6.9	20
Paving	30	0	0	14.7	6.9	20
Architectural Coating	30	0	0	14.7	6.9	20

¹ CalEEMod does not distinguish different trip lengths for import and export activities. As such, a weighted trip length is used for hauling trips. (Urban Crossroads, 2020a, Table 5-1)

Construction Equipment Electricity Usage Estimates – Primary Land Use Plan

The focus within this discussion is the energy implications of the construction process, specifically the power cost from on-site electricity consumption during construction of the Primary Land Use Plan. Based on the 2019 National Construction Estimator, the typical power cost per 1,000 square feet (s.f.) of building construction per month is estimated to be \$2.38. The Primary Land Use Plan consists of various light industrial, business park, and commercial uses as specified in EIR Subsection 3.0 which would be constructed within a 100-month period. Based on Table 5-4 of the Project’s Energy Analysis (*Technical Appendix E*), the total power cost of the on-site electricity usage during the construction of the proposed Project is estimated to be approximately \$2,687,718.77. Additionally, as of April 13, 2020, SCE’s general service rate schedule for is \$0.09 per kWh of electricity. As shown on Table 5-5 of the Energy Analysis, the total electricity usage from on-site Project construction related activities are estimated to be approximately 29,863,542 kWh. (Urban Crossroads, 2020a, p. 28)

Construction Equipment Fuel Estimates – Primary Land Use Plan

Fuel consumed by construction equipment would be the primary energy resource expended over the course of Project construction. Project construction activity timeline estimates, construction equipment schedules, equipment power ratings, load factors, and associated fuel consumption estimates are presented in Table 5-6 of the Project’s Energy Analysis (*Technical Appendix E*). The number of usage hours per day are based on CalEEMod defaults. The aggregate fuel consumption rate for all equipment is estimated at 18.5 hp-hr-gal., obtained from California Air Resources Board (CARB) 2018 Emissions Factors Tables and cited fuel consumption rate factors presented in Table D-24 of the Moyer guidelines. For the purposes of this analysis, the calculations are based on all construction equipment being diesel-powered which is standard practice consistent with industry standards. Diesel fuel would be supplied by existing commercial fuel providers serving the County and region. As presented in Table 5-6 of the Project’s Energy Analysis, Project construction activities would consume an estimated 1,099,608 gallons of diesel fuel. Project construction would represent a “single-event” diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose. (Urban Crossroads, 2020a, p. 30)



Construction Worker Fuel Estimates – Primary Land Use Plan

It is assumed that all construction worker trips would be from light duty autos (LDA) along area roadways. With respect to estimated VMT, the construction worker trips would generate an estimated 7,230,063 VMT. Data regarding Project-related construction worker trips were based on CalEEMod 2016.3.2 model defaults utilized within the Project’s Air Quality Assessment (“AQA”; EIR *Technical Appendix B*). Output from the model runs for construction activity are provided in Appendix 5.1 to the Project’s Energy Analysis (*Technical Appendix E*). (Urban Crossroads, 2020a, p. 32)

As previously stated, vehicle fuel efficiencies for LDAs were estimated using information generated within the 2017 version of the EMFAC developed by the CARB. EMFAC2017 was run for the LDA vehicle class within the California sub-area for a 2021 calendar year. While construction would occur in multiple years, vehicles are understood to be less efficient overall in earlier years. As such, calculating fuel use based on 2021 fuel efficiencies presents a more conservative approach than calculating by year. Data from EMFAC2017 is shown in Appendix 5.2 to the Project’s Energy Analysis (*Technical Appendix E*). (Urban Crossroads, 2020a, p. 32)

As generated by EMFAC2017, an aggregated fuel economy of LDAs ranging from model year 1974 to model year 2021 are estimated to have a fuel efficiency of 31.83 miles per gallon (mpg). Table 5-7 of the Project’s Energy Analysis (*Technical Appendix E*) provides an estimated annual fuel consumption resulting from the Project generated by LDAs related to construction worker trips. Based on Table 5-7 of the Energy Analysis, it is estimated that 227,139 gallons of fuel would be consumed related to construction worker trips during full construction of the proposed Project. Project construction worker trips would represent a “single-event” gasoline fuel demand and would not require on-going or permanent commitment of fuel resources for this purpose. (Urban Crossroads, 2020a, p. 32)

Construction Vendor/Hauling Fuel Estimates – Primary Land Use Plan

With respect to estimated VMT, the construction vendor and hauling trips would generate an estimated 1,959,666 VMT along area roadways. It is assumed that 50% of all vendor trips are from Medium-Heavy-Duty-Trucks (MHDT) and 50% are from Heavy-Heavy-Duty Trucks (HHDT), and 100% of hauling trips are from HHDT. These assumptions are consistent with the 2016.3.2 CalEEMod defaults. Vehicle fuel efficiencies for MHDTs and HHDTs were estimated using information generated within EMFAC2017. For purposes of analysis, EMFAC2017 was run for the MHDT and HHDT vehicle class within the California sub-area for a 2021 calendar year. As discussed above, using fuel data from 2021 presents the most conservative means to conduct the Project analysis. Data from EMFAC2017 is shown in Appendix 5.2 to the Project’s Energy Analysis (*Technical Appendix E*). (Urban Crossroads, 2020a, pp. 32-33)

As generated by EMFAC2017, an aggregated fuel economy of MHDTs ranging from model year 1974 to model year 2021 are estimated to have a fuel efficiency of 10.05 mpg. Additionally, HHDTs are estimated to have a fuel efficiency of 6.89 mpg. Based on Tables 5-8 and 5-9 of the Project’s Energy Analysis (*Technical Appendix E*), it is estimated that 91,008 gallons of fuel would be consumed related to construction vendor trips



(MHDTs) and 132,837 gallons of fuel would be consumed related to construction vendor trips (HHDTs) during full construction of the proposed Project. An additional 18,908 gallons of fuel would be consumed as part of grading haul truck trips. Project construction vendor trips would represent a “single-event” diesel fuel demands and would not require on-going or permanent commitment of diesel fuel resources for this purpose. (Urban Crossroads, 2020a, p. 33)

☐ Construction Energy Efficiency/Conservation Measures – Primary Land Use Plan

The equipment used for Project construction for the Primary Land Use Plan would conform to CARB regulations and California emissions standards. Additionally, consistent with the Project’s Air Quality Assessment (EIR *Technical Appendix B*) and the analysis presented in EIR Subsection 4.3, *Air Quality*, the Project would implement Mitigation Measures MM 4.3-1 and 4.3-2, which would serve to generally reduce energy demand associated with the Project. Specifically, Mitigation Measures MM 4.3-2 requires that the Project implement several measures under the County of Riverside Board of Supervisors Policy F-3 (Good Neighbor Policy for Logistics and Warehouse/Distribution Uses). These measures would reduce fuel consumption during construction. It should also be noted that there are no unusual Project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities, or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the Project’s Primary Land Use Plan would therefore not result in inefficient wasteful, or unnecessary consumption of fuel. (Urban Crossroads, 2020a, pp. 33-34)

The Project would utilize construction contractors which practice compliance with applicable CARB regulations regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants (TAC). Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption. (Urban Crossroads, 2020a, p. 34)

Additionally, certain incidental construction-source energy efficiencies would likely accrue through implementation of California regulations and best available control measures (BACM). More specifically, California Code of Regulations Title 13, Motor Vehicles, section 2449(d)(3), *Idling*, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. To this end, “grading plans shall reference the requirement that a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling.” In this manner, construction equipment operators are informed that engines are to be turned off at or prior to five minutes of idling. Enforcement of idling limitations is realized through periodic site inspections conducted by County building officials, and/or in response to citizen complaints. (Urban Crossroads, 2020a, p. 34)



Indirectly, construction energy efficiencies and energy conservation would be achieved for the proposed development through energy efficiencies realized from bulk purchase, transport and use of construction materials. (Urban Crossroads, 2020a, p. 34)

A full analysis related to the energy needed to form construction materials is not included in the Project's Energy Analysis due to a lack of detailed Project-specific information on construction materials. At this time, an analysis of the energy needed to create Project-related construction materials would be extremely speculative and thus has not been prepared. (Urban Crossroads, 2020a, p. 34)

In general, the construction processes promote conservation and efficient use of energy by reducing raw materials demands, with related reduction in energy demands associated with raw materials extraction, transportation, processing, and refinement. Use of materials in bulk reduces energy demands associated with preparation and transport of construction materials as well as the transport and disposal of construction waste and solid waste in general, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations. (Urban Crossroads, 2020a, pp. 34-35)

2. Operational Energy Demands – Primary Land Use Plan

Energy consumption in support of or related to the proposed Project's Primary Land Use operations would include transportation energy demands (energy consumed by employee and patron vehicles accessing the Project site) and facilities energy demands (energy consumed by building operations and site maintenance activities) (Urban Crossroads, 2020a, p. 35).

Transportation Energy Demands – Primary Land Use Plan

Energy that would be consumed by the Proposed Project's Primary Land Use Plan-generated traffic is a function of total VMT and estimated vehicle fuel economies of vehicles accessing the Project site. The following vehicle subcategories included in this analysis are consistent with CalEEMod and EMFAC for a 2030 Opening Year. (Urban Crossroads, 2020a, p. 35)

With respect to estimated VMT, and based on the trip frequency and trip length methodologies cited in the Project's AQA (EIR *Technical Appendix B*), the Project would generate an estimated 144,169,525 annual VMT along area roadways for all vehicles with full build-out of the Project. Table 4.6-5, *Total Project-Generated Traffic Annual Fuel Consumption (All Vehicles) – Primary Land Use Plan*, provides an estimated range of annual fuel consumption resulting from Project generated vehicles. Based on Table 4.6-5, it is estimated that 10,651,780 gallons of fuel would be consumed annually with buildout of the Primary Land Use Plan (Urban Crossroads, 2020a, p. 35).



Table 4.6-5 Total Project-Generated Traffic Annual Fuel Consumption (All Vehicles) – Primary Land Use Plan

Vehicle Type ¹	Annual VMT	Estimated Annual Fuel Consumption (gallons)
LDA	36,719,150	895,934
LDT1 ²	3,759,182	110,312
LDT2 ³	11,747,443	348,205
MDV	469,898	17,374
LHDT1 ⁴	4,430,464	273,023
LHDT2	1,208,308	71,622
MHDT	13,636,307	1,142,735
HHDT	63,404,973	7,532,126
OBUS	268,513	34,554
MCY	8,525,287	225,895
TOTAL (ALL VEHICLES)	144,169,525	10,651,780

1. LDA = Light Duty Autos; LDT = Light Duty Trucks; MDV = Medium Duty Vehicles; LHDT = Light Heavy Duty Trucks; MHDT = Medium Heavy Duty Trucks; HHDT = Heavy Heavy Duty Trucks; OBUS = Other Buses; MCY = Motorcycles
2. Vehicles under the LDT1 category have a gross vehicle weight rating (GVWR) of less than 6,000 lbs. and equivalent test weight (ETW) of less than or equal to 3,750 lbs.
3. Vehicles under the LDT2 category have a GVWR of less than 6,000 lbs. and ETW between 3,751 lbs. and 5,750 lbs.
4. Vehicles under the LHDT1 category have a GVWR of 8,501 to 10,000 lbs.
(Urban Crossroads, 2020a, Table 5-10)

Facility Energy Demands – Primary Land Use Plan

Project building operations and Project site maintenance activities would result in the consumption of natural gas and electricity. Natural gas would be supplied to the Project by SoCalGas; electricity would be supplied to the Project by SCE. Annual natural gas and electricity demands of the Project are summarized in Table 4.6-6, *Project Annual Operational Energy Demand Summary – Primary Land Use Plan*. (Urban Crossroads, 2020a, pp. 35-36)

Operational Energy Efficiency/Conservation Measures – Primary Land Use Plan

Energy efficiency/energy conservation attributes of the Project would be complemented by increasingly stringent State and federal regulatory actions addressing vehicle fuel economies and vehicle emissions standards; and enhanced building/utilities energy efficiencies mandated under California building codes (e.g., Title 24, California Green Building Standards Code). Additionally, consistent with the Project’s Air Quality Assessment (EIR *Technical Appendix B*) and the analysis presented in EIR Subsection 4.3, *Air Quality*, the Project would implement Mitigation Measures MM 4.3-3 through 4.3-7, which would serve to generally reduce energy demand associated with the Project. It should also be noted that the Project would not result in a substantial increase in demand or transmission service, resulting in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure because it would be served by the existing electric utility lines in the Project vicinity. (Urban Crossroads, 2020a, p. 36)



Table 4.6-6 Project Annual Operational Energy Demand Summary – Primary Land Use Plan

Natural Gas Demand	kBTU/year
Industrial Park	1,558,540
Manufacturing	23,634,900
Refrigerated Warehouse-No Rail	611,696
Unrefrigerated Warehouse-No Rail	86,098,600
Unrefrigerated Warehouse-No Rail	611,696.00
Free-Standing Discount Superstore	164,400
Strip Mall	36,115
TOTAL PROJECT NATURAL GAS DEMAND	112,715,947
Electricity Demand	kWh/year
Industrial Park	5,517,450
Manufacturing	8,044,460
Refrigerated Warehouse-No Rail	67,190,300
Unrefrigerated Warehouse-No Rail	6,672,490
Unrefrigerated Warehouse-No Rail	962,030
Free-Standing Discount Superstore	1,125,600
Strip Mall	247,272
TOTAL PROJECT ELECTRICITY DEMAND	89,512,330

(Urban Crossroads, 2020a, Table 5-21)

Enhanced Vehicle Fuel Efficiencies

Project annual fuel consumption estimates presented previously in Table 4.6-5 represent likely potential maximums that would occur for the Project. Under subsequent future conditions, average fuel economies of vehicles accessing the Project site can be expected to improve as older, less fuel-efficient vehicles are removed from circulation, and in response to fuel economy and emissions standards imposed on newer vehicles entering the circulation system. The amount of fuel consumed by the Project can be expected to improve as older, less fuel-efficient vehicles are removed from circulation, and in response to fuel economy and emissions standards imposed on newer vehicles entering the circulation system. (Urban Crossroads, 2020a, p. 37)

3. Conclusion – Primary Land Use Plan

As supported by the preceding analyses, Project construction and operations would not result in the inefficient, wasteful, or unnecessary consumption of energy. Further, the energy demands of the Project can be accommodated within the context of available resources and energy delivery systems. Future building permit applications associated with the Project would be required to comply with the 2019 Title 24 standards. The CEC anticipates that non-residential buildings will use approximately 30% less energy due to lighting upgrades



compared to the prior code. As such, energy consumed by the Project's operation is calculated to be comparable to, or less than, energy consumed by other older commercial, business park, and light industrial uses of similar scale and intensity that are constructed and operating in California. Additionally, the Project's proximity to the Interstate freeway system would reduce VMT and therefore decrease reliance on fossil fuels. On this basis, the Project would not result in the inefficient, wasteful, or unnecessary consumption of energy. The Project would therefore not cause or result in the need for additional energy producing or transmission facilities. The Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservation goals within the State of California. Therefore, the Project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources, and impacts would be less than significant. (Urban Crossroads, 2020a, p. 52)

B. Alternative Land Use Plan

As evaluated herein, buildout of the Alternative Land Use Plan would result in the construction of 8,476,776 s.f. of light industrial uses, 936,540 s.f. of business park uses, and 126,542 s.f. of commercial retail uses. Specific land uses were evaluated consistent with the Project's Traffic Impact Analysis ("TIA"; EIR *Technical Appendix LI*), and include the following: (Urban Crossroads, 2020a, p. 39)

- 2,966,870 sf of Unrefrigerated Warehouse - No Rail
- 2,966,870 of Unrefrigerated Warehouse - No Rail
- 374,620 sf of Unrefrigerated Warehouse - No Rail
- 1,695,360 sf of Refrigerated Warehouse - No Rail
- 561,920 sf of Industrial Park
- 847,680 sf of Manufacturing
- 26,540 sf of Strip Mall
- 1,498,464 sf of Other Asphalt Surfaces
- 1,367,784 sf of Other Non-Asphalt Surfaces
- 100,000 sf of Free-Standing Discount Superstore

Provided below is a summary of the projected energy demands during construction and operation for the Alternative Land Use Plan.

1. Construction-Related Energy Demand – Alternative Land Use Plan

Construction related energy usage is expected from the following construction activities (Urban Crossroads, 2020a, p. 39):

- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating



Construction worker vehicles traveling to and from the Project site, vendor trips (construction materials delivered to the Project site), were estimated based on information from CalEEMod defaults. The number of worker, vendor, and hauling trips are presented below in Table 4.6-7, *Construction Trip Assumptions – Alternative Land Use Plan*. (Urban Crossroads, 2020a, p. 40)

Construction is expected to commence in July 2021 and will last through November 2029 as shown in Table 6-2 of the Project’s Energy Analysis (*Technical Appendix E*). The duration of construction activity represents a reasonable approximation as required per State CEQA Guidelines. The duration of construction activity was based on information provided by the Project applicant. The Project is anticipated to be fully built and occupied in 2030. (Urban Crossroads, 2020a, p. 40)

Table 4.6-7 Construction Trip Assumptions – Alternative Land Use Plan

Phase Name	Trips			Trip Length		
	Worker (Trips/Day)	Vendor (Trips/Day)	Hauling (Total)	Worker	Vendor	Hauling
Site Preparation	18	0	0	14.7	6.9	20
Grading	20	0	0	14.7	6.9	20
Building Construction	253	178	14	14.7	6.9	20
Paving	15	0	0	14.7	6.9	20
Architectural Coating	15	0	0	14.7	6.9	20

¹ CalEEMod does not distinguish different trip lengths for import and export activities. As such, a weighted trip length is used for hauling trips. (Urban Crossroads, 2020a, Table 6-1)

Site specific construction fleet may vary due to specific project needs at the time of construction. The associated construction equipment by phase is detailed in Table 6-3 of the Project’s Energy Analysis (*Technical Appendix E*). The associated equipment represents a reasonable approximation of the expected construction fleet as required per State CEQA Guidelines. (Urban Crossroads, 2020a, p. 40)

Construction Equipment Electricity Usage Estimates – Alternative Land Use Plan

The focus within this section is the energy implications of the construction process, specifically the power cost from on-site electricity consumption during construction of the proposed Project. Based on the 2019 National Construction Estimator, the typical power cost per 1,000 s.f. of building construction per month is estimated to be \$2.38. The Alternative Land Use Plan consist of various light industrial, business park, and commercial uses as specified in EIR Subsection 3.0 which would be constructed within a 100-month period. Based on Table 6-4 of the Project’s Energy Analysis (*Technical Appendix E*), the total power cost of the on-site electricity usage during the construction of the proposed Project is estimated to be approximately \$2,627,121.11. Additionally, as of April 13, 2020, SCE’s general service rate schedule for is \$0.09 per kWh of electricity. As shown on Table 6-5 of the Energy Analysis, the total electricity usage from on-site Project construction related activities are estimated to be approximately 29,190,235 kWh. (Urban Crossroads, 2020a, p. 41)



Construction Equipment Fuel Estimates – Alternative Land Use Plan

Fuel consumed by construction equipment would be the primary energy resource expended over the course of Project construction. Project construction activity timeline estimates, construction equipment schedules, equipment power ratings, load factors, and associated fuel consumption estimates are presented in Table 6-6 of the Project's Energy Analysis (*Technical Appendix E*). The number of usage hours per day are based on CalEEMod defaults. The aggregate fuel consumption rate for all equipment is estimated at 18.5 hp-hr-gal., obtained from California Air Resources Board (CARB) 2018 Emissions Factors Tables and cited fuel consumption rate factors presented in Table D-24 of the Moyer guidelines. For the purposes of analysis, the calculations are based on all construction equipment being diesel-powered which is standard practice consistent with industry standards. Diesel fuel would be supplied by existing commercial fuel providers serving the City and region. As presented in Table 6-6 of the Project's Energy Analysis, Project construction activities would consume an estimated 1,099,608 gallons of diesel fuel. Project construction would represent a "single-event" diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose. (Urban Crossroads, 2020a, p. 43)

Construction Worker Fuel Estimates – Alternative Land Use Plan

It is assumed that all construction worker trips would be from light duty autos (LDA) along area roadways. With respect to estimated VMT, the construction worker trips would generate an estimated 6,312,165 VMT. Data regarding Project related construction worker trips were based on CalEEMod 2016.3.2 model defaults utilized within the Project's AQA (*EIR Technical Appendix B*). Output from the model runs for construction activity are provided in Appendix 6.1 to the Project's Energy Analysis (*Technical Appendix E*). (Urban Crossroads, 2020a, p. 45)

As previously stated, vehicle fuel efficiencies for LDAs were estimated using information generated within the 2017 version of the EMFAC developed by the CARB. EMFAC2017 was run for the LDA vehicle class within the California sub-area for a 2021 calendar year. While construction would occur in multiple years, vehicles are understood to be less efficient overall in earlier years. As such, calculating fuel use based on 2021 fuel efficiencies presents a more conservative approach than calculating by year. Data from EMFAC2017 is shown in Appendix 5.2 to the Project's Energy Analysis (*Technical Appendix E*). (Urban Crossroads, 2020a, p. 45)

As generated by EMFAC2017, an aggregated fuel economy of LDAs ranging from model year 1974 to model year 2021 are estimated to have a fuel efficiency of 31.83 mpg. Table 5-7 of the Project's Energy Analysis (*Technical Appendix E*) provides an estimated annual fuel consumption resulting from the Project generated by LDAs related to construction worker trips. Based on Table 6-7 of the Energy Analysis, it is estimated that 198,302 gallons of fuel would be consumed related to construction worker trips during full construction of the proposed Project. Project construction worker trips would represent a "single-event" gasoline fuel demand and would not require on-going or permanent commitment of fuel resources for this purpose. (Urban Crossroads, 2020a, p. 45)



Construction Vendor/Hauling Fuel Estimates – Alternative Land Use Plan

With respect to estimated VMT, construction vendor trips would generate an estimated 1,809,139 VMT along area roadways. It is assumed that 50% of all vendor trips are from Medium-Heavy-Duty-Trucks (MHDT) and 50% are from Heavy-Heavy-Duty Trucks (HHDT). These assumptions are consistent with the 2016.3.2 CalEEMod defaults. Vehicle fuel efficiencies for MHDTs and HHDTs were estimated using information generated within EMFAC2017. For purposes of this analysis, EMFAC2017 was run for the MHDT and HHDT vehicle class within the California sub-area for a 2021 calendar year. Estimating fuel consumption by using the fuel efficiency of the first year of construction presents the most conservative approach for use in the Project analysis. Data from EMFAC2017 is shown in Appendix 5.2 to the Project’s Energy Analysis (*Technical Appendix E*). (Urban Crossroads, 2020a, pp. 45-46)

As generated by EMFAC2017, an aggregated fuel economy of MHDTs ranging from model year 1974 to model year 2021 are estimated to have a fuel efficiency of 10.05 mpg. Additionally, HHDTs are estimated to have a fuel efficiency of 6.89 mpg. Based on Table 6-8 of the Project’s Energy Analysis (*Technical Appendix E*), it is estimated that 89,997 gallons of fuel would be consumed related to construction vendor trips (MHDTs) and 131,361 gallons of fuel would be consumed related to construction vendor trips (HHDTs) during full construction of the proposed Project. Project construction vendor trips would represent a “single-event” diesel fuel demands and would not require on-going or permanent commitment of diesel fuel resources for this purpose. (Urban Crossroads, 2020a, p. 46)

Construction Energy Efficiency/Conservation Measures – Alternative Land Use Plan

The equipment used for Project construction for the Alternative Land Use Plan would conform to CARB regulations and California emissions standards. Additionally, consistent with the Project’s Air Quality Assessment (EIR *Technical Appendix B*) and the analysis presented in EIR Subsection 4.3, *Air Quality*, the Project would implement Mitigation Measures MM 4.3-1 and 4.3-2, which would serve to generally reduce energy demand associated with the Project. Specifically, Mitigation Measures MM 4.3-2 requires that the Project implement several measures under the County of Riverside Board of Supervisors Policy F-3 (Good Neighbor Policy for Logistics and Warehouse/Distribution Uses). These measures would reduce fuel consumption during construction. It should also be noted that there are no unusual Project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities, or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the Project’s Alternative Land Use Plan would therefore not result in inefficient wasteful, or unnecessary consumption of fuel. (Urban Crossroads, 2020a, pp. 46-47)

The Project would utilize construction contractors which practice compliance with applicable CARB regulations regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants (TAC). Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-



related energy and the minimization or elimination of wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption. (Urban Crossroads, 2020a, p. 47)

Additionally, certain incidental construction-source energy efficiencies would likely accrue through implementation of California regulations and best available control measures (BACM). More specifically, California Code of Regulations Title 13, Motor Vehicles, section 2449(d)(3), *Idling*, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. To this end, “grading plans shall reference the requirement that a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling.” In this manner, construction equipment operators are informed that engines are to be turned off at or prior to five minutes of idling. Enforcement of idling limitations is realized through periodic site inspections conducted by County building officials, and/or in response to citizen complaints. (Urban Crossroads, 2020a, p. 47)

Indirectly, construction energy efficiencies and energy conservation would be achieved for the proposed development through energy efficiencies realized from bulk purchase, transport, and use of construction materials. (Urban Crossroads, 2020a, p. 47)

A full analysis related to the energy needed to form construction materials is not included in this analysis due to a lack of detailed Project-specific information on construction materials. At this time, an analysis of the energy needed to create Project-related construction materials would be extremely speculative and thus has not been prepared. (Urban Crossroads, 2020a, p. 47)

In general, the construction processes promote conservation and efficient use of energy by reducing raw materials demands, with related reduction in energy demands associated with raw materials extraction, transportation, processing, and refinement. Use of materials in bulk reduces energy demands associated with preparation and transport of construction materials as well as the transport and disposal of construction waste and solid waste in general, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations. (Urban Crossroads, 2020a, pp. 47-48)

2. *Operational Energy Demands – Alternative Land Use Plan*

Energy consumption in support of or related to the proposed Project’s Alternative Land Use Plan operations would include transportation energy demands (energy consumed by employee and patron vehicles accessing the Project site) and facilities energy demands (energy consumed by building operations and site maintenance activities) (Urban Crossroads, 2020a, p. 48).

□ Transportation Energy Demands – Alternative Land Use Plan

Energy that would be consumed by the Proposed Project’s Alternative Land Use Plan-generated traffic is a function of total VMT and estimated vehicle fuel economies of vehicles accessing the Project site. The



following vehicle subcategories included in this analysis are consistent with CalEEMod and EMFAC for a 2030 Opening Year. (Urban Crossroads, 2020a, p. 48)

As summarized on Table 4.6-8, *Total Project-Generated Traffic Annual Fuel Consumption (All Vehicles) – Alternative Land Use Plan*, with respect to estimated VMT, and based on the trip frequency and trip length methodologies cited in the Project’s AQA (EIR *Technical Appendix B*), the Project would generate an estimated 142,547,830 annual VMT along area roadways for all vehicles with full build-out of the Project (Urban Crossroads, 2020a, p. 49) Based on Table 4.6-8, it is estimated that 10,496,067 gallons of fuel would be consumed from Project-generated LDA trips. (Urban Crossroads, 2020a, p. 48)

Table 4.6-8 Total Project-Generated Traffic Annual Fuel Consumption (All Vehicles) – Alternative Land Use Plan

Vehicle Type	Annual VMT	Estimated Annual Fuel Consumption (gallons)
LDA	36,542,256	891,618
LDT1	3,741,072	109,781
LDT2	11,690,850	346,527
MDV	467,634	17,291
LHDT1	4,409,120	271,707
LHDT2	1,202,487	71,277
MHDT	13,406,507	1,123,478
HHDT	62,336,468	7,405,194
OBUS	267,219	34,388
MCY	8,484,217	224,807
TOTAL (ALL VEHICLES)	142,547,830	10,496,067

(Urban Crossroads, 2020a, Table 6-10)

□ Facility Energy Demands – Alternative Land Use Plan

Project building operations and Project site maintenance activities would result in the consumption of natural gas and electricity. Natural gas would be supplied to the Project by SoCalGas; electricity would be supplied to the Project by SCE. Annual natural gas and electricity demands of the Project are summarized in Table 4.6-9, *Project Annual Operational Energy Demand Summary – Alternative Land Use Plan*. (Urban Crossroads, 2020a, pp. 48-49)



Table 4.6-9 Project Annual Operational Energy Demand Summary – Alternative Land Use Plan

Natural Gas Demand	kBTU/year
Industrial Park	1,949,860
Manufacturing	27,541,100
Refrigerated Warehouse-No Rail	87,751,800
Unrefrigerated Warehouse-No Rail	6,022,750
Unrefrigerated Warehouse-No Rail	760,479.00
Free-Standing Discount Superstore	222,000.00
Strip Mall	58,918.80
TOTAL PROJECT NATURAL GAS DEMAND	124,306,908
Electricity Demand	kWh/year
Industrial Park	4,831,950
Manufacturing	8,044,480
Refrigerated Warehouse-No Rail	67,190,500
Unrefrigerated Warehouse-No Rail	6,672,490
Unrefrigerated Warehouse-No Rail	842,520
Free-Standing Discount Superstore	1,125,600
Strip Mall	298,734
TOTAL PROJECT ELECTRICITY DEMAND	88,707,540

(Urban Crossroads, 2020a, Table 6-21)

□ Operational Energy Efficiency/Conservation Measures – Alternative Land Use Plan

Energy efficiency/energy conservation attributes of the Project would be complemented by increasingly stringent State and federal regulatory actions addressing vehicle fuel economies and vehicle emissions standards, and enhanced building/utilities energy efficiencies mandated under California building codes (e.g., Title 24, California Green Building Standards Code). Additionally, consistent with the Project’s Air Quality Assessment (EIR *Technical Appendix B*) and the analysis presented in EIR Subsection 4.3, *Air Quality*, the Project would implement Mitigation Measures MM 4.3-3 through 4.3-7, which would serve to generally reduce energy demand associated with the Project. It also should be noted that the Project would not result in a substantial increase in demand or transmission service, resulting in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure because it would be served by the existing electric utility lines in the Project vicinity. (Urban Crossroads, 2020a, p. 49)



Enhanced Vehicle Fuel Efficiencies

Project annual fuel consumption estimates presented previously in Table 4.6-8 represent likely potential maximums that would occur for the Project. Under subsequent future conditions, average fuel economies of vehicles accessing the Project site can be expected to improve as older, less fuel-efficient vehicles are removed from circulation, and in response to fuel economy and emissions standards imposed on newer vehicles entering the circulation system. The amount of fuel consumed by the Project can be expected to improve as older, less fuel-efficient vehicles are removed from circulation, and in response to fuel economy and emissions standards imposed on newer vehicles entering the circulation system. (Urban Crossroads, 2020a, p. 50)

3. Conclusion – Alternative Land Use Plan

As supported by the preceding analyses, Project construction and operations would not result in the inefficient, wasteful, or unnecessary consumption of energy. Further, the energy demands of the Project can be accommodated within the context of available resources and energy delivery systems. The Project would therefore not cause or result in the need for additional energy producing or transmission facilities. Future building permit applications associated with the Project would be required to comply with the 2019 Title 24 standards. The CEC anticipates that non-residential buildings will use approximately 30% less energy due to lighting upgrades compared to the prior code. As such, energy consumed by the Project's operation is calculated to be comparable to, or less than, energy consumed by other older commercial, business park, and light industrial uses of similar scale and intensity that are constructed and operating in California. Additionally, the Project's proximity to the Interstate freeway system would reduce VMT and therefore decrease reliance on fossil fuels. On this basis, the Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservation goals within the State of California. Therefore, the Project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources, and impacts would be less than significant. (Urban Crossroads, 2020a, p. 52)

<p><i>Threshold b.: Would the Project conflict with or obstruct a State or Local plan for renewable energy or energy efficiency?</i></p>

A summary of the Project's consistency with applicable regulations and requirements is provided below.

Consistency with Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

Transportation and access to the Project site is provided primarily by the local and regional roadway systems. The Project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may be realized pursuant to the ISTEA because Southern California Association of Governments (SCAG) is not planning for intermodal facilities on or through the Project site.

Consistency with 2019 Integrative Energy Policy Report (IEPR)

Electricity would be provided to the Project site by SCE, and SoCalGas would provide natural gas. SCE's Clean Power and Electrification Pathway (CPEP) white paper and the SoCalGas 2018 Corporate Sustainability Report build on existing state programs and policies. As such, under both land use plans, the Project is



consistent with, and would not otherwise interfere with, nor obstruct implementation the goals presented in the 2019 IEPR. Additionally, for both land use plans, the Project would comply with the applicable Title 24 standards which would ensure that the Project energy demands would not be inefficient, wasteful, or otherwise unnecessary. As such, development of the proposed Project would support the goals presented in the 2019 IEPR. (Urban Crossroads, 2020a, p. 52)

Consistency with Energy Action Plan

The Project site is located along major transportation corridors with proximate access to the interstate freeway system. The site selected for the Project facilitates access, acts to reduce VMT, and takes advantage of existing infrastructure systems. The Project therefore supports urban design and planning processes identified under the Energy Action Plan, is consistent with, and would not otherwise interfere with, nor obstruct implementation of the State of California Energy Plan. (Urban Crossroads, 2020a, p. 52)

Consistency with California Code Title 24, Part 6, Energy Efficiency Standards

The 2019 version of Title 24 was adopted by the CEC and became effective on January 1, 2020, and the Project would be subject to all applicable Title 24 requirements. Further, the Project would not cause or result in the need for additional energy producing facilities or energy delivery systems and would reduce mobile based fossil fuel reliance. As such, the Project would not conflict with or obstruct implementation of the 2019 Title 24 standards. (Urban Crossroads, 2020a, p. 52)

Consistency with Renewable Portfolio Standard (RPS)

California's Renewable Portfolio Standard is not applicable to the Project as it is a statewide measure that establishes a renewable energy mix. No feature of the Project would interfere with implementation of the requirements under RPS. (Urban Crossroads, 2020a, p. 53)

Consistency with AB 1493

AB 1493 is not applicable to the Project as it is a statewide measure establishing vehicle emissions standards. No feature of the Project would interfere with implementation of the requirements under AB 1493. (Urban Crossroads, 2020a, p. 53)

Consistency with SB 350

This measure is not directly applicable to development projects, but the proposed Project would use energy from Southern California Edison, which has committed to diversify its portfolio of energy sources by increasing energy from wind and solar sources. No feature of the Project would interfere with implementation of SB 350. (Urban Crossroads, 2020a, p. 53)

Consistency with the County of Riverside Climate Action Plan (CAP)

The Project would be required to comply with the 2019 Title 24 standards. Title 24 standards are expected to reduce the energy use of non-residential buildings by 30% and residential buildings by up to 53% compared



to the previous 2016 Title 24 standards. The Project Applicant would be required to install solar panels on future buildings to achieve more than 20% of energy from on-site renewable sources as required by CAP measure R2-CE1, *Clean Energy*. The Project Applicant also would be required to incorporate environmentally sound landscaping into the project, as required by CAP measure R2-L1, *Tree Planting for Shading and Energy Saving*. Additionally, and as documented in EIR Subsection 4.8, *Greenhouse Gas Emissions*, and as summarized previously in Table 4.6-3 and described above in subsection 4.6.4, the Project would be required to achieve a minimum of 100 points pursuant to the CAP Screening Tables (CAP Appendix D). As such, no feature of the Project would conflict with the County of Riverside Climate Action Plan. (Urban Crossroads, 2020a, pp. 53-54)

Conclusion

As indicated in the preceding analysis, the Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Thus, impacts would be less than significant.

4.6.5 CUMULATIVE IMPACT ANALYSIS

As indicated under the analysis of Threshold a., there are no components of the proposed Project that would result in the wasteful, inefficient, or unnecessary consumption of energy resources. Although it is possible other cumulative developments could result in the wasteful, inefficient, or unnecessary consumption of energy resources, the Project's projected energy demand during operations would be less-than-cumulatively considerable with mandatory compliance with applicable regulations.

As indicated under the analysis of Threshold b., the Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. As such, the Project has no potential to result in cumulatively-considerable impacts due to a conflict with or obstruction of such plans.

4.6.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a.: Less-than-Significant Impact. Project construction and operations under both the Primary Land Use Plan and Alternative Land Use Plan would not result in the inefficient, wasteful, or unnecessary consumption of energy. Further, the energy demands of the Project can be accommodated within the context of available resources and energy delivery systems. The Project would therefore not cause or result in the need for additional energy producing or transmission facilities. The Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservations goals within the State of California. As such, Project impacts due to wasteful, inefficient, or unnecessary consumption of energy resources would be less than significant requiring no mitigation.

Threshold b.: Less-than-Significant Impact. Energy consumed by the Project's operation is calculated to be comparable to, or less than, energy consumed by other commercial, business park, and light industrial projects of similar scale and intensity that are operating in California, as the Project would be subject to current regulatory requirements, such as the 2019 version of Title 24, which was not in effect when most existing developments were constructed. Specifically, the CEC anticipates that non-residential buildings will use



approximately 30% less energy due to lighting upgrades compared to the 2016 version of the Title 24 requirements. Moreover, the Project would be subject to compliance with the mitigation measures presented in EIR Subsection 4.3, *Air Quality*, which would further reduce the Project's energy demand. Based on the analysis presented herein, the Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency, and impacts would be less than significant.

4.6.7 COUNTY REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

Applicable County Regulations and Design Requirements

The following are applicable regulations and design requirements within the County of Riverside. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable City regulations and design requirements.

- Pavley Fuel Efficiency Standards (AB1493). Establishes fuel efficiency ratings for new vehicles.
- Renewable Portfolio Standards (SB 100). Increases California's RPS requirement to 50% renewable resources target by December 31, 2026, and to achieve a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045; and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural Resources Agency (CNRA), California Environmental Protection Agency (CalEPA), the Department of Food and Agriculture (CDFA), and CARB to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal.
- CCR Title 13, Motor Vehicles, Section 2449(d)(3), *Idling*. Grading plans shall reference the requirement that a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling.

Mitigation

Project impacts due to energy consumption would be less than significant; therefore, mitigation measures are not required.



4.7 GEOLOGY AND SOILS

This Subsection assesses the existing surface and subsurface geologic conditions and features of the Project site and determines the potential for impacts associated with these features. The analysis in this Subsection is based, in part, on information from the report titled, “Updated Geotechnical Evaluation, Proposed ‘Stoneridge’ Industrial and Mixed-Use Development,” prepared by LGC Geotechnical, Inc. (herein, “LGC”), dated August 18, 2021, and included as EIR *Technical Appendix F* (LGC, 2021).

4.7.1 EXISTING CONDITIONS

A. Regional Geology

The Project site is regionally located in the Peninsular Ranges geomorphic province which extends from the Los Angeles Basin south to Baja California. The province is characterized by numerous southwest trending mountain ranges and valleys that are geologically controlled by a series of paralleling major active faults. More specifically, the Project site is located in the northern portion of the Perris block, which is bordered to the northeast by the San Jacinto Fault Zone and to the southwest by the Chino/Elsinore Fault Zone. The Peninsular Ranges batholith is composed of Cretaceous aged plutonic rocks mainly of tonalitic composition. Near the Project site, the plutonic rocks are associated with the Lakeview Mountain Pluton which primarily consists of biotite-hornblende tonalite characterized by ubiquitous schlieren and the lack of potassium feldspar. The Project site is situated on the western margin of an alluvial flood plain associated with the San Jacinto River. Most of the alluvial areas west of the San Jacinto River consists of Pleistocene age fluvial deposits similar to those observed at the Project site. These alluvial materials generally form the large area flanking the Perris Valley and the west side of the San Jacinto River Valley. (LGC, 2021, p. 6)

B. Local Geology

Based on the Geologic Map of the 7.5-foot Perris Quadrangle, the Project site is underlain by Very Old Fan Deposits of the late Pleistocene. In addition, Lakeview Mountain plutonic bedrock is present along and adjacent to the western boundary of the Project site. The presence of some minor amounts of artificial fill (not mapped) associated with existing “dirt” roadway construction and past agricultural uses likely occur on site. The approximate lateral limits of the geologic units are depicted on the Geotechnical Maps included in the Project’s Geotechnical Evaluation (refer to Sheets 1 through 3 of EIR *Technical Appendix F*). Provided below is a description of the geologic units mapped on site. (LGC, 2021, p. 6)

- **Quaternary Very Old Fan Deposits (Map Symbol - Qvof):** Quaternary Very Old Fan deposits generally flank steep bedrock slopes and consist of reddish brown, well indurated sand deposits. During the subsurface field evaluation conducted by LGC, these deposits were observed to generally consist of brown, gray-brown, and reddish-brown sand, silty sand and clayey sand. The upper approximately 1-foot of the alluvial material was observed to be desiccated and contained rootlets. (LGC, 2021, p. 6)



- **Cretaceous Lakeview Mountain Tonalite (Map Symbol – Klmt):** The Lakeview Mountain Tonalite is described as a medium to coarse grained biotite-hornblende tonalite with an absence of potassium (alkali) feldspar. During the subsurface field evaluation conducted by LGC, these materials were observed to generally be gray to brown, medium to coarse grained rock with abundant hornblende and biotite. The bedrock ranged from moderately to slightly weathered. (LGC, 2021, p. 6)

Both the Quaternary Old Fan deposits and the Cretaceous Lake View Mountain Tonalite were observed to be massive and lacking any significant geologic structure during the subsurface exploration conducted by LGC. (LGC, 2021, p. 7)

C. Site Topography

As previously shown on EIR Figure 2-9, the topography of the Project site is largely characterized by flat lands throughout most of the site, with several large hillforms occurring along the western Project boundary. In general, the topography of the Project site decreases from west to east, with drainage under existing conditions being conveyed to the San Jacinto River. Elevations on site range from 1,425 feet above mean sea level (amsl) in the southeastern corner of the Project site (i.e., within the San Jacinto River) to 1,695 feet amsl along the western Project boundary. Overall topographic relief is approximately 270 feet. (Google Earth, 2018)

D. Groundwater

Groundwater was not encountered during the subsurface field evaluation conducted by LGC to the maximum explored depth of approximately 50 feet below existing ground. Based on nearby available well data, recent high groundwater for Well 337981N1171695W001 south of the Project site was measured at an elevation of approximately 1,357 feet above mean sea level (amsl) in March of 2013. This corresponds to depth of approximately 57 feet below existing grades in the southeastern (lowest) portion of the Project site. (LGC, 2021, p. 7)

Seasonal fluctuations of groundwater elevations should be expected over time. In general, groundwater levels fluctuate with the seasons and local zones of perched groundwater may be present within the near-surface deposits due to local seepage or during rainy seasons. Local perched groundwater conditions or surface seepage may develop once site development is completed and landscape irrigation commences. (LGC, 2021, p. 7)

E. Landslides, Debris Flows, and Rock Falls

A review of readily available geologic resources conducted by LGC and field observations of the surficial conditions by LGC do not indicate the presence of landslides on the Project site or in the immediate vicinity. In general, the Project site consists of relatively flat-lying, very old fan deposits which are not considered susceptible to landslides, seismically-induced landslides, or other mass wasting processes (debris flows, rockfalls, etc.). (LGC, 2021, p. 7)



In general, the cause of debris flows is a combination of heavy rainfall, loose soil, and steep slope conditions. Based on documents reviewed by LGC, debris flows have the potential to occur on slopes that have a gradient steeper than approximately 18 degrees which is approximately equivalent to a 3:1 (horizontal to vertical) slope ratio. Debris flows are most common and have higher flow velocity on slopes with gradients ranging from approximately 2:1 to 1:1. Generally, the steeper the slope, the more prone it is to developing a fast moving, violent debris flow. In addition, debris flows generally begin at drainage heads where there is a concentration of water during heavy rainfall. (LGC, 2021, p. 7)

A rockfall is a fragment of rock, or block of rocks, that detaches from a vertical to sub-vertical cliff or bluff in a downward motion. Boulder outcrops are present within the Project site along the western boundary. The natural slopes along the western boundary, where outcrops are observed, generally have a slope gradient of 3:1 (horizontal to vertical) or shallower. (LGC, 2021, pp. 7-8)

F. Seiches

A seiche is an underwater wave that oscillates through a body of water which may be triggered by earthquakes or landslides. In general, seiches are small (on the order of a few inches) and are present in larger lakes as a result of the depth, temperature, and contours of the body of water. Due to the lack of an onsite body of water the potential for the Project site to be impacted by seiches is considered low. (LGC, 2021, p. 8)

G. Subsidence

Per County GIS, the proposed Project is located within an area considered to be potentially susceptible to subsidence (RCIT, 2020). A specific ground subsidence evaluation was previously performed by Western Technologies, Inc. (1990) due to the observation of well-defined fissures within and nearby the Project site. The observed fissure was located in the eastern central portion of the Project site and trended approximately north-south, near parallel with the San Jacinto River. Previous subsurface evaluations found that the observed fissure extended to a maximum depth of approximately 17 feet below the existing ground surface. Aerial photograph review conducted by LGC indicated that the fissure “daylighted” to the surface relatively rapidly between 1974 to 1976 and has been followed by a slower rate of modification since that time. In addition, it was concluded that the observed fissuring is a result of localized subsidence from the horizontal shrinkage of fine-grained clayey floodplain sediments induced by historic groundwater withdrawal. (LGC, 2021, p. 8)

H. Faulting and Seismic Hazards

The Project site is not located within a State of California Earthquake Fault Zone (i.e., Alquist- Priolo Earthquake Fault Act Zone) and no active faults are known to cross the site. A fault is considered “Holocene-active” if evidence of surface rupture in Holocene time (the last approximately 11,000 years) is present. The possibility of damage due to ground rupture is considered low since no active faults are known to cross the Project site. The closest known active fault is the Casa Loma Fault of the San Jacinto Fault Zone located approximately 5 miles northeast of the Project site. (LGC, 2021, p. 11)



Secondary effects of seismic shaking resulting from large earthquakes on the major faults in the Southern California region, which may affect the Project site, include ground lurching and shallow ground rupture, soil liquefaction, and dynamic settlement. These secondary effects of seismic shaking are a possibility throughout the Southern California region and are dependent on the distance between the site and causative fault, and the onsite geology. A discussion of these secondary effects is provided in the following subsections. (LGC, 2021, p. 11)

1. Liquefaction and Dynamic Settlement

Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similarly to a fluid when subject to high-intensity ground shaking. Liquefaction occurs when three general conditions coexist: 1) shallow groundwater; 2) low density non-cohesive (granular) soils; and 3) high-intensity ground motion. Studies indicate that loose, saturated, near surface cohesionless soils exhibit the highest liquefaction potential, while dry, dense, cohesionless soils and cohesive soils exhibit low to negligible liquefaction potential. In general, cohesive soils are not considered susceptible to liquefaction, depending on their plasticity and moisture content. Effects of liquefaction on level ground include settlement, sand boils, and bearing capacity failures below structures. Dynamic settlement of dry sands can occur as the sand particles tend to settle and densify as a result of a seismic event. (LGC, 2021, p. 11)

The Project site is located within a zone with a low to moderate potential for liquefaction according to maps prepared by the County of Riverside. Site soils are not generally susceptible to liquefaction due to a lack of groundwater in the upper 50 feet and generally dense to very dense sandy soils. However, isolated layers may be susceptible to dry sand seismic settlement. (LGC, 2021, p. 7)

Based on the data obtained from the field evaluation conducted by LGC, seismic settlement due to dry sands is estimated to be on the order of about ½-inch or less. Differential settlement may be estimated as half of the total settlement over a horizontal span of 40 feet. Seismic settlement calculations were performed using the program CLiq (GeoLogismiki, 2017) and are provided in Appendix F to the Project's Geotechnical Evaluation (EIR *Technical Appendix F*). (LGC, 2021, pp. 7-8)

2. Lateral Spreading

Lateral spreading is a type of liquefaction-induced ground failure associated with the lateral displacement of surficial blocks of sediment resulting from liquefaction in a subsurface layer. Once liquefaction transforms the subsurface layer into a fluid mass, gravity plus the earthquake inertial forces may cause the mass to move downslope towards a free face (such as a river channel or an embankment). Lateral spreading may cause large horizontal displacements and such movement typically damages pipelines, utilities, bridges, and structures. Due to the low probability of liquefaction, the potential for lateral spreading at the Project site also is considered low. (LGC, 2021, p. 12)



I. Settlement and Collapse/Swell Potential

The underlying very old fan deposits encountered were found by LGC to be medium dense to very dense and are generally not considered susceptible to long-term consolidation settlement. Due to the primarily coarse-grained nature and apparent density of the soils on the Project site, static settlement should occur immediately during increasing grades. In addition to static settlement, recent and previous laboratory testing indicates the presence of potentially collapsible native alluvial soils within the upper approximately 10 feet. Four of the six samples tested for collapse/consolidation experienced hydro-collapse and the resulting two experienced soil swell or expansion. The collapse potential (or hydro-collapse) of the four samples ranged from approximately 0 to 0.9 percent, which is considered to be slightly susceptible to hydro-collapse. (LGC, 2021, p. 13)

J. Expansion Potential

Based on the results of laboratory testing, soils on the Project site are anticipated to have a “Very Low” to “Low” expansion potential. (LGC, 2021, p. 14)

K. Soil Types and Erosion Potential

EIR Table 2-1 (previously presented) provides a summary of the soils present on the Project site, and identifies the attendant rate of runoff and erosion susceptibility. As shown, approximately 7.9% of the Project site has a “Very Slow” rate of runoff, with no erosion susceptibility identified. Approximately 1.8% of the Project site has a slow rate of runoff and a slight susceptibility to erosion. Approximately 68.1% of the Project site has a slow to medium rate of runoff and a slight to moderate susceptibility to erosion. Approximately 18.2% of the Project site has a medium rate of runoff and a moderate erosion susceptibility, while approximately 3.3% of the Project site has a rapid rate of runoff and a high susceptibility to erosion. Approximately 0.8% of the Project site is not rated by the United States Department of Agriculture (USDA) for rate of runoff or erosion susceptibility. (USDA, 1971, pp. 23-24, 32, 38-40, 47, 54-55, 65, and 67-68; USDA, 2020)

4.7.2 APPLICABLE REGULATORY REQUIREMENTS

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

A. Federal Regulations

1. Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was substantially reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1972. Under the CWA, the Environmental Protection Agency (EPA) has implemented pollution control programs such as setting wastewater standards for industry, and also has set water quality standards for all contaminants in surface waters. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. EPA's National Pollutant Discharge Elimination System



(NPDES) permit program controls discharges. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. (EPA, 2020a)

B. State Regulations

1. Alquist-Priolo Earthquake Fault Zoning Act (A-P Act)

The Alquist-Priolo Earthquake Fault Zoning Act (A-P Act) was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The A-P Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The A-P Act only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards. (CA Legislative Info, n.d.)

The A-P Act requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of active faults and to issue appropriate maps. ["Earthquake Fault Zones" were called "Special Studies Zones" prior to January 1, 1994.] The maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling new or renewed construction. Local agencies must regulate most development projects within the zones. Projects include all land divisions and most structures for human occupancy. Single family wood-frame and steel-frame dwellings up to two stories not part of a development of four units or more are exempt. However, local agencies can be more restrictive than state law requires. (CA Legislative Info, n.d.)

Before a project can be permitted, cities and counties must require a geologic investigation to demonstrate that proposed buildings will not be constructed across active faults. An evaluation and written report of a specific site must be prepared by a licensed geologist. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (generally 50 feet). (CA Legislative Info, n.d.)

2. Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) of 1990 (Public Resources Code, Chapter 7.8, § 2690-2699.6) directs the Department of Conservation, California Geological Survey to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. The purpose of the SHMA is to minimize loss of life and property through the identification, evaluation, and mitigation of seismic hazards. (CDC, 2019b)

Staff geologists in the Seismic Hazard Zonation Program gather existing geological, geophysical, and geotechnical data from numerous sources to produce the Seismic Hazard Zone Maps. They integrate and interpret these data regionally in order to evaluate the severity of the seismic hazards and designate as Zones of Required Investigation (ZORI) those areas prone to liquefaction and earthquake-induced landslides. Cities and counties are then required to use the Seismic Hazard Zone Maps in their land use planning and building permit processes. (CDC, 2019b)



The SHMA requires site-specific geotechnical investigations be conducted within the Zones of Required Investigation to identify and evaluate seismic hazards and formulate mitigation measures prior to permitting most developments designed for human occupancy. (CDC, 2019b)

3. *Natural Hazards Disclosure Act*

The Natural Hazards Disclosure Act, effective June 1, 1998 (as amended June 9, 1998), requires that sellers of real property and their agents provide prospective buyers with a "Natural Hazard Disclosure Statement" when the property being sold lies within one or more state-mapped hazard areas, including a Seismic Hazard Zone. (CA Legislative Info, n.d.)

The law requires the State Geologist to establish regulatory zones (Zones of Required Investigation) and to issue appropriate maps (Seismic Hazard Zone maps). These maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling construction and development. Single-family frame dwellings up to two stories not part of a development of four or more units are exempt from the state requirements. However, local agencies can be more restrictive than state law requires. (CA Legislative Info, n.d.)

Before a development permit can be issued or a subdivision approved, cities and counties must require a site-specific investigation to determine whether a significant hazard exists at the site and, if so, recommend measures to reduce the risk to an acceptable level. The investigation must be performed by state-licensed engineering geologists and/or civil engineers. (CA Legislative Info, n.d.)

4. *Essential Services Buildings Seismic Safety Act*

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

5. *California Building Standards Code (Title 24)*

California Code of Regulations (CCR) Title 24 is reserved for state regulations that govern the design and construction of buildings, associated facilities, and equipment. These regulations are also known as building standards (reference California Health and Safety Code § 18909). Health and Safety Code (state law) § 18902 gives CCR Title 24 the name California Building Standards Code (CBSC). (CBSC, 2019, p. 1)

The CBSC in CCR Title 24 is published by the California Building Standards Commission and it applies to all building occupancies (see Health and Safety Code §§ 18908 and 18938) throughout the State of California.



Cities and counties are required by state law to enforce CCR Title 24 (reference Health and Safety Code §§ 17958, 17960, 18938(b), and 18948). Cities and counties may adopt ordinances making more restrictive requirements than provided by CCR Title 24, because of local climatic, geological, or topographical conditions. Such adoptions and a finding of need statement must be filed with the California Building Standards Commission (Reference Health and Safety Code §§ 17958.7 and 18941.5). (CBSC, 2019, p. 1)

6. Porter-Cologne Water Control Act

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

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

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

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



The Porter-Cologne Act also implements many provisions of the Clean Water Act, such as the NPDES permitting program. The Porter-Cologne Act also requires adoption of water quality control plans that contain the guiding policies of water pollution management in California. In addition, regional water quality control plans (basin plans) have been adopted by each of the Regional Water Boards and get updated as necessary and practical. These plans identify the existing and potential beneficial uses of waters of the State and establish water quality objectives to protect these uses. The basin plans also contain implementation, surveillance, and monitoring plans. (SWRCB, 2014) The Project site is located in the Santa Ana River Watershed, which is within the purview of Santa Ana Regional Water Quality Control Board (RWQCB). The RWQCB's Santa Ana Region Basin Plan ("Basin Plan"), as most recently updated in June 2019, is the governing water quality plan for the region (RWQCB, 2019).

C. Local Regulations

1. *Riverside County Ordinance No. 457 - Riverside County Building and Fire Codes*

Every three years, Riverside County's Building and Fire Codes are adapted from the California Building Standards Code (CCR Title 24), which includes both building and fire codes. These codes establish site-specific investigation requirements, construction standards and inspection procedures to ensure that development authorized by the County of Riverside does not pose a threat to the health, safety, or welfare of the public. The California Building Standards Code contains minimum baseline standards to guard against unsafe development. This ordinance also adopts, in some cases with modification to a stricter standard, a number of California State's Title 24 codes (fire, building, plumbing, electrical, etc.). The Riverside County Department of Building and Safety provides technical expertise in reviewing and enforcing these codes. (Riverside County, 2015, p. 4.12-25)

2. *Riverside County Ordinance No. 547 - Implementation of the Alquist-Priolo Earthquake Fault Zoning Act*

This ordinance establishes the policies and procedures used by the County of Riverside to implement the A-P Act. Among other things, it requires all projects proposed within an "earthquake fault zone," as shown on the maps prepared by the State Geologist to comply with the provisions of the A-P Act. It establishes regulations for construction, including for grading, slopes and compaction, erosion control, retaining wall design and earthquake fault zone setbacks. (Riverside County, 2015, p. 4.12-25)

3. *Riverside County Ordinance No. 484 - Control of Blowing Dust*

This ordinance establishes requirements for the control of blowing sand within county-designated "Agricultural Dust Control Areas." It defines activities that may contribute to wind erosion, identifies restrictions on activities within these areas, establishes penalties for violation of the ordinance and identifies procedures necessary to obtain a valid permit. (Riverside County, 2015, p. 4.12-25)



4.7.3 BASIS FOR DETERMINING SIGNIFICANCE

Section VII of Appendix G to the State CEQA Guidelines addresses typical adverse effects due to geological conditions, and includes the following threshold questions to evaluate the Project's impacts resulting from geologic or soil conditions (OPR, 2018a):

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
 - Strong seismic ground shaking?
 - Seismic-related ground failure, including liquefaction?
 - Landslides?
- Result in substantial soil erosion or the loss of topsoil?
- 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?
- 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?
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, as modified based on the 2018 updates to Section VII of Appendix G to the State CEQA Guidelines (listed above), and indicate significant impacts would occur if the Project or any Project-related component would:

- a. *Be subject to 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;*
- b. *Be subject to seismic-related ground failure, including liquefaction;*
- c. *Be subject to strong seismic ground shaking;*



- d. *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, collapse, or rockfall hazards;*
- e. *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 ground subsidence;*
- f. *Be subject to geologic hazards, such as seiche, mudflow, or volcanic hazard;*
- g. *Change topography or ground surface relief features;*
- h. *Create cut or fill slopes greater than 2:1 or higher than 10 feet;*
- i. *Result in grading that affects or negates subsurface sewage disposal systems;*
- j. *Result in substantial soil erosion or the loss of topsoil;*
- k. *Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial direct or indirect risks to life or property;*
- l. *Have soils incapable of adequately supporting use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water;*
- m. *Be impacted by or result in an increase in wind erosion and blow sand, either on or off site.*

The significance thresholds set forth in Riverside County’s Environmental Assessment Checklist, as modified by the 2018 updates to the State CEQA Guidelines, were used to evaluate the significance of the proposed Project’s impacts on geology and soils. It should be noted that impacts to paleontological resources and unique geologic features are addressed separately in EIR Subsection 4.13, *Paleontological Resources*.

4.7.4 IMPACT ANALYSIS

Threshold a.: *Would the Project be subject to 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?*

Threshold c.: *Would the Project be subject to strong seismic ground shaking?*

The Project site is not located within a State of California Earthquake Fault Zone (i.e., Alquist- Priolo Earthquake Fault Act Zone) and no active faults are known to cross the site. A fault is considered “Holocene-active” if evidence of surface rupture in Holocene time (the last approximately 11,000 years) is present. The possibility of damage due to ground rupture is considered low since no active faults are known to cross the Project site. The closest known active fault is the Casa Loma Fault of the San Jacinto Fault Zone located approximately 5 miles northeast of the Project site. Impacts due to rupture of a known earthquake would therefore be less than significant. (LGC, 2021, p. 11)



The Project site is, however, located in a seismically active area of southern California and is expected to experience moderate to severe ground shaking during the lifetime of the Project. The risk is not considered substantially different than that of other similar properties in the southern California area. The Project would be required to construct all proposed structures in accordance with the California Building Standards Code (CBSC, Title 24) and the Riverside County Building Code. The CBSC and Riverside County Building Code have been designed to preclude significant adverse effects associated with strong seismic ground shaking.

Notwithstanding, the Project as evaluated herein is limited to changes in the land use designations and zoning classifications for the 582.6-acre Project site. Site-specific geotechnical evaluations would be required for future implementing developments within the Project site (i.e., tentative tract maps, plot plans, etc.). Grading plans would be required for future implementing developments, and proposed grading plans would be required to incorporate the recommendations of the future-required site-specific geotechnical evaluations. However, a significant impact due to strong seismic ground shaking could occur if future developments failed to incorporate the site-specific recommendations of the future-required geotechnical studies. This is evaluated as a potentially significant direct impact of the proposed Project for which mitigation would be required.

Threshold b.: Would the Project be subject to seismic-related ground failure, including liquefaction?

The Project site is located within a zone with a low to moderate potential for liquefaction according to maps prepared by the County of Riverside. Site soils are not generally susceptible to liquefaction due to a lack of groundwater in the upper 50 feet and generally dense to very dense sandy soils. However, isolated layers may be susceptible to dry sand seismic settlement. (LGC, 2021, p. 7) Site-specific geotechnical evaluations would be required for future implementing developments within the Project site (i.e., tentative tract maps, plot plans, etc.). Grading plans would be required for future implementing developments, and proposed grading plans would be required to incorporate the recommendations of the future-required site-specific geotechnical evaluations. However, a significant impact due to localized liquefaction hazards could occur if future developments failed to incorporate the site-specific recommendations of the future-required geotechnical studies. This is evaluated as a potentially significant direct impact of the proposed Project for which mitigation would be required.

Threshold d.: Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, collapse, or rockfall hazards?

Landslide Hazards

A review of readily available geologic resources conducted by LGC and field observations of the surficial conditions by LGC do not indicate the presence of landslides on the Project site or in the immediate vicinity. In general, the Project site consists of relatively flat-lying, very old fan deposits which are not considered susceptible to landslides, seismically-induced landslides, or other mass wasting processes (debris flows, rockfalls, etc.). (LGC, 2021, p. 7)



In general, the cause of debris flows is a combination of heavy rainfall, loose soil, and steep slope conditions. Based on documents reviewed by LGC, debris flows have the potential to occur on slopes that have a gradient steeper than approximately 18 degrees which is approximately equivalent to a 3:1 (horizontal to vertical) slope ratio. Debris flows are most common and have higher flow velocity on slopes with gradients ranging from approximately 2:1 to 1:1 (horizontal to vertical). Generally, the steeper the slope, the more prone it is to developing a fast moving, violent debris flow. In addition, debris flows generally begin at drainage heads where there is a concentration of water during heavy rainfall. Approximately 2:1 (horizontal to vertical) cut and fill slopes are proposed for the proposed Project. Cut and fill slopes would consist of hard Lakeview Tonalite Bedrock and dense compacted fill soils, respectfully. These slopes are considered surficially stable as long as they are designed and constructed with proper surface drainage and are properly maintained after construction. Therefore, LGC concludes that the potential for the development of a rapid debris flow event on a slope associated with or adjacent to the proposed development is considered very low. Nonetheless, impacts could occur if proposed slopes are not constructed in accordance with the site-specific recommendations of the future-required geotechnical studies. This is evaluated as a potentially significant direct impact of the proposed Project for which mitigation would be required. (LGC, 2021, p. 7)

Lateral Spreading

Lateral spreading is a type of liquefaction-induced ground failure associated with the lateral displacement of surficial blocks of sediment resulting from liquefaction in a subsurface layer. Once liquefaction transforms the subsurface layer into a fluid mass, gravity plus the earthquake inertial forces may cause the mass to move downslope towards a free face (such as a river channel or an embankment). Lateral spreading may cause large horizontal displacements and such movement typically damages pipelines, utilities, bridges, and structures. Due to the low probability of liquefaction to occur on site, the potential for lateral spreading is also considered low. Nonetheless, impacts could occur if proposed grading activities are not conducted in accordance with the site-specific recommendations of the future-required geotechnical studies. This is evaluated as a potentially significant direct impact of the proposed Project for which mitigation would be required. (LGC, 2021, p. 12)

Collapse Hazards

Static settlement of the site would be induced by subjecting the existing grades to design grades (adding fill) and by the proposed structural building loads. The underlying very old fan deposits encountered by LGC were found to be medium dense to very dense and are generally not considered susceptible to long-term consolidation settlement. Due to the primarily coarse-grained nature and apparent density of the site soils, static settlement should occur immediately during increasing grades; therefore, static settlement from increasing grades should not affect the proposed structural improvements. Notwithstanding, impacts due to collapse hazards could occur if proposed grading activities are not conducted in accordance with the site-specific recommendations of the future-required geotechnical studies. This is evaluated as a potentially significant direct impact of the proposed Project for which mitigation would be required. (LGC, 2021, p. 13)

In addition to static settlement, recent and previous laboratory testing indicates the presence of potentially collapsible native alluvial soils within the upper approximately 10 feet. Four of the six samples tested by LGC



for collapse/consolidation experienced hydro-collapse and the resulting two experienced soil swell or expansion. The collapse potential (or hydro-collapse) of the four samples ranged from approximately 0 to 0.9 percent, which is considered to be slightly susceptible to hydro-collapse. Impacts due to hydro-collapse hazards could occur if proposed grading activities are not conducted in accordance with the site-specific recommendations of the future-required geotechnical studies. This is evaluated as a potentially significant direct impact of the proposed Project for which mitigation would be required. (LGC, 2021, pp. 13-14)

Rockfall Hazards

A rockfall is a fragment of rock, or block of rocks, that detaches from a vertical to sub-vertical cliff or bluff in a downward motion. Boulder outcrops are present within the Project site along the western boundary. The natural slopes along the western boundary, where outcrops were observed by LGC, generally have a slope gradient of 3:1 (horizontal to vertical) or shallower. During grading as proposed by the Project, a majority of the western boundary would be cut in order to produce an approximately 2:1 (vertical to horizontal) slope exposing dense Lakeview Tonalite Bedrock. Due to the shallow slope gradients of the existing slopes and proposed manufactured slopes, the potential for rockfalls to impact the proposed Project is considered low. Notwithstanding, impacts due to rockfall hazards could occur if proposed grading activities are not conducted in accordance with the site-specific recommendations of the future-required geotechnical studies. This is evaluated as a potentially significant direct impact of the proposed Project for which mitigation would be required. (LGC, 2021, pp. 7-8)

Threshold e.: Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in ground subsidence?

Per Riverside County GIS, the Project site is located within an area considered to be potentially susceptible to subsidence. A specific ground subsidence evaluation was previously performed by Western Technologies, Inc. (1990) due to the observation of well-defined fissures within and nearby the Project site. Based on the report prepared by Western Technologies (1990), the observed fissure was located in the eastern central portion of the Project site and trended approximately north-south, near parallel with the San Jacinto River. Previous subsurface evaluations found that the observed fissure extended to a maximum depth of approximately 17 feet below the existing ground surface. Aerial photograph review indicated that the fissure “daylighted” to the surface relatively rapidly between 1974 to 1976 and has been followed by a slower rate of modification since that time. In addition, it was concluded that the observed fissuring is a result of localized subsidence from the horizontal shrinkage of fine-grained clayey floodplain sediments induced by historic groundwater withdrawal. In general, potential constraints on the proposed Project from the existing fissure may be mitigated utilizing specialized grading techniques, geotextile reinforcement, and requiring post-tension/stiffened building foundations within 25 feet of the existing fissure. (LGC, 2021, p. 8)

Based on Figure No. 1 from the subsidence evaluation report, at its closest the land uses proposed as part of the Project are located approximately 700 feet northwest of the above-described fissure. Therefore, the observed fissure would not significantly impact development of the Project site. However, there is a potential for additional well-defined fissures to be observed prior to or during grading operations. (LGC, 2021, p. 8)



Subsidence on a much larger regional scale is possible if groundwater resources are not managed properly. Mitigation against such a large-scale groundwater drawdown cannot be done by means of typical grading or construction methods within the limits of the proposed Project, but instead “requires regional cooperation among all agencies” and, therefore, is not a site-specific geotechnical consideration. Based on the review conducted by LGC, it appears that the majority of the areas located within the Lakeview Basin are composed of alluvial deposits that are considered potentially susceptible to subsidence (RCIT, 2020). Surveys performed across the Lakeview Basin since 1967 indicate that regional subsidence is most likely continuing at a very slow and decreasing rate (Western, 1990). Thus, based on current conditions, the potential impact of regional subsidence on the proposed development is considered very low. Notwithstanding, impacts due to subsidence hazards could occur if proposed grading activities are not conducted in accordance with the site-specific recommendations of the future-required geotechnical studies. This is evaluated as a potentially significant direct impact of the proposed Project for which mitigation would be required. (LGC, 2021, p. 9)

Threshold f.: Would the Project be subject to geologic hazards, such as seiche, mudflow, or volcanic hazard?

There are no volcanoes in the Project region; thus, no impacts due to volcanic hazards would occur.

A seiche is an underwater wave that oscillates through a body of water which may be triggered by earthquakes or landslides. In general, seiches are small (on the order of a few inches) and are present in larger lakes as a result of the depth, temperature, and contours of the body of water. Due to the lack of an onsite body of water or other bodies of water within close proximity to the site that have the potential to result in site inundation, the potential for the subject site to be impacted by seiches is considered low. As such, impacts due to seiches would be less than significant. (LGC, 2021, p. 8)

Although portions of the Project site and surrounding areas contain large hillforms, these hillforms largely contain very shallow bedrock and outcroppings. Due to the limited nature of soils on these on- and off-site hillforms, it is unlikely that the Project site would be subject to mudflow hazards. (LGC, 2021) Accordingly, impacts would be less than significant.

Threshold g.: Would the Project change topography or ground surface relief features?

Threshold h.: Would the Project create cut or fill slopes greater than 2:1 or higher than 10 feet?

The topography of the Project site is relatively flat throughout most of the site, with several large hillforms occurring on and off site along the western property boundary. The Conceptual Grading Plan included in proposed SP 239A1 and previously depicted on EIR Figure 3-10 generally identifies proposed grades that largely reflect the site’s existing topographic conditions. No grading is proposed along the hillform located within proposed Planning Area 9 of SP 239A1, and no grading of off-site hillsides is proposed. As such, it is anticipated that future development of the Project site would generally maintain the site’s existing topography, except as necessary for proper site drainage and/or soil remediation as part of Project construction. The Project



would not substantially change topography or ground surface relief features, and impacts would be less than significant.

Due to the relatively flat nature of the portions of the Project site proposed for development, the Project generally would not require cut or fill slopes greater than 2:1 or higher than 10 feet. However, there is a potential that portions of the site may require cut or fill slopes greater than 2:1 or higher than 10 feet. If such slopes are proposed, the slopes would be subject to evaluation as part of the geotechnical studies required for future implementing development on site (e.g., tentative tract maps, plot plans, etc.). Notwithstanding, a potentially significant impact due to slopes greater than 2:1 or higher than 10 feet would occur if future implementing projects were to fail to incorporate the recommendations of the future geotechnical evaluations. This is evaluated as a potentially significant impact for which mitigation would be required.

Threshold i.: Would the Project result in grading that affects or negates subsurface sewage disposal systems?

Threshold l.: Would the Project have soils incapable of adequately supporting use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Based on a site-specific investigation conducted by Hillman Consulting LLC (“Hillman”), there is no indication of a septic system existing on the Project site (Hillmann, 2019, p. 23). While the Project site was used for agricultural production in the past, there is no evidence that the site ever contained structures that could be associated with subsurface sewage disposal systems. No subsurface sewage disposal systems (septic systems) currently serve the site, and therefore no such systems would be affected or negated by Project grading. As such, no impact would occur.

SP 239A1 includes a Conceptual Sewer Plan (refer to EIR Figure 3-9) that would involve the construction of sewer lines, force mains, and sewer lift stations to convey wastewater generated by the Project to an existing EMWD 27-inch sewer main located within Pico Avenue, south of the Project site. Wastewater generated by the Project would be treated at the existing Perris Valley Regional Water Reclamation Facility (PVRWRF) to the south. The Project does not propose any septic tanks or alternative waste water disposal systems. As such, no impact associated with septic tanks or alternative waste water disposal systems would occur.

Threshold j.: Would the Project result in substantial soil erosion or the loss of topsoil?

Threshold m.: Would the Project be impacted by or result in an increase in wind erosion and blow sand, either on or off site?

Implementation of the Project has the potential to result in soil erosion. The analysis below summarizes the likelihood of the Project to result in substantial soil erosion during temporary construction activities and long-term operation.



Construction-Related Impacts

Proposed grading and construction activities at the Project site would expose underlying soils and disturb surficial soils on the respective properties. Exposed soils would be subject to erosion during rainfall events or high winds due to the removal of stabilizing vegetation and exposure of these erodible materials to wind and water.

Pursuant to the requirements of the State Water Resources Control Board, the Project Applicant is required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for construction activities, including proposed grading. The NPDES permit is required for all projects that include construction activities such as clearing, grading, and/or excavation that disturb at least one (1) acre of total land area. The County's Municipal Separate Storm Sewer System (MS4) NPDES Permit requires the Project Applicant to prepare and submit to the County for approval a Project-specific Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would identify a combination of erosion control and sediment control measure (i.e., Best Management Practices (BMPs)) to reduce or eliminate sediment discharge to surface water from storm water and non-stormwater source discharges during construction.

In addition, proposed construction activities would be required to comply with SCAQMD Rule 403, which would reduce the amount of particulate matter in the air and minimize the potential for wind erosion. Rule 403 requires that certain construction practices be following that limit dust and dirt from leaving the construction site. For example, no dust is allowed to be tracked out of the site by more than 25 feet. In addition, proposed construction activities would be required to comply with applicable County ordinances (i.e., Ordinance Nos. 457 and 460) to protect and enhance the water quality of the County, which requires the Project Applicant to prepare an erosion control plan to be used during the rainy season. With mandatory compliance to the requirements noted in the Project's SWPPP, as well as mandatory compliance to applicable regulatory requirements including but not limited to SCAQMD Rule 403, and Riverside County Ordinance Nos. 457 and 460, the potential for water and/or wind erosion impacts during Project construction would be reduced to less-than-significant levels.

Long-Term Operational Impacts

Following construction, wind and water erosion on the Project site would be minimized, as the disturbed areas would be landscaped or covered with impervious surfaces, and drainage would be controlled through a storm drain system. As discussed in detail in EIR Subsection 4.10, *Hydrology and Water Quality*, the Project is not anticipated to substantially increase the rate or amount of runoff leaving the site, as compared to existing conditions. Future implementing developments (e.g., tentative tract maps, plot plans, etc.) would be required to construct stormwater facilities (such as detention basins) to reduce on-site runoff flows to pre-development conditions. As discussed in Subsection 4.10 (Hydrology and Water Quality), construction of detention basins and water quality basins on-site would ensure that post-development rates and amounts of runoff are similar or slightly reduced as compared to those occurring under existing conditions. Accordingly, implementation of the Project would not increase the risk of siltation or erosion in stormwater discharged from the Project site. In addition, Water Quality Management Plans (WQMPs) would be required for future implementing



developments within the Project site, which would identify post-construction measures to ensure on-going protection against erosion. Compliance with the WQMP would be required as a condition of approval for future implementing developments, and long-term maintenance of on-site water quality features also would be required. Based on the foregoing, implementation of the Project would not significantly increase the risk of long-term wind or water erosion on- or off-site, and impacts would be less than significant.

Threshold k.: Would the Project be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property?

Based on the results of laboratory testing commissioned by LGC, site soils are anticipated to have a “Very Low” to “Low” expansion potential. However, LGC recommends that the final expansion potential of site soils should be determined at the completion of grading. Results of expansion testing at finish grades would need to be utilized to confirm final foundation design. (LGC, 2021, p. 14) Notwithstanding, impacts due to expansive soils could occur if proposed grading activities are not conducted in accordance with the site-specific recommendations of the future-required geotechnical studies. This is evaluated as a potentially significant direct impact of the proposed Project for which mitigation would be required.

4.7.5 CUMULATIVE IMPACT ANALYSIS

With exception of erosion hazards, potential geologic and soils effects are inherently restricted to the areas proposed for development and would not contribute to cumulative impacts associated with other existing, planned, or proposed development. That is, thresholds including fault rupture, seismic ground shaking, liquefaction, landslides, expansive soils, and other geologic hazards would involve effects to (and not from) the proposed development, and are specific to on-site conditions. Accordingly, addressing these potential hazards for the proposed development would involve using measures to conform to existing requirements, and/or site-specific design and construction efforts that have no relationship to, or impact on, off-site areas. Because of the site-specific nature of these potential hazards and the measures to address them, there would be no connection to similar potential issues or cumulative effects to or from other properties. Cumulatively-considerable impacts would be less than significant.

As discussed under Thresholds j. and m., during both near-term construction and long-term operation, measures would be incorporated into the Project’s design to ensure that significant erosion hazards do not occur. Other developments within the cumulative study area would be required to comply with similar requirements, such as the need to obtain an NPDES permit and mandatory compliance with the resulting SWPPPs. All projects in the cumulative study area also would be required to demonstrate that measures have been incorporated to ensure that development does not result in substantial increases in the amount or rate of runoff under long-term operating conditions, which could in turn increase soil erosion. Further, all projects in the cumulative study area also would be required to comply with Riverside County Ordinance Nos. 457 and 460, as well as SCAQMD Rule 403, which would preclude water- and wind-related erosion hazards during construction. Therefore, because the Project site would result in less-than-significant erosion impacts, and because other projects within the cumulative study area would be subject to similar requirements to control



erosion hazards during construction and long-term operation, cumulatively-considerable impacts associated with wind and water erosion hazards are evaluated as less than significant.

4.7.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Thresholds a. & c.: Significant Direct Impact. The Project site is not subject to fault hazards, as none occur on site. However, the Project as evaluated herein is limited to changes in the land use designations and zoning classifications for the 582.6-acre Project site. Site-specific geotechnical evaluations would be required for future implementing developments within the Project site (i.e., tentative tract maps, plot plans, etc.). Grading plans would be required for future implementing developments, and proposed grading plans would be required to incorporate the recommendations of the future-required site-specific geotechnical evaluations. However, a significant impact due to strong seismic ground shaking could occur if future developments failed to incorporate the site-specific recommendations of the future-required geotechnical studies.

Threshold b.: Significant Direct Impact. Site soils are not generally susceptible to liquefaction due to a lack of groundwater in the upper 50 feet and generally dense to very dense sandy soils. However, isolated layers may be susceptible to dry sand seismic settlement. (LGC, 2021, p. 7) A significant impact due to localized liquefaction hazards could occur if future developments failed to incorporate the site-specific recommendations of the future-required geotechnical studies.

Threshold d.: Significant Direct Impact. Impacts due to landslide hazards, lateral spreading, collapse hazards, and rockfall hazards could occur if proposed grading is not conducted in accordance with the site-specific recommendations of the future-required geotechnical studies.

Threshold e.: Significant Direct Impact. Impacts due to subsidence hazards could occur if proposed grading activities are not conducted in accordance with the site-specific recommendations of the future-required geotechnical studies.

Threshold f.: Less-than-Significant Impact. The Project site is not subject to volcanic hazards. Due to the lack of an onsite body of water or other bodies of water in the Project vicinity that could subject the site to inundation due to seiches, the potential for the subject site to be impacted by seiches is considered low, and impacts due to seiches would therefore be less than significant. Due to shallow bedrock and the limited nature of soils on the on- and off-site hillforms, it is unlikely that the Project site would be subject to mudflow hazards; thus, impacts due to mudflow hazards would be less than significant.

Thresholds g. and h.: Significant Direct Impact. The Project would not substantially change topography or ground surface relief features, and impacts would be less than significant. However, there is a potential that portions of the site may require cut or fill slopes greater than 2:1 or higher than 10 feet. If such slopes are proposed, the slopes would be subject to evaluation as part of the geotechnical studies required for future implementing development on site (e.g., tentative tract maps, plot plans, etc.). Notwithstanding, a potentially significant impact due to slopes greater than 2:1 or higher than 10 feet would occur if future implementing projects were to fail to incorporate the recommendations of the future geotechnical evaluations.



Thresholds i. and l: No Impact. There are no subsurface sewage disposal systems on site under existing conditions, and the Project does not propose any septic tanks or alternative waste water disposal systems. As such, no impact would occur.

Thresholds j. and m.: Less-than-Significant Impact. The Project would not result in substantial soil erosion or loss of topsoil. The Project Applicant would be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for construction activities and adhere to a Storm Water Pollution Prevention Plan (SWPPP) as well as SCAQMD Rule 403 and Riverside County Ordinance Nos. 457, and 460. With mandatory compliance to these regulatory requirements, the potential for water and wind erosion impacts during construction would be less than significant. Following development, 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 and drainage would be controlled through a storm drain system. Furthermore, the Project is required by law to implement a WQMP during operation, which would preclude substantial erosion impacts in the long-term.

Threshold k.: Significant Direct Impact. Impacts due to expansive soils could occur if proposed grading activities are not conducted in accordance with the site-specific recommendations of the future-required geotechnical studies.

4.7.7 COUNTY REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

Applicable County Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

- The Project is required to comply with the provisions of County Ordinance Nos. 457, 460, and 547. Ordinance No. 457 requires that all projects comply with California Building Codes and the International Building Codes. These codes establish site-specific investigation requirements, construction standards, and inspection procedures to ensure that development does not pose a threat to the health, safety, and welfare of the public, and includes requirements related to erosion. Ordinance No. 460 sets forth soil erosion control requirements and requires preparation and implementation of a wind erosion control plan. In addition, Ordinance No. 547 requires that cases where a proposed project falls within an earthquake fault zone as shown on the maps prepared by the State Geologist, this Ordinance requires compliance with all of the provisions of the Alquist-Priolo Act and the adopted policies and criteria of Ordinance No. 547.
- The Project is required to comply with the provisions of SCAQMD Rule 403, by addressing blowing dust from the Project's construction activities.



- The Project is required to comply with the provisions of the Project's National Pollution Discharge Elimination System (NPDES) permit, and the Project's Storm Water Pollution Prevention Plan (SWPPP). Compliance with the NPDES permit and the SWPPP would identify and implement an effective combination of erosion control and sediment control measures (i.e., Best Management Practices) to reduce or eliminate discharge to surface water from stormwater and non-stormwater discharges.

Mitigation

MM 4.7-1 Prior to approval of any future implementing developments within the 582.6-acre Project site (e.g., tentative tract maps, plot plans, etc.), updated site-specific geotechnical studies shall be prepared to evaluate grading and site work proposed as part of the future implementing developments. All future implementing projects shall be conditioned to require that the site-specific recommendations of the implementing geotechnical evaluations shall be incorporated into future grading and building permit applications. Future grading or building permits shall not be issued by the County unless the investigations required by Riverside County Ordinance Nos. 457 and 547 have been completed and the site-specific recommendations have been incorporated into the design of grading and/or building permits, as appropriate.

4.7.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Thresholds a. & c.: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.7-1 would ensure that appropriate measures are incorporated into future grading and/or building permit applications to address seismic-related hazards in conformance with the CBSC and the Riverside County Building Code. With implementation of the required mitigation, impacts due to strong seismic ground shaking would be reduced to less-than-significant levels.

Threshold b.: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.7-1 would ensure that appropriate measures are incorporated into future grading and/or building permit applications to address any localized liquefaction hazards that may be identified in areas subject to grading and development. With implementation of the required mitigation, impacts due to liquefaction hazards would be reduced to less-than-significant levels.

Threshold d.: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.7-1 would ensure that appropriate measures are incorporated into future grading and/or building permit applications to address the potential for landslide hazards. With implementation of the required mitigation, impacts due to landslide hazards would be reduced to less-than-significant levels.

Threshold e.: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.7-1 would ensure that appropriate measures are incorporated into future grading and/or building permit applications to address potential subsidence hazards. With implementation of the required mitigation, impacts due to subsidence hazards would be reduced to less-than-significant levels.



Thresholds g. and h.: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.7-1 would ensure that appropriate measures are incorporated into future grading and/or building permit applications to ensure that any slopes higher than 10 feet or at a gradient steeper than 2:1 would be grossly stable. With implementation of the required mitigation, impacts associated with unstable slopes would be reduced to less-than-significant levels.

Threshold k.: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.7-1 would ensure that appropriate measures are incorporated into future grading and/or building permit applications to address expansive soils on site. With implementation of the required mitigation, impacts associated with expansive soils would be reduced to less-than-significant levels.



4.8 GREENHOUSE GAS EMISSIONS

The analysis in this Subsection is based in part on a greenhouse gas (GHG) analysis prepared as part of the Project's Air Quality Assessment (AQA), which is entitled, "Air Quality & Greenhouse Gas Assessment, Stoneridge Commerce Center Specific Plan," prepared by ECORP Consulting, Inc. (herein, "ECORP"), and dated December 2020 (ECORP, 2020b). The AQA is included as *Technical Appendix B* to this EIR. Refer to Section 7.0, *References*, for a complete list of reference sources.

4.8.1 EXISTING CONDITIONS

A. Greenhouse Gas Setting

Certain gases in the earth's atmosphere, classified as Greenhouse Gases (GHGs), play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead trapped, resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth. Without the greenhouse effect, the earth would not be able to support life as we know it. (ECORP, 2020b, p. 74)

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Fluorinated gases include chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride; however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of these GHGs in excess of natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change. It is "extremely likely" that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic factors together. (ECORP, 2020b, p. 74)

Table 4.8-1, *Description of Greenhouse Gases*, describes the primary GHGs attributed to global climate change, including their physical properties, primary sources, and contributions to the greenhouse effect. Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH₄ traps over 25 times more heat per molecule than CO₂, and N₂O absorbs 298 times more heat per molecule than CO₂. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO₂e), which weights each gas by its global warming potential. Expressing GHG emissions in CO₂e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO₂ were being emitted. (ECORP, 2020b, p. 74)



Table 4.8-1 Description of Greenhouse Gases

Greenhouse Gas	Description
CO ₂	Carbon dioxide is a colorless, odorless gas. CO ₂ is emitted in a number of ways, both naturally and through human activities. The largest source of CO ₂ emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO ₂ emissions. The atmospheric lifetime of CO ₂ is variable because it is so readily exchanged in the atmosphere. ¹
CH ₄	Methane is a colorless, odorless gas and is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. Methane is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (intestinal fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of CH ₄ to the atmosphere. Natural sources of CH ₄ include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. The atmospheric lifetime of CH ₄ is about 12 years. ²
N ₂ O	Nitrous oxide is a clear, colorless gas with a slightly sweet odor. Nitrous oxide is produced by both natural and human-related sources. Primary human-related sources of N ₂ O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. N ₂ O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N ₂ O is approximately 120 years. ³

(ECORP, 2020b, Table 3-1)

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, it is understood that more CO₂ is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms. Of the total annual human-caused CO₂ emissions, approximately 55 percent is sequestered through ocean and land uptakes every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO₂ emissions remains stored in the atmosphere. (ECORP, 2020b, pp. 74-75)

The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; it is sufficient to say the quantity is enormous, and no single project alone would measurably contribute to a noticeable incremental change in the global average temperature or to global, local, or microclimates. From the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative. (ECORP, 2020b, p. 75)

B. Sources of Greenhouse Gas Emissions

In 2019, CARB released the 2019 edition of the California GHG inventory covering calendar year 2017 emissions. In 2017, California emitted 424.1 million gross metric tons of CO₂e (MTCO₂e) including from imported electricity. Combustion of fossil fuel in the transportation sector was the single largest source of



California's GHG emissions in 2017, accounting for approximately 41 percent of total GHG emissions in the state. This sector was followed by the industrial sector (24 percent) and the electric power sector including both in- and out-of-state sources (15 percent). Emissions of CO₂ are by-products of fossil fuel combustion. CH₄, a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. N₂O is also largely attributable to agricultural practices and soil management. CO₂ sinks, or reservoirs, include vegetation and the ocean, which absorb CO₂ through sequestration and dissolution (CO₂ dissolving into the water), respectively, two of the most common processes for removing CO₂ from the atmosphere. (ECORP, 2020b, p. 75)

4.8.2 APPLICABLE REGULATORY REQUIREMENTS

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

A. International Regulations

1. Kyoto Protocol

The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change, which commits its Parties by setting internationally binding emission reduction targets. Recognizing that developed countries are principally responsible for the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities." (UNFCCC, n.d.)

The Kyoto Protocol was adopted in Kyoto, Japan, on December 11, 1997 and entered into force on February 16, 2005. The detailed rules for the implementation of the Protocol were adopted at Conference of the Parties (COP) 7 in Marrakesh, Morocco, in 2001, and are referred to as the "Marrakesh Accords." Its first commitment period started in 2008 and ended in 2012. (UNFCCC, n.d.)

On December 8, 2012, in Doha, Qatar, the "Doha Amendment to the Kyoto Protocol" was adopted. The amendment includes:

- New commitments for Annex I Parties to the Kyoto Protocol who agreed to take on commitments in a second commitment period from January 1, 2013 to December 31, 2020;
- A revised list of greenhouse gases (GHG) to be reported on by Parties in the second commitment period; and
- Amendments to several articles of the Kyoto Protocol which specifically referenced issues pertaining to the first commitment period and which needed to be updated for the second commitment period. (UNFCCC, n.d.)



On December 21, 2012, the amendment was circulated by the Secretary-General of the United Nations, acting in his capacity as Depositary, to all Parties to the Kyoto Protocol in accordance with Articles 20 and 21 of the Protocol. (UNFCCC, n.d.)

During the first commitment period, 37 industrialized countries and the European Community committed to reduce GHG emissions to an average of five percent against 1990 levels. During the second commitment period, Parties committed to reduce GHG emissions by at least 18 percent below 1990 levels in the eight-year period from 2013 to 2020; however, the composition of Parties in the second commitment period is different from the first. (UNFCCC, n.d.)

2. The Paris Agreement

The Paris Agreement builds upon the Convention and – for the first time – brings all nations into a common cause to undertake ambitious efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries to do so. As such, it charts a new course in the global climate effort. (UNFCCC, n.d.)

The Paris Agreement’s central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to strengthen the ability of countries to deal with the impacts of climate change. To reach these ambitious goals, appropriate financial flows, a new technology framework and an enhanced capacity building framework will be put in place, thus supporting action by developing countries and the most vulnerable countries, in line with their own national objectives. The Agreement also provides for enhanced transparency of action and support through a more robust transparency framework. (UNFCCC, n.d.)

The Paris Agreement requires all Parties to put forward their best efforts through “nationally determined contributions” (NDCs) and to strengthen these efforts in the years ahead. This includes requirements that all Parties report regularly on their emissions and on their implementation efforts. (UNFCCC, n.d.)

In 2018, Parties will take stock of the collective efforts in relation to progress towards the goal set in the Paris Agreement and to inform the preparation of NDCs. There will also be a global stock-taking every five years to assess the collective progress towards achieving the purpose of the Agreement and to inform further individual actions by Parties. (UNFCCC, n.d.)

The Paris Agreement entered into force on November 4, 2016, thirty days after the date on which at least 55 Parties to the Convention accounting in total for at least an estimated 55% of the total global greenhouse gas emissions have deposited their instruments of ratification, acceptance, approval, or accession with the Depositary. (UNFCCC, n.d.)



On June 1, 2017, President Donald Trump announced he would begin the process of withdrawing the United States from the Paris Agreement. In accordance with articles within the Paris Agreement, the earliest effective date for the United States' withdrawal from the Agreement is November 4, 2020.

B. Federal Regulations

1. Clean Air Act

Coinciding with the 2009 meeting of international leaders in Copenhagen, on December 7, 2009, the EPA issued an Endangerment Finding under § 202(a) of the Clean Air Act (CAA), opening the door to federal regulation of GHGs. The Endangerment Finding notes that GHGs threaten public health and welfare and are subject to regulation under the CAA. To date, the EPA has not promulgated regulations on GHG emissions, but it has begun to develop them. (EPA, 2019a; DOJ, 2015)

Previously the EPA had not regulated GHGs under the CAA because it asserted that the Act did not authorize it to issue mandatory regulations to address Global Climate Change (GCC) and that such regulation would be unwise without an unequivocally established causal link between GHGs and the increase in global surface air temperatures. In *Massachusetts v. Environmental Protection Agency et al.* (127 S. Ct. 1438 [2007]); however, the U.S. Supreme Court held that GHGs are pollutants under the CAA and directed the EPA to decide whether the gases endangered public health or welfare. The EPA had also not moved aggressively to regulate GHGs because it expected Congress to make progress on GHG legislation, primarily from the standpoint of a cap-and-trade system. However, proposals circulated in both the House of Representative and Senate have been controversial and it may be some time before the U.S. Congress adopts major climate change legislation. The EPA's Endangerment Finding paves the way for federal regulation of GHGs with or without Congress. (EPA, 2019a; DOJ, 2015)

C. State Regulations

1. Title 24 Building Energy Standards

The California Energy Commission (CEC) first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency, and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically to allow for the consideration and inclusion of new energy efficiency technologies and methods. The latest revisions (2019 Building Energy Efficiency Standards) became effective on January 1, 2020. The CEC anticipates that single-family homes built with the 2019 standards will use approximately 7% less energy compared to the residential homes built under the 2016 standards. Additionally, after implementation of solar PV systems, homes built under the 2019 standards will about 53% less energy than homes built under the 2016 standards. Nonresidential buildings will use approximately 30% less energy due to lighting upgrades compared to the prior code. (CEC, n.d.)



Part 11 of Title 24 is referred to as the California Green Building Standards Code (CALGreen Code). The purpose of the CALGreen Code is to “improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality.” The CALGreen Code is not intended to substitute or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission (CBSC). Unless otherwise noted in the regulation, all newly constructed buildings in California are subject of the requirements of the CALGreen Code. (CEC, 2018)

2. California Assembly Bill No. 1493 (AB 1493)

AB 1493 required CARB to adopt the nation’s first GHG emission standards for automobiles. On September 24, 2009, CARB adopted amendments to the “Pavley” regulations that reduce greenhouse gas (GHG) emissions in new passenger vehicles from model year 2009 through 2016. These amendments were part of California’s commitment toward a nation-wide program to reduce new passenger vehicle GHGs from 2012 through 2016. CARB’s September amendments cement California’s enforcement of the Pavley rule starting in 2009 while providing vehicle manufacturers with new compliance flexibility. The amendments also prepare California to harmonize its rules with the federal rules for passenger vehicles. (CARB, 2017b)

The U.S. EPA granted California the authority to implement GHG emission reduction standards for new passenger cars, pickup trucks, and sport utility vehicles On June 30, 2009. The first California request to implement GHG standards for passenger vehicles, known as a waiver request, was made in December 2005, and was denied by the EPA in March 2008. That decision was based on a finding that California’s request to reduce GHG emissions from passenger vehicles did not meet the CAA requirement of showing that the waiver was needed to meet “compelling and extraordinary conditions.” (CARB, 2017b)

CARB’s Board originally approved regulations to reduce GHGs from passenger vehicles in September 2004, with the regulations to take effect in 2009. These regulations were authorized by the 2002 legislation Assembly Bill 1493 (Pavley). (CARB, 2017b)

The regulations had been threatened by automaker lawsuits and were stalled by the EPA’s delay in reviewing and then initially denying California’s waiver request. The parties involved entered a May 19, 2009 agreement to resolve these issues. With the granting of the waiver on June 30, 2009, it is expected that the Pavley regulations reduced GHG emissions from California passenger vehicles by about 22 percent in 2012 and about 30 percent in 2016, all while improving fuel efficiency and reducing motorists’ costs. (CARB, 2017b)

The CARB has adopted a new approach to passenger vehicles – cars and light trucks – by combining the control of smog-causing pollutants and greenhouse gas emissions into a single coordinated package of standards. The new approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emission vehicles in California. (CARB, 2017b)



3. *Executive Order S-3-05*

Executive Order (EO) S-3-05 documents GHG emission reduction goals, creates the Climate Action Team and directs the Secretary of the California EPA to coordinate efforts with meeting the GHG reduction targets with the heads of other state agencies. The EO requires the Secretary to report back to the Governor and Legislature biannually to report: progress toward meeting the GHG goals; GHG impacts to California; and applicable Mitigation and Adaptation Plans. EO S-3-05 goals for GHG emissions reductions include: reducing GHG emissions to 2000 levels by the year 2010; reducing GHG emissions to 1990 levels by the year 2020; and reducing GHG emissions to 80 percent below 1990 levels by 2050. (CEC, n.d.)

4. *California Assembly Bill 32 – Global Warming Solutions Act of 2006*

In September 2006, Governor Schwarzenegger signed Assembly Bill 32 (AB 32), the California Climate Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020, which represents a reduction of approximately 15 percent below emissions expected under a “business as usual” scenario. Pursuant to AB 32, the CARB must adopt regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. The full implementation of AB 32 will help mitigate risks associated with climate change, while improving energy efficiency, expanding the use of renewable energy resources, cleaner transportation, and reducing waste. (CARB, 2019)

AB 32 specifically required that CARB do the following: (CARB, 2019)

- Prepare and approve a Scoping Plan for achieving the maximum technologically feasible and cost-effective reductions in GHG emissions from sources or categories of sources of GHGs by 2020, and update the Scoping Plan every five years.
- Maintain and continue reductions in emissions of GHG beyond 2020.
- Identify the statewide level of GHG emissions in 1990 to serve as the emissions limit to be achieved by 2020.
- Identify and adopt regulations for discrete early actions that could be enforceable on or before January 1, 2010.
- Adopt a regulation that establishes a system of market-based declining annual aggregate emission limits for sources or categories of sources that emit GHG emissions.
- Convene an Environmental Justice Advisory Committee to advise the Board in developing and updating the Scoping Plan and any other pertinent matter in implementing AB 32.
- Appoint an Economic and Technology Advancement Advisory Committee to provide recommendations for technologies, research, and GHG emission reduction measures.

In November 2007, CARB completed its estimated calculations of Statewide 1990 GHG levels. Net emission 1990 levels were estimated at 427 million metric tons (MMTs) (emission sources by sector were: transportation – 35 percent; electricity generation – 26 percent; industrial – 24 percent; residential – 7 percent; agriculture – 5 percent; and commercial – 3 percent). Accordingly, 427 million metric tons of carbon dioxide equivalent (MMT_{CO₂e}) equivalent was established as the emissions limit for 2020. For comparison, CARB’s estimate



for baseline GHG emissions was 473 MMTCO_{2e} for 2000 and without emissions reduction measures 2010 emissions were projected to be 532 MMTCO_{2e}. “Business as usual” conditions (without the reductions to be implemented by CARB regulations) for 2020 were projected to be 596 MMTCO_{2e}. (CARB, 2007)

5. California Senate Bill No. 1368 (SB 1368)

In 2006, the State Legislature adopted Senate Bill (SB) 1368 (Perata, Chapter 598, Statutes of 2006), which directs the California Public Utilities Commission (CPUC) to adopt a GHG emission performance standard (EPS) for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than five years from resources that exceed specified emissions criteria. Accordingly, SB 1368 effectively prevents California’s utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. SB 1368 will lead to dramatically lower GHG emissions associated with California energy demand. (CEC, n.d.)

6. Executive Order S-01-07

Executive Order (EO) S-01-07 is effectively known as the Low Carbon Fuel Standard (LCFS). The Executive Order seeks to reduce the carbon intensity of California’s passenger vehicle fuels by at least 10 percent by 2020. The LCFS requires fuel providers in California to ensure that the mix of fuel they sell into the California market meet, on average, a declining standard for GHG emissions measured in CO_{2e} grams per unit of fuel energy sold. (CEC, n.d.)

7. Senate Bill 1078

Senate Bill (SB) 1078 establishes the California Renewables Portfolio Standard Program, which requires electric utilities and other entities under the jurisdiction of the California Public Utilities Commission to meet 20% of their renewable power by December 31, 2017 for the purposes of increasing the diversity, reliability, public health, and environmental benefits of the energy mix. (CEC, n.d.)

8. Senate Bill 107

SB 107 directed California Public Utilities Commission's Renewable Energy Resources Program to increase the amount of renewable electricity (Renewable Portfolio Standard) generated per year, from 17% to an amount that equals at least 20% of the total electricity sold to retail customers in California per year by December 31, 2010. (CEC, n.d.)

9. California Renewable Portfolio Standards (RPS)

The California Energy Commission (CEC) implements and administers portions of California’s Renewables Portfolio Standard (RPS). Under the existing RPS, 25% of retail sales are required to be from renewable sources by December 31, 2016, 33% by December 31, 2020, 40% by December 31, 2024, 45% by December 31, 2027, and 50% by December 31, 2030. Senate Bill 100 (SB 100) raises California’s RPS requirement to achieve a target of 50% renewable resources by December 31, 2026, and to achieve a 60% target by December



31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045, and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural Resources Agency (CNRA), California Environmental Protection Agency (CalEPA), the Department of Food and Agriculture (CDFA), and CARB to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal. (CEC, n.d.)

10. Senate Bill 97

By enacting SB 97 in 2007, California's lawmakers expressly recognized the need to analyze GHGs as a part of the CEQA process. SB 97 required the Governor's Office of Planning and Research (OPR) to develop, and the Natural Resources Agency to adopt, amendments to the State CEQA Guidelines addressing the analysis and mitigation of greenhouse gas emissions. Those State CEQA Guidelines amendments clarified several points, including the following: (CA Legislative Info, n.d.)

- Lead agencies must analyze the GHG emissions of proposed projects, and must reach a conclusion regarding the significance of those emissions. (See State CEQA Guidelines § 15064.4.)
- When a project's GHG emissions may be significant, lead agencies must consider a range of potential mitigation measures to reduce those emissions. (See State CEQA Guidelines § 15126.4(c).)
- Lead agencies must analyze potentially significant impacts associated with placing projects in hazardous locations, including locations potentially affected by climate change. (See State CEQA Guidelines § 15126.2(a).)
- Lead agencies may significantly streamline the analysis of GHGs on a project level by using a programmatic GHG emissions reduction plan meeting certain criteria. (See State CEQA Guidelines § 15183.5(b).)
- CEQA mandates analysis of a proposed project's potential energy use (including transportation-related energy), sources of energy supply, and ways to reduce energy demand, including through the use of efficient transportation alternatives. (See State CEQA Guidelines, Appendix F.)

As part of the administrative rulemaking process, the Natural Resources Agency developed a Final Statement of Reasons explaining the legal and factual bases, intent, and purpose of the State CEQA Guidelines amendments. The amendments to the State CEQA Guidelines implementing SB 97 became effective on March 18, 2010. (CA Legislative Info, n.d.)

Of note, the new guidelines state that a lead agency shall have discretion to determine whether to use a quantitative model or methodology, or in the alternative, rely on a qualitative analysis or performance based standards. Pursuant to State CEQA Guidelines § 15064.4(a), "A lead agency shall have discretion to determine, in the context of a particular project, whether to: (1) Use a model or methodology to quantify greenhouse gas



emissions resulting from a project, and which model or methodology to use; or (2) Rely on a qualitative analysis or performance based standards.” (CA Legislative Info, n.d.)

CEQA emphasizes that the effects of greenhouse gas emissions are cumulative, and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis. (See State CEQA Guidelines § 15130(f)).

§ 15064.4(b) of the guidelines provides direction for lead agencies for assessing the significance of impacts of greenhouse gas emissions:

1. The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; or
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

The CEQA Guideline amendments do not identify a threshold of significance for GHG emissions, nor do they prescribe assessment methodologies or specific mitigation measures. Instead, they call for a “good-faith effort, based on available information, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project.” The amendments encourage lead agencies to consider many factors in performing a CEQA analysis and preserve lead agencies' discretion to make their own determinations based upon substantial evidence. The amendments also encourage public agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses. Specific GHG language incorporated in the Guidelines' suggested Environmental Checklist (Guidelines Appendix G) is as follows:

VII. GREENHOUSE GAS EMISSIONS

Would the project:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*
- b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*



11. Senate Bill 375

The Sustainable Communities and Climate Protection Act of 2008 (Sustainable Communities Act, SB 375, Chapter 728, Statutes of 2008) supports the State's climate action goals to reduce greenhouse gas (GHG) emissions through coordinated transportation and land use planning with the goal of more sustainable communities. (CARB, n.d.)

Under the Sustainable Communities Act, CARB sets regional targets for GHG emissions reductions from passenger vehicle use. In 2010, CARB established these targets for 2020 and 2035 for each region covered by one of the State's metropolitan planning organizations (MPO). CARB will periodically review and update the targets, as needed. (CARB, n.d.)

Each of California's MPOs must prepare a "sustainable communities strategy" (SCS) as an integral part of its regional transportation plan (RTP). The SCS contains land use, housing, and transportation strategies that, if implemented, would allow the region to meet its GHG emission reduction targets. Once adopted by the MPO, the RTP/SCS guides the transportation policies and investments for the region. CARB must review the adopted SCS to confirm and accept the MPO's determination that the SCS, if implemented, would meet the regional GHG targets. If the combination of measures in the SCS would not meet the regional targets, the MPO must prepare a separate "alternative planning strategy" (APS) to meet the targets. The APS is not a part of the RTP. (CARB, n.d.)

The Sustainable Communities Act also establishes incentives to encourage local governments and developers to implement the SCS or the APS. Developers can get relief from certain environmental review requirements under CEQA if their new residential and mixed-use projects are consistent with a region's SCS (or APS) that meets the targets (see Cal. Public Resources Code §§ 21155, 21155.1, 21155.2, 21159.28.). (CARB, n.d.)

12. Executive Order B-30-15

On April 29, 2015, Governor Brown issued Executive Order B-30-15, which sets a goal to reduce GHG emissions in California to 40 percent below 1990 levels by 2030. The 2030 target serves as a benchmark goal on the way to achieving the GHG reductions goal set by former Governor Schwarzenegger via Executive Order S-3-05 (i.e., 80 percent below 1990 greenhouse gas emissions levels by 2050). (CEC, n.d.)

13. Senate Bill 32

On September 8, 2016, Governor Jerry Brown signed the Senate Bill (SB) 32 and its companion bill, Assembly Bill (AB) 197. SB 32 requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The new legislation builds upon the AB 32 goal of 1990 levels by 2020 and provides an intermediate goal to achieving S-3-05, which sets a statewide greenhouse gas reduction target of 80% below 1990 levels by 2050. (CA Legislative Info, n.d.)



14. CARB Scoping Plan

AB 32 required CARB to develop a Scoping Plan which identified California's strategy for meeting the AB 32 reduction goals for 2020. The Scoping Plan must be updated every five years. In December 2008, CARB approved the initial Scoping Plan, which included a suite of measures to sharply cut GHG emissions to achieve the AB 32 GHG reduction target. (CARB, 2019)

In May 2014, CARB approved the First Update to the Climate Change Scoping Plan (Update), which builds upon the initial Scoping Plan with new strategies and recommendations. The Update highlighted California's progress toward meeting the near-term 2020 GHG emission reduction goals, highlights the latest climate change science and provides direction on how to achieve long-term emission reduction goal described in Executive Order S-3-05. The Update recalculated 1990 GHG emissions using new global warming potentials identified in the IPCC Fourth Assessment Report released in 2007. Using those GWPs, the 427 MTCO_{2e} 1990 emissions level and 2020 GHG emissions limit identified in the 2008 Scoping Plan would be slightly higher, at 431 MTCO_{2e}. Based on the revised 2020 emissions level projection identified in the 2011 Final Supplement and the updated 1990 emissions levels identified in the discussion draft of the First Update, achieving the 1990 emissions level in 2020 would require a reduction of 78 MTCO_{2e} (down from 509 MTCO_{2e}), or approximately 15.3 percent (down from 28.5 percent), from the BAU condition. (CARB, 2019; CARB, 2017a)

In November 2017, CARB released the Final 2017 Scoping Plan Update, which identifies the State's post-2020 reduction strategy. The Final 2017 Scoping Plan Update reflects the 2030 target of a 40% reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. Key programs that the proposed Second Update builds upon include the Cap-and-Trade Regulation, the LCFS, and much cleaner cars, trucks, and freight movement, utilizing cleaner, renewable energy, and strategies to reduce CH₄ emissions from agricultural and other wastes.

The Final 2017 Scoping Plan Update establishes a new emissions limit of 260 MMTCO_{2e} for the year 2030, which corresponds to a 40% decrease in 1990 levels by 2030.

California's climate strategy will require contributions from all sectors of the economy, including the land base, and will include enhanced focus on zero- and near-zero-emission (ZE/NZE) vehicle technologies; continued investment in renewables, including solar roofs, wind, and other distributed generation; greater use of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (CH₄, black carbon, and fluorinated gases); and an increased focus on integrated land use planning to support livable, transit-connected communities and conservation of agricultural and other lands. Requirements for direct GHG reductions at refineries will further support air quality co-benefits in neighborhoods, including in disadvantaged communities historically located adjacent to these large stationary sources, as well as efforts with California's local air pollution control and air quality management districts (air districts) to tighten emission limits on a broad spectrum of industrial sources. Major elements of the Final 2017 Scoping Plan Update framework include:



- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing ZEV buses and trucks.
- LCFS, with an increased stringency (18% by 2030).
- Implementing SB 350, which expands the RPS to 50% RPS and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of zero-emission vehicles (ZEV) trucks.
- Implementing the proposed Short-Lived Climate Pollutant Strategy (SLPS), which focuses on reducing CH₄ and hydrofluorocarbon emissions by 40% and anthropogenic black carbon emissions by 50% by year 2030.
- Continued implementation of SB 375.
- Post-2020 Cap-and-Trade Program that includes declining caps.
- 20% reduction in GHG emissions from refineries by 2030.
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

Note, however, that the Final 2017 Scoping Plan Update acknowledges that:

“[a]chieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA.”

In addition to the statewide strategies listed above, the Final 2017 Scoping Plan Update also identifies local governments as essential partners in achieving the State's long-term GHG reduction goals and identifies local actions to reduce GHG emissions. As part of the recommended actions, CARB recommends that local governments achieve a community-wide goal to achieve emissions of no more than 6 metric tons of CO₂e (MTCO₂e) or less per capita by 2030 and 2 MTCO₂e or less per capita by 2050. For CEQA projects, CARB states that lead agencies may develop evidenced-based bright-line numeric thresholds – consistent with the Scoping Plan and the State's long-term GHG goals – and projects with emissions over that amount may be required to incorporate on-site design features and mitigation measures that avoid or minimize project emissions to the degree feasible; or, a performance-based metric using a CAP or other plan to reduce GHG emissions is appropriate.

According to research conducted by the Lawrence Berkeley National Laboratory (LBNL) and supported by CARB, California, under its existing and proposed GHG reduction policies, could achieve the 2030 goals under SB 32. The research utilized a new, validated model known as the California LBNL GHG Analysis of Policies Spreadsheet (CALGAPS), which simulates GHG and criteria pollutant emissions in California from 2010 to 2050 in accordance to existing and future GHG-reducing policies. The CALGAPS model showed that by 2030, emissions could range from 211 to 428 MTCO₂e per year, indicating that “even if all modeled policies are not implemented, reductions could be sufficient to reduce emissions 40% below the 1990 level [of SB 32].”



CALGAPS analyzed emissions through 2050 even though it did not generally account for policies that might be put in place after 2030. Although the research indicated that the emissions would not meet the State's 80% reduction goal by 2050, various combinations of policies could allow California's cumulative emissions to remain very low through 2050.

D. Local Regulations

1. South Coast Air Quality Management District (SCAQMD)

To provide guidance to local lead agencies on determining significance for GHG emissions in CEQA documents, SCAQMD staff is convening an ongoing GHG CEQA Significance Threshold Working Group. Members of the working group include government agencies implementing CEQA and representatives from various stakeholder groups that provide input to SCAQMD staff on developing the significance thresholds. On October 8, 2008, the SCAQMD released the Draft AQMD Staff CEQA GHG Significance Thresholds. These thresholds have not been finalized and continue to be developed through the working group.

The Draft AQMD Staff CEQA GHG Significance Thresholds guidance document, which builds on the previous guidance prepared by the California Air Pollution Control Officers Association (CAPCOA), explored various approaches for establishing a significance threshold for GHG emissions and was described as a "work in progress" of efforts to date. However, the draft interim CEQA thresholds guidance document was not adopted or approved by the Governing Board. In December 2008, the SCAQMD adopted an interim 10,000 metric tons of CO₂e per year (MTCO₂e/yr) screening level threshold for stationary source/industrial projects for which the SCAQMD is the lead agency. From December 2008 to September 2010, SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. SCAQMD has continued to consider adoption of significance thresholds for residential and general land use development projects. The most recent proposal, issued in September 2010, used the following tiered approach to evaluate potential GHG impacts from various uses:

- Tier 1: Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.
- Tier 2: Consider whether or not the proposed project is consistent with a locally-adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.
- Tier 3: Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 MTCO₂e/yr threshold for industrial uses would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 MTCO₂e/yr), commercial projects (1,400 MTCO₂e/yr), and mixed-use projects (3,000 MTCO₂e/yr). Under option 2, a single numerical screening threshold of 3,000 MTCO₂e/yr would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.



- Tier 4: Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 MTCO₂e/yr per service population for project level analyses and 6.6 MTCO₂e/yr per service population for plan level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.
- Tier 5: Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

The SCAQMD has not announced when staff is expecting to present a finalized version of its GHG thresholds to the governing board. These thresholds were developed as part of the SCAQMD GHG CEQA Significance Threshold Working Group. This working group was formed to assist SCAQMD's efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders including the State Office of Planning and Research (OPR), CARB, the Attorney General's Office, a variety of city and county planning departments in the SoCAB, various utilities such as sanitation and power companies throughout the SoCAB, industry groups, and environmental and professional organizations. These thresholds were developed to be consistent with CEQA requirements for developing significance thresholds, are supported by substantial evidence, and provides guidance to CEQA practitioners with regard to determining whether GHG emissions from a proposed land use project are significant.

2. Southern California Association of Governments (SCAG)

On April 7, 2016, the Southern California Association of Governments (SCAG) Regional Council adopted the 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy (2016 RTP/SCS). The 2016 RTP/SCS charts a course for closely integrating land use and transportation, so that the region can grow smartly and sustainably. It was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses, and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The 2016 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The SCAG region strives toward sustainability through integrated land use and transportation planning. The SCAG region must achieve specific federal air quality standards and is required by state law to lower regional GHG emissions. Targets for the SCAG region in the 2016 RTP/SCS includes an eight percent per capita reduction in GHG emissions from automobiles and light trucks by 2020, an 18 percent reduction by 2035, and a 21 percent reduction by 2040 compared with 2005 levels. On June 28, 2016, CARB accepted SCAG's conclusion that the 2016-2040 RTP/SCS, if implemented, would achieve the 2020 and 2035 emission reduction targets set by CARB for the SCAG region. (ECORP, 2020b, p. 80)



3. *Riverside County Climate Action Plan (CAP)*

The County of Riverside Climate Action Plan (CAP), which was adopted in December 2015 and most recently updated in November 2019, was designed under the premise that the County of Riverside, and the community it represents, is uniquely capable of addressing emissions associated with sources under Riverside County’s jurisdiction, and that Riverside County’s emission reduction efforts should coordinate with the state strategies of reducing emissions in order to accomplish these reductions in an efficient and cost-effective manner. The 2019 CAP Update establishes GHG emission reduction programs and regulations that correlate with and support evolving state GHG emissions reduction goals and strategies. The CAP Update includes reduction targets for year 2030 and year 2050. These reduction targets require the County to reduce emissions by at least 525,511 MTCO₂e/yr below the Adjusted Business As Usual (ABAU) scenario by 2030 and at least 2,982,948 MTCO₂e/yr below the ABAU scenario by 2050. To evaluate consistency with the CAP Update, the County has implemented CAP Update Screening Tables (Screening Tables) to aid in measuring the reduction of GHG emissions attributable to certain design and construction measures incorporated in development projects. To this end, the Screening Tables establish categories of GHG Implementation Measures. Under each Implementation Measure category, mitigation or project design features (collectively “features”) are assigned point values that correspond to the minimum GHG emissions reduction that would result from each feature. Projects that yield at least 100 points are considered to be consistent with the GHG emissions reduction quantities anticipated in the County’s GHG Technical Report and support the GHG emissions reduction targets established under the CAP Update. The potential for such projects to generate direct or indirect GHG emissions that would result in a significant impact on the environment; or conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG would be considered less than significant. (ECORP, 2020b, p. 82)

4. *Riverside County Board of Supervisors Policy F-3*

The logistics industry is a well-established sector of the Riverside County economy that has contributed to local job growth, fueled by societal growth trends in e-commerce and coupled with our strategic location along a major trade corridor that connects to the Ports of Los Angeles and Long Beach. It is expected that Riverside County will continue to see strong demand for growth in the logistics industry. However, it is also recognized that the construction and operations of logistics and warehouse projects in close proximity to residences or other sensitive land uses may negatively affect the quality of life of those existing communities. The County of Riverside Board of Supervisors Policy F-3, *Good Neighbor Policy for Logistics and Warehouse/Distribution Uses*, provides a framework through which large-scale logistics and warehouse projects, such as that proposed by the Project, can be designed and operated in a way that lessens their impact on surrounding communities and the environment. It is meant to apply Best Management Practices to help minimize potential impacts to sensitive receptors and is intended to be used in conjunction with the County’s Land Use Ordinance, which provides development requirements for said projects, and CEQA. This policy provides a series of development and operational criteria applicable to logistics and warehouse projects that include any building larger than 250,000 square feet in size that are implemented to supplement project-level mitigation measures in order to further reduce impacts related to logistics and warehousing development and operations. Pursuant to Mitigation Measure MM 4.3-2 in EIR Subsection 4.3, *Air Quality*, all future buildings within the Project site



would be subject to applicable provisions of Policy F-3, regardless as to building size. The specific policy provisions germane to Project GHG emissions include the following: (ECORP, 2020b, pp. 81-82)

- 2.1 During construction of the warehouse/distribution facility, all heavy-duty haul trucks accessing the site shall have CARB-approved 2010 engines or newer approved CARB engine standards.
- 2.4 Construction contractors shall utilize construction equipment, with properly operating and maintained mufflers, consistent with manufacturers' standards.
- 2.9 Construction Contractors shall prohibit truck drivers from idling more than five (5) minutes and require operators to turn off engines when not in use, in compliance with the California Air Resources Board regulations.
- 4.1 Facility operators shall maintain records of their fleet equipment and ensure that all diesel-fueled Medium-Heavy Duty Trucks ("MHDT") and Heavy-Heavy Duty Trucks ("HHD") accessing the site use year CARB 2010 or newer engines. The records should be maintained on-site and be made available for inspection by the County.
- 4.2 Facility operators shall prohibit truck drivers from idling more than five (5) minutes and require operators to turn off engines when not in use, in compliance with the California Air Resources Board regulations.
- 4.3 Facility operators shall train their managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.
- 4.4 Facility operators shall coordinate with CARB and SCAQMD to obtain the latest information about regional air quality concentrations, health risks, and trucking regulations.
- 4.7 Facility operators for sites that exceed 250 employees shall establish a rideshare program, in accordance with AQMD rule 2202, with the intent of discouraging single-occupancy vehicle trips and promote alternate modes of transportation, such as carpooling and transit where feasible.
- 4.8 A minimum of 5 percent of employee parking spaces shall be designated for electric or other alternative fueled vehicles.
- 5.5 Each Facility shall designate a Compliance Officer responsible for implementing the measures described herein and/or in the project conditions of approval and mitigation measures. Contact information should be provided to the County and updated annually, and signs should be posted in visible locations providing the contact information for the Compliance Officer to the surrounding community.

4.8.3 BASIS FOR DETERMINING SIGNIFICANCE

While estimated Project-related GHG emissions can be quantified, the direct impacts of such emissions on GCC and global warming cannot be determined on the basis of available science. There is no evidence at this time that would indicate that the emissions from a project the size of the proposed Project would directly or indirectly affect the global climate.



AB 32 states, in part, that “[g]lobal warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California.” Because global warming is the result of GHG emissions, and GHGs are emitted by innumerable sources worldwide, the proposed Project would have no potential to result in a direct impact to global warming; rather, Project-related contributions to GCC, if any, only have potential significance on a cumulative basis. Therefore, the analysis below focuses on the Project’s potential to contribute to GCC in a cumulatively-considerable way.

Section VIII of Appendix G to the State CEQA Guidelines addresses typical adverse effects due to greenhouse gas emissions, and includes the following threshold questions. (OPR, 2018a) The proposed Project would result in a significant impact due to greenhouse gas emissions if the Project or any Project-related component would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment: or
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The above-listed thresholds are derived directly from Section VII of Appendix G to the State CEQA Guidelines and the County’s Environmental Assessment form, and address typical adverse effects associated with greenhouse gas emissions.

The above-listed thresholds for GHG’s do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the State CEQA Guidelines emphasize the lead agency’s discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA. With respect to GHG emissions, State CEQA Guidelines Section 15064.4(a) states that lead agencies “shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate” GHG emissions resulting from a project. The State CEQA Guidelines note that an agency has the discretion to either quantify a project’s GHG emissions or rely on a “qualitative analysis or other performance-based standards.” A lead agency may use a “model or methodology” to estimate GHG emissions and has the discretion to select the model or methodology it considers “most appropriate to enable decision makers to intelligently take into account the project’s incremental contribution to climate change.” Section 15064.4(b) provides that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment: (ECORP, 2020b, p. 80)

1. The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.



3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)).

In addition, Section 15064.7(c) of the State CEQA Guidelines specifies that “[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence.” The State CEQA Guidelines also clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA’s requirements for cumulative impact analysis. As a note, the State CEQA Guidelines were amended in response to SB 97. In particular, the State CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant. (ECORP, 2020b, p. 83)

Per State CEQA Guidelines Section 15064(h)(3), a project’s incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a “water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans, [and] plans or regulations for the reduction of greenhouse gas emissions.” Put another way, State CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of less than significant for GHG emissions if a project complies with adopted programs, plans, policies, and/or other regulatory strategies to reduce GHG emissions. (ECORP, 2020b, pp. 83-84)

The significance of the Project’s GHG emissions is evaluated consistent with State CEQA Guidelines Section 15064.4(b)(2) by considering whether the Project complies with applicable plans, policies, regulations, and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. (ECORP, 2020b, p. 84)

The County of Riverside CAP aims to reduce GHG emissions from development projects under County jurisdiction. The CAP builds on state and regional policies aimed at reducing GHG emissions consistent with the SB 32 2030 GHG reduction target and statewide post-2030 reduction goals. To evaluate consistency with the CAP Update, the County has implemented CAP Update Screening Tables (Screening Tables) to aid in measuring the reduction of GHG emissions attributable to certain design and construction measures incorporated in development projects. To this end, the Screening Tables establish categories of GHG Implementation Measures. Under each Implementation Measure category, mitigation or project design features (collectively “features”) are assigned point values that correspond to the minimum GHG emissions reduction that would result from each feature. Projects that yield at least 100 points are considered to be consistent with the GHG emissions reduction quantities anticipated in the County’s GHG Technical Report and support the



GHG emissions reduction targets established under the CAP Update. The potential for such projects to generate direct or indirect GHG emissions that would result in a significant impact on the environment, or conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG emissions, would be considered less than significant. (ECORP, 2020b, p. 84.)

The CAP Update identifies a two-step approach in evaluating GHG emissions. First, a screening threshold of 3,000 MTCO₂e/yr is used to determine if additional analysis is required. Projects that exceed the 3,000 MTCO₂e/yr will be required to quantify and disclose the anticipated GHG emissions then either: 1) demonstrate how the project would reduce GHG emissions to levels below 3,000 MTCO₂e/yr through project design features and/or mitigation measures; or 2) garner 100 points through the Screening Tables. Projects that garner at least 100 points (equivalent to an approximate 49 percent reduction in GHG emissions) are determined to be consistent with the reduction quantities anticipated in the County's GHG Technical Report, and consequently would be consistent with the CAP Update. As such, projects that achieve a total of 100 points or more are considered to have a less-than-significant individual and cumulative impact on GHG emissions. (ECORP, 2020b, p. 84)

Consistent with State CEQA Guidelines § 15064.4(b)(2) and SCAQMD Tier 2 thresholds, the proposed Project is analyzed for consistency with the CAP Update in order to determine its significance.

4.8.4 IMPACT ANALYSIS

A. Methodology

GHG-related impacts were assessed in accordance with methodologies recommended by the County of Riverside. Onsite construction-related (including worker commutes and vendors), area source, energy source, water/wastewater pumping, and solid waste hauling and decomposition emissions were modeled using CalEEMod, version 2016.3.2, for both the Primary Land Use Plan and Alternative Land Use Plan. CalEEMod is a statewide land use emissions computer model designed to quantify potential GHG emissions associated with both construction and operations from a variety of land use projects. Construction haul truck GHG emissions and operational mobile source GHG emissions under both the Primary Land Use Plan and Alternative Land Use Plan are calculated with EMFAC2017, developed by CARB. EMFAC 2017 is a mathematical model that was developed to calculate emission rates from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by CARB to estimate changes in future emissions from on-road mobile sources. The most recent version of this model, EMFAC 2017, incorporates regional motor vehicle data, information and estimates regarding the distribution of vehicle miles traveled by speed, and number of starts per day. The most important improvement in EMFAC 2017 is the integration of the new data and methods to estimate emissions from diesel trucks and buses. The model includes the emissions benefits of the truck and bus rule and the previously adopted rules for other on-road diesel equipment. (ECORP, 2020b, p. 85)

Construction-generated GHG emissions under both the Primary Land Use Plan and Alternative Land Use Plan, including proposed offsite improvements, were primarily calculated using CalEEMod model defaults for



Riverside County. All on-road haul trucks were modeled as CARB-approved 2010 engines or newer, consistent with the requirements of the County of Riverside Board of Supervisors Policy F-3 (Good Neighbor Policy for Logistics and Warehouse/Distribution Uses). GHG emissions for both land use scenarios during operations were based on the Project site plans and the estimated traffic trip generation rates and Project fleet mix from the Project’s Traffic Impact Analysis (“TIA”; *Technical Appendix L1*). (ECORP, 2020b, p. 85)

B. Project Impacts due to Greenhouse Gas Emissions

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

As discussed below, the Project’s GHG emissions were estimated for both construction and long-term operation.

1. Construction-Related GHG Emissions

Construction-related activities that would generate GHG emissions include worker commute trips, haul trucks carrying supplies and materials to and from the Project site, and off-road construction equipment (e.g., dozers, loaders, excavators). Construction-generated GHG emissions associated with the Primary Land Use Plan and Alternative Land Use Plan were calculated using the CARB-approved CalEEMod computer program, which is designed to model GHG emissions for land use development projects, based on typical construction requirements. The duration of construction has been adjusted to reflect a start date in the summer of 2021 and an anticipated opening year in the year 2030. The CalEEMod model defaults for the number of construction equipment employed was doubled for all construction phases with accelerated timelines. Construction-generated emissions were calculated to account for the development of the entire Project site simultaneously in order to identify the worst-case construction emissions potential. However, the actual construction of the Project would be dependent on several factors, including timing of Project approvals, market conditions, and/or Project funding. As such, this analysis accounts for minor modifications as Project plans evolve from conceptual planning to final mapping. If construction starts at a later date, it can be expected that Project emissions would be reduced because CalEEMod incorporates lower emission factors associated with construction equipment in future years due to improved emissions controls and fleet modernization through turnover. Construction haul truck emissions are calculated separately with EMFAC2017. Emissions from haul trucks contribute to GHG emissions for the first three years of construction. See Attachment D to the Project’s AQA (*Technical Appendix B*) for more information regarding the construction assumptions, including construction equipment and duration, used in the analysis. (ECORP, 2020b, pp. 85-86)

Construction-Related GHG Emissions – Primary Land Use Plan

Table 4.8-2, *Primary Land Use Plan Construction-Related Greenhouse Gas Emissions*, illustrates the specific construction generated GHG emissions that would result from construction of the Project under the Primary Land Use Plan. As shown in Table 4.8-2, Project construction under the Primary Land Use Plan would result in the generation of approximately 15,658 MTCO_{2e} over the course of nine years of construction. Once construction is complete, the generation of these GHG emissions would cease. Consistent with SCAQMD



guidance, total construction GHG emissions have been amortized over the estimated life of a project, or 30 years. The amortized construction emissions are added to the annual average operational emissions of the Primary Land Use Plan. (ECORP, 2020b, p. 86)

Table 4.8-2 Primary Land Use Plan Construction-Related Greenhouse Gas Emissions

Emissions Source	CO ₂ e (Metric Tons/ Year)
Construction in 2021 (including material export)	629
Construction in 2022 (including material export)	1,709
Construction in 2023 (including material export)	1,769
Construction in 2024	1,620
Construction in 2025	2,066
Construction in 2026	2,051
Construction in 2027	2,039
Construction in 2028	2,020
Construction in 2029	1,755
Total	15,658

Source: CalEEMod version 2016.3.2; EMFAC2017. Refer to Attachment D to the Project’s AQA (*Technical Appendix B*) for Model Data Outputs.

Notes: All on-road haul trucks were modeled as CARB-approved 2010 engines or newer, consistent with County requirements and Riverside County Board of Supervisors’ Policy F-3. (ECORP, 2020b, Table 3-2)

Construction-Related GHG Emissions – Alternative Land Use Plan

Table 4.8-3, *Alternative Land Use Plan Construction-Related Greenhouse Gas Emissions*, illustrates the specific construction generated GHG emissions that would result from construction of the Project under the Alternative Land Use Plan. As shown in Table 4.8-3, Project construction under the Alternative Land Use Plan would result in the generation of approximately 15,389 MTCO₂e over the course of nine years of construction. Once construction is complete, the generation of these GHG emissions would cease. Consistent with SCAQMD guidance, total construction GHG emissions have been amortized over the estimated life of a project, or 30 years. The amortized construction emissions are added to the annual average operational emissions of the Alternative Land Use Plan. (ECORP, 2020b, p. 87)

2. Operational-Related GHG Emissions

Operation of the Project would result in GHG emissions predominantly associated with motor vehicle use. As previously described, the County of Riverside Board of Supervisors Policy F-3 (Good Neighbor Policy for Logistics and Warehouse/Distribution Uses) contains several policy provisions that address GHG generated



Table 4.8-3 Alternative Land Use Plan Construction-Related Greenhouse Gas Emissions

Emissions Source	CO ₂ e (Metric Tons/ Year)
Construction in 2021 (including material export)	619
Construction in 2022 (including material export)	1,687
Construction in 2023 (including material export)	1,748
Construction in 2024	1,588
Construction in 2025	2,026
Construction in 2026	2,013
Construction in 2027	2,001
Construction in 2028	1,983
Construction in 2029	1,724
Total	15,389

Source: CalEEMod version 2016.3.2; EMFAC2017. Refer to Attachment D to the Project’s AQA (*Technical Appendix B*) for Model Data Outputs.

Notes: All on-road haul trucks were modeled as CARB-approved 2010 engines or newer, consistent with County requirements and Riverside County Board of Supervisors’ Policy F-3. (ECORP, 2020b, Table 3-3)

during construction of warehouse/distribution projects proposing building space larger than 250,000 square feet in size. These provisions would apply to the operations of the Project under either the Primary Land Use Plan or Alternative Land Use Plan. Additionally, Mitigation Measure MM 4.3-7 in EIR Subsection 4.3, *Air Quality*, requires that all future buildings within the Project site, regardless of size, must comply with the Board of Supervisors’ Policy F-3, where feasible. As part of the requirements, all future cold storage warehouse uses would be equipped with electrical hookups to eliminate idling of main and auxiliary engines during the loading and unloading process and provide for transport refrigeration units, auxiliary power units and other trucks requiring electrical power. This requirement eliminates the need for transport refrigeration units to supply the energy for refrigeration from diesel fuel, and thus substantially reduces emissions. Mitigation Measure MM 4.3-7 also requires an electrical room(s) and/or exterior area(s) of the site to be designated where future electrical panels would be located for the purpose of supplying power to on-site charging facilities for electric powered trucks at shell building permit. Conduit must be installed from this designated area where the panel would be located to the onsite location where the charging facilities would be located and where electric-powered trucks would park and connect to charging facilities to charge the batteries that power the motors of the electric-powered trucks. If the tenant is served by electric trucks, the electrical panel and charging units must be installed, and the electrical wiring connections must be made from the electrical panel to the charging units at issuance of a building permit for Tenant Improvements. Mitigation Measure MM 4.3-7 also requires that at least five percent of all passenger vehicle parking spaces include EV charging stations. Mitigation Measure MM 4.3-7 further requires facility operators to maintain records of their fleet equipment and ensure that all diesel-fueled Medium-Heavy Duty Trucks and Heavy-Heavy Duty Trucks accessing the site use year CARB



2010 or newer engines. Thus, older model year trucks, which are less efficient and produce greater GHG emissions, would be prohibited from visiting the site. The requirement that all future cold storage warehousing be equipped with electrical hookups has been accounted for in the analysis below, in addition to the requirement that all diesel-fueled Medium-Heavy Duty Trucks and Heavy-Heavy Duty Trucks accessing the site use year CARB 2010 or newer engines. (ECORP, 2020b, pp. 87-88)

As previously described, operational GHG emissions were based on the Project site plans and the estimated traffic trip generation rates and Project fleet mix from the Project's TIA (*Technical Appendix LI*). Consistent with SCAQMD recommendations, in order to more accurately account for the trip distribution patterns of freight trucks, the average trip length is calculated at 53.9 miles, which represents the average distance between the Project site and the Port of Los Angeles/Long Beach, the Project site and the Banning Pass, the Project site and the San Diego County line, the Project site and the Cajon Pass, and the Project site and downtown Los Angeles. (ECORP, 2020b, p. 88)

Operational-Related GHG Emissions – Primary Land Use Plan

Long-term operational GHG emissions attributable to the Primary Land Use Plan are identified in Table 4.8-4, *Primary Land Use Plan Operational-Related Greenhouse Gas Emissions*. As shown in Table 4.8-4, operations under the Primary Land Use Plan, inclusive of amortized construction emissions, would generate 179,382 MTCO₂e/yr. (ECORP, 2020b, pp. 88-89)

Operational-Related GHG Emissions – Alternative Land Use Plan

Long-term operational GHG emissions attributable to the Alternative Land Use Plan are identified in Table 4.8-5, *Alternative Land Use Plan Operational-Related Greenhouse Gas Emissions*. As shown in Table 4.8-5, operations under the Alternative Land Use Plan, inclusive of amortized construction emissions, would generate 177,107 MTCO₂e/yr. (ECORP, 2020b, pp. 89-90)

3. *Analysis of Project-Related GHG Emissions*

As previously described, the purpose of the County of Riverside CAP Update is to provide guidance on how to analyze GHG emissions and determine significance during the CEQA review of proposed development projects within the County, including the proposed Project under both the Primary Land Use Plan and Alternative Land Use Plan. To address the State's requirement to reduce GHG emissions, the County prepared its CAP Update with the goal of reducing GHG emissions within the County by 49 percent below "existing" 2008 levels by the year 2030. The County's target is consistent with the state Scoping Plan target and ensures that the County will be providing GHG reductions locally that will complement state efforts to reduce GHG emissions. The County's target is also consistent with the SB 32 target that expands on AB 32 to reduce GHG emissions to 40 percent below the 1990 levels by 2030. Because the County's CAP Update addresses GHG emissions reductions and is consistent with the requirements of the state Scoping Plan, SB 32, and international efforts to reduce GHG emissions, compliance with the CAP Update fulfills the description of mitigation found in the State CEQA Guidelines. (ECORP, 2020b, p. 90)



Table 4.8-4 Primary Land Use Plan Operational-Related Greenhouse Gas Emissions

Emissions Source	CO₂e (Metric Tons/ Year)
Construction Emissions (amortized over the 30-year life of the Project)	522
Area Source Emissions	0
Energy Source Emissions	28,570
Mobile Source Emissions	
<i>Passenger Vehicles</i>	36,709
<i>Heavy-Duty Trucks</i>	107,057
Mobile Source Total	143,766
Solid Waste Emissions	4,965
Water Emissions	1,559
Total Emissions	179,382

Source: CalEEMod version 2016.3.2; EMFAC2017. Refer to Attachment D to the Project’s AQA (*Technical Appendix B*) for Model Data Outputs.

Notes: Emissions projections account for a trip generation rate and fleet mix identified by the Project’s TIA (*Technical Appendix LI*). Specifically, Urban Crossroads estimates the generation of 23,894 average vehicle trips daily, 3,916 of which would be heavy-duty trucks, under the Primary Land Use Plan. Heavy-duty trucks are a weighted average of Medium-heavy duty trucks and Heavy-heavy duty trucks as identified by the Project Traffic Assessment. The average trip length is calculated at 53.9 miles, which represents the average distance between the Project site and the Port of Los Angeles/Long Beach, the Project site and the Banning Pass, the Project Site and the San Diego County line, the Project site and the Cajon Pass, and the Project site and downtown Los Angeles.

(ECORP, 2020b, Table 3-5)



Table 4.8-5 Alternative Land Use Plan Operational-Related Greenhouse Gas Emissions

Emissions Source	CO ₂ e (Metric Tons/ Year)
Construction Emissions (amortized over the 30-year life of the Project)	513
Area Source Emissions	0
Energy Source Emissions	28,382
Mobile Source Emissions	
<i>Passenger Vehicles</i>	38,527
<i>Heavy-Duty Trucks</i>	105,253
Mobile Source Total	141,780
Solid Waste Emissions	4,893
Water Emissions	1,539
Total Emissions	177,107

Source: CalEEMod version 2016.3.2; EMFAC2017. Refer to Attachment D to the Project’s AQA (*Technical Appendix B*) for Model Data Outputs.

Notes: Emissions projections account for a trip generation rate and fleet mix identified by the Project’s TIA (*Technical Appendix LI*). Specifically, Urban Crossroads estimates the generation of 23,624 average vehicle trips daily, 3,850 of which would be heavy-duty trucks, under the Alternative Land Use Plan. Heavy-duty trucks are a weighted average of Medium-heavy duty trucks and Heavy-heavy duty trucks as identified by the Project Traffic Assessment. The average trip length is calculated at 53.9 miles, which represents the average distance between the Project site and the Port of Los Angeles/Long Beach, the Project site and the Banning Pass, the Project site and the San Diego County line, the Project site and the Cajon Pass, and the Project site and downtown Los Angeles.

(ECORP, 2020b, Table 3-5)

The CAP Update identifies a two-step approach in evaluating GHG emissions. First, a screening threshold of 3,000 MTCO₂e/yr is used to determine if additional analysis is required. Projects that exceed the 3,000 MTCO₂e/yr will be required to quantify and disclose the anticipated GHG, then either: 1) demonstrate how the project would reduce GHG emissions to levels below 3,000 MTCO₂e/yr through project design features and/or mitigation measures; or 2) garner 100 points through the CAP Screening Tables. As shown on Table 4.8-4 and Table 4.8-5, both the Primary Land Use Plan and Alternative Land Use Plan would result in substantially more GHG emissions than the County’s screening threshold of 3,000 MTCO₂e/yr. As such, prior to mitigation, the Project’s impacts due to GHG emissions would be significant on a cumulatively-considerable basis, and mitigation requiring future developments to achieve 100 points per the CAP Screening Tables is required. (ECORP, 2020b, pp. 90-91)



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

As previously stated, pursuant to § 15604.4 of the State CEQA Guidelines, a lead agency may rely on qualitative analysis or performance-based standards to determine the significance of impacts from GHG emissions. As such, the Project's consistency with AB 32, SB 32, and the County's CAP are discussed below.

□ Project Consistency with AB 32/CARB 2008 Scoping Plan

The California Air Resources Board (CARB) Scoping Plan identifies strategies to reduce California's GHG emissions in support of AB 32 which requires the State to reduce its GHG emissions to 1990 levels by 2020. Many of the strategies identified in the Scoping Plan are not applicable at the project level, such as long-term technological improvements to reduce emissions from vehicles. Some measures are applicable and supported by the Project, such as energy efficiency. Finally, while some measures are not directly applicable, the project would not conflict with their implementation. Reduction measures are grouped into 18 action categories, as follows:

1. California Cap-and-Trade Program Linked to Western Climate Initiative Partner Jurisdictions. Implement a broad-based California cap-and-trade program to provide a firm limit on emissions. Link the California cap-and-trade program with other Western Climate Initiative Partner programs to create a regional market system to achieve greater environmental and economic benefits for California. Ensure California's program meets all applicable AB 32 requirements for market-based mechanisms.
2. California Light-Duty Vehicle GHG Standards. Implement adopted Pavley standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.
3. Energy Efficiency. Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities).
4. Renewables Portfolio Standards. Achieve 33% renewable energy mix statewide.
5. Low Carbon Fuel Standard. Develop and adopt the Low Carbon Fuel Standard.
6. Regional Transportation-Related GHG Targets. Develop regional GHG emissions reduction targets for passenger vehicles.
7. Vehicle Efficiency Measures. Implement light-duty vehicle efficiency measures.
8. Goods Movement. Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities.
9. Million Solar Roofs Program. Install 3,000 megawatts of solar-electric capacity under California's existing solar programs.



10. Medium- and Heavy-Duty Vehicles. Adopt medium- (MD) and heavy-duty (HD) vehicle efficiencies. Aerodynamic efficiency measures for HD trucks pulling trailers 53-feet or longer that include improvements in trailer aerodynamics and use of rolling resistance tires were adopted in 2008 and went into effect in 2010. Future, yet to be determined improvements, includes hybridization of MD and HD trucks.
11. Industrial Emissions. Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce GHG emissions and provide other pollution reduction co-benefits. Reduce GHG emissions from fugitive emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive methane emissions and reduce flaring at refineries.
12. High Speed Rail. Support implementation of a high-speed rail system.
13. Green Building Strategy. Expand the use of green building practices to reduce the carbon footprint of California’s new and existing inventory of buildings.
14. High Global Warming Potential Gases. Adopt measures to reduce high warming global potential gases.
15. Recycling and Waste. Reduce methane emissions at landfills. Increase waste diversion, composting and other beneficial uses of organic materials, and mandate commercial recycling. Move toward zero-waste.
16. Sustainable Forests. Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation. The 2020 target for carbon sequestration is 5 million MTCO₂e/YR.
17. Water. Continue efficiency programs and use cleaner energy sources to move and treat water.
18. Agriculture. In the near-term, encourage investment in manure digesters and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020.

Table 4.8-6, *Project Consistency with 2008 CARB Scoping Plan*, summarizes the project’s consistency with the 2008 Scoping Plan. As summarized, the project will not conflict with any of the provisions of the Scoping Plan and in fact supports seven of the action categories through energy efficiency, water conservation, recycling, and landscaping.

Table 4.8-6 Project Consistency with 2008 CARB Scoping Plan

Action	Supporting Measures	Consistency
Cap-and-Trade Program	--	Not applicable. These programs involve capping emissions from electricity generation, industrial facilities, and broad scoped fuels. Caps do not directly affect commercial projects.
Light-Duty Vehicle Standards	T-1	Not applicable. While these are CARB-enforced measures that are not directly applicable to the proposed Project, vehicles that access the Project are required to comply with the standards and will comply with this strategy. EV charging stations are required to be installed on site per the 2019 Title 24 standards.



Table 4.8-6 Project Consistency with 2008 CARB Scoping Plan

Action	Supporting Measures	Consistency
Energy Efficiency	E-1	Consistent. The Project will include a variety of building, water, and solid waste efficiencies consistent with the most current CALGreen requirements.
	E-2	
	CR-1	
	CR-2	
Renewables Portfolio Standard	E-3	Not applicable. Establishes the minimum statewide renewable energy mix.
Low Carbon Fuel Standard	T-2	Not applicable. Establishes reduced carbon intensity of transportation fuels.
Regional Transportation-Related GHG Targets	T-3	Not applicable. This is a Statewide measure and is not within the purview of this Project.
Vehicle Efficiency Measures	T-4	Not applicable. Identifies measures such as minimum tire-fuel efficiency, lower friction oil, and reduction in air conditioning use.
Goods Movement	T-5	Not applicable. Identifies measures to improve goods movement efficiencies such as advanced combustion strategies, friction reduction, waste heat recovery, and electrification of accessories. While these measures are not directly applicable to the Project, any commercial activity associated with Goods Movement would be required to comply with these measures as adopted. As such, the proposed Project would not interfere with their implementation.
	T-6	
Million Solar Roofs (MSR) Program	E-4	Consistent. The MSR program sets a goal for use of solar systems throughout the state as a whole. Consistent with CAP measure R2-CE1, as would be required pursuant to the mitigation measures identified herein, proposed buildings larger than 100,000 s.f. in size would be required to generate on-site renewable energy of at least 20% of energy demand for commercial, office, industrial, or manufacturing development.
Medium- and Heavy-Duty Vehicles	T-7	Not applicable. MD and HD trucks and trailers for industrial uses would be subject to aerodynamic and hybridization requirements as established by CARB; the proposed Project would not interfere with implementation of these requirements and programs.
	T-8	
Industrial Emissions	I-1	Not applicable. These measures are applicable to large industrial facilities (> 500,000 MTCO ₂ e/yr) and other intensive uses such as refineries. As shown in Table 4.8-4 and Table 4.8-5, the Project is not anticipated to generate more than 500,000 MTCO ₂ e/yr.
	I-2	
	I-3	
	I-4	
	I-5	
High-Speed Rail	T-9	Not applicable. Supports increased mobility choice.
Green Building Strategy	GB-1	Consistent. The Project would include a variety of building, water, and solid waste efficiencies consistent with the current CALGreen requirements.
High Global Warming Potential Gases	H-1	Not Applicable. The proposed Project is not a substantial source of high GWP emissions and would comply with any future changes in air conditioning, fire protection suppressant, and other requirements.
	H-2	
	H-3	
	H-4	



Table 4.8-6 Project Consistency with 2008 CARB Scoping Plan

Action	Supporting Measures	Consistency
	H-5	
	H-6	
	H-7	
Recycling and Waste	RW-1	Consistent. The Project would be required recycle a minimum of 65% from construction activities and Project operations per State and County requirements.
	RW-2	
	RW-3	
Sustainable Forests	F-1	Consistent. The Project would increase carbon sequestration by increasing on-site trees per the project landscape design guidelines.
Water	W-1	Consistent. The Project would include use of low-flow fixtures and efficient landscaping per State and County requirements.
	W-2	
	W-3	
	W-4	
	W-5	
	W-6	
Agriculture	A-1	Not applicable. The Project does not propose agricultural uses.

Project Consistency with SB 32/2017 Scoping Plan

The 2017 Scoping Plan Update reflects the 2030 target of a 40% reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. Table 4.8-7, *Project Consistency with 2017 CARB Scoping Plan*, summarizes the project’s consistency with the 2017 Scoping Plan. As summarized in Table 4.8-7, the Project would not conflict with any of the provisions of the Scoping Plan and in fact supports seven of the action categories. Additionally, any regulations adopted would apply directly or indirectly to the Project. Further, recent studies show that the State’s existing and proposed regulatory framework will allow the State to reduce its GHG emissions level to 40% below 1990 levels by 2030.

Table 4.8-7 Project Consistency with 2017 CARB Scoping Plan

Action	Responsible Parties	Consistency
Implement SB 350 by 2030		
Increase the Renewables Portfolio Standard to 50% of retail sales by 2030 and ensure grid reliability.	CPUC, CEC, CARB	Consistent. This measure is not directly applicable to development projects, but the proposed Project would use energy from Southern California Edison, which has committed to diversify its portfolio of energy sources by increasing energy from wind and solar sources.
Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.		Consistent. Although this measure is directed towards policymakers, the proposed Project would be designed consistent with CAP measure R2-CE1, which would generate on-site renewable energy of at least 20% of energy demand for commercial, office, industrial or manufacturing development for any proposed buildings that exceed 100,000 s.f. in size.



Table 4.8-7 Project Consistency with 2017 CARB Scoping Plan

Action	Responsible Parties	Consistency
<p>Reduce GHG emissions in the electricity sector through the implementation of the above measures and other actions as modeled in Integrated Resource Planning (IRP) to meet GHG emissions reductions planning targets in the IRP process. Load-serving entities and publicly-owned utilities meet GHG emissions reductions planning targets through a combination of measures as described in IRPs.</p>		<p>Consistent. Although this measure is directed towards policymakers, the proposed Project would be designed consistent with CAP measure R2-CE1, which would generate on-site renewable energy of at least 20% of energy demand for commercial, office, industrial or manufacturing development for any proposed buildings that exceed 100,000 s.f. in size.</p>
<p>Implement Mobile Source Strategy (Cleaner Technology and Fuels)</p>		
<p>At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025.</p>	<p>CARB, California State Transportation Agency (CalSTA), Strategic Growth Council (SGC), California Department of Transportation (Caltrans), CEC, OPR, Local Agencies</p>	<p>Consistent. These are CARB enforced standards; vehicles that access the Project would be required to comply with the standards.</p>
<p>At least 4.2 million zero emission and plugin hybrid light-duty electric vehicles by 2030.</p>		<p>Consistent. These are CARB enforced standards; vehicles that access the Project would be required to comply with the standards.</p>
<p>Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations.</p>		<p>Consistent. These are CARB enforced standards; vehicles that access the Project would be required to comply with the standards.</p>
<p>Medium- and Heavy-Duty GHG Phase 2.</p>		<p>Consistent. These are CARB enforced standards; vehicles that access the Project would be required to comply with the standards.</p>
<p>Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20% of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero-emission technology ramped up to 100% of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NO_x standard.</p>		<p>Not applicable. This measure is not within the purview of this Project.</p>
<p>Last Mile Delivery: New regulation that would result in the use of low NO_x or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3-7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5% of new Class 3-7 truck sales in local fleets starting in 2020, increasing to 10%</p>		<p>Not applicable. This Project is not responsible for implementation of SB 375 and would therefore not conflict with this measure.</p>



Table 4.8-7 Project Consistency with 2017 CARB Scoping Plan

Action	Responsible Parties	Consistency
<p>in 2025 and remaining flat through 2030. Further reduce VMT through continued implementation of SB 375 and regional Sustainable Communities Strategies; forthcoming statewide implementation of SB 743; and potential additional VMT reduction strategies not specified in the Mobile Source Strategy but included in the document “Potential VMT Reduction Strategies for Discussion.”</p>		<p>Not applicable. This Project is not responsible for implementation of SB 375 and would therefore not conflict with this measure.</p>
<p>Increase stringency of SB 375 Sustainable Communities Strategy (2035 targets).</p>	<p>CARB</p>	<p>Not applicable. The Project is not within the purview of SB 375 and would therefore not conflict with this measure.</p>
<p>By 2019, adjust performance measures used to select and design transportation facilities</p>		
<p>Harmonize project performance with emissions reductions and increase competitiveness of transit and active transportation modes (e.g. via guideline documents, funding programs, project selection, etc.).</p>	<p>CalSTA, SGC, OPR, CARB, Governor’s Office of Business and Economic Development (GOBiz), California Infrastructure and Economic Development Bank (IBank), Department of Finance (DOF), California Transportation Commission (CTC), Caltrans</p>	<p>Not applicable. Although this is directed towards CARB and Caltrans, the proposed Project would be designed to promote and support pedestrian activity on-site and in the Project area.</p>
<p>By 2019, develop pricing policies to support low-GHG transportation (e.g. low-emission vehicle zones for heavy duty, road user, parking pricing, transit discounts).</p>	<p>CalSTA, Caltrans, CTC, OPR, SGC, CARB</p>	<p>Not applicable. Although this measure is directed towards policymakers, the proposed Project would comply with AB 341, which sets a statewide policy that not less than 75% of solid waste generated be source reduced, recycled, or composted by the year 2020. Additionally, the proposed Project would be required to have a recycling program and recycling collection.</p>



Table 4.8-7 Project Consistency with 2017 CARB Scoping Plan

Action	Responsible Parties	Consistency
		During construction, the proposed Project Applicant would be required to recycle and reuse construction and demolition waste per County solid waste requirements and regulations.
Implement California Sustainable Freight Action Plan		
Improve freight system efficiency.	CalSTA, CalEPA, CNRA, CARB, Caltrans, CEC, GO-Biz	When adopted, this measure would apply to all trucks accessing the Project site, this may include existing trucks or new trucks that are part of the statewide goods movement sector.
Deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near-zero emission freight vehicles and equipment powered by renewable energy by 2030.		Not applicable. This measure is not within the purview of this Project.
Adopt a Low Carbon Fuel Standard with a Carbon Intensity reduction of 18%.	CARB	When adopted, this measure would apply to all fuel purchased and used by the Project in the State.
Implement the Short-Lived Climate Pollutant Strategy by 2030		
40% reduction in methane and hydrofluorocarbon emissions below 2013 levels.	CARB, CalRecycle, CDFA, SWRCB, Local Air Districts	When adopted, the Project would be required to comply with this measure and reduce SLPS accordingly.
50% reduction in black carbon emissions below 2013 levels.		Not applicable. This measure is not within the purview of this Project.
By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.	CARB, CalRecycle, CDFA SWRCB, Local Air Districts	Not applicable. This measure is not within the purview of this Project.
Implement the post-2020 Cap-and-Trade Program with declining annual caps.	CARB	When adopted, the Project would be required to comply with the Cap-and-Trade Program if it generates emissions from sectors covered by Cap-and-Trade.
By 2018, develop Integrated Natural and Working Lands Implementation Plan to secure California's land base as a net carbon sink		
Protect land from conversion through conservation easements and other incentives.	CNRA, Departments Within CDFA, CalEPA, CARB	Not applicable. This measure is not within the purview of this Project.
Increase the long-term resilience of carbon storage in the land base and enhance sequestration capacity		Not applicable. This measure is not within the purview of this Project.
Utilize wood and agricultural products to increase the amount of carbon stored in the natural and built environments		Not applicable. This measure is not within the purview of this Project.
Establish scenario projections to serve as the foundation for the Implementation		Not applicable. This measure is not within the purview of this Project.



Table 4.8-7 Project Consistency with 2017 CARB Scoping Plan

Action	Responsible Parties	Consistency
Plan		
Establish a carbon accounting framework for natural and working lands as described in SB 859 by 2018	CARB	Not applicable. This measure is not within the purview of this Project.
Implement Forest Carbon Plan	CNRA, California Department of Forestry and Fire Protection (CAL FIRE), CalEPA	Not applicable. This measure is not within the purview of this Project.
Identify and expand funding and financing mechanisms to support GHG reductions across all sectors.	State Agencies & Local Agencies	Not applicable. This measure is not within the purview of this Project.

Project Consistency with Riverside County CAP Update

The County of Riverside approved the CAP Updated on December 17, 2019. The CAP Update was designed under the premise that the County, and the community it represents, is uniquely capable of addressing emissions associated with sources under Riverside County’s jurisdiction, and that Riverside County’s emission reduction efforts should coordinate with the state strategies of reducing emissions in order to accomplish these reductions in an efficient and cost-effective manner.

In order to evaluate consistency with the CAP, the County provided Screening Tables to aid in measuring the reduction of GHG emissions attributable to certain design and construction measures incorporated into development projects. The County’s CAP currently evaluates and quantifies reductions out to Year 2030. The CAP states that “[t]hrough 2050, Riverside County would continue implementation of the Screening Tables. During this time, the reduction measures implemented through the Screening Tables would continue to reduce GHG missions from new development. Additionally, it is assumed that the State measures would keep being updated and reinforced to further reduce emissions. With these assumptions, Riverside County’s emissions would decrease to a level below the reduction target by 2050.” Thus, compliance with the CAP would serve to meet and support the reduction targets established Senate Bill 32 and the CARB 2017 Scoping Plan.

Pursuant to the CAP Update and associated Screening Tables, projects that garner at least 100 points (equivalent to an approximate 49% reduction in GHG emissions below 2008 baseline levels) are determined to be consistent with the reduction quantities anticipated in the County’s GHG Technical Report, and consequently would be consistent with the CAP. Absent implementation of Screening Table Measures, the Project could be considered inconsistent with the County CAP. This is a potentially significant impact for which mitigation is required.



The CAP Update also includes measure R2-CE1, which requires on-site renewable energy production. This measure is required for any tentative tract map, plot plan, or conditional use permit that proposes to add more than 100,000 gross square feet of commercial, office, industrial, or manufacturing development. Renewable energy production shall be onsite generation of at least 20 percent (%) of energy demand for commercial, office, industrial or manufacturing development. Future implementing developments within the Project site would be subject to compliance with measure R2-CE1 as a standard condition of approval, and thus the Project would not conflict with CAP Update measure R2-CE1.

4.8.5 CUMULATIVE IMPACT ANALYSIS

As discussed in subsection 4.8.1, there is no evidence at this time that would indicate that the emissions from a project the size of the Project would directly or indirectly affect the global climate. As such, Project impacts due to GHG emissions are inherently cumulative in nature.

As discussed under the analysis of Threshold a., the Project would result in approximately 179,382 MTCO₂e/yr under the Primary Land Use Plan and 177,107 MTCO₂e/yr under the Alternative Land Use Plan; thus, the proposed Project would exceed the County's screening threshold of 3,000 MTCO₂e/yr. Accordingly, the Project would have the potential to result in a cumulatively-considerable impact on the environment with respect to GHG emissions.

As discussed under the analysis of Threshold b., the Project would be consistent with or otherwise would not conflict with the CARB 2008 Scoping Plan and the CARB 2017 Scoping Plan. However, the Project has the potential to conflict with the Riverside County CAP Update if the Project were unable to achieve 100 points pursuant to the CAP Screening Tables. This is evaluated as a cumulatively-considerable impact of the proposed Project.

4.8.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a.: Significant Cumulatively-Considerable Impact. The Project would result in approximately 179,382 MTCO₂e/yr under the Primary Land Use Plan and 177,107 MTCO₂e/yr under the Alternative Land Use Plan; thus, the proposed Project would exceed the County's screening threshold of 3,000 MTCO₂e/year. If the Project were to fail to achieve 100 points pursuant to the CAP Screening Tables, Project-related GHG emissions would have the potential to result in a significant cumulatively-considerable impact on the environment.

Threshold b.: Significant Cumulatively-Considerable Impact. The Project would be consistent with or otherwise would not conflict with the CARB 2008 Scoping Plan and the CARB 2017 Scoping Plan. However, the Project has the potential to conflict with the Riverside County CAP Update if the Project were unable to achieve 100 points pursuant to the CAP Screening Tables. This is evaluated as a cumulatively-considerable impact of the proposed Project.



4.8.7 COUNTY REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

Applicable County Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

The Project would be required to comply with all mandates imposed by the State of California and SCAQMD aimed at the reduction of GHG emissions. Those that are applicable to the Project and that would assist in the reduction of greenhouse gas emissions are listed below:

- Global Warming Solutions Act of 2006 (AB32).
- Pavley Fuel Efficiency Standards (AB1493). Establishes fuel efficiency ratings for new vehicles.
- Title 17 California Code of Regulations (Low Carbon Fuel Standard). Requires carbon content of fuel sold in California to be 10% less by 2020.
- Statewide Retail Provider Emissions Performance Standards (SB 1368). Requires energy generators to achieve performance standards for GHG emissions.
- Renewable Portfolio Standards (SB 100). Requires electric corporations to increase the amount of energy obtained from eligible renewable energy resources to achieve a target of 50% renewable resources by December 31, 2026, and to achieve a 60% target by December 31, 2030.. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030.
- Senate Bill 32 (SB 32). Requires the state to reduce statewide greenhouse gas emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15.

Mitigation

MM 4.8-1 Prior to approval of implementing development permit applications (i.e., plot plans, conditional use permits, etc.) and prior to building permit issuance, the Project Applicant shall demonstrate that appropriate building construction measures shall apply to achieve a minimum of 100 points per Appendix D to the Riverside County 2019 Climate Action Plan (CAP) Update. The conceptual measures anticipated for the Project are listed in Table 3-6 of the Project's Air Quality Assessment (AQA), which is appended to this EIR as Technical Appendix B. The conceptual measures may be replaced with other measures as listed in the CAP Screening Tables (Appendix D to the CAP Update), as long as they are replaced at the same time with other measures that in total achieve a minimum of 100 points per Appendix D to the Riverside County CAP Update.

MM 4.8-2 Pursuant to Riverside County Climate Action Plan Update Measure R2-CE1, prior to issuance of building permits, and in accordance with measure R2-CE1 of the County's Climate Action



Plan (CAP) Update, future implementing building permits that involve more than 100,000 gross square feet of commercial, office, industrial, or manufacturing development shall be required to offset the energy demand through renewable energy production. Renewable energy production shall be onsite generation of at least 20% of energy demand for commercial, office, industrial or manufacturing development.

4.8.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a.: Less-than-Significant Impact with Mitigation Incorporated. The Riverside County CAP Update (November 2019) qualifies as a “Plan for the Reduction of Greenhouse Gas Emissions,” pursuant to State CEQA Guidelines § 15183.5(b). Pursuant to State CEQA Guidelines §§ 15064(h)(3) and 15130(d), a lead agency may determine that a project’s incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously adopted plan or mitigation program. Additionally, and as discussed above in subsection 4.8.2, Tier 2 of the SCAQMD interim thresholds for GHG emissions indicates that if a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions. Implementation of Mitigation Measures MM 4.8-1 and MM 4.8-2 would ensure that the proposed Project is fully consistent with the Riverside County CAP Update (November 2019) by requiring the Project Applicant to demonstrate that implementing building permit applications have incorporated measures to achieve a minimum of 100 points pursuant to the CAP Update Screening Tables, and by requiring the Project to offset energy demands through renewable energy production. Accordingly, with implementation of Mitigation Measure MM 4.8-1, the Project would be fully consistent with the CAP Update and the Project’s cumulatively-considerable impacts due to GHG emissions would be reduced to less-than-significant levels.

Threshold b.: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.8-1 would ensure that the proposed Project is fully consistent with the Riverside County CAP Update (November 2019) by requiring the Project Applicant to demonstrate that future implementing building permit applications have incorporated measures to achieve a minimum of 100 points pursuant to the CAP Update Screening Tables. With implementation of Mitigation Measure MM 4.8-1, Project impacts due to a potential conflict with the CAP Update would be reduced to less-than-significant levels.



4.9 HAZARDS AND HAZARDOUS MATERIALS

The information and analysis presented in this Subsection is based in part on a technical study that was prepared to determine the presence or absence of hazardous materials on the Project site under existing conditions. This report, entitled, “Phase I Environmental Site Assessment, Vacant Land, 307-070-003, -004, -005; 307-080-005, -006, -007, -008; 307-090-001, -002, -004, -005, -006; 307-100-001, -003, -004, -005; 307-110-003, -004, -007, -008; 307-220-001, -002; 307-230-019, -020, Perris, California 92571,” was prepared by Hillmann Consulting (herein, “Hillmann”), is dated April 10, 2019, and is included as EIR *Technical Appendix G* (Hillmann, 2019).

4.9.1 EXISTING CONDITIONS

A. Definition of Toxic Substances and Hazardous Waste

For purposes of this EIR, the term “toxic 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.

“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, § 66261.3. The defining characteristics of hazardous waste are: ignitability (oxidizers, compressed gases, and extremely flammable liquids and solids), corrosivity (strong acids and bases), reactivity (explosives or generates toxic fumes when exposed to air or water), and toxicity (materials listed by the United States Environmental Protection Agency [USEPA] as capable of inducing systemic damage to humans or animals).

Certain wastes are called “Listed Wastes” and are found in the California Code of Regulations, Title 22, §§ 66261.30 through 66261.35. Wastes appear on the lists because of their known hazardous nature or because the processes that generate them are known to produce hazardous wastes (which are often complex mixtures).

B. Historical Review, Regulatory Review, and Field Reconnaissance

Hillman performed a search of readily available environmental record sources. The search results are summarized below. The search radius for each data base was one mile from the Project site. Environmental Data Resources, Inc. (EDR) conducted a search for sites listed on various federal and state databases within one mile of the Project site. A detailed description of the results of the regulatory and historical records review is provided in the Project’s ESA (*Technical Appendix G*), and is summarized below.



1. *Historical Review*

Hillmann has conducted research in order to help identify the likelihood of past uses having led to Recognized Environmental Conditions (RECs) in connection with the Project site. Standard historical sources were sought by Hillmann in an attempt to document the past uses of the Project site as far back as it can be shown that the Project site contained structures; or from the time the Project site was first used for residential, agricultural, commercial, industrial or governmental purposes. (Hillmann, 2019, p. 12)

Hillmann reviewed historic aerial photographs of the Property online at www.historicaerials.com. Based on this review, Hillmann determined that the Project site was used for agricultural activities as far back as 1938 and as recently as 1985. Agricultural activities on site are thought to have been discontinued on the site in the late 1980s, with no agricultural uses shown in aerial photographs between 1994 and present. Based on the historical aerials, it does not appear that any permanent structures have ever been constructed on site. (Hillmann, 2019, pp. 13-14)

The Property was historically developed for agricultural uses as early as 1938 until at least 1985. This use suggests the historical application of pesticides during this time, which could have accumulated in the shallow soils at that time. The Property remained as vacant land since the late 1980s. The former use of the property as agricultural land may have contributed to accumulated pesticides in the shallow soils and is considered to be a REC in connection with the Project site. (Hillmann, 2019, p. 15)

2. *Regulatory Records Review*

Hillmann obtained a regulatory database report, titled EDR Radius Map™ Report, from Environmental Data Resources of Shelton, CT. The report provided a search of standard environmental record sources in general accordance with the requirements of the American Society for Testing for Testing Materials (ASTM) E1527-13. Hillmann has reviewed the regulatory database report, and also has also reviewed the list of unmapped sites (a.k.a. “Orphan List” sites). Table 4.9-1, *Regulatory Database Search Results*, summarizes the results of the regulatory database search. The review of the database search results determined that the Project site is not identified on any of the databases searched by EDR, nor are any adjoining properties identified in regulatory databases. Detailed descriptions of the meaning and significance of the regulatory databases can be found in the regulatory database report in Appendix E to the Project’s Phase I ESA, which is included as EIR *Technical Appendix G*. (Hillmann, 2019, pp. 15-16)

As shown in Table 4.9-1, although the Project site and adjacent properties were not included in any of the regulatory database searches, there are properties within the required search radius that do occur on regulatory databases. These properties are summarized below.

- State/Tribal Hazardous Waste Sites: Six (6) State Hazardous Waste Sites (SHWS) listings were identified within a one-mile radius of the Project site on the EnviroStor database. The closest off-site listing identified as Preissman Ranch Elem/Mid (2100 Rider Street), is located approximately 3.8 miles to the west-northwest and is upgradient relative to the Project site. This is listed as a school



investigation by the Department of Toxic Substances Control (DTSC) due to potential pesticide contamination from previous agricultural uses. The current status is listed as “No Further Action” as of September 26, 2001. Based on the distance and the status, this facility is not considered a REC in connection to the Project site. Based on the distance and/or status, none of the other listings are considered RECs in connection with the Project site. (Hillmann, 2019, p. 17)

Table 4.9-1 Regulatory Database Search Results

Regulatory Database	Search Distance	Property Listed?	Adj. Properties Listed?	Total Listings Within Search Distance
Fed. NPL/Proposed NPL	1-mile	No	No	0
Fed. Delisted NPL	½-mile	No	No	0
Fed. SEMS	½-mile	No	No	0
Fed. SEMS-ARCHIVE	½-mile	No	No	0
Fed. RCRA CORRACTS	1-mile	No	No	0
Fed. RCRA TSD	½-mile	No	No	0
Fed. RCRA LQG	Site & Adj.	No	No	
Fed. RCRA SQG	Site & Adj.	No	No	
Fed. RCRA CESQG	Site & Adj.	No	No	
Fed. ENG Control List	Site	No		
Fed. INST Control List	Site	No		
Fed. ERNS	Site	No		
State/Tribal Hazardous Waste Site	1-mile	No	No	6
State/Tribal Landfill/Solid Waste	½-mile	No	No	0
State/Tribal Leaking Storage Tanks	½-mile	No	No	3
State/Tribal Registered Storage Tanks	Site & Adj.	No	No	
State/Tribal Eng. Control List	Site	No		
State/Tribal Inst. Control List	Site	No		
State/Tribal Voluntary Cleanup Sites	½-mile	No	No	0
State/Tribal Brownfields	½-mile	No	No	0
Supplemental Regulatory Databases	Site & Adj.	No	No	

(Hillmann, 2019, p. 16)

- State/Tribal Leaking Storage Tanks: Three (3) Leaking Underground Storage Tank (LUST) listings were identified within a ½-mile radius of the Project site. The closest off-site listing is identified as the Tava Development (12th Street), and is located approximately 4,440 feet to the east-southeast and is downgradient relative to the Project site. This site is listed on the LUST database due to impacts to soil with gasoline. The LUST case received regulatory closure on July 27, 1993. Based on the regulatory closure received, this site is not considered a REC in connection with the Project site. Based on the distance and/or status, none of the other listings are considered RECs in connection with the Project site. (Hillmann, 2019, p. 17)

Hillmann also reviewed adjoining and vicinity database sites to identify potential off-site sources of subsurface vapor encroachment. Vicinity database sites pertaining to non-petroleum product releases within 1,760 feet



of the Project site in the up-gradient direction, 365 feet of the Property in the cross gradient direction, and 100 feet of the Property in the down gradient direction; and vicinity database sites pertaining to petroleum product releases within 528 feet of the Property in the up-gradient direction, 165 feet of the Property in the cross gradient direction and 100 feet of the Property in the down gradient direction were reviewed to identify active contamination sites with the potential to affect subsurface vapor conditions at the Project site. The potential for vapor encroachment was considered in assessing whether or not a REC exists in connection with the Property when reviewing applicable sites within those distances. Hillmann did not identify sites with active petroleum or non-petroleum releases within the search criteria specified above that are considered to be RECs due to a risk of vapor encroachment. (Hillmann, 2019, p. 18)

Hillmann also reviewed the regulatory database report for listings on supplemental databases that were searched in addition to the Standard Environmental Record Sources. None of the other supplemental database listings identified by the regulatory database report are considered to be a REC in connection with the Project site. In addition, Hillmann consulted local agencies and available internet sources, and did not identify any RECs in connection with the Project site (Hillmann, 2019, p. 18)

3. Site Reconnaissance

The site reconnaissance conducted by Hillmann consisted of visual and/or physical observations of the Project site and improvements, adjoining properties as viewed from the Project boundaries, and the surrounding area based on visual observations from adjoining public thoroughfares. The Project site is characterized as undeveloped and overgrown with vegetation. The vicinity is characterized as undeveloped and agricultural land. Hillmann observed a buried water pipeline associated with the Eastern Municipal Water District (EMWD) at the north central portion of the Project site. Hillmann notes that additional buried pipelines may exist in other areas of the Project site. (Hillmann, 2019, p. 20)

The terrain of the Property appeared to be mostly flat with portions of a hill. Hillmann did not observe evidence of standing or pooling liquids on the Property. The Project site is undeveloped and there are no structures present. No obvious indication of past usage on site likely to have involved the use, treatment, storage, disposal, or generation of hazardous substances or petroleum products was observed at the time of the site visit. No indication of past uses of the adjoining properties was noted at the time of the site visit. (Hillmann, 2019, pp. 20-21)

The following provides a summary of the site reconnaissance conducted by Hillmann with respect to specific hazardous substances and petroleum products:

- No drums were observed on the Project site at the time of the site reconnaissance.
- No unidentified containers suspected of containing hazardous substances or petroleum products were observed on the Project site at the time of site reconnaissance.
- No other hazardous substances or petroleum products were observed on the Project site at the time of site reconnaissance.



- No storage tanks for bulk petroleum or hazardous material storage were identified or reported to be present, and are not suspected to be present based on visual observations.
- No electrical or hydraulic equipment suspected of containing PCBs was identified at the Project site.
- No strong, unusual or pungent odors were noted on the Project site at the time of site reconnaissance.
- No standing water or pools of liquid likely to contain hazardous substances or petroleum products were observed at the Project site at the time of site reconnaissance.
- No interior stains or corrosion due to hazardous substance/petroleum products spills/releases were observed on the Project site.
- No floor drains or sump pits were noted at the Project site other than for storm water or sewage management.
- No evidence of exterior pits, ponds or lagoons was identified on the Project site in connection with waste treatment or disposal.
- No stained soil, pavement or stressed vegetation was observed at the Project site.
- Hillmann observed evidence of nuisance trash and debris dumped in various locations throughout the Project site. No evidence of recently deposited fill materials was observed at the Project site at the time of site reconnaissance.
- Storm water runoff generated on-site are discharged into a nearby catch basin or the southeast adjoining stream/creek. No other waste discharges were observed at the Project site.
- No indication of a septic system, well, or railroad spurs was noted on the Project site.

C. Airport Hazards

The Riverside County Airport Land Use Commission (RCALUC) has jurisdiction over development in the Project area due to the proximity of the March Air Reserve Base (MARB), which is located approximately 4.6 miles northwest of the Project site. The March Air Reserve Base Inland Port Airport Land Use Compatibility Plan (ALUCP) identifies land use standards and design criteria for new development located in the proximity of the March Air Reserve Base to ensure compatibility between the airport and surrounding land uses and to maximize public safety (ALUC, 2014). A majority of the western, central, and southern portions of the Project site are located within the Airport Influence Area (AIA) for the March Air Reserve Base and are located within ALUCP Compatibility Zone E (RCIT, 2020). No restrictions are identified by the ALUCP for Compatibility Zone E, other than prohibiting specific types of land uses that can create a hazard to flight (ALUC, 2014). However, proposed developments within the AIA per the MARB require review by the RCALUC.

4.9.2 APPLICABLE REGULATORY REQUIREMENTS

The following is a brief description of the federal, state, and local environmental laws and related regulations related to hazards and hazardous materials.



A. Hazardous Materials Regulations and Plans

1. Federal Regulations

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

The Comprehensive Environmental Response, Compensation, and Liability Act, also known as CERCLA or Superfund, provides a Federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, the Environmental Protection Agency (EPA) was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup. EPA cleans up orphan sites when potentially responsible parties cannot be identified or located, or when they fail to act. Through various enforcement tools, EPA obtains private party cleanup through orders, consent decrees, and other small party settlements. EPA also recovers costs from financially viable individuals and companies once a response action has been completed. (EPA, 2020b)

EPA is authorized to implement the Act in all 50 states and U.S. territories. Superfund site identification, monitoring, and response activities in states are coordinated through the state environmental protection or waste management agencies. (EPA, 2020b)

The Superfund Amendments and Reauthorization Act (SARA) of 1986 reauthorized CERCLA to continue cleanup activities around the country. Several site-specific amendments, definitions clarifications, and technical requirements were added to the legislation, including additional enforcement authorities. Also, Title III of SARA authorized the Emergency Planning and Community Right-to-Know Act (EPCRA). (EPA, 2020b)

Resource Conservation and Recovery Act (RCRA)

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. (EPA, 2020c)

The Federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program. (EPA, 2020c)



Hazardous Materials Transportation Act (HMTA)

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

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

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

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

Hazardous Materials Transportation Uniform Safety Act of 1990

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

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

Occupational Safety and Health Act (OSHA)

Congress passed the Occupational and Safety Health Act (OSHA) to ensure worker and workplace safety. Their goal was to make sure employers provide their workers a place of employment free from recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions. (EPA, 2019b)

In order to establish standards for workplace health and safety, the Act also created the National Institute for Occupational Safety and Health (NIOSH) as the research institution for OSHA. OSHA is a division of the U.S. Department of Labor that oversees the administration of the Act and enforces standards in all 50 states. (EPA, 2019b)



Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 provides EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics, and pesticides. TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint. (EPA, 2019c)

Various sections of TSCA provide authority to:

- Require, under Section 5, pre-manufacture notification for "new chemical substances" before manufacture
- Require, under Section 4, testing of chemicals by manufacturers, importers, and processors where risks or exposures of concern are found
- Issue Significant New Use Rules (SNURs), under Section 5, when it identifies a "significant new use" that could result in exposures to, or releases of, a substance of concern.
- Maintain the TSCA Inventory, under Section 8, which contains more than 83,000 chemicals. As new chemicals are commercially manufactured or imported, they are placed on the list.
- Require those importing or exporting chemicals, under Sections 12(b) and 13, to comply with certification reporting and/or other requirements.
- Require, under Section 8, reporting and record-keeping by persons who manufacture, import, process, and/or distribute chemical substances in commerce.
- Require, under Section 8(e), that any person who manufactures (including imports), processes, or distributes in commerce a chemical substance or mixture and who obtains information which reasonably supports the conclusion that such substance or mixture presents a substantial risk of injury to health or the environment to immediately inform EPA, except where EPA has been adequately informed of such information. EPA screens all TSCA b§8(e) submissions as well as voluntary "For Your Information" (FYI) submissions. The latter are not required by law, but are submitted by industry and public interest groups for a variety of reasons. (EPA, 2019c)

2. *State Regulations*

Cal/OSHA and the California State Plan

Under an agreement with OSHA, since 1973 California has operated an occupational safety and health program in accordance with Section 18 of the federal OSHA. The State of California's Department of Industrial Relations administers the California Occupational Safety and Health Program, commonly referred to as Cal/OSHA. The State of California's Division of Occupational Safety and Health (DOSH) is the principal agency that oversees plan enforcement and consultation. In addition, the California State program has an independent Standards Board responsible for promulgating State safety and health standards, and reviewing variances. It also has an Appeals Board to adjudicate contested citations and the Division of Labor Standards Enforcement to investigate complaints of discriminatory retaliation in the workplace. (OSHA, n.d.)



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

California Hazardous Waste Control Law

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

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

A variety of California Code of Regulation (CCR) titles address regulations and requirements for generators of hazardous waste. Title 22 contains detailed compliance requirements for hazardous waste generators, transporters, and facilities for treatment, storage, and disposal. Because California is a fully-authorized state according to RCRA, most regulations (i.e., 40 CFR 260, et seq.) have been duplicated and integrated into Title 22. However, because the Department of Toxic Substances Control (DTSC) regulates hazardous waste more stringently than the EPA, the integration of state and federal hazardous waste regulations that make up Title 22 does not contain as many exemptions or exclusions as does 40 CFR 260. As with the HSC, Title 22 also regulates a wider range of waste types and waste management activities than does RCRA. To aid the regulated community, California has compiled hazardous materials, waste, and toxics-related regulations from CCR, Titles 3, 8, 13, 17, 19, 22, 23, 24 and 27 into one consolidated listing: CCR Title 26 (Toxics). However, the hazardous waste regulations are still commonly referred to collectively as “Title 22.” (DTSC, n.d.; DTSC, 2020)

3. *Local Regulations*

Riverside County Ordinance No. 651.5

Riverside County Ordinance No. 651.1 is intended to implement, within the County of Riverside, the Hazardous Materials Release Response Plans and Inventory Law, Chapter 6.95 of the California Health and



Safety Code (HSC), to establish a system for permitting businesses that handle hazardous materials, to enforce minimum standards respecting such materials, and to designate the County of Riverside, Department of Environmental Health (DEH), as the administering agency (or Certified Unified Program Agency-CUPA) responsible for administering and enforcing Chapter 6.95 HSC. Ordinance No. 651.5 sets forth requirements for handling hazardous materials, requires a permit for handling certain types and quantities of hazardous materials, requires businesses to report their hazardous materials inventory, identifies different classifications of hazardous materials handlers, and requires reporting of spills or releases or threatened releases of a hazardous material to the DEH and to the Governor’s Office of Emergency Services. (Riverside County, 2019c)

B. Airport and Aircraft Hazards Regulations and Plans

1. State Regulations

State Aeronautics Act

The State Aeronautics Commission Act of 1947 created the Division of Aeronautics (“Division”), and was later amended by statute to read the State Aeronautics Act (Aeronautics Act) in 1961. As a result of this legislation, the Division’s first priorities are those mandated by the Aeronautics Act, then Caltrans guidance, then Division guidance as expressed through its Policy Element. As directed by the Aeronautics Act, the Division is a steward and advocate of aviation in California. To that end, its efforts are focused on activities that “protect the public interest in aeronautics and aeronautical progress.” (§ 21002) (CA Legislative Info, n.d.)

The Aeronautics Act itself is divided into six chapters, the first five of which have not received significant cleanup legislation since its enabling in 1947. The first chapter begins with general provisions and definitions and explains the Legislature’s intent for a State aviation program. Chapter two explains Caltrans’ role in administering the Division, and explains the role of the California Transportation Commission (CTC). Chapter three includes many of the safety considerations from Federal Aviation Administration (FAA) regulations that help keep airports and the surrounding communities safe and compatible with flight operations. Chapter four deals with airport and heliport permitting, air navigation facilities, noise guidelines, funding, and importantly, the formation and authority of Airport Land Use Commissions (ALUC). Chapter five covers the investigations and hearings on matters covered in the Aeronautics Act. Finally, Chapter six introduces airport planning and specifically introduces the intent of the CASP and how it can be used to support California aviation. (CA Legislative Info, n.d.)

California Environmental Quality Act

The operation of airports and aircraft is the responsibility of the Federal Aviation Administration (FAA), but the requirement to document potential hazards related to airports and air activities when a new project is proposed is contained in CEQA, specifically PRC Section 21096, which states: (CA Legislative Info, 2003)

“(a) If a lead agency prepares an environmental impact report for a project situated within airport land use compatibility plan boundaries, or, if an airport land use compatibility plan has not been adopted, for a project within two nautical miles of a public airport or public use airport,



the Airport Land Use Planning Handbook published by the Division of Aeronautics of the Department of Transportation, in compliance with section 21674.5 of the Public Utilities Code and other documents, shall be utilized as technical resources to assist in the preparation of the environmental impact report as the report relates to airport-related safety hazards and noise problems.

(b) A lead agency shall not adopt a negative declaration for a project described in subdivision (a) unless the lead agency considers whether the project will result in a safety hazard or noise problem for persons using the airport or for persons residing or working in the project area.”

4.9.3 BASIS FOR DETERMINING SIGNIFICANCE

Section IX of Appendix G to the State CEQA Guidelines addresses typical adverse effects due to hazards and hazardous materials, and includes the following threshold questions to evaluate a project’s impacts due to hazards and hazardous materials (OPR, 2018a).

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- 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?
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- 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?
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Significance thresholds are set forth in Riverside County’s Environmental Assessment Checklist, are derived from Section IX of Appendix G to the State CEQA Guidelines (listed above), and state that the proposed Project would have a significant impact from hazards and hazardous materials if construction and/or operation of the Project would:

- a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;*



- b. *Create a significant hazard to the public, or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;*
- c. *Impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan;*
- d. *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;*
- e. *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;*
- f. *Result in an inconsistency with an Airport Master Plan;*
- g. *Require review by the Airport Land Use Commission;*
- h. *For a project located within an airport land use plan or, where such a plan has not been adopted, within two (2) miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area; or*
- i. *For a project within the vicinity of a private airstrip, or heliport, would the project result in a safety hazard for people residing or working in the project area.*

The significance thresholds set forth in Riverside County’s Environmental Assessment Checklist, which were revised to incorporate the 2018 updates to the State CEQA Guidelines, were used to evaluate the significance of the proposed Project’s impacts due to hazards and hazardous materials. It should be noted that the issue of loss, injury, or death involving wildland fires is addressed separately in EIR Subsection 4.21, *Wildfire*.

4.9.4 IMPACT ANALYSIS

Threshold a.: *Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Threshold b.: *Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Implementation of the Project would result in the construction and long-term operation of a light industrial and business park development with small areas of commercial retail. The analysis below evaluates the potential for the Project to result in a substantial hazard to people or the environment due to existing site conditions, construction activities, and long-term operation.



Impact Analysis for Existing Site Conditions

As indicated above under subsection 4.9.1.B, based on the Phase I ESA prepared by Hillmann (*Technical Appendix G*), and based on a review of historical documents, regulatory records, and site reconnaissance, the Project site is identified as having a potential REC due to the former use of the property as agricultural land, which may have contributed to accumulated pesticides in the shallow soils. No other RECs were identified in relation to the Project site. Nonetheless, the Project site's potential to contain accumulated pesticides in the shallow soil represents a potentially significant impact of the Project for which mitigation would be required.

Impact Analysis for Temporary Construction-Related Activities

Heavy equipment (e.g., dozers, excavators, tractors) would be operated on the Project site during construction of the Project. This heavy equipment likely would be fueled and maintained by petroleum-based substances such as diesel fuel, gasoline, oil, and hydraulic fluid, which are considered hazardous if improperly stored or handled. In addition, materials such as paints, adhesives, solvents, and other substances typically used in building construction would be used on the Project site during construction. Improper use, storage, or transportation of hazardous materials can result in accidental releases or spills, potentially posing health risks to workers, the public, and the environment. This is a standard risk on all construction sites, and there would be no greater risk for improper handling, transportation, or spills associated with the Project than would occur on any other similar construction site. Construction contractors would be required to comply with all applicable federal, State, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials, including but not limited to requirements imposed by the Environmental Protection Agency (EPA) and DTSC, as well as the Santa Ana Regional Water Quality Control Board (RWQCB) pertaining to water quality as discussed in Subsection 4.10, *Hydrology and Water Quality*. With mandatory compliance with applicable hazardous materials regulations, the Project would not create significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials during the construction phase. A less-than-significant impact would occur.

Impact Analysis for Long-Term Operation

The future occupants that would occupy the future buildings on site are not yet known. However, the future building occupant likely will include general warehousing, industrial, manufacturing, assembly, business park, commercial retail, and/or similar uses and it is possible that hazardous materials could be used during the course of a future building user's daily operations. State and federal Community-Right-to-Know laws allow the public access to information about the amounts and types of chemicals in use at local businesses. Laws also are in place that require businesses to plan and prepare for possible chemical emergencies. Any businesses that occupy the proposed buildings on the Project site and that handle hazardous materials (as defined in Section 25500 of California Health and Safety Code, Division 20, Chapter 6.95) would require a permit from the Riverside County Department of Environmental Health (DEH) in order to register the business as a hazardous materials handler. Such businesses also are required to comply with California's Hazardous Materials Release Response Plans and Inventory Law, which requires immediate reporting to the County of Riverside Fire Department and the State Office of Emergency Services regarding any release or threatened release of a hazardous material, regardless of the amount handled by the business. In addition, any business



handling at any one time, greater than 500 pounds of solid, 55 gallons of liquid, or 200 cubic feet of gaseous hazardous material, is required, under Assembly Bill 2185 (AB 2185), to file a Hazardous Materials Business Emergency Plan (HMBEP). A HMBEP is a written set of procedures and information created to help minimize the effects and extent of a release or threatened release of a hazardous material. The intent of the HMBEP is to satisfy federal and State Community Right-To-Know laws and to provide detailed information for use by emergency responders.

If businesses that use or store hazardous materials occupy the future buildings on the Project site, the business owners and operators would be required to comply with all applicable federal, State, and local regulations to ensure proper use, storage, use, emission, and disposal of hazardous substances (as described above). With mandatory regulatory compliance, the Project is not expected to pose a significant hazard to the public or the environment through the routine transport, use, storage, emission, or disposal of hazardous materials, nor would the Project increase the potential for accident conditions which could result in the release of hazardous materials into the environment. In addition, the Project would be required to comply with Riverside County Ordinance No. 651.5, which establishes specific requirements for the storage of hazardous materials and requirements for reporting and permitting the use, handling, storage, and transportation of hazardous materials.

With mandatory regulatory compliance, along with mandatory compliance with Riverside County Ordinance No. 651.5, potential hazardous materials impacts associated with long-term operation of the Project are determined to be less than significant and mitigation is not required.

Threshold c.: Would the Project impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan?

The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route. Additionally, there are no emergency response plans or emergency evacuation plans in effect in the local area. During construction and long-term operation of the Project, adequate emergency access for emergency vehicles would be required to be maintained along public streets that abut the Project site. Furthermore, improvements planned as part of the Project are not anticipated to adversely affect traffic operations in the local area, including along nearby segments of the Ramona Expressway and Nuevo Road. As part of the County's discretionary review process, Riverside County reviewed the Project's application materials to ensure that appropriate emergency ingress and egress would be available to-and-from the Project site and that circulation on the Project site was adequate for emergency vehicles. Additional reviews would be conducted by Riverside County as part of future implementing discretionary applications (i.e., tentative tract maps, plot plans, etc.), as well as part of future grading and building permit applications, in order to ensure adequate emergency ingress and egress are adequately accommodated. Moreover, the Project would construct several major new roadways on site (i.e., Antelope Road and Orange Avenue), which would serve to improve emergency access in the local area. Accordingly, implementation of the proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan, and no impact would occur.



Threshold d.: Would the Project emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

There are no existing or proposed schools within 0.25-mile of the Project site. However, the Lakeside Middle School is located approximately 0.38-mile northwest of the northwestern Project boundary, while the Sierra Vista Elementary School is located approximately 0.50-mile west of the northwestern Project boundary. (Google Earth, 2018) Although these schools are located more than 0.25 mile from the Project site, the Project's potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, and/or wastes that could adversely affect these schools or associated students has been conducted and is provided below.

As described above under the analysis for Thresholds a. and b., the use of and transport of hazardous substances or materials to and from the Project site during construction and long-term operational activities would be required to comply with applicable federal, State, and local regulations that would preclude substantial public safety hazards. Accordingly, there would be no potential for existing or proposed schools to be exposed to substantial safety hazards associated with emission, handling, or the routine transport of hazardous substances or materials to-and-from the Project site and impacts would be less than significant.

Although impacts would be less than significant with compliance to applicable federal, State, and local regulations, Mitigation Measure MM 4.9-2 is specified herein to ensure regulatory compliance, which requires the Project Applicant to provide a Hazardous Materials Business Emergency Plan (HMBEP) (if required by law) to the Superintendent's Office and Facilities Office of the Val Verde Unified School District (VVUSD). Impacts would remain less than significant.

Refer to EIR Subsection 4.3, *Air Quality*, for analysis pertaining to human health risks associated with air pollutant emissions associated with the Project, including risks to the maximally exposed school child located within and further than one-quarter mile from the Project site. As concluded in EIR Subsection 4.3, the Project's toxic air contaminant emissions (and their associated health risks) would be less than significant.

Threshold e.: Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Based on the results of the Project's Phase I ESA (*Technical Appendix G*), the Project site is not located on any list of the lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Hillmann, 2019). Accordingly, no impact would occur.



Threshold f.: Would the Project result in an inconsistency with an Airport Master Plan?

Threshold g.: Would the Project require review by the Airport Land Use Commission?

Threshold h.: 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 for people residing or working in the project area?

The Project site is not located within the boundaries of any Airport Master Plans, and no impact due to an inconsistency with an Airport Master Plan would occur. As previously indicated, a majority of the western, central, and southern portions of the Project site are located within the Airport Influence Area (AIA) for the March Air Reserve Base (MARB) and are located within ALUCP Compatibility Zone E (RCIT, 2020). Because the Project site is partially located within the AIA for the MARB, the Project required review by the Riverside County Airport Land Use Commission (RCALUC). In accordance with the MARB ALUCP, the Riverside County ALUC Director reviewed both portions of the Project site for consistency with the ALUCP. Based on the result of the ALUC’s review, the Project was determined to be fully consistent with the March ARB ALUCP. As such, the Project would result in less-than-significant impacts due to a conflict with the MARB ALUCP.

Moreover, according to the MARB ALUCP, the “Risk Level” for land uses within Compatibility Zone “E” is considered “Low,” and indicates that these areas are within outer or occasionally used portions of flight corridors. Thus, the Project would not result in a safety hazard for people residing or working in the Project area, and impacts would be less than significant.

Threshold i.: For a project within the vicinity of a private airstrip, or heliport, would the Project result in a safety hazard for people residing or working in the project area?

There are no private airstrips or heliports within two miles of the Project site, and no such facilities are proposed as part of the Project. The nearest private airport facility is the Perris Valley Airport, which is located approximately 3.5 miles southwest of the Project site. However, according to the Riverside County ALUCP policy document, the Project site is not located within the AIA for the Perris Valley Airport, and also is not identified as being located within any of the Compatibility Zones for the Perris Valley Airport (ALUC, 2010, Map PV-1). Accordingly, the Project would not result in a safety for people residing or working in the Project area associated with private airstrips or heliports, and no impact would occur.

4.9.5 CUMULATIVE IMPACT ANALYSIS

Because the issue of hazards and hazardous materials tends to be site-specific in nature, the cumulative study area includes existing and planned developments within a one-mile radius of the Project site. A one-mile radius is appropriate for most of the thresholds identified herein because that is the standard distance used in regulatory database searches of properties that may generate or store toxic materials. With respect to cumulatively-considerable impacts to public airport facilities, the cumulative study area would include the Project site and surroundings, as well as other properties located within the AIA for the MARB.



As discussed under the analysis of Thresholds a. and b., the Project site is identified as having a potential REC due to the former use of the property as agricultural land, which may have contributed to accumulated pesticides in the shallow soils. Although site specific in nature, there is nonetheless a potential that other developments within the cumulative study area also could occur on soils contaminated by past agricultural use. Thus, the Project's impacts due to potential pesticides that may occur in shallow soils on the Project site represents a cumulatively-considerable impact.

With respect to construction activities, the Project would be subject to compliance with all applicable federal, State, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials, including but not limited to requirements imposed by the EPA and DTSC, as well as the Santa Ana RWQCB pertaining to water quality. Other cumulative developments similarly would be subject to applicable federal, State, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials. As such, cumulatively-considerable impacts would be less than significant.

Similarly, under long-term operating conditions, future businesses on site that involve the storage or use of hazardous materials or substances would be subject to applicable federal, State, and local requirements related to hazardous materials. Other businesses within the Project's cumulative study area similarly would be required to comply with applicable federal, State, and local requirements related to hazardous materials. With mandatory regulatory compliance, along with mandatory compliance with Riverside County Ordinance No. 651.5 (or the applicable ordinances of other local agencies), potential hazardous materials impacts associated with long-term operation of the Project are determined to be less-than-cumulatively considerable.

The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route. Additionally, there are no emergency response plans or emergency evacuation plans in effect in the local area, and the Project construction activities are not anticipated to adversely affect operations of existing local roadways in the area, including Ramona Expressway and Nuevo Road. Moreover, the Project would construct several major new roadways on site (i.e., Antelope Road and Orange Avenue), which would serve to improve emergency access in the local area. Thus, there is no potential for the Project to contribute to any cumulative impacts associated with an adopted emergency response plan or emergency evacuation plan.

There are no existing schools within one-quarter mile of the Project site, although the Lakeside Middle School is located approximately 0.38-mile northwest of the northwestern Project boundary, while the Sierra Vista Elementary School is located approximately 0.50-mile west of the northwestern Project boundary. (Google Earth, 2018) It is possible that other businesses could be proposed in the future within close proximity to these schools, and thereby could result in hazardous emissions or hazardous or acutely hazardous materials, substances, or waste. However, the Project and other cumulative developments would be required to comply with applicable federal, State, and local regulations that would preclude substantial public safety hazards. Although Project impacts would be less than significant with compliance to applicable federal, State, and local regulations, Mitigation Measure MM 4.9-2 is specified herein to ensure regulatory compliance, which requires the Project Applicant to provide a Hazardous Materials Business Emergency Plan (HMBEP) (if required by law) to the Superintendent's Office and Facilities Office of the Val Verde Unified School District (VVUSD).



Other cumulative developments likewise would be required to prepare a HMBEP (as required by law). With implementation of the required mitigation (which merely requires compliance with applicable regulations and requirements), hazardous materials impacts to the nearby schools would be less than significant.

The Project site is not located on the list of hazardous materials sites compiled pursuant to Government Code § 65962.5; therefore, the Project has no potential to contribute to substantial, cumulative effects related to the development of contaminated sites listed on regulatory databases.

Based on the result of the ALUC's review, the Project was determined to be fully consistent with the March ARB ALUCP. As such, the Project would result in less-than-significant impacts due to a conflict with the MARB ALUCP. Other cumulative developments within the MARB AIA similarly would require review by the ALUC, and would be subject to the conditions and requirements imposed by the ALUC as part of the required consistency determination. Accordingly, cumulatively-considerable impacts would be less than significant.

There are no private airstrips or heliports within two miles of the Project site, and no such facilities are proposed as part of the Project. As such, cumulatively-considerable safety impacts associated with private airstrips or heliports would not occur.

4.9.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Thresholds a. and b.: Significant Direct and Cumulatively-Considerable Impact. The Project site is identified as having a potential REC due to the former use of the property as agricultural land, which may have contributed to accumulated pesticides in the shallow soils. The Project site's potential to contain accumulated pesticides in the shallow soil represents a potentially significant impact of the Project on both a direct and cumulatively-considerable basis. Impacts associated with construction and operation of the Project would be less than significant.

Threshold c.: No Impact. The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route. Additionally, there are no emergency response plans or emergency evacuation plans in effect in the local area. Improvements planned as part of the Project are not anticipated to adversely affect traffic operations in the local area, including along nearby segments of the Ramona Expressway and Nuevo Road. Moreover, the Project would construct several major new roadways on site (i.e., Antelope Road and Orange Avenue), which would serve to improve emergency access in the local area. Accordingly, implementation of the proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan, and no impact would occur.

Threshold d.: Less-than-Significant Impact. The Project has the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, and/or wastes within close proximity to two existing schools (Lakeside Middle School and Sierra Vista Elementary School), although both schools are located more than 0.25 mile from the Project site. However, impacts would be less than significant with compliance to applicable federal, State, and local regulations. Although impacts would be less than significant,



mitigation has been identified herein to require preparation of a Hazardous Materials Business Emergency Plan (HMBEP) for future implementing uses, if required by law (refer to Mitigation Measure MM 4.9-2).

Threshold e.: No Impact. Based on the results of the Project's Phase I ESA (*Technical Appendix G*), the Project site is not located on any list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Accordingly, no impact would occur.

Thresholds f., g., and h.: Less-than-Significant Impact. The Project would not result in an inconsistency with an Airport Master Plan, and impacts would be less than significant. The ALUC reviewed the Project and found that the Project would not conflict with the March ARB ALUCP. Therefore, impacts would be less than significant. Moreover, according to the MARB ALUCP, the "Risk Level" for land uses within Compatibility Zone "E" is considered "Low," and indicates that these areas are within outer or occasionally used portions of flight corridors. Thus, the Project would not result in a safety hazard for people residing or working in the Project area, and impacts would be less than significant.

Threshold i.: No Impact. There are no private airstrips or heliports within two miles of the Project site, and no such facilities are proposed as part of the Project. No impact would occur.

4.9.7 COUNTY REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

Applicable County Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

- All future businesses operating on site would be subject to compliance with Riverside County Ordinance No. 651.1, which sets forth requirements for handling hazardous materials, requires a permit for handling certain types and quantities of hazardous materials, requires businesses to report their hazardous materials inventory, identifies different classifications of hazardous materials handlers, and requires reporting of spills or releases or threatened releases of a hazardous material to the Riverside County Department of Environmental Health (DEH) and to the Governor's Office of Emergency Services.
- The Project shall comply with Title 22, Division 4.5 of the California Code of Regulations, which requires residents and employees to dispose of household hazardous waste, including pesticides, batteries, old paint, solvents, used oil, antifreeze, and other chemicals, at a Household Hazardous Waste Collection Facility.
- The Project shall comply with Title 22, Division 4.5, Chapter 11 of the California Code of Regulations which requires fluorescent lamps, batteries, and mercury thermostats be recycled or taken to a Household Hazardous Waste Collection Facility.



Mitigation

The following mitigation measure is identified to address potential pesticide contamination in on site soils:

MM 4.9-1 Prior to issuance of any grading permits, the Project Applicant shall have prepared, and the Riverside County Planning Department shall review and approve, a Phase II Environmental Site Assessment (ESA). The Phase II ESA shall be prepared for all areas proposed for development with commercial retail, business park, and/or light industrial land uses. The purpose of the Phase II ESA is to evaluate the near-surface soils on site for evidence of contamination with pesticides. In the event that the results of the Phase II ESA determine that pesticide levels in site soils are below regulatory limits, then no further action is required. In the event that the Phase II ESA identifies levels of pesticide contamination that exceeds regulatory limits, then the Phase II ESA shall identify appropriate remediation measures, which may include, but may not be limited to, the removal of surficial soils and mixing with other on site soils, or disposal at a facility that is approved to handle contaminated soils. Future grading permits shall be conditioned to implement the attenuation measures identified by the Phase II ESA, as appropriate. Prior to final grading inspection, the Project Applicant shall provide evidence that the remediation measures identified by the Phase II ESA have been completed as part of site grading activities to the satisfaction of Riverside County.

Although hazardous materials impacts to nearby schools would be less than significant with the Project Applicant's compliance to applicable federal, State, and local regulations addressing hazardous materials, the following mitigation measure is recommended to ensure regulatory compliance.

MM 4.9-2 Prior to the issuance of any new occupancy permit for a use/user within the proposed Project's buildings, and to the extent hazardous materials are planned to exist on-site and a Hazardous Materials Business Emergency Plan (HMBEP) is required by law, the Project Applicant shall provide a copy of its approved Emergency Response Plan to the Superintendent's Office and Facilities Office of the Val Verde Unified School District outlining how the building user(s) will prevent or respond to spills or leaks of hazardous materials related to its facility/facilities and use of the Project site. If so requested, the Project Applicant shall also meet with School District and Fire Department officials to discuss emergency response procedures as contained in the HMBEP for spills or leaks at the Project site in relation to the nearby school facilities. This measure shall be implemented under the supervision of the Riverside County Planning Department, with input from the Val Verde Unified School District Superintendent as appropriate. All meetings shall be documented and documentation shall be provided to the County Planning Department within 30 days of each meeting. Failure to abide by these procedures may be grounds for revocation of any plot plans or other discretionary approvals for specific warehouse uses on the Project site.



4.9.8 SIGNIFICANT OF IMPACTS AFTER MITIGATION

Thresholds a. and b.: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.9-1 would ensure that appropriate remedial measures are undertaken as part of future site grading activities to address soils on site that may be contaminated with pesticides that exceed regulatory limits. With implementation of the required mitigation, Project hazardous materials impacts due to existing site conditions would be reduced to less-than-significant levels.



4.10 HYDROLOGY AND WATER QUALITY

The following analysis is based on a study entitled “Preliminary Hydrology Analysis, Stoneridge Industrial” prepared by Hunsaker and Associates, Inc. (herein, “Hunsaker”) and dated August 2021. The Preliminary Hydrology Analysis is included in this EIR as Technical Appendix H1 (Hunsaker, 2021a). Analysis in this Subsection also is based on a Preliminary Water Quality Management Plan (WQMP) titled “Project Specific Water Quality Management Plan,” prepared by Hunsaker and dated August 12, 2021. The WQMP is included in this EIR as Technical Appendix H2 (Hunsaker, 2021b).

4.10.1 EXISTING CONDITIONS

A. Regional Hydrology

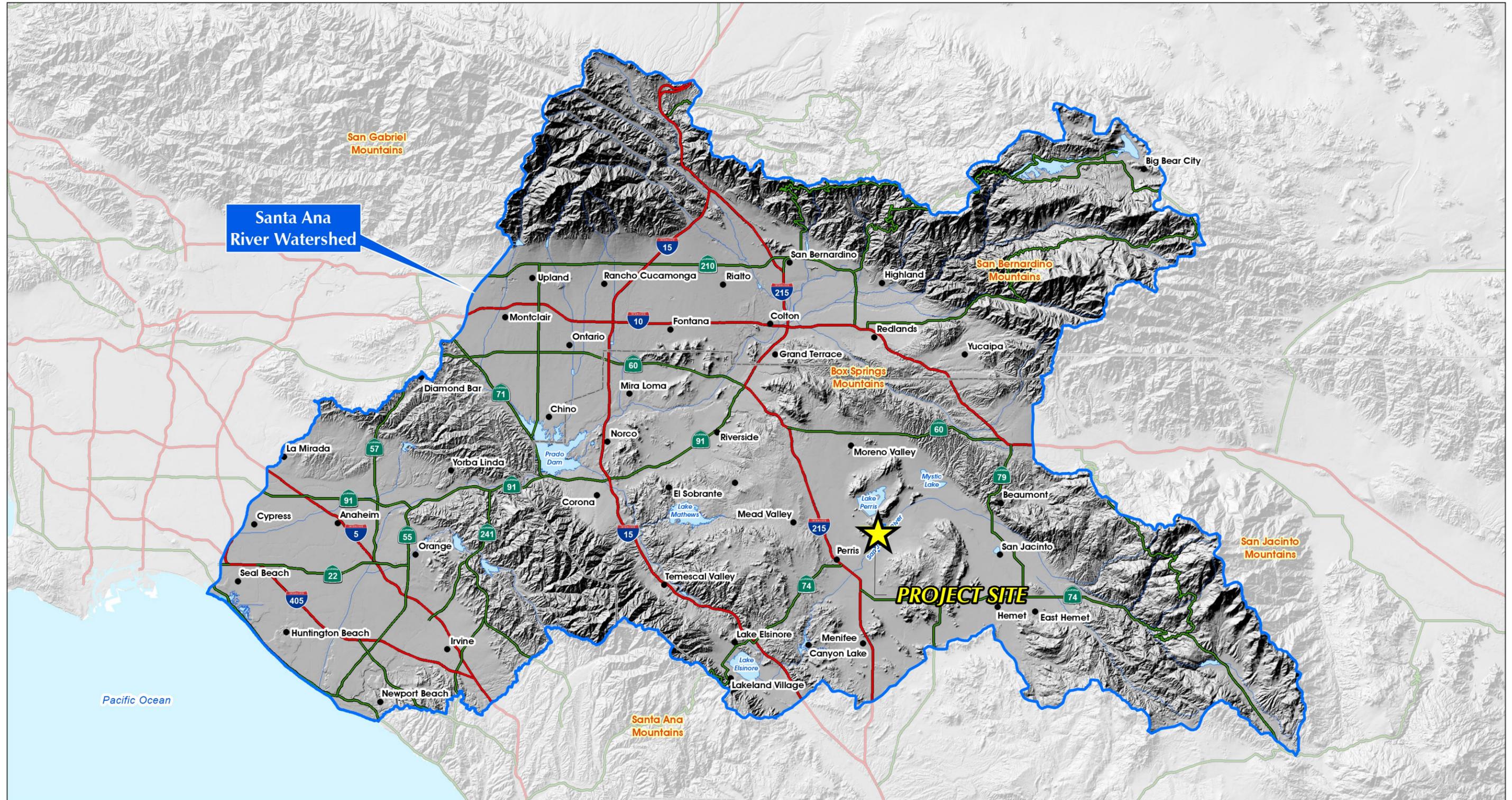
The Project site is located within the Santa Ana River watershed, which drains a 2,840 square-mile area and is the principal surface flow water body within the region. The Santa Ana River flows over 100 miles and drains the largest coastal stream system in Southern California. It discharges into the Pacific Ocean at the City of Huntington Beach. The total stream length of the Santa Ana River and its major tributaries is about 700 miles. (SAWPA, 2019, p. 4-1). The Project site’s location within the Santa Ana River Watershed is depicted on Figure 4.10-1, *Santa Ana River Watershed Map*. The Project site is located within the Lakeview Hydrologic Subunit Area within the Perris Hydrologic Area of the San Jacinto Valley Hydrologic Unit (RWQCB, 2019, p. 4-33).

B. Site Hydrology

Under existing conditions, a majority of the Project site is relatively flat, with a large hillform occurring along the western Project site boundary in the southern portion of the site. Runoff on the site and areas tributary to the site generally is conveyed in a west-to-east orientation towards the San Jacinto River, which is located immediately east of the Project site. The topography of the site is typical of the Perris Valley in that it exhibits gently rolling topography with elevations ranging from approximately 1,425 feet to 1,695 feet above mean sea level. (Hunsaker, 2021a)

Under existing conditions, and as mapped by Hunsaker, the site includes three main Drainage Management Areas (DMAs) on site (DMAs “A” through “C”), with two off-site drainage basins tributary to the site (DMAs “D” and “E”), as depicted on Figure 4.10-2, *Existing Conditions Hydrology Map*. A description of these DMAs is provided below. (Hunsaker, 2021a, pp. 1-2 through 1-5)

- **Drainage Management Area “A”** encompasses approximately 89.6 acres, inclusive of the northeast portions of the Project site. Flows within DMA “A” are conveyed in a southeasterly direction from Ramona Expressway towards the San Jacinto River. Peak runoff from DMA “A” during 24-hour 100-year storm events is approximately 33.8 cubic feet per second (cfs).



Source(s): ESRI, RCTLMA (2019)



Figure 4.10-1

Santa Ana River Watershed Map



- **Drainage Management Area “B”** encompasses approximately 560.2 acres, including the northern and central portions of the Project site. Runoff within DMA “B” is conveyed in a generally west-to-east orientation from the western site boundary towards the San Jacinto River. Peak runoff from DMA “B” during 24-hour 100-year storm events is approximately 116.5 cfs.
- **Drainage Management Area “C”** encompasses approximately 53.0 acres, including the southern portions of the Project site. Runoff from DMA “C” is conveyed in a generally southeasterly direction towards the San Jacinto River. Peak runoff from DMA “C” during 24-hour 100-year storm events is approximately 27.3 cfs.
- **Drainage Management Area “D”** is located off site and encompasses approximately 143.87 acres. Runoff from DMA “D” is tributary to the northern portions of the Project site. Peak flowrates from DMA “D” are approximately 282.8 cfs.
- **Drainage Management Area “E”** is located off site and encompasses approximately 88.3 acres. Runoff from DMA “E” is tributary to the southern portions of the Project site. Peak flowrates from DMA “E” are approximately 206.8 cfs.

C. Flood Hazards

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Nos. 06065C1435H and 06065C1445H, the eastern portions of the northern portions of the Project site, along with the southeast corner of the Project site, are located in a “Special Flood Hazard Area Subject to Inundation by the 1% Annual Chance Flood.” Specifically, these areas of the Project site, which primarily occur within proposed open space Planning Areas 10 and 11 of proposed SP 239A1, are located within Flood Zone “AE,” which encompasses floodplains where the base flood elevations have been determined. A small portion of proposed Planning Area 4 also occur within Flood Zone “AE.” (FEMA, 2014a; FEMA, 2014b) In addition, the areas on site that are located within mapped FEMA floodplains also are located within a potential dam inundation area associated with failure of the Lake Perris dam (Riverside County, 2019a, LNAP Figure 10)

D. Water Quality

The Project site is located within the jurisdiction of the Santa Ana Basin Regional Water Quality Control Board (RWQCB). The receiving waters of flows from the Project site include the San Jacinto River, Canyon Lake, and Lake Elsinore, as indicated in Table 4.10-1, *Receiving Waters for Storm Water Runoff from the Project Site*. Of these receiving waters, the San Jacinto River is not listed as “impaired” in accordance with the Clean Water Act 303(d) list regulations, Canyon Lake is listed as being impaired by nutrients and pathogens, and Lake Elsinore is impaired by nutrients, organic enrichment/low dissolved oxygen, PCBs, and sediment toxicity. Impairment is typically associated with point and non-point sources of water pollutants including industrial discharge and agricultural operations, respectively. The beneficial uses of the receiving surface waters of the Project site are also summarized in Table 4.10-1. (Hunsaker, 2021b, p. 7)



Table 4.10-1 Receiving Waters for Storm Water Runoff from the Project Site

Receiving Waters	EPA Approved 303(d) List Impairments	Designated Beneficial Uses	Proximity to RARE Beneficial Use
San Jacinto River	None	MUN, AGR, GWR, REC1, REC2, WARM, WILD	N/A
Canyon Lake	Nutrients, Pathogens	MUN, AGR, GWR, REC1, REC2, WARM, WILD	N/A
Lake Elsinore	Nutrients, Organic Enrichment/Low Dissolved Oxygen, PCBs, Sediment Toxicity,	REC1, REC2, WARM, WILD	N/A

Notes: MUN = Municipal and Domestic Supply; AGR = Agricultural Supply; GWR = Groundwater Recharge; REC1 = Water Contact Recreation; REC2 = Non-contact Water Recreation; WARM = Warm Freshwater Habitat; and WILD = Wildlife Habitat.

(Hunsaker, 2021b, Table A.1)

E. Groundwater

According to Figure 6-4 of the 2015 Urban Water Management Plan (UWMP) prepared by the Eastern Municipal Water District (EMWD), a majority of the flatter portions of the Project site are located within the Lakeview/Hemet North Groundwater Management Zone (GMZ) of the West San Jacinto Groundwater Management Plan Area, with a small portion of the extreme southern portions of the Project site located within the Perris South GMZ of the West San Jacinto Groundwater Management Plan Area. As such, development on site is subject to EMWD’s “West San Jacinto Groundwater Basin Groundwater Management Plan.” Under existing conditions, the Project site is vacant and undeveloped, and thus the Project site allows for groundwater infiltration under existing conditions. Depth to groundwater is estimated to be 63 feet below the existing grades in the southeastern (lowest) portion of the Project site. (EMWD, 2016b, Figure 6-4; EMWD, 2020; LGC, 2019, p. 7)

4.10.2 APPLICABLE REGULATORY REQUIREMENTS

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

A. Federal Regulations

1. Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was substantially reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1972. Under the CWA, the Environmental Protection Agency (EPA) has implemented pollution control programs such as setting wastewater standards for industry, and also has set water quality standards for all contaminants in surface waters. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. EPA's National Pollutant Discharge Elimination System



(NPDES) permit program controls discharges. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. (EPA, 2020a)

2. Federal Flood Insurance Program

The U.S. Congress established the National Flood Insurance Program (NFIP) with the passage of the National Flood Insurance Act of 1968. The NFIP is a Federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for State and community floodplain management regulations that reduce future flood damages. Participation in the NFIP is based on an agreement between communities and the Federal Government. If a community adopts and enforces a floodplain management ordinance to reduce future flood risk to new construction in floodplains, the Federal Government will make flood insurance available within the community as a financial protection against flood losses. This insurance is designed to provide an insurance alternative to disaster assistance to reduce the escalating costs of repairing damage to buildings and their contents caused by floods. The Federal Insurance and Mitigation Administration (FIMA) within the Federal Emergency Management Agency (FEMA) is responsible for administering the NFIP and administering programs that provide assistance for mitigating future damages from natural hazards. (FEMA, 2002)

3. Executive Order 11988 – Floodplain Management

Executive Order 11988 requires federal agencies to avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. In accomplishing this objective, "each agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by flood plains in carrying out its responsibilities" for the following actions: (FEMA, 2020)

- acquiring, managing, and disposing of federal lands and facilities;
- providing federally-undertaken, financed, or assisted construction and improvements; and
- conducting federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulation, and licensing activities.

B. State Regulations

1. Porter-Cologne Water Control Act

The Porter-Cologne Act is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code § 13000 et seq.), the policy of the State is as follows: (SWRCB, 2014)



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

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

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

The Porter-Cologne Act also implements many provisions of the Clean Water Act, such as the NPDES permitting program. The Porter-Cologne Act also requires adoption of water quality control plans that contain the guiding policies of water pollution management in California. In addition, regional water quality control plans (basin plans) have been adopted by each of the Regional Water Boards and get updated as necessary and practical. These plans identify the existing and potential beneficial uses of waters of the State and establish water quality objectives to protect these uses. The basin plans also contain implementation, surveillance, and monitoring plans. (SWRCB, 2014) The Project site is located within the Santa Ana River Watershed, which is within the purview of the Santa Ana Regional Water Quality Control Board (RWQCB). The Santa Ana River Basin Plan (“Basin Plan”) is the governing water quality plan for the region.

2. California Water Code

The California Water Code is the principal state law regulating water quality in California. Water quality provisions must be complied with as contained in numerous code sections including: 1) the Health and Safety Code for the protection of ground and surface waters from hazardous waste and other toxic substances; 2) the Fish and Game Code for the prevention of unauthorized diversions of any surface water and discharge of any substance that may be deleterious to fish, plant, animal, or bird life; 3) the Harbors and Navigation Code for



the prevention of the unauthorized discharge of waste from vessels into surface waters; and 4) the Food and Agriculture Code for the protection of groundwater which may be used for drinking water supplies. The California Department of Fish and Wildlife (CDFW), through provisions of the Fish & Game Code (§§ 1601 - 1603) is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by CDFW. (CA Legislative Info, 2004)

Surface water quality is the responsibility of the Regional Water Quality Control Board (RWQCB), water supply and wastewater treatment agencies, and city and county governments. The principal means of enforcement by the RWQCB is through the development, adoption, and issuance of water discharge permits. RWQCB basin plans establish water quality objectives that are defined as the limits or levels of water quality constituents or characteristics for the reasonable protection of beneficial uses of water. (CA Legislative Info, 2004)

3. *California Toxics Rule (CTR)*

The California Toxics Rule (CTR) fills gap in California's water quality standards necessary to protect human health and aquatic life beneficial uses. The CTR criteria are similar to those published in the National Recommended Water Quality Criteria. The CTR supplements, and does not change or supersede, the criteria that EPA promulgated for California waters in the National Toxics Rule (NTR). The human health NTR and CTR criteria that apply to drinking water sources (those water bodies designated in the Basin Plans as municipal and domestic supply) consider chemical exposure through consumption of both water and aquatic organisms (fish and shellfish) harvested from the water. For waters that are not drinking water sources (e.g., enclosed bays and estuaries), human health NTR and CTR criteria only consider the consumption of contaminated aquatic organisms. The CTR and NTR criteria, along with the beneficial use designations in the Basin Plans and the related implementation policies, are the directly applicable water quality standards for toxic priority pollutants in California waters. (SWRCB, 2016, pp. 14-15)

4. *Watershed Management Initiative (WMI)*

The State and Regional Water Boards are currently focused on looking at entire watersheds when addressing water pollution. The Water Boards adopted the Watershed Management Initiative (WMI) to further their goals. The WMI establishes a broad framework overlying the numerous federal and State mandated priorities. As such, the WMI helps the Water Boards achieve water resource protection, enhancement and restoration while balancing economic and environmental impacts. (SWRCB, 2017) The integrated approach of the WMI involves three main ideas:

- Use water quality to identify and prioritize water resource problems within individual watersheds. Involve stakeholders to develop solutions.
- Better coordinate point source and nonpoint source regulatory efforts. Establish working relationships between staff from different programs.



- Better coordinate local, state, and federal activities and programs, especially those relating to regulations and funding, to assist local watershed groups. (SWRCB, 2017)

5. Sustainable Groundwater Management Act (SGMA)

The 2014 Sustainable Groundwater Management Act (SGMA) requires governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. The DWR categorizes the priority of groundwater basins. For critically over-drafted basins, that will be 2040. For the remaining high and medium priority basins, 2042 is the deadline. The SGMA also requires local public agencies and Groundwater Sustainability Agencies (GSAs) in high- and medium-priority basins to develop and implement Groundwater Sustainability Plans (GSPs) or Alternatives to GSPs. GSPs are detailed road maps for how groundwater basins will reach long term sustainability. (DWR, 2020)

4.10.3 BASIS FOR DETERMINING SIGNIFICANCE

Section X of Appendix G to the State CEQA Guidelines addresses typical adverse effects to hydrology and water quality, and includes the following threshold questions to evaluate the Project's impacts (OPR, 2018a):

- Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;
- Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - *Result in substantial erosion or siltation on or off site;*
 - *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site; or*
 - *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;*
- In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation; or
- Would the project conflict with or otherwise obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, are derived from Section X of Appendix G to the State CEQA Guidelines (listed above), and state that the proposed Project



would have a significant impact to hydrology and water quality if construction and/or operation of the Project would:

- a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;*
- b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;*
- c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surface;*
- d. Result in substantial erosion or siltation on-site or off-site;*
- e. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-site or off-site;*
- f. 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;*
- g. Impede or redirect flood flows;*
- h. In flood hazard, tsunami, or seiche zones, risk the release of pollutants due to project inundation; or*
- i. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.*

The significance thresholds set forth in Riverside County’s Environmental Assessment Checklist were used to evaluate the significance of the proposed Project’s impacts on hydrology and water quality.

4.10.4 IMPACT ANALYSIS

- Threshold a.:*** *Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*
- Threshold b.:*** *Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*
- Threshold i.:*** *Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

Potable water service to the Project site would be provided by the EMWD, and the Project would not involve direct groundwater extraction via existing or proposed groundwater wells. Additionally, although the Project would result in a substantial increase in impervious surfaces on the site, the total amount of runoff from the



site would be similar to existing conditions, and all runoff would be conveyed to downstream facilities where groundwater infiltration would continue to occur (i.e., the San Jacinto River, Canyon Lake, and Lake Elsinore). Thus, the Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin. Impacts would be less than significant.

The Project site is located within the jurisdiction of the Santa Ana RWQCB. Water quality information for the Santa Ana River watershed is contained in the Santa Ana Region Basin Plan (“Basin Plan”), as most recently updated in June 2019 (RWQCB, 2019). In addition, a majority of the Project site is located within the Lakeview/Hemet North Groundwater Management Zone (GMZ) of the West San Jacinto Groundwater Management Plan Area, with a small portion of the extreme southern portions of the Project site located within the Perris South GMZ of the West San Jacinto Groundwater Management Plan Area. Thus, the Project is subject to the EMWD’s “Groundwater Management Plan – West San Jacinto Groundwater Basin” (EMWD, 2020). The Project’s consistency with each is discussed below.

Santa Ana Region Basin Plan

The California Porter-Cologne Water Quality Control Act (§ 13000 (“Water Quality”) et seq., of the California Water Code), and the Federal Water Pollution Control Act Amendment of 1972 (also referred to as the Clean Water Act (CWA)) require that comprehensive water quality control plans be developed for all waters within the State of California. The Project site is located within the jurisdiction of the Santa Ana RWQCB. Water quality information for the Santa Ana River watershed is contained in the Santa Ana Region Basin Plan (as most recently updated in June 2019). This document is herein incorporated by reference and is available for public review at the Santa Ana RWQCB office located at 3737 Main Street, Suite 500, Riverside, CA 92501-3348. (RWQCB, 2019)

The CWA requires all states to conduct water quality assessments of their water resources to identify water bodies that do not meet water quality standards. Water bodies that do not meet water quality standards are placed on a list of impaired waters pursuant to the requirements of Section 303(d) of the CWA. The Project site resides within the Santa Ana Watershed and receiving waters for the property’s drainage are the San Jacinto River, Canyon Lake, and Lake Elsinore. Receiving waters listed on the Section 303(d) list include Canyon Lake and Lake Elsinore. Canyon Lake is currently impaired by nutrients and pathogens, while Lake Elsinore currently is impaired by nutrients, organic enrichment/low dissolved oxygen, PCBs, and sediment toxicity. The San Jacinto River currently is not listed as impaired. (Hunsaker, 2021b, p. 7)

Specific provision of the CWA applicable to the proposed Project is CWA Section 402, which authorizes the National Pollutant Discharge Elimination System (NPDES) permit program that covers point sources of pollution discharging to a water body. The NPDES program also requires operators of construction sites one acre or larger to prepare a Stormwater Pollution Prevention Plan (SWPPP) and obtain authorization to discharge stormwater under an NPDES construction stormwater permit.



Provided below is a discussion of the Project's potential to conflict with the Santa Ana Region Basin Plan during both construction and long-term operation.

Construction-Related Water Quality

Construction of the proposed Project would involve clearing, grading, paving, utility installation, building construction, and landscaping activities, which would result in the generation of potential water quality pollutants such as silt, debris, chemicals, paints, and other solvents with the potential to adversely affect water quality. As such, short-term water quality impacts have the potential to occur during construction of the Project in the absence of any protective or avoidance measures.

Pursuant to the requirements of the Santa Ana RWQCB and the County of Riverside, the Project Applicant would be required to obtain a NPDES Municipal Stormwater Permit for construction activities. The NPDES permit is required for all projects that include construction activities, such as clearing, grading, and/or excavation that disturb at least one acre of total land area. In addition, the Project would be required to comply with the RWQCB's Basin Plan. Compliance with the NPDES permit and the Basin Plan involves the preparation and implementation of a SWPPP for construction-related activities. The SWPPP is required to specify the Best Management Practices (BMPs) that the Project would be required to implement during construction activities to ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the subject property. Mandatory compliance with the SWPPP would ensure that the proposed Project does not violate any water quality standards or waste discharge requirements during construction activities. Therefore, with mandatory adherence to the future required SWPPP, runoff associated with Project-related construction activities would not conflict with the Santa Ana Region Basin Plan requirements, and impacts would be less than significant.

Operational Water Quality Impacts

As noted above, receiving waters for the property's drainage are the San Jacinto River, Canyon Lake, and Lake Elsinore. Canyon Lake/Railroad Canyon Reservoir is currently impaired by nutrients and pathogens, while Lake Elsinore currently is impaired by nutrients, organic enrichment/low dissolved oxygen, PCBs, and sediment toxicity (Hunsaker, 2021b, p. 7). In order to assess the Project's potential for water quality impacts, Project-specific Hydrology and Water Quality Technical Appendices were prepared for the Project and are included as *Technical Appendices H1 and H2*, respectively.

To meet NPDES requirements, the Project's proposed storm drain system would be designed to route first flush runoff (i.e., the initial surface runoff of a rainstorm) to detention basins, landscaped areas, bioretention basins, or bio swales that would be constructed on the Project site. The future required detention basins, landscaped areas, bioretention basins, and/or bio swales would be designed to detain runoff and provide water quality treatment, and would reduce pollutants of concern in runoff leaving the Project site, such as bacterial indicators, metals, nutrients, pesticides, toxic organic compounds, sediments, trash/debris, and oil/grease (Hunsaker, 2021b, p. 21). However, the required detention basins, bioretention basins, or bio swales, and other water quality features would be identified as part of future implementing development applications (i.e., tentative tract maps, plot plans, etc.), and the specific measures to address potential water quality impacts of



the Project cannot be identified without specific development plans for the site. As such, a potentially significant impact could occur if future implementing developments do not include appropriate measures to treat runoff from the Project site for pollutants of concern for receiving waters. This represents a potential conflict with the Santa Ana Region Basin Plan; thus, prior to mitigation, impacts due to a conflict with the Basin Plan would be potentially significant.

Groundwater Management Plan – West San Jacinto Groundwater Basin

The EMWD adopted the *Groundwater Management Plan – West San Jacinto Groundwater Basin* (GMP) on June 8, 1995, which is intended to manage the West San Jacinto Groundwater Basin (SJGB) in a manner that would supplement EMWD’s water supplies, thereby increasing the amount of locally-available water and reducing the amount of water that needs to be imported through MWD. The GMP covers approximately 256-square miles (over 164,200 acres) and has been divided into six (6) groundwater management zones. The Project site mostly is located in the Lakeview/Hemet North Groundwater Management Zone (GMZ) of the West San Jacinto Groundwater Management Plan Area, with a small portion of the extreme southern portions of the Project site located within the Perris South GMZ of the West San Jacinto Groundwater Management Plan Area.

EMWD adopted the GMP in June 1995 in accordance with Assembly Bill 3030 (AB3030), enacted in 1992, which is now codified in the California Water Code Sections 10750 through 10755. The GMP is intended to protect the vested interests of existing groundwater producers while providing a planning framework for new water supply projects for the benefit of groundwater producers and the public. The Management Plan goals include (EMWD, 2020, p. 13):

- Establishment of a Groundwater Basin Manager
- Monitoring of Groundwater Production
- Monitoring of Groundwater Level and Quality
- Development of Well Construction Policies
- Development of a Well Abandonment and Destruction Program
- Monitoring of Well Construction, Abandonment, and Destruction
- Groundwater Quality Protection
- Exchange of Agricultural and Other Non-potable Groundwater Production to Municipal Use
- Maximize Yield Augmentation with Local Resources – Local Runoff and Reclaimed Water
- Maximize Conjunctive Use
- Groundwater Treatment

There are no existing groundwater wells on the Project site, and the Project does not propose to construct any wells on site. As such, the Project would not directly extract groundwater, but would instead obtain potable water from the EMWD, which relies in part on groundwater resources. Accordingly, the Project only would have the potential to conflict with the West San Jacinto GMP if the Project were to obstruct infiltration of



runoff into the groundwater basin, or if the Project were to contribute to or exacerbate existing water quality problems within the basin.

As noted above under the discussion of the Project's consistency with the Santa Ana Region Basin Plan, the Project Applicant would be required to obtain a NPDES Municipal Stormwater Permit for construction activities. The NPDES permit is required for all projects that include construction activities, such as clearing, grading, and/or excavation that disturb at least one acre of total land area. Compliance with the NPDES permit and the Basin Plan involves the preparation and implementation of a SWPPP for construction-related activities. The SWPPP is required to specify the BMPs that the Project would be required to implement during construction activities to ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the subject property. Mandatory compliance with the SWPPP would ensure that construction of the proposed Project does result in polluted runoff that could adversely affect water quality within the SJGB. Additionally, the total amount of runoff from the Project site during construction would not change substantially in relation to existing conditions, thereby continuing to allow for infiltration into the SJGB. Accordingly, during construction the Project would not conflict with the West San Jacinto GMP, and a less-than-significant impact would occur.

Following construction activities, infiltration on the Project site largely would be precluded and would be limited to landscaped areas, as remaining areas of the site would be covered with impervious surfaces (i.e., buildings, drive aisles, etc.). However, under existing conditions all runoff generated on and tributary to the Project site is conveyed directly or indirectly to the San Jacinto River. While a nominal amount of groundwater recharge may occur under existing conditions, the majority of runoff is conveyed to downstream facilities, which ultimately include unlined drainage channels and bodies of water (i.e., Canyon Lake and Lake Elsinore) wherein groundwater recharge occurs. These conditions would not substantially change under the proposed Project. Groundwater recharge would continue to occur downstream, as it does under existing conditions.

With respect to groundwater quality under long-term operations, the Project Applicant would be required to identify measures to reduce pollutants in runoff from the Project site pursuant to the applicable NPDES permit requirements. However, the specific measures that would be incorporated into future developments on site to address water quality cannot be determined without site-specific design, which would not be available until future applications for implementing permits and approvals (i.e., tentative tract maps, plot plans, etc.). Thus, the Project has the potential to contribute polluted runoff, which could adversely affect groundwater quality. This is evaluated as a potentially significant impact prior to mitigation due to a conflict with the West San Jacinto GMP.



Threshold c.: *Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces?*

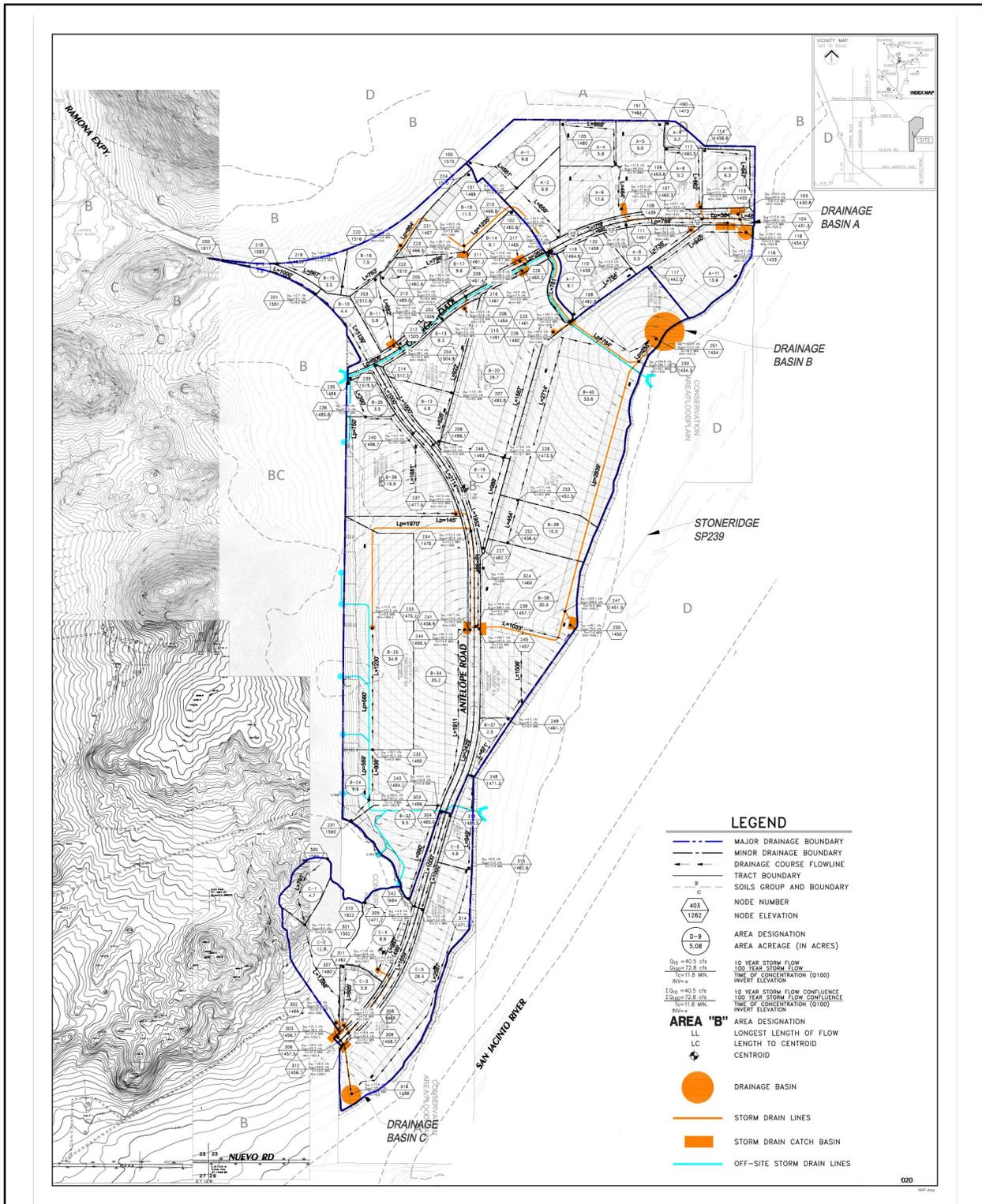
Threshold f.: *Would the Project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

As discussed above under the analysis of Thresholds a., b., and i., under long-term operating conditions the Project has the potential to result in substantial additional sources of polluted runoff. This is a significant impact for which mitigation would be required.

Under existing conditions, the Project site is relatively flat, with hillforms occurring along the western site boundary in the southern portions of the Project site. Runoff generally is conveyed in a west-to-east direction and discharges into the San Jacinto River, which is located immediately adjacent to the site's eastern boundary. As previously shown on EIR Figure 3-7, *Conceptual Drainage and Water Quality Plan*, and EIR Figure 3-10, *Conceptual Grading Plan*, the site's topography generally would be maintained with development of the Project site as proposed, although drainage from on-site areas would be diverted to one of three proposed Primary Drainage Basins for detention and water quality treatment prior to flows being discharged to the San Jacinto River.

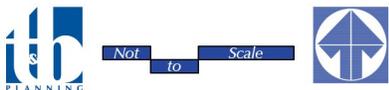
None of the improvements proposed as part of the Project would directly affect the course of any streams or rivers. While runoff from the Project site would be conveyed to the San Jacinto River, the San Jacinto River is a regional drainage corridor that has been designed to accommodate drainage with buildout of the Project vicinity. As such, the Project would not result in any direct impacts due to the alteration of the course of a stream or river, and impacts would be less than significant.

With respect to runoff from the site, runoff would occur within one of three on-site Drainage Management Areas (DMAs), consistent with existing conditions, as shown on Figure 4.10-3, *Proposed Conditions Hydrology Map*. Table 4.10-2, *Drainage Management Area "A" Peak Flow Rates (cfs)*, Table 4.10-3, *Drainage Management Area "B" Peak Flow Rates (cfs)*, and Table 4.10-4, *Drainage Management Area "C" Peak Flow Rates (cfs)*, present a comparison of the existing and proposed peak flow rates for DMAs "A," "B," and "C," respectively, without consideration of the proposed detention and water quality features. As shown in Table 4.10-2, the Project would increase the peak flow rate and volume of storm water run-off within DMA "A," with the largest peak flow rate increase occurring during the 10-year 1-hour storm event, where the anticipated flow rate would increase by 32.0 cfs, as compared to natural condition. As shown in Table 4.10-3, the Project would increase the peak flow rate and volume of storm water run-off within DMA "B," with the largest peak flow rate increase occurring during the 100-year 3-hour storm event, where the anticipated flow rate increased by 216.2 cfs, as compared to natural condition. As shown in Table 4.10-4, the Project would increase the peak flow rate and volume of storm water run-off within DMA "C," with the largest peak flow rate increase occurring during the 10-year 6-hour storm event, where the anticipated flow rate increased by 18.9 cfs, as compared to natural condition. (Hunsaker, 2021a, pp. 1-2 through 1-4)



Source(s): Hunsaker Engineering (06-2020)

Figure 4.10-3



Proposed Conditions Hydrology Map



Table 4.10-2 Drainage Management Area “A” Peak Flow Rates (cfs)

	10 YEAR			100 YEAR		
	Existing	Proposed	Mitigation Flowrate	Existing	Proposed	Mitigation Flowrate
1 HOUR	109.7	141.7	32.0	208.6	234.9	26.3
3 HOUR	57.7	82.6	24.9	117.6	132.4	14.8
6 HOUR	45.9	70.7	24.8	104.4	119.6	15.2
24 HOUR	3.3	24.7	21.4	33.8	43.3	9.5

(Hunsaker, 2021a, p. 1-2)

Table 4.10-3 Drainage Management Area “B” Peak Flow Rates (cfs)

	10 YEAR			100 YEAR		
	Existing	Proposed	Mitigation Flowrate	Existing	Proposed	Mitigation Flowrate
1 HOUR	206.0	373.4	167.4	426.1	626.9	200.8
3 HOUR	145.3	361.5	216.2	317.0	421.9	104.9
6 HOUR	120.7	230.8	110.1	296.4	392.2	95.8
24 HOUR	17.0	88.6	71.6	116.5	154.9	38.4

(Hunsaker, 2021a, p. 1-3)

Table 4.10-4 Drainage Management Area “C” Peak Flow Rates (cfs)

	10 YEAR			100 YEAR		
	Existing	Proposed	Mitigation Flowrate	Existing	Proposed	Mitigation Flowrate
1 HOUR	94.1	105.6	11.5	173.8	174.9	1.1
3 HOUR	48.5	65.6	17.1	94.8	104.6	9.8
6 HOUR	38.8	57.7	18.9	84.1	96.8	12.7
24 HOUR	4.3	19.1	14.8	27.3	33.9	6.6

(Hunsaker, 2021a, p. 1-4)



Although the San Jacinto River improvements in the Project area have been designed to accommodate runoff from future development in the Project area, the anticipated increase in runoff from the Project site represents a substantial increase and could adversely affect the San Jacinto River. Additionally, the increase in runoff has the potential to exceed the capacity of existing and planned drainage infrastructure downstream. This is evaluated as a potentially significant impact, for which mitigation would be required.

Threshold d.: Would the Project result in substantial erosion or siltation on-site or off-site?

A. Construction-Related Erosion Impacts

As shown on EIR Figure 3-10, the Project has been designed to generally maintain the existing topography of the site, with modifications as necessary to accommodate site development and proposed drainage conditions. Nonetheless, construction of the proposed Project would involve substantial ground disturbance during clearing and grading of the site. In addition, on-site erosion could occur if graded slopes are not stabilized prior to ultimate development or landscaping. The proposed grading activities would generate silt which could be carried off-site during a heavy rainfall event. Should such an event occur in the absence of any preventative measures to contain silt and other soils on-site, erosion and/or siltation downstream could result.

However, pursuant to requirements of the SWRCB, the Project Applicant would be required to obtain a NPDES permit for construction activities on-site. The NPDES permit is required for all projects that include construction activities, such as clearing, grading, and/or excavation that disturb at least one (1) acre of total land area. Compliance with the NPDES permit involves the preparation and implementation of a SWPPP for construction related activities. The SWPPP would specify BMPs to minimize the potential for erosion and siltation to occur and would include specific Project site measures to address the potential for the caving in of temporary excavations. Typical BMPs that are implemented at construction sites to protect water quality include the implementation of straw bale barriers, plastic sheeting/erosion control blankets, and outlet protection measures. With mandatory adherence to the SWPPP requirements, effects associated with construction-related erosion, siltation, water quality, and flooding on downstream water sources and flood control systems would be maintained at a level below significance.

B. Post-Development Erosion Impacts

Implementation of the proposed Project would result in the conversion of the site from undeveloped land to that of a master-planned development with light industrial, business park, and commercial retail uses. With development of the Project site, large portions of the Project site would consist of impervious surfaces, with areas of pervious surfaces largely confined to landscaped areas. Thus, the potential for erosion hazards on site would be substantially decreased as compared to existing conditions with buildout of the Project site. However, due to the increase in impervious surfaces on site, runoff from the site following development has the potential to contribute to erosion hazards downstream. As shown above in Table 4.10-2 through Table 4.10-4, with implementation of the Project runoff from the site would substantially increase. Although it is anticipated that future implementing developments on the Project site (e.g., tentative tract maps, plot plans, etc.) would incorporate measures, such as bioretention basins, landscape detention areas, and bioswales, to



reduce the rate of runoff from the site, it cannot be assured that these measures would adequately attenuate the rate of runoff from the Project site. Accordingly, prior to mitigation, the Project has the potential to cause or contribute to erosion hazards downstream. This is evaluated as a potentially significant impact for which mitigation would be required.

Threshold e.: Would the Project substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-site or off-site?

Threshold g.: Would the Project impede or redirect flood flows?

As previously indicated, according to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Nos. 06065C1435H and 06065C1445H, the eastern portions of the northern portions of the Project site, along with the southeast corner of the Project site, are located in a “Special Flood Hazard Area Subject to Inundation by the 1% Annual Chance Flood.” Specifically, these areas of the Project site are located within Flood Zone “AE,” which encompasses floodplains where the base flood elevations have been determined. (FEMA, 2014a; FEMA, 2014b) In addition, the areas on site that are located within mapped FEMA floodplains also are located within a potential dam inundation area associated with failure of the Lake Perris dam (Riverside County, 2019a, LNAP Figure 10) A majority of areas on site within identified flood plains and dam inundation areas are proposed to be conserved as natural open space within proposed Planning Areas 10 and 11 of proposed SP 239A1. Areas planned for development with light industrial, business park, and commercial retail land uses largely occur outside of the flood hazard areas and dam inundation zones. However, a small portion of proposed Planning Area 4 of proposed SP 239A1, which is proposed for light industrial uses, occurs within the mapped floodplain. As such, development within Planning Area 4 has the potential to impede or redirect flood flows if future grading activities were to encroach into the floodplain, and this is evaluated as a significant impact for which mitigation would be required.

As shown above in Table 4.10-2 through Table 4.10-4, the Project would increase the peak flow rate and volume of storm water run-off within DMA “A” during the 10-year 1-hour storm event, where the anticipated flow rate would increase by 32.0 cfs, as compared to natural condition. The Project also would increase the peak flow rate and volume of storm water run-off within DMA “B” during the 100-year 3-hour storm event, where the anticipated flow rate increased by 216.2 cfs, as compared to natural condition. Additionally, the Project would increase the peak flow rate and volume of storm water run-off within DMA “C” during the 10-year 6-hour storm event, where the anticipated flow rate increased by 18.9 cfs, as compared to natural condition. (Hunsaker, 2021a, pp. 1-2 through 1-4) As such, runoff from the Project site following development has the potential to contribute to increased flood hazards downstream. This is evaluated as a potentially significant impact for which mitigation would be required.

Threshold h.: In flood hazard, tsunami, or seiche zones, would the Project risk the release of pollutants due to Project inundation?

The Project site is located approximately 37 miles northeast of the Pacific Ocean, and as such there is no potential for the Project site to be inundated with tsunamis. According to Figure 10 of the LNAP, the Project



site is located within the dam inundation area for Lake Perris. However, the portions of the Project site that are subject to dam inundation largely would be conserved as natural open space within Planning Areas 10 and 11 of proposed SP 239A1. However, a small portion of proposed Planning Area 4 occurs within the dam inundation area for Lake Perris. According to an extensive study conducted by the State Department of Water Resources (DWR) in 2005, there were fears that an earthquake of magnitude 7.5 or larger could breach the dam (Riverside County, 2015, p. 4.11-18). The Perris Dam Modernization Project addresses seismic risks that could impact water deliveries and the safety of surrounding communities. In 2005, DWR began the Perris Dam Modernization Project with the seismic retrofit to the dam embankment. With the completion of the remaining project components in 2023, DWR will achieve its goal of upgrading its infrastructure to protect the water system and enhance public safety. (DWR, n.d.) As such, due to on-going improvements to the Perris Dam that will be completed in 2023, the Project site would not be subject to inundation hazards associated with the failure of the Perris Dam. Because the Project site would not be subject to inundation due to a failure of the Perris Dam, it also can be concluded that the Project site would not be subject to inundation due to seiches within Lake Perris. As such, in the event of a seiche occurring within Lake Perris, future development on site would not be subject to inundation that could risk the release of pollutants. While on-site areas mapped as being within the San Jacinto River floodplain primarily would occur within proposed Planning Areas 10 and 11 of proposed SP 239A1, a small portion of proposed Planning Area 4 of SP 239A1 occurs within the San Jacinto River floodplain. As such, there is a potential that future development within Planning Area 4 could be subject to inundation during flood events, risking the release of pollutants due to Project site inundation. This is evaluated as a potentially significant impact for which mitigation would be required.

4.10.5 CUMULATIVE IMPACT ANALYSIS

The cumulative impact analysis considers construction and operation of the proposed Project in conjunction with other development projects in the vicinity of the Project site and resulting from full buildout of the Riverside County General Plan and the general plans of local jurisdictions that are located within the Santa Ana River watershed.

As discussed under the analysis of Thresholds a., b., and i., the Project would result in less-than-significant impacts to surface and groundwater quality during construction because the Project Applicant would be required to obtain a NPDES Municipal Stormwater Permit for construction activities. Compliance with the NPDES permit and the Basin Plan involves the preparation and implementation of a SWPPP for construction-related activities. The SWPPP is required to specify the Best Management Practices (BMPs) that the Project would be required to implement during construction activities to ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the subject property. Other cumulative developments within the cumulative study area also would be required to comply with the NPDES Municipal Stormwater Permit and would be required to implement BMPs during construction activities to preclude water quality impacts that could impair downstream waters or groundwater. As such, construction-related water quality impacts, as well as impacts due to a conflict with the Basin Plan and the West San Jacinto GMP, would be less-than-cumulatively considerable. With respect to long-term impacts to water quality, the Project does not involve any site-specific development, and as such specific measures that would be required in the future to address water quality are not known at this time. As such, there is a potential



that water quality impacts to downstream waters and groundwater could occur in the absence of structural/treatment and non-structure/source control BMPs. Buildout of other developments within the cumulative study area also have the potential to result in adverse water quality impacts during long-term operations, which could contribute to impairments downstream or could adversely affect groundwater quality. Therefore, water quality impacts associated with long-term operation of the Project would be cumulatively-considerable prior to mitigation. Project-related water quality impacts also could result in a conflict with the Basin Plan or the West San Jacinto GMP, resulting in a cumulatively-considerable impact prior to mitigation.

As indicated under the analysis of Thresholds c. and f., the Project would not result in any direct effects to the course of any streams or rivers, and cumulatively-considerable impacts therefore would not occur. However, the Project has the potential to result in a substantial increase in runoff from the Project site as compared to existing conditions, which in turn could adversely affect streams and rivers downstream. Other developments in the cumulative study area also have the potential to increase the rate of runoff, which also could contribute to adverse effects to streams or rivers downstream or could exceed the capacity of existing and planned storm drainage systems. As such, Project impacts would be cumulatively-considerable and mitigation would be required to attenuate the rate of runoff from the Project site following development. The Project also has the potential to result in substantial additional sources of polluted runoff, as discussed above, and impacts would therefore be cumulatively considerable.

As discussed under the analysis of Threshold d., during construction the Project would be subject to compliance with the applicable NPDES permit, which requires the preparation and implementation of a SWPPP to address erosion hazards associated with construction activities. Other cumulative developments similarly would be required to prepare and implement a SWPPP. As such, erosion-related hazards during construction activities would be less-than-cumulatively considerable. However, due to the increase in impervious surfaces on site, runoff from the site following development has the potential to contribute to erosion hazards downstream. Other cumulative developments similarly have the potential to result in an increased rate of runoff, which in turn could contribute to erosion hazards downstream. Thus, the Project's impacts due to erosion under long-term operational conditions would be cumulatively considerable.

A small portion of proposed Planning Area 4 of proposed SP 239A1, which is proposed for light industrial uses, occurs within the mapped floodplain for the San Jacinto River. As such, the Project has the potential to impede or redirect flood flows. As other developments within the cumulative study area also have the potential to impede or redirect flood flows, Project impacts due to flood hazards would be cumulatively considerable. Additionally, with implementation of the Project runoff from the site would substantially increase. Other cumulative developments within the Project's watershed similarly have the potential to result in increased runoff. As such, runoff from the Project site following development has the potential to cumulatively contribute to increased flood hazards downstream. This is evaluated as a cumulatively-considerable impact for which mitigation would be required.

The Project site is not subject to inundation due to tsunamis, and the Project site is unlikely to be affected by seiches that may occur within Lake Perris. Thus, impacts due to inundation from tsunamis and seiches would



be less-than-cumulatively considerable. With respect to flood hazards, a small portion of proposed Planning Area 4 of SP 239A1 occurs within the San Jacinto River floodplain. As such, there is a potential that future development within Planning Area 4 could be subject to inundation during flood events, risking the release of pollutants due to Project site inundation. As other developments within the cumulative study area similarly could have the potential for the release of pollutants due to flood hazards, the Project's impacts due to the potential release of pollutants during flood events would be cumulatively considerable.

4.10.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Thresholds a., b., and i.: Significant Direct and Cumulatively-Considerable Impact. The Project would be served potable water by the EMWD, and does not propose any groundwater wells on site; thus, Project impacts to groundwater supplies would be less than significant. Additionally, the total amount of runoff from the site would not change with Project development, and as such Project-related runoff would be conveyed to downstream facilities where groundwater recharge would continue to occur. Additionally, water quality impacts during construction, including potential impacts due to a conflict with the Basin Plan and the West San Jacinto GMP, would be less than significant. However, the specific design of measures to be incorporated in the future to address potential water quality impacts under long-term operational conditions are not known at this time, and would be identified as part of future implementing developments on site (i.e., tentative tract maps, plot plans, etc.). As such, in the absence of any specific measures to address water quality in site runoff, the Project has the potential to adversely affect surface and groundwater quality during long-term operations. The Project's potential operational-related water quality impacts also could represent a conflict with the Basin Plan and West San Jacinto GMP.

Thresholds c. and f.: Significant Direct and Cumulatively-Considerable Impact. As discussed above under the analysis of Thresholds a., b., and i., under long-term operating conditions the Project has the potential to result in substantial additional sources of polluted runoff. This is a significant impact for which mitigation would be required. The Project would generally maintain the Project site's existing topography, and would not directly affect the course of any streams or rivers. However, it is anticipated that buildout of the Project would result in a substantial increase in peak runoff from the site as compared to existing conditions, in the absence of detention and water quality treatment facilities. As a result, Project-related runoff has the potential to indirectly affect the course of a stream or a river, and also has the potential to exceed the capacity of existing or planned drainage systems. This is evaluated as a significant impact for which mitigation would be required.

Threshold d.: Significant Direct and Cumulatively-Considerable Impact. Due to mandatory compliance with the applicable NPDES permit and associated requirement to prepare and implement a SWPPP during construction, construction-related impacts due to erosion or siltation would be less than significant. However, it is anticipated that buildout of the Project would result in an increase in the peak rate of runoff from the site. Although it is anticipated that future implementing developments on the Project site (e.g., tentative tract maps, plot plans, etc.) would incorporate measures, such as bioretention basins, landscape detention areas, and bioswales, it cannot be assured that these measures would adequately attenuate the rate of runoff from the Project site. Accordingly, prior to mitigation, the Project has the potential to cause or contribute to erosion



hazards downstream. This is evaluated as a potentially significant impact for which mitigation would be required.

Thresholds e. and g.: Significant Direct and Cumulatively-Considerable Impact. According to mapping information available from the Federal Emergency Management Agency (FEMA), the portions of the Project site that are proposed for development with light industrial, business park, and commercial retail land uses primarily are located outside of mapped floodplains. However, a small portion of proposed Planning Area 4 of proposed SP 239A1, which is proposed for light industrial uses, occurs within the mapped floodplain. As such, development within Planning Area 4 has the potential to impede or redirect flood flows if future grading activities were to encroach into the floodplain, and this is evaluated as a significant impact for which mitigation would be required. Additionally, with implementation of the Project runoff from the site would substantially increase in the absence of measures such as bioretention basins, landscape detention areas, and bioswales. As such, runoff from the Project site following development has the potential to contribute to increased flood hazards downstream. This is evaluated as a potentially significant impact for which mitigation would be required.

Threshold h.: Significant Direct and Cumulatively-Considerable Impact. The Project site is not subject to inundation due to tsunamis. Although a portion of the areas proposed for development with light industrial uses as part of the Project occur within the mapped inundation area for the Lake Perris dam, the DWR is planning to complete improvements to the dam in 2023, which would attenuate the risk of dam failure. As such, the Project site would not be subject to inundation hazards associated with the failure of the Perris Dam. Because the Project site would not be subject to inundation due to a failure of the Perris Dam, it also can be concluded that the Project site would not be subject to inundation due to seiches within Lake Perris. While the portions of the Project site that are located within mapped floodplains and dam inundation areas associated with the Lake Perris dam primarily are proposed to be conserved as open space as part of SP 239A1, a small portion of proposed Planning Area 4 of SP 239A1 occurs within the San Jacinto River floodplain. As such, there is a potential that future development within Planning Area 4 could be subject to inundation during flood events, risking the release of pollutants due to Project site inundation. This is evaluated as a potentially significant impact for which mitigation would be required.

4.10.7 COUNTY REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

Applicable County Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

- The Project is required to comply with the provisions of the Project's NPDES permit, and the Project's SWPPP. Compliance with the NPDES permit and the SWPPP would identify and implement an effective combination of erosion control and sediment control measures (i.e., Best Management



Practices) to reduce or eliminate discharge to surface water from storm water and non-storm water discharges.

Mitigation

- MM 4.10-1 Prior to approval of any future implementing developments on site (i.e., tentative tract maps, plot plans, etc.), the Project Applicant or implementing developer shall prepare site-specific hydrology studies. The hydrology studies required for implementing developments shall be prepared in accordance with the Riverside County Flood Control and Water Conservation District (RCFCWCD) “Hydrology Manual,” and shall demonstrate that measures have been incorporated, such as bioretention basins, landscape detention areas, and bioswales, to attenuate runoff from the Project site in a manner consistent with RCFCWCD requirements. The future-required hydrology studies also shall demonstrate that runoff from the developed portions of the Project site would not exceed the capacity of existing or planned downstream drainage infrastructure. Measures identified by the hydrology studies shall be depicted on the development plans associated with future development applications (i.e., tentative tract maps, plot plans, etc.), and also shall be depicted on all future construction plans (e.g., grading permits). The hydrology studies for implementing developments shall be reviewed and approved by the RCFCWCD prior to approval of implementing developments within the Project site, and the future implementing developments shall be conditioned to implement the measures identified in the hydrology studies as necessary to attenuate the rate of runoff from the Project site as required by the RCFCWCD.
- MM 4.10-2 Prior to approval of any future implementing developments on site (i.e., tentative tract maps, plot plans, etc.), the Project Applicant shall prepare site-specific Preliminary Water Quality Management Plans (PWQMPs). The implementing Preliminary PWQMPs shall be prepared in accordance with the Santa Ana Regional Water Quality Control Board (RWQCB) requirements as set forth in the RWQCB’s “Water Quality Management Plan for the Santa Ana Region of Riverside County,” and shall identify appropriate Best Management Practices (BMPs) as necessary to address the Project’s identified pollutants of concern. Measures identified by the PWQMPs shall be depicted on the development plans associated with future development applications (i.e., tentative tract maps, plot plans, etc.), and also shall be depicted on all future construction plans (e.g., grading permits). The PWQMPs for implementing developments shall be reviewed and approved by the RCFCWCD prior to approval of implementing developments within the Project site, and the future implementing developments shall be conditioned to implement the measures identified in the WQMPs as necessary to preclude substantial amounts of pollutants in runoff from the Project site.
- MM 4.10-3 Prior to issuance of grading permits that would encroach into areas mapped as subject to flood hazards by the Federal Emergency Management Agency (FEMA), the Project Applicant shall obtain a Conditional Letter of Map Revision (CLOMR) from FEMA to identify measures that will be undertaken to remove the areas proposed for development from the mapped floodplain



on site. Prior to final grading inspection for any grading that would encroach into the mapped floodplain, the Project Applicant shall obtain a Letter of Map Revision (LOMR) from FEMA to verify that the Project site has been graded in such a manner as to remove areas planned for development with light industrial uses from areas subject to flooding hazards.

4.10.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Thresholds a., b., and i.: Less-than-Significant Impact with Mitigation. Implementation of Mitigation Measures MM 4.10-1 and MM 4.10-2 would ensure that hydrology studies and PWQMPs are prepared as part of future implementing developments (i.e., tentative tract maps, plot plans, etc.). The required PWQMPs would ensure that runoff from the Project site does not violate any water quality standards or waste discharge requirements, and that implementing developments do not otherwise substantially degrade surface or groundwater quality. Additionally, the future-required hydrology studies would ensure that runoff from the Project site is properly detained in order to avoid substantial increases in runoff that could cause erosion or flooding hazards downstream. Compliance with the required mitigation also would ensure that future implementing developments do not conflict with the Basin Plan or the West San Jacinto GMP. With implementation of the required mitigation, impacts would be reduced to less-than-significant levels.

Thresholds c. and f.: Less-than-Significant Impact with Mitigation. Implementation of Mitigation Measures MM 4.10-1 and MM 4.10-2 would ensure that hydrology studies and PWQMPs are prepared as part of future implementing developments (i.e., tentative tract maps, plot plans, etc.). The future-required hydrology studies would be required to demonstrate that measures have been incorporated (e.g., bioswales, bioretention basins, etc.) to reduce the rate of runoff from the developed portions of the property in a manner consistent with RCFCWCD requirements, thereby ensuring runoff from the Project site does not exceed the capacity of existing or planned drainage systems or adversely affect the course of a stream or river. The required PWQMPs also would ensure that runoff from the Project site is adequately treated for water quality pollutants prior to discharge from the Project site. Implementation of the required mitigation would reduce Project impacts to less-than-significant levels.

Threshold d.: Less-than-Significant Impact with Mitigation. Implementation of Mitigation Measures MM 4.10-1 and MM 4.10-2 would ensure that hydrology studies and PWQMPs are prepared as part of future implementing developments (i.e., tentative tract maps, plot plans, etc.). Measures would be identified as part of the PWQMPs to reduce siltation within runoff from the Project site. The required hydrology studies would ensure that runoff from the Project site does not substantially increase with Project development, thereby reducing the Project's potential to result in erosion or siltation hazards to downstream areas. Thus, implementation of the required mitigation would ensure that the Project does not result in substantial erosion or siltation on or off site, and impacts would be reduced to less-than-significant levels.

Thresholds e. and g.: Less-than-Significant Impact with Mitigation. Implementation of Mitigation Measures MM 4.10-1 and MM 4.10-2 would ensure that hydrology studies and PWQMPs are prepared as part of future implementing developments (i.e., tentative tract maps, plot plans, etc.). The future-required hydrology studies would be required to demonstrate that measures have been incorporated (e.g., bioswales, bioretention basins,



etc.) to reduce the rate of runoff from the developed portions of the property in a manner consistent with RCFCWCD requirements, thereby ensuring runoff from the Project site does not cause or contribute to flood hazards downstream. Implementation of Mitigation Measures MM 4.10-3 requires the Project Applicant to obtain a CLOMR and LOMR from FEMA to remove the portions of the Project site proposed for development with light industrial uses from mapped floodplains occurring on site. As part of the CLOMR and LOMR process, FEMA will evaluate the proposed changes to the floodplain to ensure that the planned improvements do not result in changes to mapped floodplains downstream. With approval of a CLOMR and LOMR, the Project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site, and would not impede or redirect flood flows in a manner that could adversely affect downstream properties. Impacts would be reduced to less-than-significant levels.

Threshold h.: Less-than-Significant Impact with Mitigation. As noted above, implementation of Mitigation Measure MM 4.10-3 would ensure that the areas of the Project site that are proposed for development with light industrial uses are removed from the mapped floodplains and would ensure that future development is not subject to inundation during flood events. With implementation of the required mitigation, the Project would not risk the release of pollutants due to Project inundation, and impacts would be reduced to less-than-significant levels.



4.11 LAND USE AND PLANNING

This Subsection discusses consistency of the proposed Project with applicable land use and planning policies adopted by Riverside County and other governing agencies for the purpose of reducing adverse effects on the physical environment. This Subsection also addresses present and future land uses, zoning, and the physical arrangement of uses on the land. Information used to support the analysis in this Subsection was also obtained in part from the Riverside County General Plan (Riverside County, 2019a), the Riverside County Lakeview/Nuevo Area Plan (LNAP) (Riverside County, 2019b), and the Riverside County GIS database (RCIT, 2020). Additionally, this Subsection relies in part on a separate analysis of the Project’s consistency with the Riverside County General Plan and LNAP, which is included as *Technical Appendix I* to this EIR. Refer to EIR Subsection 7.0, *References*, for a complete list of reference sources.

4.11.1 EXISTING CONDITIONS

A. Existing On-Site and Adjacent Land Uses

Under existing conditions, the 582.6-acre Project site consists of undeveloped land that was used for agricultural production as recently as the 1980s. There are no structures on site under existing conditions. A majority of the flatter portions of the Project site are routinely disced for fire abatement purposes, and contain several dirt pathways. In the western portions of the Project site is a portion of a large hillform with generally undisturbed vegetation. Several pedestrian pathways occur at the base of this hillside. The San Jacinto River, a channelized regional drainage facility, traverses the southeast corner of the Project site, while the northeastern portions of the site contain a portion of the San Jacinto River floodplain. (Google Earth, 2018)

To the west of the Project site are numerous large hillforms and undeveloped lands, beyond which are agricultural and rural residential land uses. To the west of the northwestern Project boundary are two existing schools (Lakeside Middle School and Sierra Vista Elementary School), beyond which is an existing master-planned residential community within the City of Perris. To the south of the Project site are undeveloped lands, the San Jacinto River, Ski Land Lake, agricultural uses, and scattered rural residential uses. Nuevo Road is improved along the site’s southern boundary to include one travel lane in each direction. To the east of the Project site are undeveloped lands and the San Jacinto River, beyond which are agricultural uses and scattered rural residential uses. To the north of the Project site are undeveloped lands and the Ramona Expressway, which is improved with one to two lanes in each direction along the site’s frontage. To the north of the Ramona Expressway are undeveloped lands, a large hillform, and the Lake Perris State Recreation Area, which includes Lake Perris. (Google Earth, 2018)

B. Existing On-Site and Surrounding Land Use Designations

The prevailing planning document for the Project site and its surrounding area is the Riverside County General Plan. The Project site is located within the Lakeview/Nuevo Area Plan (LNAP) of the Riverside County General Plan, and is located within the boundaries of the Stoneridge Commerce Center Specific Plan (SP 239). As previously depicted on EIR Figure 2-4, the General Plan and LNAP designations for the site, which reflect the land use designations of the adopted SP 239, include “Community Center (CC),” “Commercial Retail



(CR),” “Medium Density Residential (MDR),” “Medium High Density Residential (MHDR),” “Very High Density Residential (VHDR),” “Open Space – Recreation (OS-R),” “Open Space – Conservation (OS-C),” “Open Space – Conservation Habitat (OS-CH),” and “Open Space – Water (OS-W)” land uses. The CC land use designation is intended to accommodate a combination of small-lot single family residences, multi-family residences, commercial retail, office, business park uses, civic uses, transit facilities, and recreational open space within a unified planned development area. The CR land use designation is intended to accommodate local and regional serving retail and services uses. The MDR land use designation allows for single-family residential development at a density range of 2 to 5 dwelling units per acre (du/ac). The MHDR land use designation allows for single-family attached and detached residences with a density range of 5 to 8 du/ac. The VHDR land use designation is intended to accommodate single-family attached residences and multi-family dwellings at densities between 14-20 du/ac. The OS-R designation is intended to accommodate recreational uses including parks, trails, athletic fields, and golf courses. The OS-C land use designation is intended to provide for the protection of open space for natural hazard protection, cultural preservation, and natural and scenic resource preservation. The OS-CH land use designation applies to public and private lands conserved and managed in accordance with adopted Multi Species Habitat and other Conservation Plan (MSHCP) and in accordance with related Riverside County policies. The OS-W land use designation includes bodies of water and natural or artificial drainage corridors. (Riverside County, 2019b, Table 1)

As also previously depicted on EIR Figure 2-4, lands to the west of the Project site are designated by the General Plan and LNAP for CC, “Rural Residential (RR),” MDR, MHDR, “Agriculture (AG),” OS-R, and OS-C land uses. Lands to the south of the Project site are designated for MDR, “Public Facilities (PF),” OS-W, and OS-CH. Lands to the east of the Project site are designated for MDR, OS-CH, and OS-W. Lands to the north of the Project site are designated for RR, MDR, PF, OS-C, and OS-CH. The RR land use designation allows for single-family residences with a minimum lot size of five acres, along with limited agricultural uses, recreational uses, compatible resource development (not including mineral resources extraction) and associated uses and government uses. The PF land use designation allows for civic uses such as County of Riverside administrative buildings and schools. The AG designation allows for agricultural uses including row crops, groves, nurseries, dairies, poultry farms, processing plants, and other related uses, and also allows single-family uses on minimum 10-acre lot sizes. (Riverside County, 2019b, Table 1)

C. Existing On-Site and Surrounding Zoning Classifications

The Riverside County Land Use Ordinance is intended to implement the Riverside County General Plan’s land use plan. Under existing conditions, the 582.6-acre Project site is zoned for “Specific Plan Zone (SP Zone),” indicating that the property is within the boundaries of the adopted SP 239. Thus, under existing conditions the Project site is subject to the zoning classifications established by the adopted SP 239, which conform to the General Plan, LNAP, and SP 239 land use designations applied to the site, as described above. (RCIT, 2020)

Lands to the west of the Project site are zoned SP Zone (SP 246A3), “Rural Residential (R-R),” and “Light Agriculture, 20-acre Minimum Lot Size (A-1-20).” Lands to the south of the Project site are zoned for R-R and “Watercourse, Watershed & Conservation Areas (W-1).” Lands to the east are zoned R-R, “Residential



Agricultural, 5-acre Minimum Lot Size (R-A-5).” Lands to the north are zoned for SP Zone, R-A-5, and “Controlled Development Areas (W-2).” (RCIT, 2020)

D. Applicable Land Use and Planning Policies

1. Riverside County General Plan

The Riverside County General Plan is a policy document that reflects the County’s vision for the future of Riverside County. The General Plan was comprehensively revised in 2003 and most recently updated in 2019. The General Plan is organized into nine separate elements, including Land Use, Circulation, Multipurpose Open Space, Safety, Noise, Housing, Air Quality, Healthy Communities, and Administration. Each General Plan Element is instrumental to achieving the County’s long-term development goals. Each element contains a series of policies that guide the course of action the County must take to achieve the County’s vision for future development. (Riverside County, 2019a)

In addition, the General Plan divides the County into 19 Area Plans. The purpose of these Area Plans is to provide more detailed land use and policy direction regarding local issues such as land use, circulation, open space, and other topical areas. The Project site is located within the Lakeview/Nuevo Area Plan (LNAP) of the General Plan. The LNAP was most recently updated on April 16, 2019. The following section provides a summary of each General Plan Element, while the LNAP is discussed below in subsection 4.11.1.D.2. (Riverside County, 2019b)

Land Use Element

The General Plan Land Use Element functions as a guide to planners, the general public, and decision makers as to the ultimate pattern of development. The Land Use Element designates the general distribution, general location, and extent of land uses, such as housing, business, industry, open space, agriculture, natural resources, recreation, and public/quasi-public uses. These designations are reflected on the General Plan Land Use Map, which categorizes individual parcels of land into five basic categories (“Foundation Components”): Rural, Rural Community, Community Development, Agriculture, and Open Space. As reflected on the General Plan Land Use Map, the Land Use Element provides for a balanced mixture of land uses, including commercial, office, industrial, agriculture, and open space. For each of the various land use designations, the General Plan provides standards for residential density and non-residential intensity, and provides specific policies intended to ensure that product types, densities, and intensities respond to a multitude of market segments. The Land Use Element governs how land is to be utilized; therefore, many of the issues and policies contained in other plan elements are linked in some degree to this element. The Project site is currently located within an adopted Specific Plan that is located within the Community Development Foundation Component. The Project site is designated by the General Plan Land Use Plan for CC, CR, MDR, MHDR, VHDR, OS-R, OS-C, OS-CH, and OS-W land uses. The Project Applicant proposes a mixture of light industrial, business park, and commercial retail land uses; thus, a General Plan Foundation Component Amendment is not required for the proposed Project as the proposed light industrial,



business park, and commercial retail land uses also fall under the Community Development Foundation Component. (Riverside County, 2019a, p. LU-1)

Circulation Element

The purpose of the Circulation Element is to provide for the movement of goods and people, including pedestrians, bicycles, transit, train, air, and automobile traffic flows within and through the community. Efficient traffic circulation is important to economic viability and the creation and preservation of a quality living environment (Riverside County, 2019a, p. C-1). The Circulation Element designates future road improvements and extensions; addresses non-motorized transportation alternatives; and identifies funding options. The various roadway improvements and extensions contemplated by the Circulation Element are reflected on the General Plan Circulation Plan. The various roadway classifications depicted on the Circulation Plan correspond to specific roadway cross-sections, which provide specific standards for right-of-way widths, lane configurations, medians, and landscaping requirements. As previously shown on EIR Figure 2-10, *LNAP Circulation Plan*, the Riverside County General Plan and LNAP classifies the Ramona Expressway as an “Expressway (128’ to 220’ ROW),” while Nuevo Road is classified as an “Urban Arterial (152’ ROW).” Additionally, the General Plan and LNAP indicate Orange Avenue is planned to traverse the Project site in an east-west orientation, and classifies Orange Avenue as an “Arterial (128’ ROW)” roadway. The General Plan and LNAP also show Antelope Road traversing the Project site in a north-south orientation between Orange Avenue and Nuevo Road, and classifies this road as a “Major (118’ ROW)” roadway. An unnamed roadway also is planned between Orange Avenue and the Ramona Expressway, and is classified as an “Arterial (128’ ROW)” roadway by the General Plan and LNAP. Additionally, the proposed Mid-County Parkway (MCP) is identified as an “Expressway (128’ to 220’ ROW),” and is identified as part of a Community Environmental Transportation Acceptability Process (CETAP) East-West Corridor. (Riverside County, 2019b, Figure 7)

As previously shown on EIR Figure 2-11, *LNAP Trails and Bikeway System*, the General Plan Circulation Element and LNAP identify numerous planned trails on and adjacent to the Project site. A “Combination Trail (Regional Trail/Class I Bike Path)” is planned to traverse the southern and northeastern portions of the Project site. A “Community Trail” is planned to traverse the central portions of the Project site in a west-east orientation, with this trail continuing in a north-south alignment in the eastern portion of the site up to the northern site boundary, where it would connect to a proposed “Design Guidelines Trail.” The “Design Guidelines Trail” is planned along the southern alignment of the Ramona Expressway, and east along the northern Project boundary where it would connect to off-site portions of the Combination Trail (Regional Trail/Class I Bike Path). A “Regional Trail: Open Space” trail segment also is planned in the western portions of the site, primarily associated with the on-site hillform located in the southern portion of the site along the western Project boundary. (Riverside County, 2019b, Figure 8)



Multipurpose Open Space Element

The Multipurpose Open Space Element addresses forms of open space in the County, including scenic, habitat, and recreation. This element has the purpose of addressing the protection and preservation of natural resources, agriculture, and open space areas; managing mineral resources; preserving and enhancing cultural resources; and providing recreational opportunities for the residents of Riverside County. The Multipurpose Open Space Element also contains figures that detail the locations of water resources, vegetation communities, parks, forests, recreation areas, mineral resources, and cultural resources within the County. Together with the Multiple Species Habitat Conservation Plan (MSHCP), the Multipurpose Open Space Element seeks to preserve and protect identified open space areas in order to maintain or improve environmental quality. (Riverside County, 2019a, p. OS-1)

Safety Element

The Safety Element has the primary objective of reducing death, injuries, property damage, and economic and social impact of potential hazards within the County. The Safety Element serves to develop a framework by which safety considerations are introduced into the land use planning process; facilitate the identification and mitigation of hazards for new development; strengthen existing codes, project review, and permitting processes; present policies directed at identifying and reducing hazards in existing development; and strengthen earthquake, flood, inundation, and wildland fire preparedness planning and post-disaster reconstruction policies. Within the Safety Element, policies are presented which pertain to seismic, slope and soil instability; flood and inundation; fire safety; hazardous waste and materials; and disaster preparedness, response, and recovery hazards. (Riverside County, 2019a, pp. S-1 - S-2)

Noise Element

The purpose of the Noise Element is to identify sources of noise generation in the County and provide policies to ensure development does not expose people to unacceptable noise levels. The establishment of desirable maximum noise levels and implementation of noise regulations are also included as part of the Noise Element. The Noise Element provides a systematic approach to identifying and managing noise problems in the community; quantifies existing and projected noise levels; addresses excessive noise exposure; and directs community planning for regulation of noise. The Noise Element includes policies, standards, criteria, programs, diagrams, a reference to action items, and maps related to the protection of public health and welfare with respect to noise. (Riverside County, 2019a, p. N-3)

Housing Element

The 2017-2021 Housing Element identifies and establishes County policies intended to fulfill the housing needs of existing and future residents in Riverside County. It establishes policies that guide County decision-making and set forth an action plan to implement its housing goals. The Housing Element includes a review of previous housing goals, an assessment of the effectiveness of those goals, and an assessment of housing needs. Additionally, the Housing Element includes an inventory of resources and constraints related to meeting housing needs in the County; an analysis of affordable



housing developments and programs intended to preserve such housing; community goals for the maintenance, preservation, improvement and development of housing; and a program which sets forth a five-year schedule of actions that the County is undertaking or intends to undertake in implementing the polices set forth in the Housing Element. (Riverside County, 2017, p. H-3)

Air Quality Element

The intent of the Air Quality Element is to provide background information on the physical and regulatory environment affecting air quality in the County. This element also identifies goals, policies, and programs that are meant to balance the County’s actions regarding land use, circulation, and other issues potentially affecting air quality. This element works in conjunction with local and regional air quality planning efforts to address ambient air quality standards set forth by the Federal Environmental Protection Agency (EPA) and the California Air Resources Board (CARB). The Air Quality Element sets ambient air quality standards for various air pollutants based on State and federal standards. The Element also contains policies regarding sensitive receptors, mobile and stationary pollution sources, energy efficiency and conservation, jobs and housing, and transportation. (Riverside County, 2019a, pp. AQ-3 - AQ-31)

Healthy Communities Element

The Healthy Communities Element provides a framework for translating the General Plan vision for a healthy Riverside County into reality by identifying policies aimed at achieving that vision. The Element addresses areas where public health and planning intersect, including transportation and active living; access to nutritious foods; access to health care; mental health; quality of life; and environmental health. This Element addresses overall health; land uses and community design; transportation system (with an emphasis on non-motorized transportation); arts and culture; social capital; complete communities; parks, trails, and open space; access to healthy foods and nutrition; healthcare and mental healthcare; schools, recreational centers, and daycare centers; and environmental health. (Riverside County, 2019a, pp. HC-1 - HC-12)

Administration Element

The Administration Element focuses on the administration of the General Plan, which is the sole responsibility of the County of Riverside, under the authority of the Board of Supervisors. Administration of the General Plan policies includes establishing, maintaining, and applying tools and procedures for interpreting the intent of the General Plan and applying the interpretation to a variety of circumstances. This Element details the vision for Riverside County, General Planning Principles, Countywide Elements and Planning Policies/Area Plan, Appendices of the General Plan, and other administrative topics. (Riverside County, 2019a, pp. AQ-1 - AQ-20)

2. *Lakeview/Nuevo Area Plan (LNAP)*

As noted above, the Project site is located within the Lakeview/Nuevo Area Plan of the Riverside County General Plan. The LNAP guides the evolving character of the area, and uses the County of Riverside General



Plan vision to establish policies for development and conservation within the specific area of Riverside County. The LNAP provides a description of the location, physical characteristic, and special features, in addition to a Land Use Plan, policies, and exhibits to better understand the physical, environmental, and regulatory characteristics that comprise the area. Each section of the LNAP addresses critical issues facing the Lakeview/Nuevo community. The LNAP includes sections detailing the features, policy areas, land use, circulation, multipurpose open space, and hazards. (Riverside County, 2019b)

As shown on LNAP Figure 4, *Lakeview/Nuevo Area Plan and Policy Areas*, the Project site is located within the boundaries of adopted SP 239. Additionally, the southeastern corner of the Project site is located within the “San Jacinto River Policy Area,” while a very small portion of the extreme southeast corner of the Project site is located within the “2-4 DU/Acre Policy Area.” The intent of the “San Jacinto River Policy Area” is to reflect the fact that the land use designations may change as a result of implementing the proposed San Jacinto River Channelization Project, which is an ongoing process that had not been finalized when the LNAP was most recently updated in April 2019. The San Jacinto River Channelization Project would reduce the threat of flooding during a 100-year flood event and allow for increased development on adjacent lands. The “2-4 DU/AC Policy Area” is currently within the 100-year floodplain of the San Jacinto River, and its function is to restrict density from the maximum allowed by the Land Use Plan to four dwelling units per acre in order to minimize the impacts of a 100-year flood event on residents and their property. (Riverside County, 2019b, Figure 4 and pp. 20-21)

In addition, LNAP Figure 6, *Lakeview/Nuevo Area Plan Mt. Palomar Night Time Lighting Policy Area*,” the Project site is located within Zone B of the Mt. Palomar Night Time Lighting Policy Area, indicating that land uses in the Project area are subject to compliance with Riverside County Ordinance No. 655 (Regulating Light Pollution). Additionally, LNAP Figure 9, *Lakeview/Nuevo Area Plan Scenic Highways*, indicates that the Ramona Expressway adjacent to the Project site is classified as a “County Eligible” scenic highway. (Riverside County, 2019b, Figures 6 and 9)

3. Riverside County Zoning Ordinance

The Riverside County Land Use Ordinance is intended to implement the Riverside County General Plan’s Land Use Plan. Under existing conditions, the 582.6-acre Project site is zoned for “Specific Plan Zone (SP Zone),” indicating that the property is within the boundaries of SP 239 and is subject to the zoning classifications established by the adopted SP 239. Refer to subsection 4.11.1 for a more thorough discussion of the site’s existing zoning classifications. (RCIT, 2020)

4. Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

Riverside County has adopted a Multiple Species Habitat Conservation Plan (MSHCP), which is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP). The MSHCP promotes conservation of species and their associated habitats in Riverside County through implementation of several HCPs that affect lands within the County. The Western Riverside County MSHCP and the Coachella Valley MSHCP are the two dominant plans that impact the largest portions of the county. These plans coordinate multi-jurisdictional



habitat-planning and conservation efforts in the region to promote biological and ecological diversity while accommodating the appropriate construction of new development and infrastructure projects. Riverside County catalogs acquisitions and conservation of lands with respect to the HCPs, and periodically updates the General Plan Land Use maps accordingly. (Riverside County, 2015, p. 4.2-27)

The Project site is located within the Western Riverside County MSHCP. As previously shown on EIR Figure 2-6, *MSHCP Cell Groups and Criteria Cells*, the eastern and southern portions of the Project site are located within MSHCP Criteria Cells. The northeast portion of the Project site is located within Criteria Cell 2442 within Cell Group G of the MSHCP Lakeview/Nuevo Area Plan (LNAP), Criteria Cell 2547 within Cell Group F of the LNAP, and Criteria Cell 2651 within Cell Group E of the LNAP. The southern portions of the Project site are located within Criteria Cell 2762 within Cell Group D of the LNAP. In addition to conservation criteria within areas designated to be included within the MSHCP Reserve System, the MSHCP also identifies a number of additional survey and conservation requirements that apply to the Project area. Refer to EIR Subsection 4.4, *Biological Resources*, for a more thorough discussion of the MSHCP and the Project site's relationship thereto.

5. Stephen's Kangaroo Rat Habitat Conservation Plan (SKR HCP)

The Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP) was prepared under the direction of the Riverside County Habitat Conservation Agency (RCHCA) Board of Directors, in consultation with United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW). The County of Riverside is a member agency of the RCHCA. The 30-year SKR HCP was designed to acquire and permanently conserve, maintain, and fund the conservation, preservation, restoration, and enhancement of Stephens' kangaroo rat-occupied habitat. The SKR HCP covers approximately 534,000 acres within the member jurisdictions and includes an estimated 30,000 acres of occupied Stephens' kangaroo rat habitat. The SKR HCP requires members to preserve and manage 15,000 acres of occupied habitat in seven Core Reserves encompassing over 41,000 acres. (Riverside County, 2015, p. 4.8-52)

On May 3, 1996, the USFWS issued a permit to the Riverside County Habitat Conservation Agency to incidentally take the federally endangered Stephens' kangaroo rat (*Dipodomys stephensi*). Similarly, the CDFW issued a California Endangered Species Act Management Authorization for Implementation of the Stephens' Kangaroo Rat HCP on May 6, 1996. To date, more than \$50 million has been dedicated to the establishment and management of a system of regional preserves designed to ensure the survival of SKR in the plan area. This effort resulted in the permanent conservation of approximately 50% of the SKR-occupied habitat remaining in the HCP area. Through direct funding and in-kind contributions, SKR habitat in the regional reserve system is managed to ensure its continuing ability to support the species. Core reserves were deemed complete in December of 2003. (Riverside County, 2015, p. 4.8-52)

Although the Project site is not targeted for conservation as part of the SKR HCP, the Project site is located within the SKR HCP fee area, which requires the payment of fees pursuant to Riverside County Ordinance No. 663.



6. Southern California Association of Governments (SCAG)

The Southern California Association of Governments (SCAG) is a Joint Powers Authority (JPA) under California State law, established as an association of local governments and agencies that voluntarily convene as a forum to address regional issues. Under federal law, SCAG is designated as a Metropolitan Planning Organization (MPO) and under State law as a Regional Transportation Planning Agency and a Council of Governments. The SCAG region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura) and 191 cities in an area covering more than 38,000 square miles. SCAG develops long-range regional transportation plans including sustainable communities strategy and growth forecast components, regional transportation improvement programs, regional housing needs allocations and other plans for the region. (SCAG, 2020a)

As an MPO and public agency, SCAG develops transportation and housing strategies that transcend jurisdictional boundaries that affect the quality of life for southern California as a whole. On May 7, 2020, SCAG's Regional Council adopted *Connected SoCal (2020-2045 Regional Transportations Plan/Sustainable Communities Strategy* (herein, "draft RTP/SCS"), for federal transportation conformity purposes only. Due to the COVID-19 pandemic, the Regional Council will consider approval of Connect SoCal in its entirety and for all other purposes within 120 days from May 7, 2020. For purposes of analysis herein, it is assumed that Connect SoCal will be adopted prior to Project approval.

The draft RTP/SCS includes long-range regional transportation plans, regional transportation improvement programs, regional housing needs allocations, and other plans for the region. The RTP/SCS also provides objectives for meeting emissions reduction targets set forth by the California Air Resources Board (ARB); these objectives were provided in a direct response to Senate Bill 375 (SB 375) which was enacted to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use, housing and environmental planning. (SCAG, 2020d) The RTP/SCS is updated periodically to allow for the consideration and inclusion of new transportation strategies and methods.

The draft 2020-2045 RTP/SCS includes a Technical Appendix titled "Goods Movement" that is applicable to the Project because the Project entails a use that is closely associated with, and relies directly on the goods movement system (e.g., manufacturing, construction, retail trade, wholesale trade and transportation, and warehousing). In April 2018 SCAG published *Industrial Warehousing in the SCAG Region*. According to the document, the SCAG region is a vibrant hub for international and domestic trade because of its large transportation base and extensive multimodal transportation system. The SCAG region's freight transportation system includes warehouses and distribution centers; the Ports of Los Angeles, Long Beach, and Hueneme; airports; rail intermodal terminals; rail lines, and local streets, state highways and interstates. Together the system enables the movement of goods from source to market, facilitating uninterrupted global commerce. The region is home to approximately 34,000 warehouses with 1.17 billion square feet of warehouse building space, and undeveloped land that could accommodate an additional 338 million square feet of new warehouse building space. These regions attract robust logistics activities, and are a major reason the region is a critical mode in the global supply chain. (SCAG, 2018, p. ES-1)



7. South Coast Air Quality Management District Air Quality Management Plan (SCAQMD AQMP)

California Health & Safety Code § 40702 et seq., the California Clean Air Act, requires that an Air Quality Management Plan (AQMP) be developed and then updated every three years for air basins with non-attainment status. As discussed in EIR Section 4.3, *Air Quality*, the Project site is located in the South Coast Air Basin (SoCAB). The SoCAB is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD), the agency charged with bringing air quality in the SoCAB into conformity with federal and State air quality standards. Air quality within the SoCAB is regulated by the SCAQMD and standards for air quality are documented in the SCAQMD's 2016 AQMP. Although air quality in the SoCAB has improved over the past several decades, according to the SCAQMD, the SoCAB currently does not meet National Air Quality Standards (NAAQS) attainment status for ozone (O₃) and particulate matter less than 2.5 microns (PM_{2.5}). The SoCAB's currently is considered non-attainment under the California Ambient Air Quality Standards (CAAQS) due to levels of ozone (O₃), particulate matter < 2.5 microns (PM_{2.5}), and particulate matter < 10 microns (PM₁₀). (SCAQMD, 2017b)

The SCAQMD AQMP is a plan for the regional improvement of air quality. Projects such as the proposed Project relate to the air quality planning process through the growth forecasts that were used as inputs into the regional transportation model. If a proposed project is consistent with these growth forecasts, and if all available emissions reduction strategies are implemented as effectively as possible on a project-specific basis, then the project is consistent with the AQMP.

8. March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan (ALUCP)

Within the State of California, Government Code Section 65302.3(a) requires that general plans, specific plans, and amendments must be consistent with the adopted airport land use plans adopted or amended pursuant to Section 21675 of the Public Utilities Code (PUC). The intent behind Comprehensive Land Use Plans for Airports within the County of Riverside is to protect and promote the safety and welfare of residents within the airport vicinity, as well as airport patrons. The land use plans are also intended to ensure the continued operation of the airports. Specifically, these plans seek to protect the public from the adverse effects of aircraft noise, to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents, and to ensure that no structures or activities encroach upon or adversely affect the use of navigable airspace. Implementation of the Comprehensive Land Use Plans promotes compatible urban development within an airport's vicinity and incompatible development is restricted; thus allowing for the continued operation of the airports. (RCALUC, 2004)

The Project site is located within the Airport Influence Area (AIA) of the March Joint Air Reserve Base (MARB) and is therefore subject to review and approval by the Riverside County Airport Land Use Commission (ALUC) for conformance to the Riverside County Airport Land Use Compatibility Plan Policy Document (ALUCP). The airport land use compatibility concerns of the ALUC (and the ALUCP) fall under two broad headings identified in state law: noise and safety. Land use compatibility within Airport Influence Areas is mapped as a series of Compatibility Zones (A thru E), with Compatibility Zone A being the closest



to the runways and therefore restricting uses to those associated with airport operations and aeronautical activities, and Zone E being the furthest from airport operations and therefore the least restrictive. A majority of the Project site, except for the northeastern portions of the Project site, are located within the MARB AIA Compatibility Zone E. No restrictions are identified by the ALUCP for Compatibility Zone E, other than prohibiting specific types of land uses that can create a hazard to flight. (ALUC, 2014)

9. *Riverside County Good Neighbor Guidelines*

The Riverside County Board of Supervisors has adopted a “‘Good Neighbor’ Policy for Logistics and Warehouse/Distribution Uses” (Good Neighbor Policy). The Good Neighbor Policy provides a framework through which large-scale logistics and warehouse projects can be designed and operated in a way that lessens their impact on surrounding communities and the environment. It is meant to apply Best Management Practices to help minimize potential impacts to sensitive receptors and is intended to be used in conjunction with the County’s Land Use Ordinance, which provides development requirements for said projects, and CEQA. The Good Neighbor Policy does not replace the need for preparation of the appropriate project-specific environmental review and application of any necessary measures that may arise out of that review. The Good Neighbor Policy provides a series of development and operational criteria that can be implemented to supplement project-level mitigation measures, in order to further reduce impacts related to logistics and warehousing development and operations. The policies are organized into specific categories, to address these potential quality of life issues from the initial design process, to construction, and through operations.

4.11.2 APPLICABLE REGULATORY REQUIREMENTS

The following is a brief description of the federal, State, and local environmental laws and related regulations related to land use and planning.

A. Federal Regulations

1. *Clean Water Act*

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was substantially reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1972. Under the CWA, the Environmental Protection Agency (EPA) has implemented pollution control programs such as setting wastewater standards for industry, and also has set water quality standards for all contaminants in surface waters. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. (EPA, 2020a)



2. *Federal Aviation Regulations Part 77*

Federal Regulation Title 14 Part 77 establishes standards and notification requirements for objects affecting navigable airspace. This notification serves as the basis for: (FAA, 2020)

- Evaluating the effect of the construction or alteration on operating procedures;
- Determining the potential hazardous effect of the proposed construction on air navigation;
- Identifying mitigating measures to enhance safe air navigation; and
- Charting of new objects.

Notification allows the Federal Aviation Administration (FAA) to identify potential aeronautical hazards in advance to prevent or minimize the adverse impacts to the safe and efficient use of navigable airspace. Any person/organization who intends to sponsor any of the following construction or alterations must notify the Administrator of the FAA: (FAA, 2020)

- Any construction or alteration exceeding 200 feet above ground level.
- Any construction or alteration:
 - within 20,000 feet of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with at least one runway more than 3,200 feet.
 - within 10,000 feet of a public use or military airport which exceeds a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 feet.
 - within 5,000 feet of a public use heliport which exceeds a 25:1 surface.
- Any highway, railroad, or other traverse way whose prescribed adjusted height would exceed that above noted standards.
- When requested by the FAA.
- Any construction or alteration located on a public use airport or heliport regardless of height or location. (FAA, 2020)

Persons failing to comply with the provisions of FAR Part 77 are subject to Civil Penalty under Section 902 of the Federal Aviation Act of 1958, as amended and pursuant to 49 U.S.C. Section 46301(a). (FAA, 2020)

B. State Regulations

1. Porter-Cologne Water Control Act

The Porter-Cologne Act is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code § 13000 et seq.), the policy of the State is as follows: (SWRCB, 2014)

- That the quality of all the waters of the State shall be protected;



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

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

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

The Porter-Cologne Act also implements many provisions of the Clean Water Act, such as the NPDES permitting program. The Porter-Cologne Act also requires adoption of water quality control plans that contain the guiding policies of water pollution management in California. In addition, regional water quality control plans (basin plans) have been adopted by each of the Regional Water Boards and get updated as necessary and practical. These plans identify the existing and potential beneficial uses of waters of the State and establish water quality objectives to protect these uses. The basin plans also contain implementation, surveillance, and monitoring plans. (SWRCB, 2014)

2. California Water Code

The California Water Code is the principal state law regulating water quality in California. Water quality provisions must be complied with as contained in numerous code sections including: 1) the Health and Safety Code for the protection of ground and surface waters from hazardous waste and other toxic substances; 2) the Fish and Game Code for the prevention of unauthorized diversions of any surface water and discharge of any substance that may be deleterious to fish, plant, animal, or bird life; 3) the Harbors and Navigation Code for the prevention of the unauthorized discharge of waste from vessels into surface waters; and 4) the Food and Agriculture Code for the protection of groundwater which may be used for drinking water supplies. The California Department of Fish and Wildlife (CDFW), through provisions of the Fish & Game Code (§§ 1601



- 1603) is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by CDFW. (CA Legislative Info, 2004)

Surface water quality is the responsibility of the RWQCB, water supply and wastewater treatment agencies, and city and county governments. The principal means of enforcement by the RWQCB is through the development, adoption, and issuance of water discharge permits. RWQCB basin plans establish water quality objectives that are defined as the limits or levels of water quality constituents or characteristics for the reasonable protection of beneficial uses of water. (CA Legislative Info, 2004)

3. California Planning and Zoning Law

The legal framework in which California cities and counties exercise local planning and land use functions is set forth in the California Planning and Zoning Law, §§ 65000 - 66499.58. Under State of California planning law, each city and county must adopt a comprehensive, long-term general plan. State law gives cities and counties wide latitude in how a jurisdiction may create a general plan, but there are fundamental requirements that must be met. These requirements include the inclusion of seven mandatory elements described in the Government Code, including a section on land use. Each of the elements must contain text and descriptions setting forth objectives, principles, standards, policies, and plan proposals; diagrams and maps that incorporate data and analysis; and mitigation measures. (OPR, 2020)

4. Subdivision Map Act

The Subdivision Map Act (“Map Act”) vests in the cities and counties the power to regulate and control the design and improvement of subdivisions within its boundaries. Each city must adopt an ordinance regulating and controlling subdivisions for which the Map Act requires a tentative and final or parcel map. The authority for a city or county to regulate land use, including subdivisions, flows from the general police power. However, the Map Act sets forth certain mandates that must be followed for subdivision processing. A city can impose conditions on the subdivision process when the Map Act is silent, but it cannot regulate contrary to specific provisions contained in the Map Act. (Curtin, Jr. & Merritt, 2002, p. 1) The Map Act's primary goals are:

- To encourage orderly community development by providing for the regulation and control of the design and improvement of the subdivision, with a proper consideration of its relation to adjoining areas;
- To ensure that the areas within the subdivision that are dedicated for public purposes will be properly improved by the subdivider so that they will not become an undue burden on the community; and
- To protect the public and individual transferees from fraud and exploitation. (Curtin, Jr. & Merritt, 2002, p. 1)



The Map Act is applied in conjunction with other state land use laws such as the general plan, specific plans, zoning, CEQA, and the Permit Streamlining Act. The Map Act provides for regulation of land divisions by a city or county and is interpreted and enforced by the city or county. (Curtin, Jr. & Merritt, 2002, p. 2)

5. Office of Planning and Research (OPR) General Plan Guidelines

Each city and county in California must prepare a comprehensive, long term general plan to guide its future. To assist local governments in meeting this responsibility, the Governor’s Office of Planning and Research (OPR) is required to adopt and periodically revise guidelines for the preparation and content of local general plans pursuant to Government Code § 65040.2. The General Plan Guidelines is advisory, not mandatory. Nevertheless, it is the state’s only official document explaining California’s legal requirements for general plans. Planners, decision-making bodies, and the public depend upon the General Plan Guidelines for help when preparing local general plans. The courts have periodically referred to the General Plan Guidelines for assistance in determining compliance with planning law. For this reason, the General Plan Guidelines closely adheres to statute and case law. It also relies upon commonly accepted principles of contemporary planning practice. (OPR, 2017b, p. 1)

6. State Aeronautics Act

The State Aeronautics Commission Act of 1947 created the Division of Aeronautics (“Division”), and was later amended by statute to read the State Aeronautics Act (Aeronautics Act) in 1961. As a result of this legislation, the Division’s first priorities are those mandated by the Aeronautics Act, then Caltrans guidance, then Division guidance as expressed through its Policy Element. As directed by the Aeronautics Act, the Division is a steward and advocate of aviation in California. To that end, its efforts are focused on activities that “protect the public interest in aeronautics and aeronautical progress.” (§ 21002) (CA Legislative Info, n.d.)

The Aeronautics Act itself is divided into six chapters, the first five of which have not received significant cleanup legislation since its enabling in 1947. The first chapter begins with general provisions and definitions and explains the Legislature’s intent for a State aviation program. Chapter two explains Caltrans’ role in administering the Division, and explains the role of the California Transportation Commission (CTC). Chapter three includes many of the safety considerations from Federal Aviation Administration (FAA) regulations that help keep airports and the surrounding communities safe and compatible with flight operations. Chapter four deals with airport and heliport permitting, air navigation facilities, noise guidelines, funding, and importantly, the formation and authority of Airport Land Use Commissions (ALUC). Chapter five covers the investigations and hearings on matters covered in the Aeronautics Act. Finally, Chapter six introduces airport planning and specifically introduces the intent of the CASP and how it can be used to support California aviation. (CA Legislative Info, n.d.)

4.11.3 BASIS FOR DETERMINING SIGNIFICANCE

Section XI of Appendix G to the State CEQA Guidelines, as updated in December 2018, addresses typical adverse effects on land use and planning, and includes the following threshold questions to evaluate the Project’s impacts on land use and planning (OPR, 2018a):



- Would the project physically divide an established community; or
- Would the project cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Significance thresholds are set forth in Riverside County’s Environmental Assessment Checklist, and have been updated to reflect the 2018 updates to Section XI of Appendix G to the State CEQA Guidelines (listed above). Accordingly, the proposed Project would have a significant impact on land use and planning if construction and/or operation of the Project would:

- 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; or*
- Disrupt or divide the physical arrangement of an established community (including a low-income or minority community).*

The significance thresholds set forth in Riverside County’s Environmental Assessment Checklist, as modified/updated per the 2018 updates to the State CEQA Guidelines, were used to evaluate the significance of the proposed Project’s impacts on land use and planning. It should be noted that the Project’s consistency with the Western Riverside County MSHCP and the SKR HCP, which are the only habitat conservation plans or natural community conservation plans applicable to the Project site, is evaluated in EIR Subsection 4.4, *Biological Resources*, under the analysis of Threshold a., and the analysis concludes that impacts due to a conflict with the MSHCP and SKR HCP would be less than significant with mitigation. Project consistency with the MSHCP and SKR HCP is not further discussed in this Subsection.

4.11.4 IMPACT ANALYSIS

Threshold a.: Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The proposed Project has the potential to conflict with the Riverside County General Plan and LNAP, as well as the SCAG draft RTP/SCS. Future light industrial development within the Project site will be subject to compliance with the County’s Good Neighbor Policy; thus, the Project has no potential to result in a conflict with the Good Neighbor Policy, and further analysis of Project compliance is not necessary. Additionally, the Project’s consistency with the SCAQMD AQMP is addressed under EIR Subsection 4.3, *Air Quality*. Similarly, the Project’s consistency with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) and the Stephens’ Kangaroo Rat Habitat Conservation Plan (SKR HCP) are addressed in EIR Subsection 4.4, *Biological Resources*. In addition, the Project’s consistency with Riverside County’s Climate Action Plan (CAP) is addressed in EIR Subsection 4.8, *Greenhouse Gas Emissions*. As discussed in Subsection 4.3, the Project would result in significant and unavoidable impacts due to a conflict with the 2016 SCAQMD AQMP, which would result from the Project’s long-term operational emissions of ROG_s and NO_x and because the Project’s proposed land uses are not consistent with the growth forecasts included in the 2016



SCAQMD AQMP. As indicated in EIR Subsections 4.4 and 4.8, the Project would not conflict with the MSHCP, the SKR HCP, or the Riverside County CAP; thus, impacts due to a conflict with the MSHCP, SKR HCP, and CAP would be less than significant. The Project's consistency with the SCAQMD AQMP, MSHCP, SKR HCP, and the County's CAP is not further discussed below.

A. Project Consistency with General Plan and LNAP

1. General Plan and LNAP Land Use Consistency

Under existing conditions, the 582.6-acre Project site is located within the boundaries of the Stoneridge Commerce Center Specific Plan (SP 239). The General Plan and LNAP designate the property for "Community Center (CC)," "Commercial Retail (CR)," "Medium Density Residential (MDR)," "Medium High Density Residential (MHDR)," "Very High Density Residential (VHDR)," "Open Space – Recreation (OS-R)," "Open Space – Conservation (OS-C)," "Open Space – Conservation Habitat (OS-CH)," and "Open Space – Water" land uses. The Project Applicant proposes a General Plan Amendment (GPA 190008) and the first amendment to Specific Plan No. 239 (SP 239A1) to change the site's land use designations to instead include "Light Industrial (LI)," "Business Park (BP)," "Commercial Retail (CR)," "Open Space – Conservation (OS-C)," and "Open Space – Conservation Habitat" land uses. With approval of GPA 190008 and SP 239A1, the Project would be fully consistent with the General Plan and LNAP land use designations for the 582.6-acre property. Moreover, impacts associated with the proposed land uses have been evaluated throughout this EIR. Where significant impacts are identified, mitigation measures are identified to reduce impacts to the maximum feasible extent. Based on the foregoing analysis, the proposed Project would not result in a significant environmental impact due to a conflict with any land use plan adopted for the purpose of avoiding or mitigating an environmental effect, and impacts would be less than significant.

2. General Plan and LNAP Policy Consistency

A General Plan Policies Consistency Analysis was prepared for the proposed Project in order to demonstrate the Project's consistency with applicable General Plan Policies, and is included as *Technical Appendix I*. For more information regarding the Project's consistency with specific applicable Riverside County General Plan and LNAP policies, please refer to *Technical Appendix I*. As concluded therein, the Project would not conflict with any of the applicable General Plan and LNAP policies adopted for the purpose of avoiding or reducing significant environmental effects. Accordingly, impacts due to a conflict with applicable General Plan or LNAP policies would be less than significant.

B. Project Consistency with SCAG's 2020-2045 RTP/SCS

As previously noted, SCAG has published a draft 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), also referred to as "Connect SoCal." Connect SoCal has not yet been adopted at the time of preparing this EIR; notwithstanding, the Project's consistency with the draft 2020-2045 RTP/SCS has been evaluated. Although not yet fully adopted, the RTP/SCS seeks to improve mobility, promote sustainability, facilitate economic development, and preserve the quality of life for the residents in the region. The long-range visioning plan balances future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health. The goals



included in the RTP/SCS are pertinent to the proposed Project. These goals are meant to provide guidance for considering the proposed Project within the context of regional goals and policies. An analysis of the Project’s consistency with the relevant goals of the draft RTP/SCS is presented below in Table 4.11-1, *Analysis of Consistency with SCAG Draft 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy Goals*. As indicated the Project would not conflict with any of the draft RTP/SCS goals, and no impact would occur.

Table 4.11-1 Analysis of Consistency with SCAG Draft 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy Goals

DRAFT RTP/SCS GOAL	GOAL STATEMENT	PROJECT CONSISTENCY DISCUSSION
1.	Encourage regional economic prosperity and global competitiveness.	<u>Consistent.</u> This policy would be implemented by cities and the counties within the SCAG region as part of comprehensive local and regional planning efforts. The Project would support this goal by providing employment-generating land uses (i.e., light industrial, business park, and commercial retail) in a portion of the County that has a low jobs-to-housing ratio.
2.	Improve mobility, accessibility, reliability, and travel safety for people and goods.	<u>Consistent.</u> EIR Section 4.18, <i>Transportation</i> , evaluates Project-related traffic impacts and specifies mitigation measures to reduce the Project’s impacts to the maximum feasible extent. The Project Applicant would implement local transportation improvements that would improve mobility, accessibility, reliability, and travel safety for people and goods in the local area.
3.	Enhance the preservation, security, and resilience of the regional transportation system.	<u>Consistent.</u> This policy would be implemented by cities and the counties within the SCAG region as part of comprehensive local and regional planning efforts. As disclosed in EIR Section 4.18, <i>Transportation</i> , there are no components of the proposed Project that would adversely affect the preservation, security, or resilience of the regional transportation system, and the Project Applicant would contribute fees towards regional improvements required in the Project vicinity. Furthermore, SP 239A1 requires roadway and intersection improvements consistent with the County General Plan Circulation Element, LNAP, and the Riverside County Road Standards (Ordinance No. 461).



Table 4.11-1 Analysis of Consistency with SCAG Draft 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy Goals

DRAFT RTP/SCS GOAL	GOAL STATEMENT	PROJECT CONSISTENCY DISCUSSION
4.	Increase person and goods movement and travel choices within the transportation system.	<u>Consistent.</u> This policy would be implemented by cities and the counties within the SCAG region as part of the overall planning and maintenance of the regional transportation system. The Project would expand facilities for goods movement in the local area, and would construct or contribute fees towards regional transportation improvements. Additionally, the intensity of the proposed Project would facilitate expanded transit service in the local area.
5.	Reduce greenhouse gas emissions and improve air quality.	<u>Consistent.</u> This policy would be implemented by cities and the counties within the SCAG region as part of comprehensive transportation planning efforts. The Project would entail development of light industrial, business park, and commercial retail uses in a portion of Riverside County that experiences a relatively low jobs-to-housing ratio; thus, the Project would serve to reduce worker commute times in the local area by providing jobs in close proximity to housing. Additionally, and as discussed in EIR Subsections 4.3, <i>Air Quality</i> , and 4.8, <i>Greenhouse Gas Emissions</i> , the Project would be required to implement mitigation measures to reduce air quality emissions to the maximum feasible extent.
6.	Support healthy and equitable communities.	<u>Consistent.</u> An analysis of the Project’s environmental impacts is provided throughout this EIR, and mitigation measures are specified where warranted. Air quality is addressed in EIR Subsection 4.3, <i>Air Quality</i> , and mitigation measures are specified to reduce the Project’s air quality impacts to the extent feasible. Additionally, the Project would implement trails, sidewalk, and bike lane improvements along public roadway rights-of-way in a manner that is consistent with the County of Riverside General Plan. The Project study area is within the service area of the Riverside Transit Authority (RTA), a public transit agency serving various jurisdictions within Riverside County. The Project would not conflict with any existing or planned RTA routes. Additionally, and as discussed in detail in EIR <i>Technical Appendix I</i> , the Project would be consistent with or otherwise would not conflict with any applicable General Plan policies or requirements, including policies and requirements included in the General Plan’s Healthy Communities Element. Thus, the Project would facilitate the establishment of healthy and equitable communities.



Table 4.11-1 Analysis of Consistency with SCAG Draft 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy Goals

DRAFT RTP/SCS GOAL	GOAL STATEMENT	PROJECT CONSISTENCY DISCUSSION
7.	Adapt to a changing climate and support an integrated regional development pattern and transportation network.	<u>Consistent.</u> This policy would be implemented by cities and the counties within the SCAG region as part of comprehensive transportation planning efforts. As indicated in EIR Subsection 4.8, <i>Greenhouse Gas Emissions</i> , the Project would be conditioned to ensure full compliance with the Riverside County Climate Action Plan (CAP), thereby demonstrating that the Project would assist the County in meeting its greenhouse gas (GHG) reduction targets. The Project also would be conditioned to construct and/or contribute fees towards improving the regional transportation network.
8.	Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	<u>Not Applicable.</u> This policy provides guidance to the County to leverage new transportation technologies and data-driven solutions that result in more efficient travel. There are no components of the proposed Project that would preclude the County’s ability to implement this goal.
9.	Encourage development of diverse housing types in areas that are supported by multiple transportation options	<u>Not Applicable.</u> This policy would be implemented by cities and the counties within the SCAG region as part of comprehensive transportation planning efforts. The Project does not include any residential uses, and therefore has no potential to conflict with this goal.
10.	Promote conservation of natural and agricultural lands and restoration of habitats	<u>No conflict identified.</u> As part of the Project, a total of 99.0 acres of the Project site would be conserved as natural open space. As indicated in EIR Subsection 4.4, <i>Biological Resources</i> , the only sensitive vegetation communities that occur on site under existing conditions is Southern Riparian Scrub. The Project would result in impacts to 0.31 acre of Southern Riparian Scrub; however, impacts would be reduced to less-than-significant levels with implementation of EIR Mitigation Measure MM 4.4-1. Additionally, the Project site is designated by the Riverside County General Plan for future development with urban land uses, and therefore the Project site is not suitable for conservation as agricultural land.

(SCAG, 2020d)

C. Land Use Compatibility

The Project as evaluated herein would provide for the future development of the 582.6-acre Project site with a mixture of light industrial, business park, and commercial retail land uses. Under existing conditions, the Project site is surrounded by a mixture of undeveloped lands/open space and agricultural uses, with scattered



low-density residential developments to the southeast and southwest, medium-density residential uses within the City of Perris to the west of the site, and two existing schools to the west (Avalon Elementary School and Lakeside Middle School). The Riverside County General Plan and LNAP designate areas east and south of the Project site for Medium Density Residential (MDR), Open Space Conservation Habitat (OS-CH), Open Space – Water (OS-W), Public Facilities (PF), and Rural Community – Low Density Residential (RC-LDR) land uses, while areas north of the site are designated for Open Space – Conservation (OS-C), MDR, PF, Rural Residential (RR), and OS-CH land uses. Areas to the west of the Project site are planned for a mixture of residential, commercial retail, schools, and open space areas pursuant to the McCanna Hills Specific Plan (SP 246). As such, the Project has the potential to result in significant environmental impacts due to the proximity of the Project’s proposed light industrial and business park uses to planned residential and school uses.

Impacts associated with the Project’s potential land use compatibility with surrounding uses have been evaluated throughout this EIR under the appropriate subject headings. For example, EIR Subsection 4.3, *Air Quality*, includes an assessment of potential localized air quality impacts that could result from Project implementation, including cancer and non-cancer risks associated with diesel-powered truck trips that would be generated by the Project. As concluded in EIR Subsection 4.3, the Project’s localized air quality impacts affecting surrounding sensitive receptors, including residential and school uses, would be less than significant. EIR subsection 4.9, *Hazards and Hazardous Materials*, includes an analysis of potential hazardous materials impacts that could affect surrounding land uses, and demonstrates that with mandatory regulatory compliance and implementation of mitigation measures, impacts associated with hazards and hazardous materials would be reduced to less-than-significant levels. EIR Subsection 4.13, *Noise*, includes an assessment of potential noise impacts associated with the Project, including noise from construction, site operations, and Project-related traffic, and concludes that with mitigation, Project impacts would be less than significant, although Project-related traffic noise could be significant and unavoidable if affected landowners do not allow for the construction of a noise wall along Ramona Expressway south of Rider Street. There are no environmental effects to surrounding existing or planned land uses that have not already been evaluated throughout this Program EIR, and where necessary mitigation measures have been imposed on the Project to reduce potential impacts to the extent feasible.

Furthermore, the Project would be subject to compliance with the County’s “Good Neighbor” Policy for Logistics and Warehouse/Distribution Uses (Good Neighbor Policy). The Good Neighbor Policy includes a number of requirements intended to reduce impacts associated with logistics and warehouse/distribution uses on surrounding land uses, particularly residential land uses. The Good Neighbor Policy applies to any logistics and warehouse project that include any building larger than 250,000 square feet (s.f.) in size. Although the precise configuration and size of proposed buildings would be determined in the future as part of future implementing discretionary actions (e.g., tentative parcel maps, plot plans, conditional use permits, etc.), it is expected that a majority of buildings to be constructed on site would exceed 250,000 s.f. in size and thus would be subject to the Good Neighbor Policy requirements. These requirements include, but are not limited to, the following:



- An air quality study, health risk assessment, noise impact analysis, and construction traffic control plan shall be prepared;
- During construction, all heavy-duty haul trucks accessing the site shall have CARB-approved 2010 engines or newer approved CARB engine standards;
- During construction, all excavators, graders, rubber-tired dozers, and similar “off-road” construction equipment shall be CARB Tier 3 Certified engines or better;
- During construction, the maximum daily disturbance area (actively graded area) shall not exceed 10 acres per day;
- During construction, the Transportation & Land Management Agency representative shall conduct an on-site inspection with a facility representative to verify compliance with these policies, and to identify other opportunities to reduce construction impacts;
- Warehouse/distribution facilities should be generally designed so that truck bays and loading docks are a minimum of 300 feet away from the property line of sensitive receptors, measured from the dock building door (this distance may be reduced the site design include berms or other similar features to appropriately shield and buffer the sensitive receptors);
- Warehouse/distribution facilities shall be designed to provide adequate on-site parking for commercial trucks and passenger vehicles and on-site queuing for trucks that is away from sensitive receptors;
- Driveways shall be placed, to the maximum extent practicable, on streets that do not have fronting sensitive receptors adjacent to the Project site;
- Sites shall be densely screened with landscaping along all bordering streets and adjacent sensitive receptors, with trees spaced at no less than 50 feet on center;
- Dock doors shall be located where they are not readily visible from sensitive receptors or major roads, or must be screened from public view through a combination of landscaping, berms, walls, or other similar features;
- To the extent possible, establish separate entry and exit points within a warehouse/distribution facility for trucks and vehicles to minimize vehicle/truck conflicts;
- Facility operators shall maintain records of their fleet equipment and ensure that all diesel-fueled Medium-Heavy Duty Trucks (“MHDT”) and Heavy-Heavy Duty Trucks (“HHD”) accessing the site use year CARB 2010 or newer engines;
- Facility operators shall train their managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks;
- Facility operators shall establish specific truck routes between the facility and regular destinations, identifying the most direct routes to the nearest highway/freeway and avoid traveling through local residential communities;
- Facility operators shall require their drivers to park and perform any maintenance of trucks in designated on-site areas and not within the surrounding community or on public streets;
- If a public address (PA) system is being used in conjunction with a warehouse/distribution facility operation, the PA system shall be oriented away from sensitive receptors and the volume set at a level not readily audible past the property line;



- Facility Operation shall comply with the exterior noise decibel levels as required by Ord. 847 (Noise Ordinance), which includes a maximum exterior decibel level of 55 dba (between 7:00 a.m. and 10:00 p.m.) and 45 dba (between 10:00 p.m. and 7:00 a.m.) as measured on adjacent occupied residences, or as modified by the most current version of Ordinance No. 847; and
- The applicant for any new facility may be required to provide a supplemental funding contribution, which would be applied to further off-set potential air quality impacts to the community and provide a community benefit above and beyond any CEQA related mitigation measures.

With mandatory compliance with the County’s Good Neighbor Guidelines, in addition to implementation of the measures described above to address other environmental issues (e.g., air quality, etc.), the Project’s potential impacts due to land use compatibility would remain less than significant.

Threshold b.: Would the Project disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?

Under existing conditions, the Project site is undeveloped and contains no public thoroughfares, aside from the Ramona Expressway and Nuevo Road, which are partially improved along site’s northern and southern boundaries, respectively. Additionally, while the hillform and open space in the western portions of the site include informal trails, these trails occur on private property and are not publicly-accessible. Although residential uses occur in the area, the Project site is not situated in a location that could physically divide any of these existing communities. Future development on site would include public roadways and trails, which would improve local access in the area and provide linkages to existing roads and infrastructure. As such, the Project would not disrupt or divide the physical arrangement of an established community, and impacts would be less than significant.

4.11.5 CUMULATIVE IMPACT ANALYSIS

As indicated under the analysis of Threshold a., with approval of the Project’s GPA, the proposed Project would not conflict with any of the policies included in the General Plan or LNAP, and would not conflict with the SCAG draft 2020-2045 RTP/SCS. Other developments within the western Riverside County region similarly would be required to demonstrate compliance with applicable general plan and RTP/SCS policies. Thus, the Project’s impacts due to a conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect would be less-than-cumulatively considerable.

As indicated under the analysis of Threshold b., the Project would not disrupt or divide the physical arrangement of an established community (including a low-income or minority community). As such, cumulatively-considerable impacts would not occur.

4.11.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a.: Less-than-Significant Impact. The Project would not conflict with the General Plan, LNAP, the SCAG draft 2020-2045 RTP/SCS, or any other land use plan, policy, or regulation adopted for the purpose of



avoiding or mitigating an environmental effect. Additionally, there are no impacts due to land use incompatibility that have not already been evaluated and mitigated to the maximum feasible extent in relevant sections of this EIR; therefore, and with exception of the significant and unavoidable impacts to surrounding land uses identified in the relevant sections of this EIR, Project impacts due to land use incompatibility would be less than significant.

Threshold b.: Less-than-Significant Impact. The Project would not disrupt or divide the physical arrangement of an established community (including a low-income or minority community), and impacts would be less than significant.

4.11.7 COUNTY REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

Impacts to land use and planning would be less than significant; therefore, mitigation measures are not required.



4.12 MINERAL RESOURCES

This subsection describes the potential mineral resources that are located on the Project site and in the vicinity and evaluates the potential effects that the Project may have on these resources. The following analysis is based on information obtained in the County’s General Plan (Riverside County, 2019a), the “Updated Geotechnical Evaluation, Proposed ‘Stoneridge’ Industrial and Mixed-Use Development,” prepared by LGC Geotechnical, Inc. (herein, “LGC”), dated September 12, 2019, and included as EIR *Technical Appendix F* (LGC, 2019), and the “Phase I Environmental Site Assessment” for the Project site prepared by Hillmann Consulting (herein, “Hillmann”), dated April 10, 2019, and included as EIR *Technical Appendix G* (Hillman, 2019).

4.12.1 EXISTING CONDITIONS

As detailed in the Geotechnical Report prepared for the Project site, the Project site encompasses 582.6 acres of undeveloped land. The Project site is generally situated along the eastern flank of some relatively small hills associated with plutonic rocks of the Peninsular Ranges geomorphic province. Historical records indicate that the Project site was utilized as agricultural land from approximately 1938 until at least 1985. Since the late 1980s, the Project site has remained vacant (LGC, 2019, p. 15). Additionally, a historical record search performed by Hillmann did not indicate evidence of any quarrying or mining activities on the Project site (Hillman, 2019, p. 12-15).

4.12.2 APPLICABLE ENVIRONMENTAL REGULATIONS

The following is a brief description of the applicable environmental laws and related regulations related to mineral resources.

A. State Regulations

1. Surface Mining and Reclamation Act of 1975

The Surface Mining and Reclamation Act of 1975 (SMARA, Public Resources Code, §§ 2710-2796) provides a comprehensive surface mining and reclamation policy with the regulation of surface mining operations to assure that adverse environmental impacts are minimized and mined lands are reclaimed to a usable condition. SMARA also encourages the production, conservation, and protection of the State’s mineral resources. Public Resources Code § 2207 provides annual reporting requirements for all mines in the state, under which the State Mining and Geology Board is also granted authority and obligations. (CDC, 2019c)

SMARA, Chapter 9, Division 2 of the Public Resources Code, requires the State Mining and Geology Board to adopt State policy for the reclamation of mined lands and the conservation of mineral resources. These policies are prepared in accordance with the Administrative Procedures Act, (Government Code) and are found in California Code of Regulations, Title 14, Division 2, Chapter 8, Subchapter 1. (CDC, 2019c)

SMARA also requires the State geologist to classify areas identified by the California Office of Planning and Research into Mineral Resource Zones. 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. The State classification system is broken out into four general zones, as shown below in Table 4.12-1, *Mineral Resources Zones*.

Table 4.12-1 Mineral Resources Zones

Zone	Significance
MRZ-1	Areas where geologic information indicates no significant mineral deposits are present
MRZ-2	Areas that contain identified mineral resources
MRZ-3	Areas of undetermined mineral resource significance
MRZ-4	Areas of unknown mineral resource potential

(Riverside County, 2019a, Table 4.12-1)

As indicated on Figure 4.14.2 of the Riverside County Draft EIR, the entire Project site is mapped within “Mineral Resource Zone 3 (MRZ-3; Significance of mineral deposits undetermined)” (Riverside County, 2019a, Fig. 4.14.2). Accordingly, the Project site does not contain any areas of known mineral resources.

4.12.3 BASIS FOR DETERMINING SIGNIFICANCE

Section XII of Appendix G to the State CEQA Guidelines addresses typical adverse effects to mineral resources, and includes the following threshold questions to evaluate the Project’s impacts on mineral resources (OPR, 2018a):

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

Significance thresholds as implemented by Riverside County are set forth in Riverside County’s Environmental Assessment Checklist form, which are derived from Section XI of Appendix G to the State CEQA Guidelines (listed above), and state that the proposed Project would have a significant impact on mineral resources if construction and/or operation of the Project 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;*
- 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;*



- c. *Be an incompatible land use located adjacent to a State classified or designated area or existing surface mine; or*
- d. *Expose people or property to hazards from proposed, existing or abandoned quarries or mines.*

The significance thresholds set forth in Riverside County’s Environmental Assessment Checklist were used to evaluate the significance of the proposed Project’s impacts on mineral resources.

4.12.4 IMPACT ANALYSIS

Threshold 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?

According to the California Department of Conservation (CDC), the Project site is classified as Mineral Resources Zone (MRZ) 3, which includes “areas containing mineral deposits the significance of which cannot be evaluated from available data” (CDC, 1984). Therefore, the Project site does not contain any known mineral resources that would be of value to the region or the residents of the State. Accordingly, with implementation of the proposed Project there would be no impact to known mineral resources.

Threshold 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?

The Project site is not designated as a mineral resource recovery site by the County’s General Plan, LNAP, or the adopted SP 239, and there are no other land use plans that identify the site for containing mineral resources. Accordingly, the Project would not 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, and no impact would occur.

Threshold c: Be an incompatible land use located adjacent to a State classified or designated area or existing surface mine?

As mapped by the CDC, there are no areas surrounding the Project site that contain known mineral resources. No lands in the Project vicinity are classified or designated by the State as containing mineral resource deposits, and there are no known surface mines in the Project vicinity. Accordingly, the Project would not be an incompatible land use located adjacent to a State classified or designated area or existing surface mine, and no impact would occur.

Threshold d: Expose people or property to hazards from proposed, existing or abandoned quarries or mines?

Historical records indicate that no quarrying or mining activities ever occurred on the Project site, and there is no evidence of any proposed, existing, or abandoned quarries in the surrounding area (Hillman, 2019, p. 15).



Accordingly, the Project would not expose people or property to hazards from proposed, existing, or abandoned quarries or mines, and no impact would occur.

4.12.5 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects within the western Riverside County region. This cumulative study area was selected because western Riverside County encompasses large areas that include geologic conditions similar to those that occur on the Project site, and because this study area encompasses a large portion of the local market for the production and consumption of mineral resources.

As mapped by the CDC, the Project site is classified as MRZ-3 and contains no known mineral resource deposits. As such, the Project has no potential to result in cumulatively-considerable impacts due to the loss of availability of a known mineral resource that would be of value to the region or residents of the State. No cumulatively-considerable impacts would occur.

Riverside County's General Plan, LNAP, and the adopted SP 239 do not designate the Project site or surrounding areas as a mineral resource recovery site, and there are no other land use plans that identify the site or surrounding areas for containing mineral resources. As such, the Project has no potential to result in cumulatively-considerable impacts due to 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. No cumulatively-considerable impacts would occur.

There are no lands in the Project vicinity that include State classified or designated areas for mineral resources, and there are no existing surface mines in the Project vicinity. As such, no cumulatively-considerable impacts to State classified or designated areas or existing surface mines would occur.

There are no known proposed, existing, or abandoned quarries or mines in the Project vicinity. As such, the Project has no potential to expose people or property to hazards from proposed, existing or abandoned quarries or mines, and no cumulatively-considerable impacts would occur.

4.12.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a.: No Impact. The Project site does not contain any known mineral resources that would be of value to the region or the residents of the State. Accordingly, with implementation of the proposed Project there would be no impact to known mineral resources.

Threshold b.: No Impact. The Project would not 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, and no impact would occur.



Threshold c.: No Impact. The Project would not be an incompatible land use located adjacent to a State classified or designated area or existing surface mine, and no impact would occur.

Threshold d.: No Impact. The Project would not expose people or property to hazards from proposed, existing, or abandoned quarries or mines, and no impact would occur.

4.12.7 APPLICABLE REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

No impact to mineral resources would occur with implementation of the proposed Project; thus, mitigation measures are not required.



4.13 NOISE

This Subsection addresses the environmental issue of noise. The information in this Subsection is based in part on a technical report prepared by ECORP Consulting, Inc. (“ECORP”), titled, “Noise Impact Assessment – Stoneridge Commerce Center Specific Plan” (“NIA”), dated August 2020, and included as *Technical Appendix J1* to this EIR (ECORP, 2020c). The analysis in this Subsection also is based on a technical report prepared to evaluate noise impacts associated with the Southern Truck Route, as described in EIR subsection 3.6.2.B.2. The report addressing the Southern Truck Route also was prepared by ECORP, is entitled, “Stoneridge Commerce Center Specific Plan Alternative Truck Route – Noise Technical Memorandum,” is dated April 2021, and is included as *Technical Appendix J2* to this EIR (herein referred to as “Southern Truck Route NIA”) (ECORP, 2021d). Both the NIA and Southern Truck Route NIA originally were prepared, in part, to evaluate operational traffic-related noise impacts associated with the Primary Land Use Plan (i.e., without implementation of the MCP) based on the adopted truck routes in effect within the City of Perris at that time. However, after preparation of the NIA and Southern Truck Route NIA, the City of Perris eliminated Ramona Expressway as a designated truck route within the City. Two supplemental technical studies were prepared in order to address traffic-related noise impacts associated with the changes to the approved City of Perris truck routes. The first report was prepared by Urban Crossroads Inc. and is entitled, “Stoneridge Commerce Center Specific Plan Supplemental Noise Assessment,” is dated March 9, 2022, is included as *Technical Appendix J3* to this EIR, and was prepared to address traffic-related noise associated with the Primary Land Use Plan/Primary Truck Route and Alternative Land Use Plan (Urban Crossroads, 2022a). The second report, also prepared by Urban Crossroads, Inc., evaluates traffic-related noise impacts associated with the Southern Truck Route, and is entitled, “Stoneridge Commerce Center Specific Plan (SP No. 239, A1) Alternative Truck Access Route Noise Assessment (Southern Truck Route),” is dated March 7, 2022, and is included as *Technical Appendix J4* to this EIR (Urban Crossroads, 2022b). Refer to Section 7.0, *References*, for a complete list of reference sources.

4.13.1 EXISTING CONDITIONS

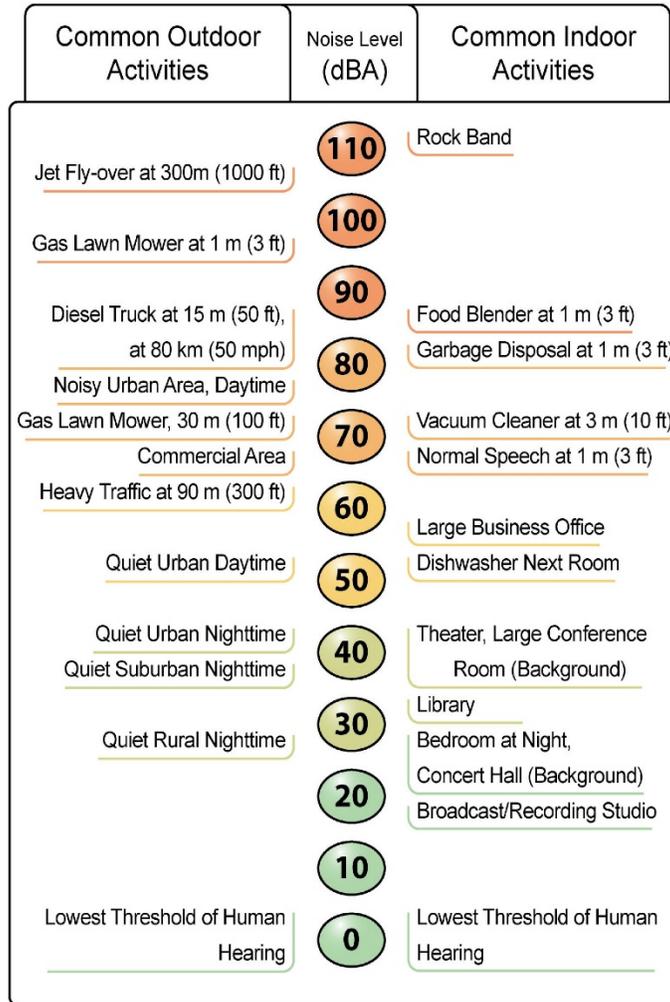
A. Fundamentals of Noise and Environmental Sound

1. Decibels

The decibel (dB) scale is logarithmic, not linear, and therefore sound levels cannot be added or subtracted through ordinary arithmetic. Two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted (dBA), an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound and twice as loud as a 60-dBA sound. When two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be three dB higher than one source under the same conditions. For example, a 65-dB source of sound, such as a truck, when joined by another 65 dB source results in a sound amplitude of 68 dB, not 130 dB (i.e., doubling the source strength increases the sound pressure by three dB). Under the decibel scale, three sources of equal loudness together would produce an increase of five dB. Typical noise levels associated with common noise sources are depicted in Figure 4.13-1, *Common Noise Levels*. (ECORP, 2020c, p. 5)



Figure 4.13-1 Common Noise Levels



(ECORP, 2020c, Figure 3)

2. Sound Propagation and Attenuation

Noise can be generated by a number of sources, including mobile sources such as automobiles, trucks and airplanes, and stationary sources such as construction sites, machinery, and industrial operations. Sound spreads (propagates) uniformly outward in a spherical pattern, and the sound level decreases (attenuates) at a rate of approximately six dB for each doubling of distance from a stationary or point source. Sound from a line source, such as a highway, propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of approximately three dB for each doubling of distance from a line source, such as a roadway, depending on ground surface characteristics. No excess attenuation is assumed for hard surfaces like a parking lot or a body of water. Soft surfaces, such as soft dirt or grass, can absorb sound,



so an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed. For line sources, an overall attenuation rate of three dB per doubling of distance is assumed. (ECORP, 2020c, p. 7)

Noise levels may also be reduced by intervening structures; generally, a single row of detached buildings between the receptor and the noise source reduces the noise level by about five dBA, while a solid wall or berm generally reduces noise levels by 10 to 20 dBA. However, noise barriers or enclosures specifically designed to reduce site-specific construction noise can provide a sound reduction 35 dBA or greater. To achieve the most potent noise-reducing effect, a noise enclosure/barrier must physically fit in the available space, must completely break the "line of sight" between the noise source and the receptors, must be free of degrading holes or gaps, and must not be flanked by nearby reflective surfaces. Noise barriers must be sizable enough to cover the entire noise source and extend lengthwise and vertically as far as feasibly possible to be most effective. The limiting factor for a noise barrier is not the component of noise transmitted through the material, but rather the amount of noise flanking around and over the barrier. In general, barriers contribute to decreasing noise levels only when the structure breaks the "line of sight" between the source and the receiver. (ECORP, 2020c, p. 7)

The manner in which older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows. The exterior-to-interior reduction of newer residential units is generally 30 dBA or more. Generally, in exterior noise environments ranging from 60 dBA Community Noise Equivalent Level (CNEL) to 65 dBA CNEL, interior noise levels can typically be maintained below 45 dBA, a typically residential interior noise standard, with the incorporation of an adequate forced air mechanical ventilation system in each residential building, and standard thermal-pane residential windows/doors with a minimum rating of Sound Transmission Class (STC) 28¹. In exterior noise environments of 65 dBA CNEL or greater, a combination of forced-air mechanical ventilation and sound-rated construction methods is often required to meet the interior noise level limit. Attaining the necessary noise reduction from exterior to interior spaces is readily achievable in noise environments less than 75 dBA CNEL with proper wall construction techniques following California Building Code methods, the selections of proper windows and doors, and the incorporation of forced-air mechanical ventilation systems. (ECORP, 2020c, p. 7)

3. Noise Descriptors

The decibel scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Several rating scales have been developed to analyze the adverse effect of community noise on people. Because environmental noise fluctuates over time, these scales consider that the effect of noise on people is largely dependent on the total acoustical energy content of the noise, as well as the time of day when the noise occurs. The Leq is a measure of ambient noise, while the Ldn and CNEL (Community Noise Equivalent Level) are measures of community

¹ STC is an integer rating of how well a building partition attenuates airborne sound. In the U.S., it is widely used to rate interior partitions, ceilings, floors, doors, windows, and exterior wall configurations.



noise. Each is applicable to this analysis and defined in Table 4.13-1, *Common Acoustical Descriptors*. (ECORP, 2020c, p. 8)

Table 4.13-1 Common Acoustical Descriptors

Descriptor	Definition
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micropascals (or 20 micronewtons per square meter), where 1 pascal is the pressure resulting from a force of 1 newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 micropascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, L_{eq}	The average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
L_{max} , L_{min}	The maximum and minimum A-weighted noise level during the measurement period.
L_{01} , L_{10} , L_{50} , L_{90}	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Day/Night Noise Level, L_{dn} or DNL	A 24-hour average L_{eq} with a 10 dBA "weighting" added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.4 dBA L_{dn} .
Community Noise Equivalent Level, CNEL	A 24-hour average L_{eq} with a 5 dBA "weighting" during the hours of 7:00 p.m. to 10:00 p.m. and a 10 dBA "weighting" added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.7 dBA CNEL.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends on its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20.

(ECORP, 2020c, Table 2)

The A-weighted decibel sound level scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Because sound levels can vary markedly over a short period of time, a method for



describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. (ECORP, 2020c, p. 9)

4. *Human Response to Noise*

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels. (ECORP, 2020c, p. 10)

Noise environments and consequences of human activities are usually well represented by median noise levels during the day or night or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60 to 70 dBA range, and high above 70 dBA. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet, suburban, residential streets with noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate-level noise environments are urban residential or semicommercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with noisier urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA). Regarding increases in A-weighted noise levels (dBA), the following relationships should be noted: (ECORP, 2020c, p. 10)

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived by humans.
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference.
- A change in level of at least 5 dBA is required before any noticeable change in community response would be expected. An increase of 5 dBA is typically considered substantial.
- A 10-dBA change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

5. *Effects of Noise on People*

Hearing Loss

While physical damage to the ear from an intense noise impulse is rare, a degradation of auditory acuity can occur even within a community noise environment. Hearing loss occurs mainly due to chronic exposure to excessive noise but may be due to a single event such as an explosion. Natural hearing loss associated with aging may also be accelerated from chronic exposure to loud noise. The Occupational Safety and Health Administration (OSHA) has a noise exposure standard that is set at the noise threshold where hearing loss may



occur from long-term exposures. The maximum allowable level is 90 dBA averaged over eight hours. If the noise is above 90 dBA, the allowable exposure time is correspondingly shorter. (ECORP, 2020c, pp. 10-11)

Annoyance

Attitude surveys are used for measuring the annoyance felt in a community for noises intruding into homes or affecting outdoor activity areas. In these surveys, it was determined that causes for annoyance include interference with speech, radio and television, house vibrations, and interference with sleep and rest. The Ldn as a measure of noise has been found to provide a valid correlation of noise level and the percentage of people annoyed. People have been asked to judge the annoyance caused by aircraft noise and ground transportation noise. There continues to be disagreement about the relative annoyance of these different sources. For ground vehicles, a noise level of about 55 dBA Ldn is the threshold at which a substantial percentage of people begin to report annoyance. (ECORP, 2020c, p. 11)

B. Fundamentals of Environmental Groundborne Vibration

1. Vibration Sources and Characteristics

Sources of earthborne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or manmade causes (explosions, machinery, traffic, trains, construction equipment, etc.). Vibration sources may be continuous (e.g., factory machinery) or transient (e.g., explosions). Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is the peak particle velocity (PPV); another is the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. The RMS velocity is defined as the average of the squared amplitude of the signal. The PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration. PPV is generally accepted as the most appropriate descriptor for evaluating the potential for building damage. For human response, however, an average vibration amplitude is more appropriate because it takes time for the human body to respond to the excitation (the human body responds to an average vibration amplitude, not a peak amplitude). Because the average particle velocity over time is zero, the RMS amplitude is typically used to assess human response. The RMS value is the average of the amplitude squared over time, typically a 1-second period. (ECORP, 2020c, p. 11)

2. Vibration Sources and Characteristics

Table 4.13-2, *Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibration Levels*, displays the reactions of people and the effects on buildings produced by continuous vibration levels. The annoyance levels shown in the table should be interpreted with care since vibration may be found to be annoying at much lower levels than those listed, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage. In high-noise environments, which are more prevalent where groundborne vibration approaches perceptible levels, this rattling phenomenon may also be produced by loud



airborne environmental noise causing induced vibration in exterior doors and windows. (ECORP, 2020c, pp. 11-12)

Table 4.13-2 Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibration Levels

Peak Particle Velocity (inches/second)	Approximate Vibration Velocity Level (VdB)	Human Reaction	Effect on Buildings
0.006–0.019	64–74	Range of threshold of perception	Vibrations unlikely to cause damage of any type
0.08	87	Vibrations readily perceptible	Recommended upper level to which ruins and ancient monuments should be subjected
0.1	92	Level at which continuous vibrations may begin to annoy people, particularly those involved in vibration sensitive activities	Virtually no risk of architectural damage to normal buildings
0.2	94	Vibrations may begin to annoy people in buildings	Threshold at which there is a risk of architectural damage to normal dwellings
0.4–0.6	98–104	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Architectural damage and possibly minor structural damage

(ECORP, 2020c, Table 3)

Ground vibration can be a concern in instances where buildings shake, and substantial rumblings occur. However, it is unusual for vibration from typical urban sources such as buses and heavy trucks to be perceptible. For instance, heavy-duty trucks generally generate groundborne vibration velocity levels of 0.006 PPV at 50 feet under typical circumstances, which as identified in Table 4.13-2 is considered very unlikely to cause damage to buildings of any type. Common sources for groundborne vibration are planes, trains, and construction activities such as earth-moving which requires the use of heavy-duty earth moving equipment. (ECORP, 2020c, p. 12)

C. Existing Environmental Noise Setting

1. Noise-Sensitive Land Uses

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as hospitals, historic sites, cemeteries, and certain recreation areas are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses. (ECORP, 2020c, pp. 12-13)



The Project is proposing onsite and offsite improvements. Due to the close proximity of offsite improvements to the Project site and the fact that said improvements involve the installation of water and sewer lines which are not a source of operational noise, on and offsite improvements are discussed collectively. The nearest existing noise-sensitive land uses to the Project site are Lakeside Middle School and Sierra Vista Elementary School, with a residential development beyond, located adjacent to the northwestern corner of the Project site traversing the Ramona Expressway. Lakeside Middle School is located closest to the Project site boundary approximately 2,000 feet (0.4 mile) to the west. The installation of the proposed offsite water line would occur directly adjacent to these land uses. (ECORP, 2020c, p. 13)

It is also noted that while not currently constructed, the approved McCanna Hills Specific Plan is located directly adjacent to the Project’s western boundary. Once built-out, commercial and residential land uses would exist on what is currently vacant land adjacent to the Project’s western boundary. (ECORP, 2020c, p. 13)

D. Existing Ambient Noise Environment

The most common and significant source of noise in Riverside County is mobile noise generated by transportation-related sources. Other sources of noise are the various land uses (i.e., residential, commercial, and institutional) that generate stationary-source noise. The Project site is bound by Ramona Expressway to the north and Nuevo Road to the south. Both of these are major roadways within the County that serve a wide variety of residential, industrial, agricultural, and commercial land uses. As shown in Table 4.13-3, *Existing (Baseline) Noise Measurements*, the ambient recorded noise level on the Project site is 41.4 dBA. (ECORP, 2020c, p. 13)

Table 4.13-3 Existing (Baseline) Noise Measurements

Location Number	Location	Leq dBA	Lmin dBA	Lmax dBA	Time
1	At the end of Walnut Avenue and adjacent to schools.	45.0	39.9	58.5	4:07 p.m.-4:17 p.m.
2	At the end of the cul-de-sac at Hawthorne Road.	55.2	36.7	74.2	3:30 p.m.-3:40 p.m.
3	On the Project site (located near the northwest corner) adjacent to Ramona Expressway.	41.4	34.5	51.8	3:28 p.m.-3:38 p.m.
4	At the corner of Nuevo Road and Menifee Road.	70.6	52.7	85.2	2:50 p.m.-3:00 p.m.

(ECORP, 2020c, Table 4)

1. Existing Ambient Noise Measurements

The Project site can be characterized as undeveloped land that is largely flat, with a large hillform that straddles the western Project boundary in the southern portions of the Project site. There are also hillforms off site directly west of the Project site. The Project site is surrounded mainly by a mix of undeveloped and agricultural land. In order to quantify existing ambient noise levels in the Project area, ECORP conducted four short-term noise measurements on August 26, 2019. The noise measurement sites were representative of typical existing



noise exposure within and immediately adjacent to the Project site (see Attachment A to the Project’s NIA, included as *Technical Appendix J1*). The 10-minute measurements were taken between 2:50 p.m. and 4:17 p.m. Short-term (Leq) measurements are considered representative of the noise levels throughout the daytime. The average noise levels and sources of noise measured at each location are listed in Table 4.13-3. (ECORP, 2020c, p. 13)

As shown in Table 4.13-3, the ambient recorded noise levels range from 45.0 to 70.6 dBA near the Project site and 41.4 dBA on the Project site. The most common noise in the Project vicinity is produced by automotive vehicles (e.g., cars, trucks, buses, motorcycles). Traffic moving along the Ramona Expressway and Nuevo Road produces a sound level that remains relatively constant and is part of the Project area’s minimum ambient noise level. Vehicular noise varies with the volume, speed, and type of traffic. Slower traffic produces less noise than fast-moving traffic. Trucks typically generate more noise than cars. Infrequent or intermittent noise also is associated with vehicles, including sirens, vehicle alarms, slamming of doors, trains, garbage, and construction vehicle activity and honking of horns. These noises add to urban noise and are regulated by a variety of agencies. (ECORP, 2020c, p. 14)

2. Existing Roadway Noise Levels

Existing roadway noise levels were calculated for the roadway segments in the Project vicinity. This task was accomplished using the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108) (see Attachment B to the Project’s NIA) and traffic volumes from the Project’s Traffic Impact Analysis (“TIA”; EIR *Technical Appendix L1*). The model calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site environmental conditions. The average vehicle noise rates (energy rates) used in the FHWA model have been modified to reflect average vehicle noise rates identified for California by Caltrans. The Caltrans data shows that California automobile noise is 0.8 to 1.0 dBA higher than national levels and that medium and heavy truck noise is 0.3 to 3.0 dBA lower than national levels. (ECORP, 2020c, p. 14)

The average daily noise levels along study area roadway segments are presented in Table 4.13-4, *Existing (Baseline) Traffic Noise Levels*. Vicinity roadways span several jurisdictions, which are noted in Table 4.13-4. It is noted that the existing roadway traffic volumes were conducted on March 11, 2020, prior to closures related to the COVID-19 pandemic. As shown, the existing traffic-generated noise level on Project-vicinity roadways currently ranges from 45.1 to 76.7 dBA CNEL at a distance of 100 feet from the centerline. As previously described, CNEL is 24-hour average noise level with a 5 dBA “weighting” during the hours of 7:00 p.m. to 10:00 p.m. and a 10 dBA “weighting” added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively. It should be noted that the modeled noise levels depicted in Table 4.13-4 may differ from measured levels in Table 4.13-3 because the measurements represent noise levels at different locations around the Project site and are also reported in different noise metrics (e.g., noise measurements are the Leq values and traffic noise levels are reported in CNEL). (ECORP, 2020c, pp. 14-20; Urban Crossroads, 2021a, p. 6)



Table 4.13-4 Existing (Baseline) Traffic Noise Levels

Roadway Segment	Jurisdiction	Surrounding Uses	CNEL at 100 feet from Centerline of Roadway
Sanderson Avenue (State Route 79)			
North of Ramona Exwy.	City of San Jacinto	Residential & Agricultural	71.2
South of Ramona Exwy.	City of San Jacinto	Residential & Agricultural	68.7
Contour Avenue			
East of Hansen Ave.	Riverside County	Residential & Educational	51.3
West of Hansen Ave.	Riverside County	Residential & Agricultural	45.1
Hansen Avenue			
North of Contour Ave.	Riverside County	Residential	58.2
Between Contour Ave. & Montgomery Ave.	Riverside County	Residential	57.5
Nuevo Road			
East of Montgomery Ave.	Riverside County	Residential & Agricultural	59.4
Between Montgomery Ave. & Lakeview Ave.	Riverside County	Residential & Agricultural	59.9
Between Lakeview Ave. & Reservoir Ave.	Riverside County	Residential & Agricultural	64.7
Between Reservoir Ave. & Project site	Riverside County	Residential & Agricultural	62.5
Between the Project site & Dunlap Dr.	Riverside County	Residential & Agricultural	64.3
Between Dunlap Dr. & Evans Rd.	Perris	Residential	64.0
Between Murrieta Rd. & Redlands Ave.	Perris	Residential	62.8
Between Redlands Ave. & Perris Blvd.	Perris	Residential, Commercial & Educational	63.7
Orange Avenue			
Between Dunlap Dr. & Evans Rd.	Perris	Residential	59.5
Between Evans Rd. & Murrieta Rd.	Perris	Residential	61.3
Between Redlands Ave. & Perris Blvd.	Perris	Residential	63.1
West of Perris Blvd.	Perris	Residential & Agricultural	63.0
Placentia Avenue			
East of Redlands Ave.	Perris	Residential & Agricultural	60.2
Between Redlands Ave. & Perris Blvd.	Perris	Residential & Industrial	60.4
Rider Street			
Between Ramona Exwy. & Bradley Rd.	Perris	Residential & Educational	59.4
Between Bradley Rd. & Evans Rd.	Perris	Residential	60.6
Between Evans Rd. & Redlands Ave.	Perris	Residential	63.8
Between Redlands Ave. & Perris Blvd.	Perris	Residential & Industrial	63.0
Ramona Expressway			
South of Rider St.	Riverside County	Residential	66.1
Between Rider St. & Bradley Rd.	Perris	Residential	57.8
Between Bradley Rd. & Evans Rd.	Perris	Residential	66.2
Between Evans Rd. & Redlands Ave.	Perris	Residential	67.7
West of Redlands Ave.	Perris	Residential & Agricultural	67.1
East of Sanderson Ave.	City of San Jacinto	Residential & Agricultural	66.5
West of Sanderson Ave.	City of San Jacinto	Residential & Agricultural	66.1
Krameria Avenue			
West of Perris Blvd.	Moreno Valley	Residential & Industrial	55.7
Between Perris Blvd. & Lasselle St.	Moreno Valley	Residential	60.5
East of Lasselle St.	Moreno Valley	Residential	60.3
Iris Avenue			
West of Perris Blvd.	Moreno Valley	Residential & Educational	66.0
West of Perris Blvd. & Lasselle St.	Moreno Valley	Residential	66.3
East of Lasselle St.	Moreno Valley	Residential & Commercial	67.7



Table 4.13-4 Existing (Baseline) Traffic Noise Levels

Roadway Segment	Jurisdiction	Surrounding Uses	CNEL at 100 feet from Centerline of Roadway
San Jacinto Avenue			
East of Menifee Rd.	Riverside County	Residential & Agricultural	47.5
West of Menifee Rd.	Riverside County	Residential & Agricultural	58.0
Ellis Road			
West of Menifee Rd.	Riverside County	Residential	47.6
Mapes Road			
East of Menifee Rd.	Riverside County	Residential	55.2
West of Menifee Rd.	Riverside County	Residential	54.3
Watson Road			
East of Menifee Rd.	Menifee	Residential	56.4
West of Menifee Rd.	Menifee	Residential	54.5
State Route 74			
East of Menifee Rd.	Menifee	Residential	65.9
West of Menifee Rd.	Menifee	Residential	66.0
Lakeview Avenue			
North of Nuevo Rd.	Riverside County	Residential & Agricultural	60.9
Reservoir Avenue/ Menifee Road			
Between Nuevo Rd. & San Jacinto Ave.	Riverside County	Residential	59.2
Between San Jacinto Ave. & Ellis Ave.	Riverside County	Residential	58.3
Between Ellis Ave. & Mapes Rd.	Riverside County	Residential	58.5
Between Mapes Rd. & Watson Rd.	Menifee	Residential	57.1
Between Watson Rd. & SR 74	Menifee	Residential	58.1
South of SR 74	Menifee	Residential	59.2
Dunlap Drive			
Between Nuevo Rd. & Orland Ave.	Riverside County	Residential	57.9
South of Nuevo Rd.	Perris	Residential	51.5
Bradley Road			
Between Ramona Exwy. & Rider St.	Perris	Residential	53.4
South of Rider St.	Perris	Residential	47.3
Evans Road			
Between Nuevo Rd. & Orange Ave.	Perris	Residential	60.7
Between Orange Ave. & Rider St.	Perris	Residential	61.0
Between Rider St. & Ramona Exwy.	Perris	Residential	62.4
Between Ramona Exwy. & Krameria Ave.	Moreno Valley/Perris	Residential	64.8
Between Krameria Ave. & Iris Ave.	Moreno Valley	Residential	64.7
Murrieta Road			
North of Nuevo Rd.	Perris	Residential	51.4
South of Nuevo Rd.	Perris	Residential & Educational	52.9
Redlands Avenue			
South of Nuevo Rd.	Perris	Residential	62.5
Between Nuevo Rd. & Orange Ave.	Perris	Residential	59.9
Between Orange Ave. & Placentia Ave.	Perris	Residential	59.6
Perris Boulevard			
North of Iris Ave.	Moreno Valley	Residential & Industrial	64.2
Between Iris Ave. & Krameria Ave.	Moreno Valley	Residential & Industrial	64.6
Between Krameria Ave. & San Michele Rd.	Moreno Valley	Residential & Industrial	65.1



Table 4.13-4 Existing (Baseline) Traffic Noise Levels

Roadway Segment	Jurisdiction	Surrounding Uses	CNEL at 100 feet from Centerline of Roadway
Between Ramona Exwy. & Morgan St.	Perris	Residential & Industrial	64.0
Between Placentia Ave. & Rider St.	Perris	Residential & Industrial	64.5
Between Placentia Ave. & Orange Ave.	Perris	Residential & Industrial	64.3
Between Orange Ave. & Nuevo Rd.	Perris	Residential & Industrial	65.3
Indian Avenue			
South of Placentia Ave.	Perris	Residential & Industrial	55.4
Between Placentia Ave. & Ramona Exwy.	Perris	Residential & Industrial	58.3
Webster Avenue			
South of Ramona Exwy.	Perris	Residential & Industrial	54.7
Between Ramona Exwy. & Harley Knox Ave.	Perris	Residential & Industrial	57.1
Interstate 215			
North of Ramona Exwy.	Perris	Residential & Industrial	76.6
Between Ramona Exwy. & Placentia Ave.	Perris	Educational, Residential & Industrial	76.4
Between Placentia Ave. & Nuevo Rd.	Perris	Educational, Residential, & Industrial	76.4
South of Nuevo Rd.	Perris	Educational, Residential, & Industrial	76.7

(Urban Crossroads, 2022a, Table 5)

4.13.2 APPLICABLE REGULATORY REQUIREMENTS

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

A. Federal Regulations

1. Noise Control Act of 1972

The Noise Control Act of 1972 establishes a national policy to promote an environment for all Americans free from noise that jeopardizes their health and welfare. The Act also serves to (1) establish a means for effective coordination of Federal research and activities in noise control; (2) authorize the establishment of Federal noise emission standards for products distributed in commerce; and (3) provide information to the public respecting the noise emission and noise reduction characteristics of such products. (EPA, n.d.)

While primary responsibility for control of noise rests with State and local governments, Federal action is essential to deal with major noise sources in commerce, control of which require national uniformity of treatment. The Environmental Protection Agency (EPA) is directed by Congress to coordinate the programs of all Federal agencies relating to noise research and noise control. (EPA, n.d.)

2. Federal Transit Administration

The Federal Transit Administration (FTA) has published a Noise and Vibration Impact Assessment (NVIA), which provides guidance for preparing and reviewing the noise and vibration sections of environmental documents. In the interest of promoting quality and uniformity in assessments, the manual is used by project sponsors and consultants in performing noise and vibration analyses for inclusion in environmental documents.



The manual sets forth the methods and procedures for determining the level of noise and vibration impact resulting from most federally-funded transit projects and for determining what can be done to mitigate such impact. (FTA, 2006, p. 1-1)

The NVIA also establishes criteria for acceptable ground-borne vibration, which are expressed in terms of root mean square (rms) velocity levels in decibels and the criteria for acceptable ground-borne noise are expressed in terms of A-weighted sound levels. As shown in Table 4.13-5, *Ground-Borne Vibration and Ground-Borne Noise Impact Criteria for General Assessment*, the FTA identifies three categories of land uses and provides Ground-Based Vibration (GBV) and Ground-Based Noise (GBN) criteria for each category of land use. (FTA, 2006, pp. 8-3 and 8-4)

3. Federal Aviation Administration

The Federal Aviation Administration (FAA) regulates the maximum noise level that an individual civil aircraft can emit through requiring aircraft to meet certain noise certification standards. These standards designate changes in maximum noise level requirements by "stage" designation. The standard requires that the aircraft meet or fall below designated noise levels. For civil jet aircraft, there are four stages identified, with Stage 1 being the loudest and Stage 4 being the quietest. For helicopters, two different stages exist, Stage 1 and Stage 2. As with civil jet aircraft, Stage 2 is quieter than Stage 1. In addition, the FAA is currently working to adopt the latest international standards for helicopters, which will be called Stage 3 and will be quieter than Stage 2. (FAA, n.d.)

The FAA has undertaken a phase out of older, noisier civil aircraft, resulting in some stages of aircraft no longer being in the fleet. Currently within the contiguous US, civil jet aircraft over 75,000 pounds maximum take-off weight must meet Stage 3 and Stage 4 to fly. In addition, aircraft at or under 75,000 pounds maximum take-off weight must meet Stage 2, 3, or 4 to operate within the U.S. In addition, by December 31, 2015, all civil jet aircraft, regardless of weight must meet Stage 3 or Stage 4 to fly within the contiguous U.S. Both Stage 1 and Stage 2 helicopters are allowed to fly within the U.S. (FAA, n.d.)

The U.S. noise standards are defined in the Code of Federal Regulations (CFR) Title 14 Part 36 – *Noise Standards: Aircraft Type and Airworthiness Certification* (14 CFR Part 36). The FAA publishes certificated noise levels in the advisory circular, *Noise Levels for U.S. Certificated and Foreign Aircraft*. This advisory circular provides noise level data for aircraft certificated under 14 CFR Part 36 and categorizes aircraft into their appropriate "stages." Any aircraft that is certified for airworthiness in the U.S. needs to also comply with noise standard requirements to receive a noise certification. The purpose of the noise certification process is to ensure that the latest available safe and airworthy noise reduction technology is incorporated into aircraft design and enables the noise reductions offered by those technologies to be reflected in reductions of noise experienced by communities. As noise reduction technology matures, the FAA works with the international community to determine if a new stringent noise standard is needed. If so, the international community through the International Civil Aviation Organization (ICAO) embarks on a comprehensive analysis to determine what that new standard will be. (FAA, 2016)



Table 4.13-5 Ground-Borne Vibration and Ground-Borne Noise Impact Criteria for General Assessment

Land Use Category	GBV Impact Levels (VdB re 1 micro-inch /sec)			GBN Impact Levels (dB re 20 micro Pascals)		
	Frequent Events ¹	Occasional Events ²	Infrequent Events ³	Frequent Events ¹	Occasional Events ²	Infrequent Events ³
Category 1: Buildings where vibration would interfere with interior operations.	65 VdB ⁴	65 VdB ⁴	65 VdB ⁴	N/A ⁴	N/A ⁴	N/A ⁴
Category 2: Residences and buildings where people normally sleep.	72 VdB	75 VdB	80 VdB	35 dBA	38 dBA	43 dBA
Category 3: Institutional land uses with primarily daytime use.	75 VdB	78 VdB	83 VdB	40 dBA	43 dBA	48 dBA

Notes:

1. "Frequent Events" is defined as more than 70 vibration events of the same source per day. Most rapid transit projects fall into this category.
2. "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day. Most commuter trunk lines have this many operations.
3. "Infrequent Events" is defined as fewer than 30 vibration events of the same kind per day. This category includes most commuter rail branch lines.
4. This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the HVAC systems and stiffened floors.
5. Vibration-sensitive equipment is generally not sensitive to ground-borne noise.

(FTA, 2006, Table 8-1)

The current FAA noise standards applicable to new type certifications of jet and large turboprop aircraft is Stage 4. It is equivalent to the ICAO Annex 16, Volume 1 Chapter 4 standards. Recently, the international community has established and approved a more stringent standard within the ICAO Annex 16, Volume 1 Chapter 14, which became effective July 14, 2014. The FAA is adopting this standard and promulgating the rule for Stage 5 that is anticipated to be effective for new type certificates after December 31, 2017 and December 31, 2020, depending on the weight of the aircraft. The Notice of Proposed Rule Making (NPRM) for Stage 5 was published on January 14, 2016. (FAA, 2016)

For helicopters, the FAA has noise standards for a Stage 3 helicopter that became effective on May 5, 2014. These more stringent standards apply to new type helicopters and are consistent with ICAO Annex 16, Volume 1 Chapter 8 and Chapter 11. (FAA, 2016)

The FAA Modernization and Reform Act of 2012, in Section 513, had a prohibition on operating certain aircraft weighing 75,000 pounds or less not complying with Stage 3 noise levels, and on July 2, 2013, the FAA published a Final Rule in the Federal Register for the *Adoption of Statutory Prohibition the Operation of Jets*



Weighing 75,000 Pounds or Less That Are Not Stage 3 Noise Compliant. In 1990, Congress passed the Aviation Noise and Capacity Act, which required that by the year 2000 all jet and large turboprop aircraft at civilian airports be Stage 3. (FAA, 2016)

4. Federal Highway Administration

The Federal Highway Administration (FHWA) is the agency responsible for administering the Federal-aid highway program in accordance with Federal statutes and regulations. The FHWA developed the noise regulations as required by the Federal-Aid Highway Act of 1970 (Public Law 91-605, 84 Stat. 1713). The regulation, 23 CFR 772 *Procedures for Abatement of Highway Traffic Noise and Construction Noise*, applies to highway construction projects where a State department of transportation has requested Federal funding for participation in the project. The regulation requires the highway agency to investigate traffic noise impacts in areas adjacent to federally-aided highways for proposed construction of a highway on a new location or the reconstruction of an existing highway to either significantly change the horizontal or vertical alignment or increase the number of through-traffic lanes. If the highway agency identifies impacts, it must consider abatement. The highway agency must incorporate all feasible and reasonable noise abatement into the project design. (FHWA, 2017)

The FHWA regulations for mitigation of highway traffic noise in the planning and design of federally aided highways are contained in Title 23 of the United States Code of Federal Regulations Part 772. The regulations require the following during the planning and design of a highway project:

- Identification of traffic noise impacts;
- Examination of potential mitigation measures;
- The incorporation of reasonable and feasible noise mitigation measures into the highway project; and
- Coordination with local officials to provide helpful information on compatible land use planning and control. (FHWA, 2017)

The regulations contain noise abatement criteria, which represent the upper limit of acceptable highway traffic noise for different types of land uses and human activities. The regulations do not require meeting the abatement criteria in every instance. Rather, they require highway agencies make every reasonable and feasible effort to provide noise mitigation when the criteria are approached or exceeded. Compliance with the noise regulations is a prerequisite for the granting of Federal-aid highway funds for construction or reconstruction of a highway. (FHWA, 2017)

5. Construction-Related Hearing Conservation

The Occupational Safety and Health Administration (OSHA) hearing conservation program is designed to protect workers with significant occupational noise exposures from hearing impairment even if they are subject to such noise exposures over their entire working lifetimes. Standard 29 CFR, Part 1910 indicates the noise levels under which a hearing conservation program is required to be provided to workers exposed to high noise levels. (OSHA, 2002) This analysis does not evaluate the noise exposure of construction workers within the



Project site based on CEQA requirements, and instead, evaluates the Project-related construction noise levels at the nearby sensitive receiver locations in the Project study area. Further, periodic exposure to high noise levels in short duration, such as Project construction, is typically considered an annoyance and not impactful to human health. It would take several years of exposure to high noise levels to result in hearing impairment.

B. State Regulations

1. Building Standards Code

The State of California’s noise insulation standards are codified in the California Code of Regulations, Title 24, Building Standards Administrative Code, Part 2, and the California Building Standards Code. These noise standards are applied to new construction in California for the purpose of controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are developed near major transportation noise sources, and where such noise sources create an exterior noise level of 60 dBA CNEL or higher. Acoustical studies that accompany building plans for noise-sensitive land uses must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL. (BSC, n.d.)

2. California Noise Insulation Standards

The California Noise Insulation Standards (CCR Title 25 Section 1092) establish uniform minimum noise insulation performance standards for new hotels, motels, dormitories, apartment houses, and dwellings other than detached single-family dwellings. Specifically, Title 25 specifies that interior noise levels attributable to exterior sources shall not exceed 45 dBA Ldn/CNEL (i.e., the same levels that the EPA recommends for residential interiors) in any habitable room of a new dwelling. An acoustical study must be prepared for proposed multiple unit residential and hotel/motel structures where outdoor Ldn/CNEL is 60 dBA or greater. The study must demonstrate that the design of the building would reduce interior noise to 45 dBA Ldn/CNEL or lower. Because noise levels can increase over time in developing areas, Title 25 also specifies that dwellings are to be designed so that interior noise levels will meet this standard for at least ten years from the time of building permit application.

3. OPR General Plan Guidelines

Though not adopted by law, the 2017 California General Plan Guidelines, published by the California Governor’s Office of Planning and Research (OPR), provides guidance for local agencies in preparing or updating General Plans. The Guidelines provide direction on the required Noise Element portion of the General Plans. The purpose of the Noise Element is to limit the exposure of the community to excessive noise levels. Local governments must “analyze and quantify” noise levels and the extent of noise exposure through actual measurement or the use of noise modeling. Technical data relating to mobile and point sources must be collected and synthesized into a set of noise control policies and programs that “minimizes the exposure of community residents to excessive noise.” Noise level contours must be mapped and the conclusions of the element used as a basis for land use decisions. The element must include implementation measures and possible



solutions to existing and foreseeable noise problems. Furthermore, the policies and standards must be sufficient to serve as a guideline for compliance with sound transmission control requirements. The Noise Element directly correlates to the Land Use, Circulation, and Housing Elements. The Noise Element must be used to guide decisions concerning land use and the location of new roads and transit facilities since these are common sources of excessive noise levels. The noise levels from existing land uses, including mining, agricultural, and industrial activities, must be closely analyzed to ensure compatibility, especially where residential and other sensitive receptors have encroached into areas previously occupied by these uses. (OPR, 2017b, pp. 131-132)

C. Local Regulations

1. Riverside County General Plan

The County of Riverside has adopted a Noise Element of the General Plan to control and abate environmental noise, and to protect the citizens of the County of Riverside from excessive exposure to noise. The Noise Element specifies the maximum allowable exterior noise levels for new developments impacted by transportation noise sources such as arterial roads, freeways, airports, and railroads. In addition, the Noise Element identifies several polices to minimize the impacts of excessive noise levels throughout the community and establishes noise level requirements for all land uses. To protect County of Riverside residents from excessive noise, the Noise Element contains the following policies related to the Project:

- N 1.1 Protect noise-sensitive land uses from high levels of noise by restricting noise-producing land uses from these areas. If the noise-producing land use cannot be relocated, then noise buffers such as setbacks, landscaping, or block walls shall be used.*
- N 1.2 Guide noise-tolerant land uses into areas irrevocably committed to land uses that are noise-producing, such as transportation corridors or within the projected noise contours of any adjacent airports.*
- N 1.3 Consider the following uses noise-sensitive and discourage these uses in areas in excess of 65 CNEL:
 - *Schools*
 - *Hospitals*
 - *Rest Homes*
 - *Long Term Care Facilities*
 - *Mental Care Facilities*
 - *Residential Uses*
 - *Libraries*
 - *Passive Recreation Uses*
 - *Places of Worship**
- N 1.4 Determine if existing land uses will present noise compatibility issues with proposed projects by undertaking site surveys.*



- N 1.5 Prevent and mitigate the adverse impacts of excessive noise exposure on the residents, employees, visitors, and noise-sensitive uses of Riverside County.*
- N 1.7 Require proposed land uses, affected by unacceptably high noise levels, to have an acoustical specialist prepare a study of the noise problems and recommend structural and site design features that will adequately mitigate the noise problem.*
- N 2.3 Mitigate exterior and interior noises to the levels listed in Table N-2 [Table 4.13-6 below] below to the extent feasible, for stationary sources:*

Table 4.13-6 Stationary Source Land Use Noise Standards (Residential)

Time	Interior Standards	Exterior Standards
10:00 p.m. to 7:00 a.m.	40 L _{eq} (10 minute)	45 L _{eq} (10 minute)
7:00 a.m. to 10:00 p.m.	55 L _{eq} (10 minute)	65 L _{eq} (10 minute)

- N 3.3 Ensure compatibility between industrial development and adjacent land uses. To achieve compatibility, industrial development projects may be required to include noise mitigation measures to avoid or minimize project impacts on adjacent uses.*
- N 4.1 Prohibit facility-related noise, received by any sensitive use, from exceeding the following worst-case noise levels:*
 - a. 45 dBA 10-minute Leq between 10:00 p.m. and 7:00 a.m.;*
 - b. 65 dBA 10-minute Leq between 7:00 a.m. and 10:00 p.m.*
- N 4.2 Develop measures to control non-transportation noise impacts.*
- N 4.3 Ensure any use determined to be a potential generator of significant stationary noise impacts be properly analyzed and ensure that the recommended mitigation measures are implemented.*
- N 4.5 Encourage major stationary noise-generating sources throughout the County of Riverside to install additional noise buffering or reduction mechanisms within their facilities to reduce noise generation levels to the lowest extent practicable prior to the renewal of conditional use permits or business license or prior to the approval and/or issuance of new conditional use permits for said facilities.*
- N 4.8 Require that the parking structures, terminals, and loading docks of commercial or industrial land uses be designed to minimize the potential noise impacts of vehicles on the site as well as on adjacent land uses.*
- N 6.3 Require commercial or industrial truck delivery hours be limited when adjacent to noise sensitive land uses unless there is no feasible alternative or there are overriding transportation benefits.*
- N 12.1 Utilize natural barrier such as hills, berms, boulders, and dense vegetation to assist in noise reduction.*



- N 13.1 Minimize the impacts of construction noise on adjacent uses within acceptable standards.*
- N 13.2 Ensure that construction activities are regulated to establish hours of operation in order to prevent and/or mitigate the generation of excessive or adverse impacts on surrounding areas.*
- N 13.3 Condition subdivision approval adjacent to developed/occupied noise-sensitive land uses (see policy N 1.3) by requiring the developer to submit a construction-related noise mitigation plan to the [County] for review and approval prior to issuance of a grading permit. The plan must depict the location of construction equipment and how the noise from this equipment will be mitigated during construction of this project, through the use of such methods as:*
- i. Temporary noise attenuation fences;*
 - ii. Preferential location and equipment; and*
 - iii. Use of current noise suppression technology and equipment.*
- N 13.4 Require that all construction equipment utilizes noise reduction features (e.g. mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.*
- N 14.1 Enforce the California Building Standards that sets standards for building construction to mitigate interior noise levels to the tolerable 45 CNEL limit. These standards are utilized in conjunction with the Uniform Building Code by the County's Building Department to ensure that noise protection is provided to the public. Some design features may include extra-dense insulation, double-paned windows, and dense construction materials.*
- N 14.3 Incorporate acoustic site planning into the design of new development, particularly large scale, mixed-use, or master planned development, through measures which may include:*
- o Separation of noise sensitive building from noise generating sources.*
 - o Use of natural topography and intervening structures to shield noise sensitive land uses.*
 - o Adequate sound proofing within the receiving structure.*
- N 14.4 Consider and, when necessary, to lower noise to acceptable limits, require noise barriers and landscaped berms.*
- N 14.5 Consider the issue of adjacent residential land uses when designing and configuring all new, nonresidential development. Design and configure on site ingress and egress points that divert traffic away from nearby noise sensitive land uses to the greatest degree practicable.*
- N 14.8 Review all development applications for consistency with the standards and policies of the Noise Element of the General Plan.*
- N 16.2 Consider the following land uses sensitive to vibration:*
- o Hospitals*
 - o Residential areas*
 - o Concert halls*
 - o Libraries*
 - o Sensitive research operations*



- Schools
- Offices

N 16.3 Prohibit exposure of residential dwellings to perceptible ground vibration from passing trains as perceived at the ground or second floor. Perceptible motion shall be presumed to be a motion velocity of 0.01 inches/second over a range of 1 to 100 Hz.

N 19.5 Require new developments that have the potential to generate significant noise impacts to inform impacted users on the effects of these impacts during the environmental review process.

To ensure noise-sensitive land uses are protected from high levels of noise (N 1.1), Table N-1 of the Noise Element identifies guidelines to evaluate proposed developments based on exterior and interior noise level limits for land uses and requires a noise analysis to determine needed mitigation measures if necessary. The Noise Element identifies residential use as a noise-sensitive land use (N 1.3) and discourages new development in areas with transportation related levels of 65 dBA CNEL or greater existing ambient noise levels. To prevent and mitigate noise impacts for its residents (N 1.5), County of Riverside requires noise attenuation measures for sensitive land use exposed to transportation related noise levels higher than 65 dBA CNEL. Policy N 4.1 of the Noise Element sets a stationary-source exterior noise limit to not to be exceeded for a cumulative period of more than ten minutes in any hour of 65 dBA Leq for daytime hours of 7:00 a.m. to 10:00 p.m., and 45 dBA Leq during the noise-sensitive nighttime hours of 10:00 p.m. to 7:00 a.m. To prevent high levels of construction noise from impacting noise-sensitive land uses, policies N 13.1 through 13.3 identify construction noise mitigation requirements for new development located near existing noise-sensitive land uses. Policy N 16.3 establishes the vibration perception threshold for rail-related vibration levels, used in this analysis as a threshold for determining potential vibration impacts due to Project construction.

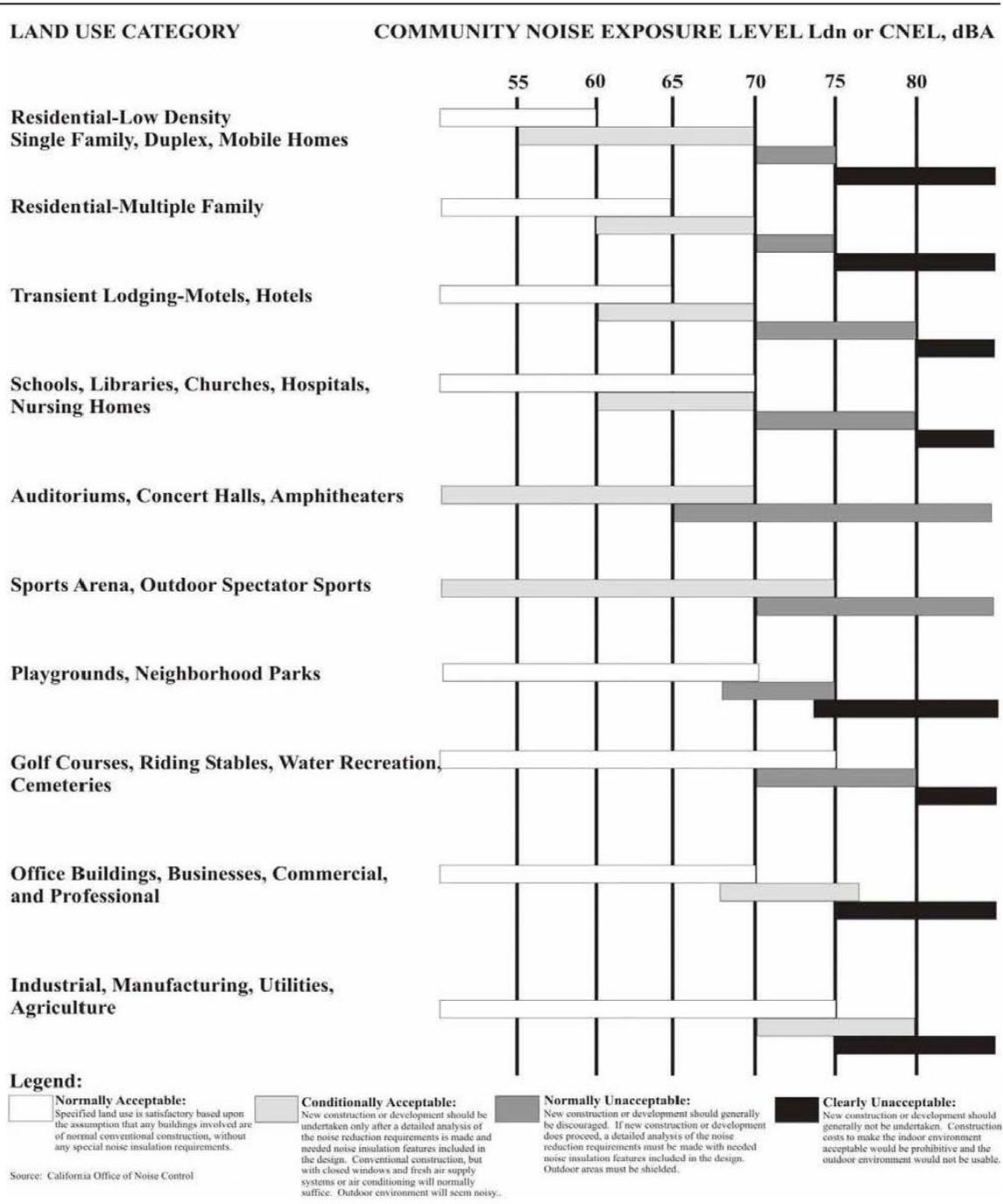
Land Use Compatibility

The noise criteria identified in the County of Riverside Noise Element (Table N-1) are guidelines to evaluate the land use compatibility of transportation related noise. The compatibility criteria, shown on Table 4.13-7, *Land Use Compatibility for Community Noise Exposure*, provides the County with a planning tool to gauge the compatibility of land uses relative to existing and future exterior noise levels.

Table 4.13-7 describes categories of compatibility and not specific noise standards. Residentially-designated land uses in the Project study area are considered normally acceptable with exterior noise levels below 60 dBA CNEL, and conditionally acceptable with exterior noise levels of up to 70 dBA CNEL. For conditionally-acceptable exterior noise levels, approaching 80 dBA CNEL for Project land uses, new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and the needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.



Table 4.13-7 Land Use Compatibility for Community Noise Exposure



Source: County of Riverside General Plan Noise Element, Table N-1.



2. Construction Noise Standards

To control noise impacts associated with the construction of projects, such as the proposed Project, the County of Riverside has established limits to the hours of operation. Section 2.i of Riverside County Ordinance No. 847 (herein, “Noise Ordinance”) indicates that noise associated with any private construction activity located within one-quarter of a mile from an inhabited dwelling is considered exempt between the hours of 6:00 a.m. and 6:00 p.m., during the months of June through September, and 7:00 a.m. and 6:00 p.m., during the months of October through May. Neither the County’s General Plan nor Municipal Code establish numeric maximum acceptable construction source noise levels at potentially affected receivers, which would allow for a quantified determination of what CEQA constitutes a substantial temporary or periodic noise increase.

To evaluate whether the Project would generate potentially significant construction noise levels at off-site sensitive receiver locations, a construction-related noise level threshold is adopted from the *Criteria for Recommended Standard: Occupational Noise Exposure* prepared by the National Institute for Occupational Safety and Health (NIOSH). A division of the U.S. Department of Health and Human Services, NIOSH identifies a noise level threshold based on the duration of exposure to the source. The construction related noise level threshold starts at 85 dBA for more than eight hours per day, and for every 3-dBA increase, the exposure time is cut in half. This results in noise level thresholds of 88 dBA for more than four hours per day, 92 dBA for more than one hour per day, 96 dBA for more than 30 minutes per day, and up to 100 dBA for more than 15 minutes per day. For the purposes of analysis, the lowest, more conservative construction noise level threshold of 85 dBA Leq is used as an acceptable threshold for construction noise at the nearby sensitive receiver locations. Since this construction-related noise level threshold represents the energy average of the noise source over a given time, they are expressed as Leq noise levels. Therefore, the noise level threshold of 85 dBA Leq over a period of eight hours or more is used to evaluate the potential Project-related construction noise level impacts at the nearby sensitive receiver locations.

The NIOSH 85 dBA Leq construction noise level threshold used in this analysis is consistent with similar construction noise level thresholds identified by the Federal Transit Administration (FTA) that are specific to noise-sensitive residential uses. The FTA *Transit Noise and Vibration Impact Assessment* identifies a daytime construction noise level threshold of 90 dBA Leq for general assessment. As such, the NIOSH 85 dBA Leq threshold used in the Project’s NIA and Southern Truck Route NIA (*Technical Appendices J1, J2, and J3, respectively*) to identify potential impacts is more conservative than the FTA threshold which is specific to construction noise at residential receiver locations. In addition, the NIOSH threshold has been used in several other technical noise studies and environmental impact reports prepared in the County of Riverside.

Consistent with the NIOSH 85 dBA Leq construction noise level threshold, the Occupational Safety and Health Administration (OSHA) requires employers to implement a hearing conservation program when noise exposure is at or above 85 dBA over 8 working hours. Workers are required to wear hearing protection when engaged in work that exposes them to noise that equals or exceeds 85 dBA over 8 working hours. This analysis does not evaluate the noise exposure of construction workers within the Project site based on CEQA requirements, and instead, evaluates the Project-related construction noise levels at the nearby sensitive



receiver locations using a construction noise level threshold that is consistent with guidelines and standards identified by NIOSH, FTA, and OSHA.

3. ***Vibration Standards***

The County of Riverside does not have vibration standards for temporary construction, but the County's General Plan Noise Element does contain the human reaction to typical vibration levels. Vibration levels with peak particle velocity of 0.0787 inches per second are considered readily perceptible and above 0.1968 in/sec are considered annoying to people in buildings. Further, County of Riverside General Plan Policy N 16.3 identifies a motion velocity perception threshold for vibration due to passing trains of 0.01 inches per second (in/sec) over the range of one to 100 Hz, which is used in the Project's NIA (*Technical Appendix JI*) to assess potential impacts due to Project construction vibration levels.

4. ***Operational Noise Standards***

The County of Riverside has set stationary-source hourly average Leq exterior noise limits to control roof-top air conditioning units, drive-through speakerphones, parking lot vehicle movements, loading docks and sports park activities associated with the development of the proposed Project. These Project-related stationary noises, as projected to any portion of any surrounding property containing a habitable dwelling, hospital, school, library, or nursing home, must not exceed the following worst-case noise levels. Policy N 4.1 of the County of Riverside General Plan Noise Element sets an stationary-source average Leq exterior noise limit not to be exceeded for a cumulative period of more than ten minutes in any hour of 65 dBA Leq for daytime hours of 7:00 a.m. to 10:00 p.m., and 45 dBA Leq during the noise-sensitive nighttime hours of 10:00 p.m. to 7:00 a.m.

Based on consultation with the County of Riverside Department of Environmental Health (DEH), Office of Industrial Hygiene (OIH), it is important to recognize that the County of Riverside Municipal Code noise level standards incorrectly identify maximum noise level (L_{max}) standards that should instead reflect the average Leq noise levels. Moreover, the County of Riverside DEH OIH's April 15th, 2015, *Requirements for Determining and Mitigating, Non-Transportation Noise Source Impacts to Residential Properties*, also identifies operational (stationary-source) noise level limits using the Leq metric, consistent with the direction of the County of Riverside General Plan guidelines and standards provided in the Noise Element. Therefore, the Project's NIA (*Technical Appendix JI*) has been prepared consistent with direction of the County of Riverside DEH OIH guidelines and standards using the Municipal Code average Leq noise level metric for stationary-source (operational) noise level evaluation.

4.13.3 BASIS FOR DETERMINING SIGNIFICANCE

A. ***Significance Thresholds***

Section XIII of Appendix G to the State CEQA Guidelines, as updated in December 2018, addresses typical adverse effects due to noise, and includes the following threshold questions to evaluate the Project's impacts due to noise (OPR, 2018b):



- Would the project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Would the project result in the generation of excessive groundborne vibration or noise levels; or
- 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.

Significance thresholds are set forth in Riverside County’s Environmental Assessment Checklist, and includes the following threshold questions to evaluate the Project’s impacts due to noise:

- a. For a project located within an airport land use plan or, where such a plan has not been adopted, within two (2) miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?*
- b. For a project located within the vicinity of a private airstrip, would the Project expose people residing or working in the project area to excessive noise levels?*
- c. Would the Project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan, noise ordinance, or applicable standards of other agencies?*
- d. Would the Project result in the generation of excessive ground-borne vibration or ground-borne noise levels?*

The significance thresholds set forth in Riverside County’s Environmental Assessment Checklist, as modified/updated per the 2018 updates to the State CEQA Guidelines, were used to evaluate the significance of the proposed Project’s impacts due to noise.

B. Noise-Sensitive Land Uses

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as hospitals, historic sites, cemeteries, and certain recreation areas are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses. (ECORP, 2020c, pp. 12-13)

The Project is proposing onsite and offsite improvements. Due to the close proximity of offsite improvements to the Project site and the fact that said improvements involve the installation of water and sewer lines which



are not a source of operational noise, on and offsite improvements are discussed collectively. The nearest existing noise-sensitive land uses to the Project site are Lakeside Middle School and Sierra Vista Elementary School, with a residential development beyond, located west of the Project site. Lakeside Middle School is located closest to the Project site boundary approximately 2,000 feet (0.4 miles) to the west. The installation of the proposed offsite water line would occur directly adjacent to these land uses. (ECORP, 2020c, p. 13)

It is also noted that while not currently constructed, the approved McCanna Hills development is located directly adjacent to the Project's western boundary. Once built-out, commercial and residential land uses would exist on what is currently vacant land adjacent to the Project's western boundary. (ECORP, 2020c, p. 13)

C. Significance Criteria

1. Airport-Related Noise

Impacts would be potentially significant under Thresholds a. and/or b. if the Project were to exacerbate existing airport-related noise in the local area, or if the future development on site would be exposed to airport-related noise that exceeds the land use compatibility criteria presented in the County's General Plan Noise Element (refer to Table 4.13-7, previously presented).

2. Construction-Related Noise

Riverside County's regulations with respect to noise are included in Riverside County Ordinance No. 847 (Regulating Noise). Section 2 of Ordinance No. 847 (Exemptions) exempts construction noise provided that private construction projects located within one-quarter of a mile from an inhabited dwelling adhere to the following: (ECORP, 2020c, p. 28)

- Construction does not occur between the hours of 6:00 p.m. and 6:00 a.m. during the months of June through September, and
- Construction does not occur between the hours of 6:00 p.m. and 7:00 a.m. during the months of October through May.

The County does not establish numeric maximum acceptable construction source noise levels at potentially affected receptors, which would allow for a quantified determination of what constitutes a substantial temporary or periodic noise increase. To evaluate whether a project would generate potentially significant construction noise levels at offsite sensitive receptor locations, the County relies on a construction-related noise level threshold from the *Criteria for Recommended Standard: Occupational Noise Exposure* prepared by the National Institute for Occupational Safety and Health (NIOSH). A division of the U.S. Department of Health and Human Services, NIOSH identifies a noise level threshold based on the duration of exposure to the source. The construction related noise level threshold starts at 85 dBA for more than eight hours per day, and for every 3-dBA increase, the exposure time is cut in half. This results in noise level thresholds of 88 dBA for more than four hours per day, 92 dBA for more than one hour per day, 96 dBA for more than 30 minutes per day, and up to 100 dBA for more than 15 minutes per day. For the purposes of analysis, the lowest, more



conservative construction noise level threshold of 85 dBA Leq is used as an acceptable threshold for construction noise at the nearby sensitive receiver locations. Since this construction-related noise level threshold represents the energy average of the noise source over a given time, they are expressed as Leq noise levels. Therefore, the noise level threshold of 85 dBA Leq over a period of eight hours or more is used to evaluate the potential Project-related construction noise level impacts at the nearby sensitive receiver locations. (ECORP, 2020c, p. 28)

3. *Operational-Related Noise*

Noise-sensitive land uses with the potential to be affected by Project-related operational noise occur within unincorporated Riverside County. Accordingly, for purposes of analysis, Project-related stationary-source (operational) noise impacts would be considered significant if Project-related noise exposes nearby sensitive receptors to noise levels that exceed the exterior or interior noise levels set forth in Table N-2 of the Riverside County General Plan Noise Element. Table 4.13-6 (previously presented) shows the interior and exterior noise standards utilized by the County. (ECORP, 2020c, p. 23)

D. Traffic-Related Noise

The County of Riverside relies on the FICON thresholds of significance for evaluating the impact of increased traffic noise. The 2000 FICON findings provide guidance as to the significance of changes in ambient noise levels due to transportation noise sources. FICON recommendations are based on studies that relate aircraft and traffic noise levels to the percentage of persons highly annoyed by the noise. FICON's measure of substantial increase for transportation noise exposure is as follows: (Urban Crossroads, 2022a, p. 4)

- If the existing ambient noise levels at existing and future noise-sensitive land uses (e.g. residential, etc.) are less than 60 dBA CNEL and the Project creates a readily perceptible 5 dBA CNEL or greater Project-related noise level increase and the resulting noise level would exceed acceptable exterior noise standards; or
- If the existing noise levels range from 60 to 65 dBA CNEL and the Project creates a barely perceptible 3 dBA CNEL or greater Project-related noise level increase and the resulting noise level would exceed acceptable exterior noise standards; or
- If the existing noise levels already exceed 65 dBA CNEL, and the Project creates a community noise level increase of greater than 1.5 dBA CNEL.

E. Vibration

Riverside County does not regulate vibrations associated with construction or operational vibration sources. However, County General Plan Policy N 16.3 identifies a standard of 0.01 inch per second RMS for assessing groundborne vibration from rail-related activities. As previously identified in Table 4.13-2, this level of ground vibration equates to the range of human perception and is unlikely to cause damage to any type of building. Accordingly, and although the Project would not result in any noise or vibration associated with rail



lines, Project construction or operational vibration levels exceeding 0.01 inch per second RMS represent a potentially significant impact, consistent with General Plan Policy N 16.3.

4.13.4 IMPACT ANALYSIS

Threshold a.: For a project located within an airport land use plan or, where such a plan has not been adopted, within two (2) miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?

Threshold b.: For a project located within the vicinity of a private airstrip, would the Project expose people residing or working in the project area to excessive noise levels?

The Project does not include an airport-related component, and the Project has no potential to contribute to or cause increased airport-related noise in the local area; thus, no direct impact would occur.

There are no public or private airports located within two miles of the Project site. The nearest public airport is the March Air Reserve Base which is approximately 4.6 miles northwest of the Project site, while the nearest private airport to the Project site is the Perris Valley Airport which is located approximately 3.5 miles southwest of the Project site (Google Earth, 2018).

The March Air Reserve Base Inland Port (MARB) Airport Land Use Compatibility Plan (ALUCP) identifies land use standards and design criteria for new development located in the proximity of the March Air Reserve Base to ensure compatibility between the airport and surrounding land uses and to maximize public safety (RCALUC, 2014). According to Riverside County GIS, a majority of the western, central, and southern portions of the Project site are located within the Airport Influence Area (AIA) for the March Air Reserve Base, with an Airport Compatibility Zone designation of “Zone E.” According to Table MA-1 of the ALUCP, lands within Compatibility Zone E are located “[b]eyond the 55-CNEL contour.” As such, future workers on the Project site would be exposed to noise levels less than 55 dBA CNEL, which is considered “Normally Acceptable” for the proposed light industrial, business park, and commercial retail land uses. As such, the Project would not expose future workers to excessive noise associated with public airports, and impacts would be less than significant. (RCALUC, 2014 Map MA-1 and Table MA-1; RCIT, 2019).

According to Map PV-3 of the ALUCP prepared for the Perris Valley Airport, the 55 dBA CNEL contour for the Perris Valley Airport does not extend north of East 4th Street within the City of Perris or east of I-215, and the Project site is located more than two miles from the 55 dBA CNEL for this facility. As noted above, noise levels below 55 dBA CNEL are considered “Normally Acceptable” for the proposed light industrial, business park, and commercial retail land uses. As such, the Project would not expose future workers to excessive noise associated with private airports, and impacts would be less than significant. (RCALUC, 2010, Map PV-3; Google Earth, 2018)



Threshold c.: Would the Project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan, noise ordinance, or applicable standards of other agencies?

The Project has the potential to result in substantial temporary or periodic noise impacts during Project construction, and has the potential to result in permanent increases in ambient noise levels associated with site operations as well as from Project-related traffic. Each is discussed below.

A. Construction-Related Noise Impacts

1. Project On- and Off-Site Construction Noise Impacts (Primary Truck Route)

Construction noise associated with buildout of the proposed Project would be temporary and would vary depending on the nature of the activities being performed. Construction-related noise would be similar under both the Primary Land Use Plan and Alternative Land Use Plan. Noise generated would primarily be associated with the operation of off-road equipment for onsite construction activities as well as construction vehicle traffic on area roadways. Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., land clearing, grading, excavation, paving). Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts). During construction, exterior noise levels could negatively affect sensitive land uses in the vicinity of the construction site. Typical noise levels associated with individual construction equipment are summarized in Table 4.13-8, *Typical Construction Equipment Noise Levels*. (ECORP, 2020c, p. 31)

The nearest existing noise-sensitive land use to the Project site is the Lakeside Middle School, located approximately 2,000 feet west of the Project site within unincorporated Riverside County. However, the installation of the proposed offsite water line would occur adjacent Lakeside Middle School and residential land uses located along Walnut Street. This activity would be expected to include excavators, backhoes, boring equipment, jackhammers, pavers, and other equipment. The installation of this proposed water line would occur for only a portion of the Project’s construction phase. Additionally, the approved McCanna Hills Specific Plan is located directly adjacent to the Project’s western boundary, while lands east of the Project site are designated for residential use by the County’s General Plan. Once built-out, commercial and residential land uses would exist on what is currently vacant land adjacent to the Project’s eastern and western boundaries. (ECORP, 2020c, pp. 32-33)

As previously noted, Riverside County Ordinance No. 847 prohibits construction noise between the hours of 6:00 p.m. and 6:00 a.m. during the months of June through September, and between the hours of 6:00 p.m. and 7:00 a.m. during the months of October through May. Additionally, construction would occur throughout the Project site and would not be concentrated at one point. (ECORP, 2020c, p. 33)



Table 4.13-8 Typical Construction Equipment Noise Levels

Type of Equipment	Maximum Noise (L_{max}) at 50 Feet (dBA)	Maximum 8-Hour Noise (L_{eq}) at 50 Feet (dBA)
Air Compressor	77.7	73.7
Backhoe	77.6	73.6
Blasting	94.0	73.0
Boring Jack (Power Unit)	83.0	80.0
Boring Jack (Horizontal)	82.0	76.0
Concrete Mixer Truck	78.8	74.8
Concrete Saw	89.9	82.6
Crane	80.6	72.6
Dozer	81.7	77.7
Excavator	80.7	76.7
Generator	80.6	77.6
Gradall (Forklift)	83.4	79.4
Grader	85.0	81.0
Jackhammer	88.9	81.9
Other Equipment	85.0	82.0
Pavement Scarifier	89.5	82.5
Paver	77.2	74.2
Roller	80.0	73.0
Scraper	83.6	79.6
Tractor	84.0	80.0
Welder	74.0	70.0

Source: FHWA, Roadway Construction Noise Model (FHWA-HEP-05-054), dated January 2006.

Note: L_{eq} is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or night, L_{max} is the maximum A-weighted noise level during the measurement period.

(ECORP, 2020c, Table 8)

Both onsite and offsite Project construction noise is compared against the construction-related noise level threshold established in the *Criteria for a Recommended Standard: Occupational Noise Exposure* prepared in 1998 by NIOSH. A division of the US Department of Health and Human Services, NIOSH identifies a noise level threshold based on the duration of exposure to the source. As previously described, the NIOSH noise



level threshold starts at 85 dBA for more than 8 hours per day, and for every 3-dBA increase, the exposure time is cut in half. This reduction results in noise level thresholds of 88 dBA for more than 4 hours per day, 92 dBA for more than 1 hour per day, 96 dBA for more than 30 minutes per day, and up to 100 dBA for more than 15 minutes per day. For the purposes of this analysis, the lowest, more conservative threshold of 85 dBA Leq is used as an acceptable threshold for construction noise at the nearby existing and future planned sensitive receptors. Since this construction-related noise level threshold represents the energy average of the noise source over a given time period, the noise level is expressed in Leq. (ECORP, 2020c, p. 33)

To estimate the worst-case onsite construction noise levels that may occur at the nearest noise-sensitive receptors in the Project vicinity, the construction equipment noise levels were calculated using the Roadway Noise Construction Model for site preparation, grading, building construction, paving, and painting. Onsite building construction, paving, and painting are modeled to occur simultaneously. The anticipated short-term construction noise levels generated for the necessary equipment is presented in Table 4.13-9, *On-site Construction Average Noise Levels by Receptor Distance and Construction Equipment*. Consistent with FTA recommendations for calculating construction noise, construction noise was measured from the center of the Project site. The nearest sensitive receptors are the future residences in the McCanna Hills Specific Plan to the west and future residential uses adjacent to the Project site's eastern boundary. As shown in Table 4.13-9, during onsite construction activities no individual or cumulative piece of construction equipment would exceed the NIOSHA threshold of 85 dBA Leq at the nearest potential receptors to onsite construction, which include future residents located in the McCanna Hills Specific Plan to the west and future residential receptors to the east of the Project site. Thus, noise impacts associated with on-site construction activities would be less than significant. (ECORP, 2020c, pp. 33-34)

As described in EIR Section 3.0, the installation of the proposed off-site water line would occur adjacent Lakeside Middle School and residential land uses located along Walnut Street. This activity is expected to include excavators, backhoes, boring equipment, jackhammers, pavers, and other equipment. Additionally, blasting and construction activities for the proposed off-site water tanks would occur approximately 620 feet from Lakeside Middle School and could potentially occur when future approved residences are built to the south of the site of the proposed water tanks (i.e., within the McCanna Hills Specific Plan). The anticipated short-term off-site construction noise levels generated for the anticipated equipment is presented in Table 4.13-10, *Off-Site Construction Average Noise Levels by Receptor Distance and Construction Equipment*. As shown, construction noise levels are predicted to reach a level of 85.0 dBA Leq during the roadway demolition phase, which is necessary in order to install the proposed off-site water line. While this would not exceed the NIOSH standard, in order to provide a conservative analysis a significant temporary noise impact is identified for which mitigation would be required. (ECORP, 2020c, pp. 35-36)



Table 4.13-9 On-site Construction Average Noise Levels by Receptor Distance and Construction Equipment

Equipment	Estimated Exterior Construction Noise Level @ Future Approved Residences	Construction Noise Standards (dBA Leq)	Exceeds Standards?
Site Preparation			
Front Loader (8)	41.9 (each)	85	No
Dozer (6)	51.7 (each)	85	No
Combined Site Preparation Equipment	61.9	85	No
Grading			
Scraper (4)	53.6 (each)	85	No
Front Loader (4)	41.9 (each)	85	No
Dozer (2)	51.7 (each)	85	No
Excavator (4)	50.7 (each)	85	No
Combined Grading Equipment	63.0	85	No
Building Construction, Paving & Painting			
Air Compressor (2)	47.7 (each)	85	No
Crane (2)	46.6 (each)	85	No
Forklift (6)	53.4 (each)	85	No
Generator (2)	51.6 (each)	85	No
Welder (2)	44.0 (each)	85	No
Backhoe (6)	47.6 (each)	85	No
Paver (4)	48.2 (each)	85	No
Roller (4)	47.0 (each)	85	No
Paving Equipment (4)	56.5 (each)	85	No
Combined Building Construction, Paving & Paining Equipment	66.5	85	No

Source: Construction noise levels were calculated by ECORP Consulting using the FHWA Roadway Noise Construction Model (FHWA 2006). Refer to Attachment B of the Project's NIA (*Technical Appendix J1*) for Model Data Outputs.

Notes: Construction equipment used during construction derived from CalEEMod 2016.3.2.

Leq = The equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the Leq of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night. (ECORP, 2020c, Table 9)



Table 4.13-10 Off-Site Construction Average Noise Levels by Receptor Distance and Construction Equipment

Equipment	Estimated Exterior Construction Noise Level @ Existing School and Residences	Construction Noise Standards (dBA Leq)	Exceeds Standards?
Blasting			
Blasting	71.7 (per blast)	85	No
Road Demolition			
Dozer (2)	75.4 (each)	85	No
Excavator (3)	74.5 (each)	85	No
Concrete Saw (1)	80.3	85	No
Bore/Drill Rig (1)	77.7	85	No
Combined Site Preparation Equipment	85.0	85	No
Site Preparation			
Bore/Drill Rig (1)	77.7	85	No
Dozer (3)	74.5 (each)	85	No
Front End Loader (2)	72.9 (each)	85	No
Tractor (1)	77.7	85	No
Backhoe (1)	71.3	85	No
Combined Site Preparation Equipment	84.4	85	No
Paving			
Paver (2)	71.9 (each)	85	No
Roller (2)	70.7 (each)	85	No
Paving Equipment (2)	80.2 (each)	85	No
Combined Building Construction, Paving & Paving Equipment	84.2	85	No

Source: Construction noise levels were calculated by ECORP Consulting using the FHWA Roadway Noise Construction Model (FHWA 2006). Refer to Attachment B of the Project's NIA (*Technical Appendix J1*) for Model Data Outputs.

Notes: Construction equipment used during construction derived from CalEEMod 2016.3.2.

Leq = The equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the Leq of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night. (ECORP, 2020c, Table 10)



2. Project Off-Site Construction Noise Impacts (Southern Truck Route)

In the event that the Southern Truck Route is implemented (as described in EIR subsection 3.6.2.B.2), the Project would require or contribute to the need for off-site improvements, several of which would not be required with implementation of the Primary Truck Route. The required improvements would be constructed by others in the future, and the Project Applicant only would be responsible for payment of the County's TUMF fees and/or payment of a fair share towards the cost of the required improvements (as summarized in EIR Subsection 4.18, *Transportation*). Improvements required in association with the Southern Truck Route include the following:

- I-215 Southbound Ramps at Placentia Avenue
 - Install a Traffic Signal
 - Construct Southbound Left Turn Lane
 - Construct Southbound Shared Left-Through Lane
 - Construct Southbound Right Turn Lane
 - Construct Westbound Left Turn Lane
 - Construct 2nd Westbound Left Turn Lane

- Indian Avenue at Placentia Avenue
 - Install a Traffic Signal
 - Construct a Northbound Left Turn Lane
 - Restripe the Northbound Right Turn Lane as a Shared Through-Right Turn Lane
 - Construct Eastbound Left Turn Lane
 - Construct Eastbound Through Lane
 - Construct 2nd Eastbound Through Lane
 - Construct 2nd Westbound Through Lane
 - Construct 2nd Northbound Through Lane
 - Construct 2nd Southbound Through Lane

- Perris Boulevard at Placentia Avenue
 - Stripe the 3rd Northbound Through Lane
 - Construct Northbound Right Turn Lane
 - Strip the 3rd Southbound Through Lane
 - Construct 2nd Eastbound Through Lane
 - Construct Eastbound Right Turn Lane
 - Restripe the Westbound Approach to Provide One Left Turn Lane, One Through Lane, and One Shared Through-Right Turn Land
 - Modify the Traffic Signal to Implement Overlap Phasing for the Eastbound Right Turn Lane

- Redlands Avenue at Ramona Expressway
 - Construct 2nd Southbound Left Turn Lane
 - Construct Northbound Right Turn Lane



- Construct 4th Eastbound Through Lane
- Construct 2nd Westbound Left Turn Lane
- Construct 4th Westbound Through Lane
- Modify the Traffic Signal to Implement Overlap Phasing for the Westbound Right Turn Lane
- Construct 2nd Eastbound Left Turn Lane
- Construct 5th Eastbound Through Lane
- Construct 5th Westbound Through Lane

- Evans Avenue at Ramona Expressway
 - Construct 3rd Westbound Through Lane
 - Construct 4th Eastbound Through Lane
 - Construct 4th Westbound Through Lane

- Bradley Road at Ramona Expressway
 - Construct 3rd and 4th Eastbound Through Lane
 - Construct 3rd and 4th Westbound Through Lane

- Dunlap Drive at Nuevo Road
 - Restripe the Eastbound Approach to Provide One Left Turn Lane, One Through Lane, and One Shared Through-Right Turn Lane
 - Construct 2nd Westbound Through Lane
 - Construct 3rd Eastbound Through Lane
 - Construct 2nd Westbound Left Turn Lane
 - Construct 3rd Westbound Through Lane
 - Modify the Traffic Signal to Implement Overlap Phasing for the Northbound Right Turn Lane

- Ramona Expressway at Rider Street
 - Construct 3rd Northbound Through Lane
 - Construct 3rd Southbound Through Lane
 - Construct 4th Northbound Through Lane
 - Construct 4th Southbound Through Lane

- Antelope Road at Ramona Expressway
 - Install a Traffic Signal
 - Construct Northbound Left Turn Lane
 - Construct 2nd Northbound Left Turn Lane
 - Construct Northbound Right Turn Lane
 - Construct Eastbound Right Turn Lane
 - Construct Westbound Left Turn Lane
 - Construct 3rd Eastbound Through Lane
 - Construct 3rd Westbound Through Lane



- Construct 4th Eastbound Through Lane
- Construct 4th Westbound Through Lane

- Antelope Road at Nuevo Road
 - Install a Traffic Signal
 - Construct Southbound Left Turn Lane
 - Construct Southbound Right Turn Lane
 - Construct Eastbound Left Turn Lane
 - Implement Overlap Phasing for the Southbound Right turn Lane
 - Construct 2nd Eastbound Through Lane
 - Construct 2nd Westbound Through Lane
 - Construct 2nd Southbound Left Turn Lane
 - Construct 2nd Southbound Right Turn Lane
 - Construct 3rd Eastbound Through Lane
 - Construct 3rd Westbound Through Lane

- Dunlap Drive at San Jacinto Avenue
 - Install a Traffic Signal
 - Construct Eastbound Left Turn Lane

- Evans Road at San Jacinto Avenue
 - Install a Traffic Signal
 - Construct Southbound Shared Left-Right Turn Lane
 - Construct Eastbound Left Turn Lane

- Murrieta Road at San Jacinto Avenue
 - Install a Traffic Signal
 - Construct Eastbound Left Turn Lane

- Redlands Avenue at San Jacinto Avenue
 - Modify the Traffic Signal to Implement Overlap Phasing for the Northbound Right turn Lane

Although the Project Applicant would contribute TUMF fees and fair-share contributions towards the cost of the required improvements, the required improvements have the potential to result in construction noise that could impact sensitive receptors located in unincorporated Riverside County and the City of Perris. The Riverside County Noise Ordinance and the City of Perris Municipal Code, Chapter 7.34, limit the hours that construction can take place but does not promulgate a numeric threshold pertaining to the noise associated with construction. This is due to the fact that construction noise is temporary, short term, intermittent in nature, and would cease on completion of the Project. Furthermore, Riverside County and the City of Perris are developing urban communities and construction noise is generally accepted as a reality within the urban environment. (ECORP, 2021d, p. 5)



To estimate the worst-case onsite construction noise levels that may occur at the nearest noise-sensitive receptors along the Southern Truck Route vicinity in order to evaluate the potential health-related effects (physical damage to the ear) from construction noise, construction equipment noise levels were calculated using the Roadway Noise Construction Model for the various construction phases for each roadway segment and compared against the construction-related noise level threshold identified herein as established by NIOSH (85 dBA Leq). The sensitive receptors that could be impacted by construction-related noise involving the intersection at Antelope Road/Nuevo Road and the intersection at Dunlap Drive/San Jacinto Avenue intersection are located in unincorporated Riverside County. The sensitive receptors that could be impacted by construction-related noise involving the intersection at Redlands Avenue/San Jacinto Avenue are located in the City of Perris. The anticipated short-term construction noise levels generated for the recommended roadway improves are presented in Table 4.13-11, *Southern Truck Route – Construction Average Noise Levels*. Consistent with FTA recommendations for calculating construction noise, construction noise was measured from the center of the affected roadways. As shown in Table 4.13-11, no individual or cumulative pieces of construction equipment would exceed the 85 dBA NIOSH construction noise standard at any nearby noise-sensitive receptors during roadway improvements and no health effects from construction noise would occur. It is noted that construction noise was modeled on a worst-case basis. It is very unlikely that all pieces of construction equipment would be operating at the same time for the various phases of construction as well as at the point closest to residences. Accordingly, noise impacts associated with transportation-related improvements needed for the Southern Truck Route would be less than significant. (ECORP, 2021d, pp. 5-8)

B. Operational-Related Noise Impacts

As previously noted, the existing nearest noise-sensitive land use to the Project site is Lakeside Middle School located approximately 0.4 mile west of the Project site. While not currently constructed, the approved McCanna Hills Specific Plan is located directly adjacent to the Project's western boundary. Once built-out, commercial and residential land uses would exist on what is currently vacant land adjacent to the Project's western boundary. Additionally, lands to the east of the Project site are planned by the County's General Plan for future residential development. For purposes of analysis, it is assumed that operational-related noise affecting existing or future noise-sensitive receptors would be the same under both the Primary Land Use Plan and Alternative Land Use Plan. (ECORP, 2020c, pp. 37, 58)

1. Operational Noise Sources

Light Industrial Operational Noise

Light Industrial uses typically attract both passenger car and trailer-truck traffic and accommodate uses such as industrial incubators, light manufacturing, parcel hub, warehouse/storage, fulfillment center, and e-commerce operations. The light industrial land uses, which would encompass a majority of the Project site, would be the primary operational noise source associated with the proposed Project. These stationary source noises would mainly be attributed to warehouse-related activity, such as trucks idling and maneuvering the site. To represent this in SoundPLAN, an area source measuring 33 feet by 33 feet (10 meters by 10 meters) every 100 feet (30 meters) with a noise level of 79.0 dBA was used to represent potential truck loading dock



noise and placed on the perimeter of the Project site closest to existing and future noise sensitive land uses. 79.0 dBA represents the loudest function of heavy-duty truck maneuvering according to the City of San Jose Loading Dock Noise Study (2014). Additionally, area sources of the same size were added along Antelope Road. (ECORP, 2020c, p. 48)

Table 4.13-11 Southern Truck Route – Construction Average Noise Levels

Equipment	Distance to Closest Residence	Estimated Exterior Construction Noise Level @ Closest Residence	Construction Noise Standard (dBA L _{eq})	Exceeds Standards?
Antelope Road & Nuevo Road Intersection				
<i>Proposed Improvements: Instillation of traffic signal and addition of traffic lanes</i>				
Paver (1)	3,000 feet	38.6	85	No
Roller (1)		37.4	85	No
Excavator (1)		41.2	85	No
Crane (1)		37.0	85	No
Tractor (1)		44.5	85	No
Air Compressor (1)		38.1	85	No
Combined Construction Equipment		48.2	85	No
Dunlap Drive & San Jacinto Avenue Intersection				
<i>Proposed Improvements: Instillation of traffic signal and addition of traffic lanes</i>				
Paver (1)	2,500 feet	40.2	85	No
Roller (1)		39.0	85	No
Excavator (1)		42.8	85	No
Crane (1)		38.6	85	No
Tractor (1)		46.0	85	No
Air Compressor (1)		39.7	85	No
Combined Construction Equipment		49.7	85	No
Redlands Avenue & San Jacinto Avenue Intersection				
<i>Proposed Improvements: Modification of traffic signal and addition of traffic lanes</i>				
Paver (1)	600 feet	52.6	85	No
Roller (1)		51.4	85	No
Excavator (1)		55.1	85	No
Crane (1)		51.0	85	No
Tractor (1)		58.4	85	No
Air Compressor (1)		52.1	85	No
Combined Construction Equipment		62.1	85	No

Source: Construction noise levels were calculated by ECORP Consulting using the FHWA Roadway Noise Construction Model (FHWA 2006). Refer to Attachment A to the Southern Truck Route NIA (*Technical Appendix J3*) for Model Data Outputs. (ECORP, 2021d, Table 1)



Business Park Operational Noise

Business Park uses primarily provide small-scale light industrial, incubator industrial, merchant wholesalers, professional services, hospitality, professional office, small-scale warehousing/storage, and research and development uses. Similar to the light industrial uses, the main operation noise would be attributed to warehouse activity. Because not all business park land uses would accommodate heavy-duty trucks or require a loading dock, only three area sources measuring 33 feet by 33 feet (10 meters by 10 meters) with a noise level of 79.0 dBA were used to represent potential truck loading dock noise. 79.0 dBA represents the loudest function of heavy-duty truck maneuvering according to the City of San Jose Loading Dock Noise Study. These noise sources were placed on the perimeter of the Project site for the purposes of Project onsite noise modeling. Additionally, a line source was used, with a noise level of 79.0 dBA, and placed around the perimeter of the land use as well. (ECORP, 2020c, p. 48)

Commercial Retail Operational Noise

Commercial retail uses are proposed in the northern portions of the Project site. Anticipated businesses include restaurants, financial institutions, commercial retailers, and personal service shops, as well as small retail businesses and offices. The main stationary source noise associated with this land use would be that of parking lot activity. To represent this in SoundPLAN an area source measuring the total land use area with a noise level of 61.1 dBA was used. The noise level of 61.1 dBA is referenced from noise measurements conducted by ECORP Consulting, Inc. on a weekday within a parking lot serving a large grocery store and multiple restaurants. (ECORP, 2020c, p. 49)

On-Site Internal Circulation-Related Noise

Internal circulation, on Antelope Road, was calculated using the FHWA Highway Noise Prediction Model. For Project operations the model was updated to reflect the anticipated amount of medium-duty and heavy-duty trucks generated by the Project, based on the results of the Project's TIA (EIR *Technical Appendix LI*), since these vehicles produce more noise than the average vehicle. A line source with a noise level of 84.2 dBA was used to represent internal circulation on the Project site. (ECORP, 2020c, p. 49)

2. Operational Noise Impacts

The main stationary operational noise associated with the Project would be warehouse-related activity, such as trucks idling and maneuvering the site. On-site Project operations have been calculated using the SoundPLAN 3D noise model. The results of this model can be found in Attachment D to the Project's NIA (*Technical Appendix JI*). Table 4.13-12, *Modeled Operational Noise Levels*, shows the predicted Project noise levels at eight locations in the Project vicinity, as predicted by SoundPLAN. Three of these locations (Locations 1 through 3) are where the existing baseline noise measurements were taken (see Table 4.13-3), while the additional five locations (Locations 4 through 8) are located along the western boundary of the Project site, adjacent to Lakeside Middle School, and in the approved McCanna Hills Land Use Plan area, where numerous future residents are planned. Additionally, a noise contour graphic has been prepared to depict



the predicted noise levels in the Project vicinity from Project operations, as shown on Figure 4.13-2, *Operational Noise Levels*. (ECORP, 2020c, p. 45)

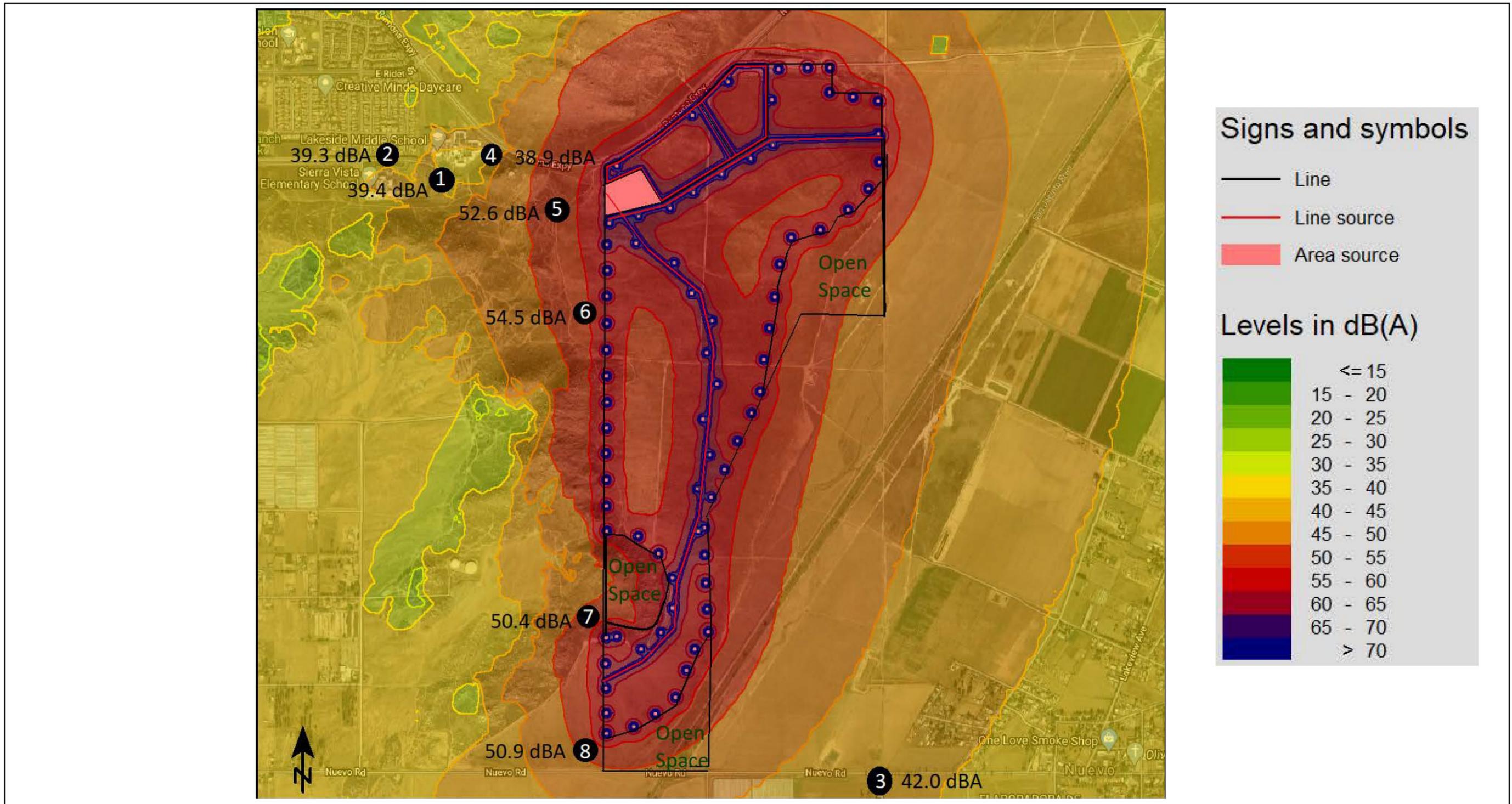
Because the Project does not include any site-specific development plans (i.e., plot plans, etc.), the future building size, orientation, and location of truck loading docks is currently unknown. As such, a worst-case analysis was performed by modeling noise-producing sources such as loading docks and the internal

Table 4.13-12 Modeled Operational Noise Levels

Site Location	Location	Existing Baseline Noise Measurements (Leq dBA)	Modeled Operational Noise Attributable to Project (Leq dBA)	County Exterior Standards (dBA) (Day/Night)	Exceed Standard? (Day /Night)
1	At the end of Walnut Avenue and adjacent to schools.	45.0	39.4	55 / 45	No / No
2	At the end of the cul-de-sac at Hawthorne Road.	55.2	39.3	55 / 45	No / No
3	At the corner of Nuevo Road and Menifee Road.	70.6	42.0	55 / 45	No / No
4	Adjacent to Lakeside Middle School.	N/A	38.9	55 / 45	No / No
5	West of the Project site in the Approved McCanna Hills Land Use Plan area.	N/A	52.6	55 / 45	No / Yes
6	West of the Project site in the Approved McCanna Hills Land Use Plan area.	N/A	54.5	55 / 45	No / Yes
7	West of the Project site in the Approved McCanna Hills Land Use Plan area.	N/A	50.4	55 / 45	No / Yes
8	West of the Project site in the Approved McCanna Hills Land Use Plan area.	N/A	50.9	55 / 45	No / Yes

Source: Stationary source noise levels were modeled by ECORP using SoundPLAN 3D noise model. Refer to Attachment C to the Project’s NIA (*Technical Appendix J1*) for noise modeling assumptions and results.

Notes: Source noise measurements identify 79.0 dBA for heavy-duty truck maneuvering per the San Jose Loading Dock Noise Study (2014), 61.1 dBA for parking lot activity per reference measurements taken by ECORP with a Larson Davis SoundExpert LxT precision sound level meter, which satisfies the American National Standards Institute for general environmental noise measurement instrumentation. Prior to the measurements, the SoundExpert LxT sound level meter was calibrated according to manufacturer specifications with a Larson Davis CAL200 Class I Calibrator., and 83.4 dBA for internal circulation as calculated by the FHWA Highway Noise Prediction Model. These reference measurements informed the SoundPLAN model to predict Project noise propagation. See Attachment D to the Project’s NIA. (ECORP, 2020c, Table 12)



Source(s): ECORP Consulting (06-29-2020)

Figure 4.13-2





circulation network as close to existing and future sensitive receptors as possible. The modeling does not account for mitigation or noise reduction measures, such as compliance with the Riverside County Board of Supervisors' Policy F-3 ("Good Neighbor Policy" for Logistics and Warehouse/Distribution Uses) or the land use development standards and design guidelines of proposed SP 239A1. As shown in Table 4.13-12 and Figure 4.13-2, without mitigation or noise attenuation measures, the Project would not exceed the daytime noise standard of 55 dBA Leq at any existing or planned receptor. Additionally, the Project would not surpass the nighttime noise standard at any existing receptor (i.e., Receptors 1 through 4). However, in the case that the Project operates any time from 10:00 p.m. to 7:00 a.m. (nighttime), operations would potentially exceed the County nighttime noise standard of 45 dBA Leq at planned future sensitive receptors within the McCanna Hills Specific Plan (i.e., Receptors 5 through 8), which abuts the Project site's western boundary. Additionally, and as shown on Figure 4.13-2, the Project could expose future residential receptors to the east of the Project site to nighttime noise levels exceeding 45 dBA. This is evaluated as a potentially significant impact for which mitigation would be required. (ECORP, 2020c, p. 48)

C. Operational Traffic-Related Noise Impacts

Implementation of the Primary Land Use Plan or the Alternative Land Use Plan would result in differing levels of traffic (i.e., trip generation), and Project traffic distribution patterns would vary depending on whether the Mid-County Parkway (MCP) is constructed. Additionally, implementation of the Primary Truck Route or Southern Truck Route also would result in differing levels of traffic on study area facilities. As such, the analysis provided below assesses potential traffic-related noise impacts associated with both the Primary Land Use Plan, which assumes the MCP is not constructed, and Alternative Land Use Plan, which assumes the MCP is constructed. The analysis also addresses potential operational-related traffic noise associated with the Primary Truck Route and Southern Truck Route. The analysis of the Southern Truck Route only is provided for the condition in which the MCP is not constructed, as once the MCP is constructed a majority of Project traffic would utilize the MCP to access I-215.

1. Operational Traffic-Related Noise Impacts – Primary Land Use Plan (Primary Truck Route)

Future traffic noise levels throughout the Project vicinity (i.e., vicinity roadway segments that traverse noise sensitive land uses) under the Primary Land Use Plan were modeled based on the traffic volumes identified by the Project's TIA (*Technical Appendix LI*) to determine the noise levels along Project vicinity roadways. As previously indicated, Project-related transportation noise is evaluated against the following thresholds of significance:

- If the existing ambient noise levels at existing and future noise-sensitive land uses (e.g. residential, etc.) are less than 60 dBA CNEL and the Project creates a readily perceptible 5 dBA CNEL or greater Project-related noise level increase and the resulting noise level would exceed acceptable exterior noise standards; or
- If the existing noise levels range from 60 to 65 dBA CNEL and the Project creates a barely perceptible 3 dBA CNEL or greater Project-related noise level increase and the resulting noise level would exceed acceptable exterior noise standards; or



- If the existing noise levels already exceed 65 dBA CNEL, and the Project creates a community noise level increase of greater than 1.5 dBA CNEL.

The proposed Project would not be fully built out and occupied until 2030, and is not expected to generate substantial amounts of traffic-related noise prior to Project buildout. Accordingly, the analysis below focuses on the Project's potential to result in significant traffic-related noise impacts under Existing plus Ambient plus Project (EAP) 2030 conditions, Existing plus Ambient plus Project plus Cumulative (EAPC) 2030 conditions, and Horizon Year (2040) conditions.

Table 4.13-13, *Operational Traffic-Related Noise Impacts (Primary Land Use Plan/Primary Truck Route) – EAPC (2030) Conditions*, shows the calculated offsite roadway noise levels under year 2030 conditions (Project buildout) with implementation of the Primary Land Use Plan/Primary Truck Route and with the addition of traffic from ambient growth (herein, “EAP 2030” conditions). Based on the traffic-related noise significance criteria presented in subsection 4.13.3.D, the segment of Nuevo Road between the Project site entrance and Dunlap Drive, located in unincorporated Riverside County, which currently experiences traffic noise levels of 65.1 dBA CNEL, would experience an increase of 1.6 dBA CNEL over this existing condition under EAP 2030 conditions. Thus, traffic-related noise under EAP (2030) conditions would exceed the County residential noise threshold of 1.5 dBA CNEL for roadways currently experiencing noise levels greater than 65 dBA CNEL, resulting in a significant impact. No other roadway segments would generate an increase of noise beyond both the FICON significance standards and acceptable exterior noise standards, and thus Project impacts to the remaining roadway segments would be less than significant with implementation of the Primary Land Use Plan/Primary Truck Route under EAP 2030 conditions.

Table 4.13-14, *Operational Traffic-Related Noise Impacts (Primary Land Use Plan/Primary Truck Route) – EAPC (2030) Conditions*, shows the calculated offsite roadway noise levels under year 2030 conditions (Project buildout) with implementation of the Primary Land Use Plan/Primary Truck Route and with the addition of traffic from ambient growth and cumulative development (herein, “EAPC 2030” conditions). The calculated noise levels as a result of the Project at affected sensitive land uses are compared to the above-described FICON thresholds of significance. As shown in Table 4.13-14, none of the study area roadway segments would experience Project-related noise level increases exceeding the FICON thresholds of significance. Accordingly, Project-related traffic noise impacts would be less than significant under EAPC 2030 traffic conditions with implementation of the Primary Land Use Plan/Primary Truck Route.

Table 4.13-15, *Operational Traffic-Related Noise Impacts (Primary Land Use Plan/Primary Truck Route) – Horizon Year (2040) Conditions*, shows the calculated offsite roadway noise levels under Horizon Year 2040 conditions under the Primary Land Use Plan/Primary Truck Route. The calculated noise levels as a result of the Project at affected sensitive land uses are compared to the above-described FICON thresholds of significance. As shown in Table 4.13-15, none of the study area roadway segments would experience Project-related noise level increases exceeding the FICON thresholds of significance. Accordingly, Project-related traffic noise impacts would be less than significant under Horizon Year 2040 traffic conditions with implementation of the Primary Land Use Plan/Primary Truck Route.



Table 4.13-13 Operational Traffic-Related Noise Impacts (Primary Land Use Plan/Primary Truck Route) – EAPC (2030) Conditions

ID	Road	Segment	CNEL at 100 feet from Centerline (dBA)			Incremental Noise Level Increase Threshold	
			No Project	With Project	Project Addition	Limit	Exceeded?
1	Sanderson Av.	North of Ramona Expy.	72.1	72.1	0.0	1.5	No
2	Sanderson Av.	South of Ramona Expy.	69.6	69.6	0.0	1.5	No
3	Contour Av.	East of Hansen Av.	52.1	52.5	0.4	5.0	No
4	Contour Av.	West of Hansen Av.	46.0	46.0	0.0	5.0	No
5	Hansen Av.	North of Contour Av.	59.0	59.0	0.0	5.0	No
6	Hansen Av.	Between Contour Av. and Montgomery Av.	58.3	58.7	0.4	5.0	No
7	Nuevo Rd.	East of Montgomery Av.	60.3	60.7	0.4	3.0	No
8	Nuevo Rd.	Between Montgomery Av. and Lakeview Av.	60.7	61.1	0.4	3.0	No
9	Nuevo Rd.	Between Lakeview Av. and Reservoir Av.	65.5	65.7	0.2	1.5	No
10	Nuevo Rd.	Between Reservoir Av. and the Project Site	63.3	64.3	1.0	3.0	No
11	Nuevo Rd.	Between the Project Site and Dunlap Dr.	65.1	66.7	1.6	1.5	Yes
12	Nuevo Rd.	Between Dunlap Dr. and Evans Rd.	64.8	66.4	1.6	3.0	No
13	Nuevo Rd.	Between Murrieta Rd. and Redlands Av.	63.6	64.6	1.0	3.0	No
14	Nuevo Rd.	Between Redlands Av. and Perris Blvd.	64.6	65.2	0.6	3.0	No
15	Orange Av.	Between Dunlap Dr. and Evans Rd.	60.3	60.3	0.0	3.0	No
16	Orange Av.	Between Evans Rd. and Murrieta Rd.	62.2	62.2	0.0	3.0	No
17	Orange Av.	Between Redlands Av. and Perris Blvd.	64.0	64.0	0.0	3.0	No
18	Orange Av.	West of Perris Blvd.	63.9	63.9	0.0	3.0	No
19	Placentia Av.	East of Redlands Av.	61.1	61.1	0.0	3.0	No
20	Placentia Av.	Between Redlands Av. and Perris Blvd.	61.3	61.3	0.0	3.0	No
21	Rider St.	Between Ramona Expy. and Bradley Rd.	60.3	61.5	1.2	3.0	No
22	Rider St.	Between Bradley Rd. and Evans Rd.	61.5	62.1	0.6	3.0	No
23	Rider St.	Between Evans Rd. and Redlands Av.	64.6	64.8	0.2	3.0	No
24	Rider St.	Between Redlands Av. and Perris Blvd.	63.9	64.0	0.1	3.0	No
25	Ramona Exwy.	South of Rider St.	66.9	69.1	2.2	1.5	Yes
26	Ramona Exwy.	Between Rider St. and Bradley Rd.	58.7	58.7	0.0	5.0	No
27	Ramona Exwy.	Between Bradley Rd. and Evans Rd.	67.0	68.9	1.9	1.5	Yes
28	Ramona Exwy.	Between Evans Rd. and Redlands Av.	68.6	69.9	1.3	1.5	No
29	Ramona Exwy.	West of Redlands Av.	68.0	68.7	0.7	1.5	No
30	Ramona Exwy.	East of Sanderson Av.	67.4	67.4	0.0	1.5	No
31	Ramona Exwy.	West of Sanderson Av.	67.0	67.2	0.2	1.5	No
32	Krameria	West of Perris Blvd.	56.6	56.6	0.0	5.0	No
33	Krameria	Between Perris Blvd. and Lasselle St.	61.4	61.4	0.0	3.0	No
34	Krameria	East of Lasselle St.	61.1	61.1	0.0	3.0	No
35	Iris Av.	West of Perris Blvd.	66.8	66.8	0.0	1.5	No
36	Iris Av.	West of Perris Blvd. and Lasselle St.	67.2	67.2	0.0	1.5	No
37	Iris Av.	East of Lasselle St.	68.5	68.6	0.1	1.5	No
38	San Jacinto Av.	East of Menifee Rd.	48.4	49.3	0.9	5.0	No
39	San Jacinto Av.	West of Menifee Rd.	58.9	58.9	0.0	5.0	No
40	Ellis Rd.	West of Menifee Rd.	48.5	49.4	0.9	5.0	No



Table 4.13-13 Operational Traffic-Related Noise Impacts (Primary Land Use Plan/Primary Truck Route) – EAPC (2030) Conditions

ID	Road	Segment	CNEL at 100 feet from Centerline (dBA)			Incremental Noise Level Increase Threshold	
			No Project	With Project	Project Addition	Limit	Exceeded?
41	Mapes Rd.	East of Menifee Rd.	56.1	56.1	0.0	5.0	No
42	Mapes Rd.	West of Menifee Rd.	55.1	55.1	0.0	5.0	No
43	Watson Rd.	East of Menifee Rd.	57.3	57.4	0.1	5.0	No
44	Watson Rd.	West of Menifee Rd.	55.3	55.5	0.2	5.0	No
45	State Route 74	East of Menifee Rd.	66.7	66.8	0.1	1.5	No
46	State Route 74	West of Menifee Rd.	66.9	66.9	0.0	1.5	No
47	Lakeview Av.	North of Nuevo Rd.	61.7	61.8	0.1	3.0	No
48	Reservoir Av./Menifee Rd.	Between Nuevo Rd. and San Jacinto Av.	60.0	60.6	0.6	1.5	No
49	Reservoir Av./Menifee Rd.	Between San Jacinto Av. And Ellis Av.	59.2	59.7	0.5	5.0	No
50	Reservoir Av./Menifee Rd.	Between Ellis Av. and Mapes Rd.	59.4	59.8	0.4	5.0	No
51	Reservoir Av./Menifee Rd.	Between Mapes Rd. and Watson Rd.	58.0	58.5	0.5	5.0	No
52	Reservoir Av./Menifee Rd.	Between Watson Rd. and SR-74	59.0	59.2	0.2	5.0	No
53	Reservoir Av./Menifee Rd.	South of SR-74	60.1	60.1	0.0	3.0	No
54	Dunlap Dr.	Between Nuevo Rd. and Orange Av.	58.8	59.1	0.3	5.0	No
55	Dunlap Dr.	South of Nuevo Rd.	52.4	52.4	0.0	5.0	No
56	Bradley Rd.	Between Ramona Exwy. and Rider St.	54.3	55.3	1.0	5.0	No
57	Bradley Rd.	South of Rider St.	48.2	48.2	0.0	5.0	No
58	Evans Rd.	Between Nuevo Rd. and Orange Av.	61.6	61.6	0.0	3.0	No
59	Evans Rd.	Between Orange Av. And Rider St.	61.9	61.9	0.0	3.0	No
60	Evans Rd.	Between Rider St. and Ramona Exwy.	63.3	63.3	0.0	3.0	No
61	Evans Rd.	Between Ramona Exwy. and Krameria Av.	65.6	65.8	0.2	1.5	No
62	Evans Rd.	Between Krameria Av. and Iris Av.	65.5	65.6	0.1	1.5	No
63	Murrieta Rd.	North of Nuevo Rd.	52.3	52.5	0.2	5.0	No
64	Murrieta Rd.	South of Nuevo Rd.	53.8	53.9	0.1	5.0	No
65	Redlands Av.	South of Nuevo Rd.	63.4	63.5	0.1	3.0	No
66	Redlands Av.	Between Nuevo Rd. and Orange Av.	60.8	61.0	0.2	3.0	No
67	Redlands Av.	Between Orange Av. and Placentia Av.	60.5	60.5	0.0	3.0	No
68	Perris Blvd.	North of Iris Av.	65.0	65.1	0.1	1.5	No
69	Perris Blvd.	Between Iris Av. And Krameria Av.	65.5	65.6	0.1	1.5	No
70	Perris Blvd.	Between Krameria Av. and San Michele Rd.	66.0	66.1	0.1	1.5	No
71	Perris Blvd.	Between Ramona Exwy. and Morgan St.	64.9	64.9	0.0	3.0	No
72	Perris Blvd.	Between Placentia Av. and Rider St.	65.3	65.3	0.0	1.5	No
73	Perris Blvd.	Between Placentia Av. and Orange Ave.	65.1	65.1	0.0	1.5	No
74	Perris Blvd.	Between Orange Av. and Nuevo Rd.	66.1	66.2	0.1	1.5	No
75	Indian Av.	South of Placentia Av.	56.3	56.3	0.0	5.0	No
76	Indian Av.	Between Placentia Av. and Ramona Exwy.	59.2	59.2	0.0	5.0	No
77	Webster Av.	South of Ramona Exwy.	55.6	55.6	0.0	5.0	No
78	Webster Av.	Between Ramona Exwy. and Harley Knox Av.	58.0	58.1	0.1	5.0	No
79	I-215 Fwy.	North of Ramona Exwy.	77.5	77.6	0.1	1.5	No
80	I-215 Fwy.	Between Ramona Exwy. and Placentia Av.	77.3	77.4	0.1	1.5	No
81	I-215 Fwy.	Between Placentia Av. and Nuevo Rd.	77.3	77.3	0.0	1.5	No
82	I-215 Fwy.	South of Nuevo Rd.	77.6	77.7	0.1	1.5	No

(Urban Crossroads, 2022a, Table 13)



Table 4.13-14 Operational Traffic-Related Noise Impacts (Primary Land Use Plan/Primary Truck Route) – EAPC (2030) Conditions

ID	Road	Segment	CNEL at 100 feet from Centerline (dBA)			Incremental Noise Level Increase Threshold	
			No Project	With Project	Project Addition	Limit	Exceeded?
1	Sanderson Av.	North of Ramona Expy.	73.6	73.6	0.0	1.5	No
2	Sanderson Av.	South of Ramona Expy.	72.0	72.0	0.0	1.5	No
3	Contour Av.	East of Hansen Av.	53.7	54.0	0.3	5.0	No
4	Contour Av.	West of Hansen Av.	46.0	46.0	0.0	5.0	No
5	Hansen Av.	North of Contour Av.	60.7	60.7	0.0	3.0	No
6	Hansen Av.	Between Contour Av. and Montgomery Av.	59.4	59.7	0.3	5.0	No
7	Nuevo Rd.	East of Montgomery Av.	62.0	62.3	0.3	3.0	No
8	Nuevo Rd.	Between Montgomery Av. and Lakeview Av.	61.8	62.0	0.2	3.0	No
9	Nuevo Rd.	Between Lakeview Av. and Reservoir Av.	66.4	66.5	0.1	1.5	No
10	Nuevo Rd.	Between Reservoir Av. and the Project Site	71.6	71.8	0.2	1.5	No
11	Nuevo Rd.	Between the Project Site and Dunlap Dr.	70.6	71.1	0.5	1.5	No
12	Nuevo Rd.	Between Dunlap Dr. and Evans Rd.	70.7	71.2	0.5	1.5	No
13	Nuevo Rd.	Between Murrieta Rd. and Redlands Av.	67.7	68.1	0.4	1.5	No
14	Nuevo Rd.	Between Redlands Av. and Perris Blvd.	67.8	68.2	0.4	1.5	No
15	Orange Av.	Between Dunlap Dr. and Evans Rd.	60.3	60.3	0.0	3.0	No
16	Orange Av.	Between Evans Rd. and Murrieta Rd.	62.2	62.2	0.0	3.0	No
17	Orange Av.	Between Redlands Av. and Perris Blvd.	64.0	64.0	0.0	3.0	No
18	Orange Av.	West of Perris Blvd.	63.9	63.9	0.0	3.0	No
19	Placentia Av.	East of Redlands Av.	61.1	61.1	0.0	3.0	No
20	Placentia Av.	Between Redlands Av. and Perris Blvd.	61.3	61.3	0.0	3.0	No
21	Rider St.	Between Ramona Expy. and Bradley Rd.	64.3	64.8	0.5	3.0	No
22	Rider St.	Between Bradley Rd. and Evans Rd.	66.1	66.3	0.2	1.5	No
23	Rider St.	Between Evans Rd. and Redlands Av.	65.1	65.2	0.1	1.5	No
24	Rider St.	Between Redlands Av. and Perris Blvd.	64.3	64.4	0.1	3.0	No
25	Ramona Exwy.	South of Rider St.	71.7	72.5	0.8	1.5	No
26	Ramona Exwy.	Between Rider St. and Bradley Rd.	58.7	58.7	0.0	5.0	No
27	Ramona Exwy.	Between Bradley Rd. and Evans Rd.	71.2	72.1	0.9	1.5	No
28	Ramona Exwy.	Between Evans Rd. and Redlands Av.	71.8	72.5	0.7	1.5	No
29	Ramona Exwy.	West of Redlands Av.	71.6	71.9	0.3	1.5	No
30	Ramona Exwy.	East of Sanderson Av.	68.4	68.5	0.1	1.5	No
31	Ramona Exwy.	West of Sanderson Av.	69.6	69.7	0.1	1.5	No
32	Krameria	West of Perris Blvd.	56.8	56.8	0.0	5.0	No
33	Krameria	Between Perris Blvd. and Lasselle St.	61.8	61.9	0.1	3.0	No
34	Krameria	East of Lasselle St.	61.6	61.6	0.0	3.0	No
35	Iris Av.	West of Perris Blvd.	67.2	67.2	0.0	1.5	No
36	Iris Av.	West of Perris Blvd. and Lasselle St.	67.6	67.6	0.0	1.5	No
37	Iris Av.	East of Lasselle St.	69.2	69.3	0.1	1.5	No
38	San Jacinto Av.	East of Menifee Rd.	48.4	49.3	0.9	5.0	No
39	San Jacinto Av.	West of Menifee Rd.	61.3	61.4	0.1	3.0	No
40	Ellis Rd.	West of Menifee Rd.	59.1	59.1	0.0	5.0	No



Table 4.13-14 Operational Traffic-Related Noise Impacts (Primary Land Use Plan/Primary Truck Route) – EAPC (2030) Conditions

ID	Road	Segment	CNEL at 100 feet from Centerline (dBA)			Incremental Noise Level Increase Threshold	
			No Project	With Project	Project Addition	Limit	Exceeded?
41	Mapes Rd.	East of Menifee Rd.	57.1	57.1	0.0	5.0	No
42	Mapes Rd.	West of Menifee Rd.	55.1	55.1	0.0	5.0	No
43	Watson Rd.	East of Menifee Rd.	57.3	57.4	0.1	5.0	No
44	Watson Rd.	West of Menifee Rd.	55.3	55.5	0.2	5.0	No
45	State Route 74	East of Menifee Rd.	66.7	66.8	0.1	1.5	No
46	State Route 74	West of Menifee Rd.	66.9	66.9	0.0	1.5	No
47	Lakeview Av.	North of Nuevo Rd.	62.1	62.2	0.1	3.0	No
48	Reservoir Av./Menifee Rd.	Between Nuevo Rd. and San Jacinto Av.	64.5	64.7	0.2	3.0	No
49	Reservoir Av./Menifee Rd.	Between San Jacinto Av. And Ellis Av.	64.4	64.5	0.1	3.0	No
50	Reservoir Av./Menifee Rd.	Between Ellis Av. and Mapes Rd.	64.9	65.0	0.1	3.0	No
51	Reservoir Av./Menifee Rd.	Between Mapes Rd. and Watson Rd.	64.7	64.8	0.1	3.0	No
52	Reservoir Av./Menifee Rd.	Between Watson Rd. and SR-74	64.9	65.0	0.1	3.0	No
53	Reservoir Av./Menifee Rd.	South of SR-74	65.2	65.2	0.0	1.5	No
54	Dunlap Dr.	Between Nuevo Rd. and Orange Av.	61.1	61.3	0.2	3.0	No
55	Dunlap Dr.	South of Nuevo Rd.	52.4	52.4	0.0	5.0	No
56	Bradley Rd.	Between Ramona Exwy. and Rider St.	54.3	55.3	1.0	5.0	No
57	Bradley Rd.	South of Rider St.	48.2	48.2	0.0	5.0	No
58	Evans Rd.	Between Nuevo Rd. and Orange Av.	63.3	63.3	0.0	3.0	No
59	Evans Rd.	Between Orange Av. And Rider St.	61.9	61.9	0.0	3.0	No
60	Evans Rd.	Between Rider St. and Ramona Exwy.	63.6	63.7	0.1	3.0	No
61	Evans Rd.	Between Ramona Exwy. and Krameria Av.	67.1	67.2	0.1	1.5	No
62	Evans Rd.	Between Krameria Av. and Iris Av.	65.9	66.0	0.1	1.5	No
63	Murrieta Rd.	North of Nuevo Rd.	54.4	54.5	0.1	5.0	No
64	Murrieta Rd.	South of Nuevo Rd.	56.9	57.0	0.1	5.0	No
65	Redlands Av.	South of Nuevo Rd.	63.9	64.0	0.1	3.0	No
66	Redlands Av.	Between Nuevo Rd. and Orange Av.	61.3	61.5	0.2	3.0	No
67	Redlands Av.	Between Orange Av. and Placentia Av.	60.5	60.5	0.0	3.0	No
68	Perris Blvd.	North of Iris Av.	65.1	65.1	0.0	1.5	No
69	Perris Blvd.	Between Iris Av. And Krameria Av.	65.5	65.6	0.1	1.5	No
70	Perris Blvd.	Between Krameria Av. and San Michele Rd.	66.0	66.1	0.1	1.5	No
71	Perris Blvd.	Between Ramona Exwy. and Morgan St.	65.6	65.6	0.0	1.5	No
72	Perris Blvd.	Between Placentia Av. and Rider St.	65.7	65.7	0.0	1.5	No
73	Perris Blvd.	Between Placentia Av. and Orange Ave.	65.1	65.1	0.0	1.5	No
74	Perris Blvd.	Between Orange Av. and Nuevo Rd.	66.1	66.2	0.1	1.5	No
75	Indian Av.	South of Placentia Av.	57.4	57.4	0.0	5.0	No
76	Indian Av.	Between Placentia Av. and Ramona Exwy.	59.7	59.7	0.0	5.0	No
77	Webster Av.	South of Ramona Exwy.	56.2	56.2	0.0	5.0	No
78	Webster Av.	Between Ramona Exwy. and Harley Knox Av.	58.4	58.5	0.1	5.0	No
79	I-215 Fwy.	North of Ramona Exwy.	78.4	78.5	0.1	1.5	No
80	I-215 Fwy.	Between Ramona Exwy. and Placentia Av.	77.9	78.0	0.1	1.5	No
81	I-215 Fwy.	Between Placentia Av. and Nuevo Rd.	77.9	77.9	0.0	1.5	No
82	I-215 Fwy.	South of Nuevo Rd.	78.0	78.2	0.2	1.5	No

(Urban Crossroads, 2022a, Table 14)



Table 4.13-15 Operational Traffic-Related Noise Impacts (Primary Land Use Plan/Primary Truck Route) – Horizon Year (2040) Conditions

ID	Road	Segment	CNEL at 100 feet from Centerline (dBA)			Incremental Noise Level Increase Threshold	
			No Project	With Project	Project Addition	Limit	Exceeded?
1	Sanderson Av.	North of Ramona Expy.	74.4	74.4	0.0	1.5	No
2	Sanderson Av.	South of Ramona Expy.	72.8	72.8	0.0	1.5	No
3	Contour Av.	East of Hansen Av.	54.8	54.9	0.1	5.0	No
4	Contour Av.	West of Hansen Av.	46.8	46.8	0.0	5.0	No
5	Hansen Av.	North of Contour Av.	61.5	61.6	0.1	3.0	No
6	Hansen Av.	Between Contour Av. and Montgomery Av.	60.5	60.7	0.2	3.0	No
7	Nuevo Rd.	East of Montgomery Av.	63.0	63.3	0.3	3.0	No
8	Nuevo Rd.	Between Montgomery Av. and Lakeview Av.	62.8	63.1	0.3	3.0	No
9	Nuevo Rd.	Between Lakeview Av. and Reservoir Av.	67.3	67.4	0.1	1.5	No
10	Nuevo Rd.	Between Reservoir Av. and the Project Site	72.5	72.7	0.2	1.5	No
11	Nuevo Rd.	Between the Project Site and Dunlap Dr.	71.9	72.2	0.3	1.5	No
12	Nuevo Rd.	Between Dunlap Dr. and Evans Rd.	71.9	72.2	0.3	1.5	No
13	Nuevo Rd.	Between Murrieta Rd. and Redlands Av.	68.8	69.0	0.2	1.5	No
14	Nuevo Rd.	Between Redlands Av. and Perris Blvd.	68.9	69.1	0.2	1.5	No
15	Orange Av.	Between Dunlap Dr. and Evans Rd.	61.1	63.5	2.4	3.0	No
16	Orange Av.	Between Evans Rd. and Murrieta Rd.	62.9	64.5	1.6	3.0	No
17	Orange Av.	Between Redlands Av. and Perris Blvd.	64.8	65.0	0.2	3.0	No
18	Orange Av.	West of Perris Blvd.	64.6	64.7	0.1	3.0	No
19	Placentia Av.	East of Redlands Av.	61.9	62.8	0.9	3.0	No
20	Placentia Av.	Between Redlands Av. and Perris Blvd.	62.1	62.3	0.2	3.0	No
21	Rider St.	Between Ramona Expy. and Bradley Rd.	65.6	65.6	0.0	1.5	No
22	Rider St.	Between Bradley Rd. and Evans Rd.	67.1	67.1	0.0	1.5	No
23	Rider St.	Between Evans Rd. and Redlands Av.	66.0	66.0	0.0	1.5	No
24	Rider St.	Between Redlands Av. and Perris Blvd.	65.2	65.2	0.0	1.5	No
25	Ramona Exwy.	South of Rider St.	73.3	73.7	0.4	1.5	No
26	Ramona Exwy.	Between Rider St. and Bradley Rd.	59.5	59.9	0.4	5.0	No
27	Ramona Exwy.	Between Bradley Rd. and Evans Rd.	72.8	73.3	0.5	1.5	No
28	Ramona Exwy.	Between Evans Rd. and Redlands Av.	73.3	73.6	0.3	1.5	No
29	Ramona Exwy.	West of Redlands Av.	72.7	72.8	0.1	1.5	No
30	Ramona Exwy.	East of Sanderson Av.	69.2	69.3	0.1	1.5	No
31	Ramona Exwy.	West of Sanderson Av.	70.5	70.5	0.0	1.5	No
32	Krameria	West of Perris Blvd.	57.6	57.6	0.0	5.0	No
33	Krameria	Between Perris Blvd. and Lasselle St.	62.7	62.7	0.0	3.0	No
34	Krameria	East of Lasselle St.	62.4	62.4	0.0	3.0	No
35	Iris Av.	West of Perris Blvd.	68.0	68.0	0.0	1.5	No
36	Iris Av.	West of Perris Blvd. and Lasselle St.	68.4	68.4	0.0	1.5	No
37	Iris Av.	East of Lasselle St.	70.0	70.1	0.1	1.5	No
38	San Jacinto Av.	East of Menifee Rd.	50.1	50.8	0.7	5.0	No
39	San Jacinto Av.	West of Menifee Rd.	62.2	62.2	0.0	3.0	No
40	Ellis Rd.	West of Menifee Rd.	59.9	60.0	0.1	5.0	No



Table 4.13-15 Operational Traffic-Related Noise Impacts (Primary Land Use Plan/Primary Truck Route) – Horizon Year (2040) Conditions

ID	Road	Segment	CNEL at 100 feet from Centerline (dBA)			Incremental Noise Level Increase Threshold	
			No Project	With Project	Project Addition	Limit	Exceeded?
41	Mapes Rd.	East of Menifee Rd.	57.9	57.9	0.0	5.0	No
42	Mapes Rd.	West of Menifee Rd.	55.9	56.1	0.2	5.0	No
43	Watson Rd.	East of Menifee Rd.	58.2	58.3	0.1	5.0	No
44	Watson Rd.	West of Menifee Rd.	56.3	56.3	0.0	5.0	No
45	State Route 74	East of Menifee Rd.	67.5	67.6	0.1	1.5	No
46	State Route 74	West of Menifee Rd.	67.7	67.7	0.0	1.5	No
47	Lakeview Av.	North of Nuevo Rd.	63.0	63.1	0.1	3.0	No
48	Reservoir Av./Menifee Rd.	Between Nuevo Rd. and San Jacinto Av.	65.5	65.7	0.2	1.5	No
49	Reservoir Av./Menifee Rd.	Between San Jacinto Av. And Ellis Av.	65.3	65.5	0.2	1.5	No
50	Reservoir Av./Menifee Rd.	Between Ellis Av. and Mapes Rd.	65.8	65.9	0.1	1.5	No
51	Reservoir Av./Menifee Rd.	Between Mapes Rd. and Watson Rd.	65.6	65.7	0.1	1.5	No
52	Reservoir Av./Menifee Rd.	Between Watson Rd. and SR-74	65.8	65.8	0.0	1.5	No
53	Reservoir Av./Menifee Rd.	South of SR-74	66.0	66.1	0.1	1.5	No
54	Dunlap Dr.	Between Nuevo Rd. and Orange Av.	62.1	62.1	0.0	3.0	No
55	Dunlap Dr.	South of Nuevo Rd.	53.2	53.8	0.6	5.0	No
56	Bradley Rd.	Between Ramona Exwy. and Rider St.	56.0	56.0	0.0	5.0	No
57	Bradley Rd.	South of Rider St.	48.9	48.9	0.0	5.0	No
58	Evans Rd.	Between Nuevo Rd. and Orange Av.	64.1	64.1	0.0	3.0	No
59	Evans Rd.	Between Orange Av. And Rider St.	62.6	62.8	0.2	3.0	No
60	Evans Rd.	Between Rider St. and Ramona Exwy.	63.3	63.3	0.0	3.0	No
61	Evans Rd.	Between Ramona Exwy. and Krameria Av.	68.0	68.1	0.1	1.5	No
62	Evans Rd.	Between Krameria Av. and Iris Av.	66.8	66.9	0.1	1.5	No
63	Murrieta Rd.	North of Nuevo Rd.	55.3	55.3	0.0	5.0	No
64	Murrieta Rd.	South of Nuevo Rd.	57.8	57.9	0.1	5.0	No
65	Redlands Av.	South of Nuevo Rd.	64.8	64.9	0.1	3.0	No
66	Redlands Av.	Between Nuevo Rd. and Orange Av.	62.2	62.2	0.0	3.0	No
67	Redlands Av.	Between Orange Av. and Placentia Av.	61.3	62.6	1.3	3.0	No
68	Perris Blvd.	North of Iris Av.	65.9	65.9	0.0	1.5	No
69	Perris Blvd.	Between Iris Av. And Krameria Av.	66.4	66.5	0.1	1.5	No
70	Perris Blvd.	Between Krameria Av. and San Michele Rd.	66.9	67.0	0.1	1.5	No
71	Perris Blvd.	Between Ramona Exwy. and Morgan St.	66.4	66.4	0.0	1.5	No
72	Perris Blvd.	Between Placentia Av. and Rider St.	66.5	66.5	0.0	1.5	No
73	Perris Blvd.	Between Placentia Av. and Orange Ave.	65.9	65.9	0.0	1.5	No
74	Perris Blvd.	Between Orange Av. and Nuevo Rd.	66.6	66.6	0.0	1.5	No
75	Indian Av.	South of Placentia Av.	58.2	58.2	0.0	5.0	No
76	Indian Av.	Between Placentia Av. and Ramona Exwy.	60.5	60.6	0.1	3.0	No
77	Webster Av.	South of Ramona Exwy.	57.0	57.0	0.0	5.0	No
78	Webster Av.	Between Ramona Exwy. and Harley Knox Av.	59.3	59.3	0.0	5.0	No
79	I-215 Fwy.	North of Ramona Exwy.	79.6	79.7	0.1	1.5	No
80	I-215 Fwy.	Between Ramona Exwy. and Placentia Av.	78.8	78.9	0.1	1.5	No
81	I-215 Fwy.	Between Placentia Av. and Nuevo Rd.	78.7	78.7	0.0	1.5	No
82	I-215 Fwy.	South of Nuevo Rd.	79.1	79.2	0.1	1.5	No

(Urban Crossroads, 2022a, Table 15)



2. Operational Traffic-Related Noise Impacts – Alternative Land Use Plan

The Alternative Land Use Plan assumes that the MCP would be constructed through the northern portions of the Project site and that no development within the potential MCP alignment would be allowed on site. With construction of the MCP, it is expected that most of the Project's truck traffic would utilize the MCP to access I-215. However, it is not expected that the MCP would be constructed and operational by Project buildout in 2030. Thus, under near-term conditions, traffic-related noise impacts would be similar to what is described above for the Primary Land Use Plan/Primary Truck Route under EAP 2030 and EAPC 2030 conditions, with slightly reduced off-site traffic-related noise increases due to the slight reduction in development intensity on site under the Alternative Land Use Plan. Consistent with the findings for the Primary Land Use Plan/Primary Truck Route, the Alternative Land Use Plan would result in noise level increases under EAP 2030 conditions that would exceed the threshold of significance along the segment of Nuevo Road between the Project site and Dunlap Drive, resulting in a significant impact. No other roadway segments would generate an increase of noise beyond both the FICON significance standards and acceptable exterior noise standards under EAP 2030 conditions with implementation of the Alternative Land Use Plan. In addition, and also consistent with the findings for the Primary Land Use Plan, none of the study area roadway segments would experience Project-related noise level increases exceeding the FICON thresholds of significance under EAPC 2030 conditions. Accordingly, Project-related traffic noise impacts would be less than significant under EAPC 2030 traffic conditions with implementation of the Alternative Land Use Plan.

Future traffic noise levels throughout the Project vicinity for the Alternative Land Use Plan under Horizon Year (2030) conditions was assessed using the same methodology and standards as the Primary Land Use Plan discussed above. The calculated noise levels as a result of the Project at affected sensitive land uses are compared to the above-described FICON thresholds of significance. As shown in Table 4.13-16, *Operational Traffic-Related Noise Impacts (Alternative Land Use Plan) – Horizon Year (2040) Conditions*, none of the study area roadway segments would experience Project-related noise level increases exceeding the FICON thresholds of significance. Accordingly, Project-related traffic noise impacts would be less than significant under Horizon Year (2040) traffic conditions with implementation of the Alternative Land Use Plan.

3. Operational Traffic-Related Noise Impacts – Primary Land Use Plan/Southern Truck Route

The Southern Truck Route may be implemented in association with the Primary Land Use Plan (and without construction of the MCP). Future traffic noise levels throughout the Project vicinity for the Southern Truck Route was assessed using the same methodology and standards as the Primary Land Use Plan/Primary Truck Route discussed above. Additionally, because under the Primary Land Use Plan/Southern Truck Route the Project would contribute substantially less traffic to the roadway segments previously evaluated as part of the Primary Land Use Plan/Primary Truck Route, it can be concluded that Project traffic-related noise contributions to these study area segments would be less than is disclosed above for the Primary Land Use Plan/Primary Truck Route for EAP 2030, EAPC 2030, and Horizon Year 2040 conditions.



Table 4.13-16 Operational Traffic-Related Noise Impacts (Alternative Land Use Plan) – Horizon Year (2040) Conditions

ID	Road	Segment	CNEL at 100 feet from Centerline (dBA)			Incremental Noise Level Increase Threshold	
			No Project	With Project	Project Addition	Limit	Exceeded?
1	Sanderson Av.	North of Ramona Expy.	73.8	73.8	0.0	1.5	No
2	Sanderson Av.	South of Ramona Expy.	73.0	73.1	0.1	1.5	No
3	Contour Av.	East of Hansen Av.	52.0	52.2	0.2	5.0	No
4	Contour Av.	West of Hansen Av.	45.9	45.9	0.0	5.0	No
5	Hansen Av.	North of Contour Av.	58.9	59.1	0.2	5.0	No
6	Hansen Av.	Between Contour Av. and Montgomery Av.	58.2	58.6	0.4	5.0	No
7	Nuevo Rd.	East of Montgomery Av.	60.2	60.6	0.4	3.0	No
8	Nuevo Rd.	Between Montgomery Av. and Lakeview Av.	60.7	61.0	0.3	3.0	No
9	Nuevo Rd.	Between Lakeview Av. and Reservoir Av.	65.4	65.6	0.2	1.5	No
10	Nuevo Rd.	Between Reservoir Av. and the Project Site	71.0	71.2	0.2	1.5	No
11	Nuevo Rd.	Between the Project Site and Dunlap Dr.	68.6	68.9	0.3	1.5	No
12	Nuevo Rd.	Between Dunlap Dr. and Evans Rd.	68.6	68.8	0.2	1.5	No
13	Nuevo Rd.	Between Murrieta Rd. and Redlands Av.	67.8	67.9	0.1	1.5	No
14	Nuevo Rd.	Between Redlands Av. and Perris Blvd.	67.9	68.0	0.1	1.5	No
15	Orange Av.	Between Dunlap Dr. and Evans Rd.	60.2	61.9	1.7	3.0	No
16	Orange Av.	Between Evans Rd. and Murrieta Rd.	62.1	63.0	0.9	3.0	No
17	Orange Av.	Between Redlands Av. and Perris Blvd.	63.9	64.1	0.2	3.0	No
18	Orange Av.	West of Perris Blvd.	63.8	63.9	0.1	3.0	No
19	Placentia Av.	East of Redlands Av.	61.0	61.4	0.4	3.0	No
20	Placentia Av.	Between Redlands Av. and Perris Blvd.	61.2	61.4	0.2	3.0	No
21	Rider St.	Between Ramona Expy. and Bradley Rd.	63.3	63.3	0.0	3.0	No
22	Rider St.	Between Bradley Rd. and Evans Rd.	64.8	64.8	0.0	3.0	No
23	Rider St.	Between Evans Rd. and Redlands Av.	64.6	64.6	0.0	3.0	No
24	Rider St.	Between Redlands Av. and Perris Blvd.	63.8	63.8	0.0	3.0	No
25	Ramona Exwy.	South of Rider St.	70.5	70.8	0.3	1.5	No
26	Ramona Exwy.	Between Rider St. and Bradley Rd.	58.6	59.1	0.5	5.0	No
27	Ramona Exwy.	Between Bradley Rd. and Evans Rd.	70.8	71.0	0.2	1.5	No
28	Ramona Exwy.	Between Evans Rd. and Redlands Av.	70.1	70.3	0.2	1.5	No
29	Ramona Exwy.	West of Redlands Av.	69.5	69.6	0.1	1.5	No
30	Ramona Exwy.	East of Sanderson Av.	67.3	67.3	0.0	1.5	No
31	Ramona Exwy.	West of Sanderson Av.	70.7	70.7	0.0	1.5	No
32	Krameria	West of Perris Blvd.	56.9	56.9	0.0	5.0	No
33	Krameria	Between Perris Blvd. and Lasselle St.	61.3	61.3	0.0	3.0	No
34	Krameria	East of Lasselle St.	61.1	61.1	0.0	3.0	No
35	Iris Av.	West of Perris Blvd.	66.8	66.8	0.0	1.5	No
36	Iris Av.	West of Perris Blvd. and Lasselle St.	67.1	67.1	0.0	1.5	No
37	Iris Av.	East of Lasselle St.	69.1	69.1	0.0	1.5	No
38	San Jacinto Av.	East of Menifee Rd.	49.6	50.4	0.8	5.0	No
39	San Jacinto Av.	West of Menifee Rd.	61.7	61.8	0.1	3.0	No
40	Ellis Rd.	West of Menifee Rd.	59.7	59.8	0.1	5.0	No



Table 4.13-16 Operational Traffic-Related Noise Impacts (Alternative Land Use Plan) – Horizon Year (2040) Conditions

ID	Road	Segment	CNEL at 100 feet from Centerline (dBA)			Incremental Noise Level Increase Threshold	
			No Project	With Project	Project Addition	Limit	Exceeded?
41	Mapes Rd.	East of Menifee Rd.	57.9	57.9	0.0	5.0	No
42	Mapes Rd.	West of Menifee Rd.	55.9	56.1	0.2	5.0	No
43	Watson Rd.	East of Menifee Rd.	58.3	58.4	0.1	5.0	No
44	Watson Rd.	West of Menifee Rd.	56.4	56.4	0.0	5.0	No
45	State Route 74	East of Menifee Rd.	70.3	70.3	0.0	1.5	No
46	State Route 74	West of Menifee Rd.	70.3	70.3	0.0	1.5	No
47	Lakeview Av.	North of Nuevo Rd.	61.7	61.8	0.1	3.0	No
48	Reservoir Av./Menifee Rd.	Between Nuevo Rd. and San Jacinto Av.	65.0	65.2	0.2	1.5	No
49	Reservoir Av./Menifee Rd.	Between San Jacinto Av. And Ellis Av.	65.1	65.3	0.2	1.5	No
50	Reservoir Av./Menifee Rd.	Between Ellis Av. and Mapes Rd.	65.8	65.9	0.1	1.5	No
51	Reservoir Av./Menifee Rd.	Between Mapes Rd. and Watson Rd.	65.7	65.8	0.1	1.5	No
52	Reservoir Av./Menifee Rd.	Between Watson Rd. and SR-74	65.1	65.2	0.1	1.5	No
53	Reservoir Av./Menifee Rd.	South of SR-74	65.4	65.4	0.0	1.5	No
54	Dunlap Dr.	Between Nuevo Rd. and Orange Av.	58.7	58.7	0.0	5.0	No
55	Dunlap Dr.	South of Nuevo Rd.	55.8	56.1	0.3	5.0	No
56	Bradley Rd.	Between Ramona Exwy. and Rider St.	54.2	54.2	0.0	5.0	No
57	Bradley Rd.	South of Rider St.	48.1	48.1	0.0	5.0	No
58	Evans Rd.	Between Nuevo Rd. and Orange Av.	61.5	61.5	0.0	3.0	No
59	Evans Rd.	Between Orange Av. And Rider St.	64.6	64.7	0.1	3.0	No
60	Evans Rd.	Between Rider St. and Ramona Exwy.	64.6	64.6	0.0	3.0	No
61	Evans Rd.	Between Ramona Exwy. and Krameria Av.	65.9	66.1	0.2	1.5	No
62	Evans Rd.	Between Krameria Av. and Iris Av.	66.1	66.2	0.1	1.5	No
63	Murrieta Rd.	North of Nuevo Rd.	54.3	54.3	0.0	5.0	No
64	Murrieta Rd.	South of Nuevo Rd.	56.8	56.9	0.1	5.0	No
65	Redlands Av.	South of Nuevo Rd.	63.3	63.4	0.1	3.0	No
66	Redlands Av.	Between Nuevo Rd. and Orange Av.	60.7	60.7	0.0	3.0	No
67	Redlands Av.	Between Orange Av. and Placentia Av.	64.3	64.4	0.1	3.0	No
68	Perris Blvd.	North of Iris Av.	65.2	65.3	0.1	1.5	No
69	Perris Blvd.	Between Iris Av. And Krameria Av.	65.8	65.9	0.1	1.5	No
70	Perris Blvd.	Between Krameria Av. and San Michele Rd.	65.9	66.0	0.1	1.5	No
71	Perris Blvd.	Between Ramona Exwy. and Morgan St.	65.4	65.4	0.0	1.5	No
72	Perris Blvd.	Between Placentia Av. and Rider St.	65.3	65.3	0.0	1.5	No
73	Perris Blvd.	Between Placentia Av. and Orange Ave.	66.0	66.0	0.0	1.5	No
74	Perris Blvd.	Between Orange Av. and Nuevo Rd.	67.5	67.5	0.0	1.5	No
75	Indian Av.	South of Placentia Av.	57.0	57.0	0.0	5.0	No
76	Indian Av.	Between Placentia Av. and Ramona Exwy.	60.5	60.6	0.1	3.0	No
77	Webster Av.	South of Ramona Exwy.	55.5	55.5	0.0	5.0	No
78	Webster Av.	Between Ramona Exwy. and Harley Knox Av.	61.1	61.1	0.0	3.0	No
79	I-215 Fwy.	North of Ramona Exwy.	79.8	79.8	0.0	1.5	No
80	I-215 Fwy.	Between Ramona Exwy. and Placentia Av.	79.5	79.5	0.0	1.5	No
81	I-215 Fwy.	Between Placentia Av. and Nuevo Rd.	78.5	78.5	0.0	1.5	No
82	I-215 Fwy.	South of Nuevo Rd.	78.7	78.7	0.0	1.5	No

(Urban Crossroads, 2022a, Table 16)



Table 4.13-17, Operational Traffic-Related Noise Impacts (Primary Land Use Plan/Southern Truck Route) – EAP (2030) Conditions, shows the calculated offsite roadway noise levels under year 2030 conditions (Project buildout) with implementation of the Primary Land Use Plan/Southern Truck Route and with the addition of traffic from ambient growth (EAP 2030 conditions). Based on the traffic-related noise significance criteria presented in subsection 4.13.3.D, the segment of Nuevo Road between the Project site entrance and Dunlap Drive, located in unincorporated Riverside County, which currently experiences traffic noise levels of 65.1 dBA CNEL, would experience an increase of 2.0 dBA CNEL over this existing condition as a result of the Southern Truck Route. Thus, traffic-related noise under EAP (2030) conditions would exceed the County residential noise threshold of 1.5 dBA CNEL for roadways currently experiencing noise levels greater than 65 dBA CNEL, resulting in a significant impact. No other roadway segments would generate an increase of noise beyond both the FICON significance standards and acceptable exterior noise standards, and thus Project impacts to the remaining roadway segments would be less than significant with implementation of the Primary Land Use Plan/Southern Truck Route.

Table 4.13-17 Operational Traffic-Related Noise Impacts (Primary Land Use Plan/Southern Truck Route) – EAP (2030) Conditions

ID	Road	Segment	CNEL at 100 feet from Centerline (dBA)			Incremental Noise Level Increase Threshold	
			No Project	With Project	Project Addition	Limit	Exceeded?
1	Nuevo Rd.	Between Stoneridge Commerce Center SP and Dunlap Dr.	65.1	67.1	2.0	1.5	Yes
2	Nuevo Rd.	Between Dunlap Dr. and Evans Rd.	64.8	66.4	1.6	3.0	No
3	Dunlap Dr.	North of Nuevo Rd.	58.6	59.0	0.4	5.0	No
4	Dunlap Dr.	Between Nuevo Rd. and San Jacinto Av.	52.4	56.1	3.7	5.0	No
5	San Jacinto Av.	Between Murrieta Rd. and Redlands Av.	66.6	67.0	0.4	1.5	No
6	Redlands Av.	South of San Jacinto Av.	69.3	69.6	0.3	1.5	No

(Urban Crossroads, 2022b, Table 11)

Table 4.13-18, Operational Traffic-Related Noise Impacts (Primary Land Use Plan/Southern Truck Route) – EAPC (2030) Conditions, shows the calculated offsite roadway noise levels under year 2030 conditions (Project buildout) with implementation of the Primary Land Use Plan/Southern Truck Route and with the addition of traffic from ambient growth and cumulative developments (EAPC 2030 conditions). The calculated noise levels as a result of the Project at affected sensitive land uses are compared to the above-described FICON thresholds of significance. As shown in Table 4.13-18, none of the study area roadway segments would experience Project-related noise level increases exceeding the FICON thresholds of significance. Accordingly, Project-related traffic noise impacts would be less than significant under EAPC 2030 traffic conditions with implementation of the Primary Land Use Plan/Southern Truck Route.



Table 4.13-18 Operational Traffic-Related Noise Impacts (Primary Land Use Plan/Southern Truck Route) – EAPC (2030) Conditions

ID	Road	Segment	CNEL at 100 feet from Centerline (dBA)			Incremental Noise Level Increase Threshold	
			No Project	With Project	Project Addition	Limit	Exceeded?
1	Nuevo Rd.	Between Stoneridge Commerce Center SP and Dunlap Dr.	70.6	71.3	0.7	1.5	No
2	Nuevo Rd.	Between Dunlap Dr. and Evans Rd.	70.7	71.2	0.5	1.5	No
3	Dunlap Dr.	North of Nuevo Rd.	61.0	61.2	0.2	3.0	No
4	Dunlap Dr.	Between Nuevo Rd. and San Jacinto Av.	52.4	56.1	3.7	5.0	No
5	San Jacinto Av.	Between Murrieta Rd. and Redlands Av.	66.9	67.3	0.4	1.5	No
6	Redlands Av.	South of San Jacinto Av.	70.0	70.3	0.3	1.5	No

(Urban Crossroads, 2022b, Table 12)

Table 4.13-19, *Operational Traffic-Related Noise Impacts (Primary Land Use Plan/Southern Truck Route) – Horizon Year (2040) Conditions*, shows the calculated offsite roadway noise levels under Horizon Year 2040 conditions with implementation of the Primary Land Use Plan/Southern Truck Route. The calculated noise levels as a result of the Project at affected sensitive land uses are compared to the above-described FICON thresholds of significance. As shown in Table 4.13-19, none of the study area roadway segments would experience Project-related noise level increases exceeding the FICON thresholds of significance. Accordingly, Project-related traffic noise impacts would be less than significant under Horizon Year 2040 traffic conditions with implementation of the Primary Land Use Plan/Southern Truck Route.

Table 4.13-19 Operational Traffic-Related Noise Impacts (Primary Land Use Plan/Southern Truck Route) – Horizon Year (2040) Conditions

ID	Road	Segment	CNEL at 100 feet from Centerline (dBA)			Incremental Noise Level Increase Threshold	
			No Project	With Project	Project Addition	Limit	Exceeded?
1	Nuevo Rd.	Between Stoneridge Commerce Center SP and Dunlap Dr.	72.0	72.4	0.4	1.5	No
2	Nuevo Rd.	Between Dunlap Dr. and Evans Rd.	71.9	72.2	0.3	1.5	No
3	Dunlap Dr.	North of Nuevo Rd.	62.0	62.0	0.0	3.0	No
4	Dunlap Dr.	Between Nuevo Rd. and San Jacinto Av.	56.9	58.8	1.9	5.0	No
5	San Jacinto Av.	Between Murrieta Rd. and Redlands Av.	66.5	66.9	0.4	1.5	No
6	Redlands Av.	South of San Jacinto Av.	69.2	69.4	0.2	1.5	No

(Urban Crossroads, 2022b, Table 13)

Threshold d.: Would the Project result in the generation of excessive ground-borne vibration or ground-borne noise levels?

The Project has the potential to result in excessive ground-borne vibration or ground-borne noise levels during both construction and long-term operation. Each is discussed below.



A. Construction-Related Vibration Impacts

Excessive groundborne vibration impacts result from continuously occurring vibration levels. Increases in groundborne vibration levels attributable to the Project primarily would be associated with short-term construction-related activities. Construction on the Project site would have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. Ground vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. (ECORP, 2020c, p. 58)

1. Construction Equipment Vibration Impacts

Construction-related ground vibration is normally associated with impact equipment such as pile drivers, jackhammers, and the operation of some heavy-duty construction equipment, such as dozers and trucks. Pile drivers would not be utilized during Project construction. Vibration decreases rapidly with distance and construction activities would occur throughout the Project site and would not be concentrated at the point closest to sensitive receptors. Groundborne vibration levels associated with construction equipment are summarized in Table 4.13-20, *Representative Vibration Source Levels for Construction Equipment*. (ECORP, 2020c, p. 58)

Table 4.13-20 Representative Vibration Source Levels for Construction Equipment

Equipment Type	Peak Particle Velocity at 25 Feet (inches per second)
Large Bulldozer	0.089
Caisson Drilling	0.089
Loaded Trucks	0.076
Hoe Ram	0.089
Jackhammer	0.035
Small Bulldozer/Tractor	0.003

(ECORP, 2020c, Table 14)

The County’s Noise Ordinance (Ordinance No. 847) does not regulate vibrations associated with construction. However, County General Plan Policy N 16.3 identifies a standard of 0.01 inch per second RMS for assessing groundborne vibration from rail-related activities. Although the Project would not result in any noise or vibration associated with rail lines, Project construction or operational vibration levels exceeding 0.01 inch per second RMS represent a potentially significant impact, consistent with General Plan Policy N 16.3. (ECORP, 2020c, p. 59)

The nearest existing land use of concern related to onsite construction vibration is Lakeside Middle School located approximately 2,000 feet to the west of the Project site. However, there is a potential that approved residential land uses could be built adjacent to the site’s western or eastern boundary by the time of Project construction. Additionally, the installation of the proposed offsite water line would occur adjacent Lakeside



Middle School and residential land uses on Walnut Street. This activity, which would be expected to include excavators, backhoes, boring equipment, jackhammers, pavers, and other equipment, would be a source of groundborne vibration at these receptors. The proposed water line would be implemented south of the Middle School, largely within the Walnut Avenue right-of-way. (ECORP, 2020c, p. 59)

Based on the representative vibration levels presented for various construction equipment types in Table 4.13-20 and the construction vibration assessment methodology published by the FTA, it is possible to estimate the potential Project construction vibration levels. Table 4.13-21, *Project Construction Vibration Levels*, presents the expected Project related vibration levels at a distance of 65 feet, which is anticipated to occur during the installation of the proposed water main line below Walnut Street. As shown, construction activities have the potential to expose nearby sensitive receptors to groundborne vibration levels exceeding the standard of 0.01 inches/second RMS. Specifically, construction of the off-site water line within Walnut Street could expose the two schools and residences along this roadway segment to groundborne vibration RMS velocity levels of 0.014 in the absence of mitigation. Additionally, if, prior to commencement of on-site construction activities, residential uses are constructed and occupied within the McCanna Hills Specific Plan or on lands to the east of the Project site that are designated for residential development, these residential uses could be significantly impacted by construction-related vibration during construction activities in the northern portions of the Project site. Thus, Project-related vibration impacts would be significant prior to mitigation. (ECORP, 2020c, p. 60)

Table 4.13-21 Project Construction Vibration Levels

Receiver PPV Levels (in/sec) ¹					Peak Vibration	RMS Velocity Levels ²	Threshold	Exceed Threshold
Small Bulldozer	Jackhammer	Loaded Trucks	Large Bulldozer	Drilling				
0.00006	0.00805	0.01748	0.02047	0.02047	0.02047	0.014	0.01	Yes

1. Based on the Vibration Source Levels of Construction Equipment included on Table 4.13-20.

2. Vibration levels in PPV are converted to RMS velocity using a 0.70 conversion factor. (ECORP, 2020c, Table 15)

2. Construction-Related Blasting Vibration Impacts

Project construction also would require blasting in order to remove non-rippable materials at the site proposed for construction of the two off-site water towers, which is located approximately 1,550 feet west of the Project site’s northwest corner (approximately 620 feet from the Middle School). When a blast is detonated, only a portion of the energy is consumed in breaking up and moving the rock. The remaining energy is dissipated in the form of seismic waves expanding rapidly outward from the blast, either through the ground (as vibration) or through the air (as air overpressure or airblast). While a blaster can quite easily design blasts to stay well below any vibration or air overpressure levels that could cause damage, it is virtually impossible to design blasts that are not perceptible by people in the vicinity. As seismic waves travel outward from a blast, they excite the particles of rock and soil through which they pass, causing them to oscillate. Spherical spreading, imperfect coupling, and other factors cause seismic waves to dissipate rapidly with distance, normally by two-



thirds for each doubling of distance from the source. The motion of particles at a given point in the earth is measured when blast vibration is recorded. (ECORP, 2020c, p. 60)

Although residential structures may not be as strongly constructed as engineered structures, it is unusual to find damage to them from blast vibration. In numerous instances, vibration levels far greater than the maximum levels recommended by the US Bureau of Mines or the Office of Surface Mining and Reclamation Enforcement failed to cause damage. With regard to residences, the main issue with blast vibration is the perception of some residents that, because they could hear and feel the blast vibration, the vibration must have caused some damage to their residence. (ECORP, 2020c, p. 60)

While it is virtually impossible to design blasts that are not perceptible by people in the vicinity, a blasting technician can design blasts to stay well below a vibration level of 0.01 in/sec RMS. Most of the factors involved in blast design are interrelated or interactive; correcting one problem may prompt others. Blast vibration is affected by the list of variables identified in Table 4.13-22, *Blast Variables*. These variables are in turn affected by blast design factors. In the absence of a precise blasting plan, there is a potential that blasting-related activities at the off-site water tanks site could result in vibration levels that exceed the 0.01 in/sec PPV RMS threshold. This is evaluated as a potentially significant impact for which mitigation would be required. (ECORP, 2020c, pp. 60-61)

B. Operational-Related Vibration Impacts

Project operations would not include the use of any stationary equipment that would result in excessive vibration levels. While the Project would accommodate heavy-duty trucks, these vehicles can only generate groundborne vibration velocity levels of 0.006 PPV (0.0042 inches/second RMS) at 50 feet under typical circumstances. Therefore, the Project would result in negligible groundborne vibration levels during operations, and impacts would be less than significant. (ECORP, 2020c, p. 62)

4.13.5 CUMULATIVE IMPACT ANALYSIS

The cumulative study area for the issue of noise includes the Project vicinity as well as areas adjacent to roadways evaluated by the Project's TIA (*Technical Appendix LI*). Areas outside of the cumulative study area are too far away to be adversely impacted by noise and ground-borne vibration generated as a result of the proposed Project.

As indicated under the analysis of Threshold a. and b., the Project site is located outside of areas that would be subject to airport-related noise in excess of 55 dBA. There are no components of the proposed Project that would cause or contribute to increased airport-related noise in the area. As such, impacts would be less-than-cumulatively considerable.



Table 4.13-22 Blast Variables

Distance	As the distance from the blast increases, the vibration decreases. However, the blasting must be conducted where it is needed, and smaller charge weights may be necessary if blasting is needed in close proximity to structures.
Site Geology	As the distance between the blast and the recording point increases, geology plays a more dominant role in determining the frequency of the blast vibration and the speed at which the vibration dissipates.
Quantity of Explosive per Delay	The quantity of explosive per delay is one of the major variables in blast design for mitigating vibration. Blast design factors that can affect this include hole diameter and depth, the number of explosive decks, and the method of initiation. Generally, reducing this quantity will reduce the vibration generated, but the powder factor must remain high enough to adequately fracture the material.
Confinement of the Explosive Energy	Confinement is affected by burden and spacing, the quantity (and quality) of stemming, amount of subdrilling, and the location of the initiating device. Highly confined blasts, such as presplitting, generate higher vibration levels per unit weight of explosive. If a certain amount of throw or heave is acceptable or if means are employed to prevent excessive throw, reducing burdens can lower vibration levels appreciably. Bottom initiation will generally result in slightly more vibration than top initiation. However, any vibration benefit that might be gained from shooting from the top down or from reducing the amount of subdrilling can be offset by any additional blasts that may be required if the primary blast does not fracture rock to the full depth.
Powder Factor	The powder factor is affected by almost all blast design factors. The keys are to use as close to the optimum amount of explosive as possible and to distribute it through the material to be blasted in such a way that it will adequately fracture and shift the mass. If the powder factor is too low, it will not adequately fragment the material and a large portion of the available energy will be lost as seismic energy, resulting in excessive blast vibration. If the powder factor is too high, it can result in increased vibration intensities.
Explosive / Borehole Coupling	Although explosive/borehole coupling can affect vibration, the effect is minimal. For example, presplitting uses decoupled charges (there is an annular space between the charge and the wall of the borehole), but results in high vibration levels because the increased burden has a greater impact than the decoupling. Decoupling of explosive charges normally is not used to reduce vibration.
Spatial Distribution of the Energy Source	The spatial distribution of the energy source can affect vibration in terms of intensity and frequency. There are two examples of this. In the first example, two holes separated by a reasonable distance and detonated simultaneously will generate less vibration than one hole containing as much explosive as the two holes combined. The extent of this effect depends largely on the separation distance between the two holes. In a second example, a long column of explosive will generate less vibration than a spherical charge of the same weight.
Timing of Detonating Charges	Extending the delay time between blasts can reduce the amount of energy released per unit of time, reducing vibration to some extent.
Blast Orientation	Blast orientation is usually mandated by terrain and the physical layout of the rock. As a general rule, the highest vibration amplitudes will usually be in a direction opposite of that in which the rock is being heaved or thrown, although local geology may affect the actual direction of maximum intensity.

(ECORP, 2020c, Table 16)

The analysis under Threshold c. indicates that the Project would not generate substantial amounts of construction-related noise that could adversely affect nearby sensitive receptors. Construction activities associated with the proposed Project and other construction projects in the area may overlap, resulting in cumulative periodic noise increases in the local area. However, construction noise impacts primarily affect the areas immediately adjacent to a construction site. Although the adjacent McCanna Hills Specific Plan or



residentially-designated properties to the east of the Project site may be under construction simultaneous with the Project, there would be no sensitive receptors within these areas that could be impacted by Project-related cumulative construction noise while these areas are under construction. Due to distance and intervening topography, the Project's contribution to construction-related noise affecting sensitive receptors in the local area would not be perceptible. Additionally, although the construction of the proposed water line within Walnut Street could occur while construction of the McCanna Hills Specific Plan is under construction, Walnut Street is separated from the proposed development within the McCanna Hills Specific Plan by several large hillforms that would preclude any cumulatively-considerable noise increases. Accordingly, Project-related construction noise impacts would be less-than-cumulatively considerable.

With respect to Project operational noise increases, areas surrounding the Project site are planned for a mixture of residential and open space uses, with areas planned for mixed uses (residential and commercial) located west of the Project site. Planned residential uses would not cumulatively contribute to Project-related operational noise impacts, as residential uses are not associated with operational noise levels exceeding the County's noise standards. However, operational noise associated with the Project, when combined with operational noise associated with areas off-site that are planned for commercial retail development, have the potential to expose nearby sensitive receptors (i.e., residential uses) to noise levels exceeding the County's noise standard. This is evaluated as a cumulatively-considerable impact for which mitigation would be required.

With respect to traffic-related noise impacts, EAPC 2030 and Horizon Year 2040 cumulative traffic noise levels throughout the Project vicinity were previously disclosed in Table 4.13-14 and Table 4.13-15, respectively, for the Primary Land Use Plan/Primary Truck Route. Table 4.13-16 (previously presented) shows the traffic noise levels anticipated under Horizon Year 2040 traffic conditions with implementation of the Alternative Land Use Plan. Table 4.13-18 and Table 4.13-19 show the cumulative noise levels for EAPC 2030 and Horizon Year 2040 traffic conditions, respectively, with implementation of the Primary Land Use Plan/Southern Truck Route. As shown in these tables, none of the study area roadway segments would experience Project-related noise level increases exceeding the FICON thresholds of significance with implementation of the Primary Land Use Plan/Primary Truck Route, Alternative Land Use Plan, or Primary Land Use Plan/Southern Truck Route under EAPC 2030 or Horizon Year 2040 traffic conditions. Accordingly, Project traffic-related noise increases would be less than significant on a cumulatively-considerable basis.

Although Project construction-related vibration has the potential to adversely affect nearby sensitive receptors, it is not expected that Project construction sources of vibration would occur within close proximity of any other sources of vibration. Additionally, it is not expected that Project-related blasting activities would overlap with other sources of vibration in the local area. As such, the Project's construction-related vibration impacts would be less-than-cumulatively considerable. Additionally, the Project would not generate substantial amounts of groundborne noise or vibration during long-term operations, and cumulatively-considerable impacts would therefore be less than significant.



4.13.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Thresholds a. and b.: Less-than-Significant Impact. The Project does not involve an airport-related component, and would not create or exacerbate aircraft-related noise in the local area. The Project site also occurs outside of the 55 dBA CNEL contours for both the MARB Airport and Perris Valley Airport. As such, the Project would not expose people residing or working in the Project area to excessive airport-related noise levels, and impacts would be less than significant.

Threshold c.: Direct and Cumulatively-Considerable Impact. Construction of the proposed off-site water line within Walnut Street would reach a level of 85.0 dBA Leq during the roadway demolition phase. While this would not exceed the NIOSH standard, in order to provide a conservative analysis a significant temporary noise impact is identified for which mitigation would be required. Additionally, Project-related operational noise would potentially exceed on both a direct and cumulatively-considerable basis the County nighttime noise standard of 45 dBA at planned future sensitive receptors within the McCanna Hills Specific Plan (i.e., Receptors 5 through 8), which abuts the Project site's western boundary, as well as future sensitive receptors located east of the Project site and that are designated for residential development by the General Plan. With implementation of the Primary Land Use Plan/Primary Truck Route, the segment of Nuevo Road between the Project site entrance and Dunlap Drive would experience an increase of 1.6 dBA CNEL over the existing condition under EAP 2030 conditions, which would exceed the County residential noise threshold of 1.5 dBA CNEL for roadways currently experiencing noise levels greater than 65 dBA CNEL; thus, Project traffic-related noise impacts along this road segment would be significant under EAP 2030 conditions. Project impacts to the remaining roadway segments under EAP 2030 conditions would be less than significant with implementation of the Primary Land Use Plan/Primary Truck Route, while implementation of the Primary Land Use Plan/Primary Truck Route would result in less-than-significant traffic-related noise impacts under EAPC 2030 and Horizon Year 2040 traffic conditions. As with the Primary Land Use Plan/Primary Truck Route, implementation of the Alternative Land Use Plan would result in significant traffic-related noise increases the segment of Nuevo Road between the Project site entrance and Dunlap Drive under EAP 2030 conditions, while impacts under EAPC 2030 and Horizon Year 2040 conditions would be less than significant. Project traffic-related noise would be less than significant under EAPC 2030 and Horizon Year 2040 conditions with implementation of the Primary Land Use Plan/Southern Truck Route. However, implementation of the Primary Land Use Plan/Southern Truck Route would result in a 2.0 dBA noise increase along the segment of Nuevo Road between the Project site entrance and Dunlap Drive under EAP 2030 conditions, which would exceed the identified threshold of significance of 1.5 dBA CNEL. Accordingly, Project traffic-related noise impacts along this segment of Nuevo Road with implementation of the Primary Land Use Plan/Southern Truck Route would be significant.

Threshold d.: Significant Direct Impact. Project construction activities have the potential to expose sensitive receptors to vibration levels exceeding the County's standard of 0.01 inch/second RMS during the construction of the off-site water line within Walnut Street and during on-site construction activities in the northern portions of the site along the western site boundary, should residential uses be constructed adjacent to the Project's western or eastern boundary prior to commencement of on-site construction activities. Additionally, in the



absence of a precise blasting plan, there is a potential that blasting-related activities during construction of the off-site water tank could result in vibration levels that exceed the 0.01 in/sec PPV RMS threshold.

4.13.7 COUNTY REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

Applicable County Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

- All construction activities and haul truck deliveries shall adhere to Section 2.i of Riverside County Ordinance No. 847, which prohibits construction activities that make loud noise from occurring between 6:00 p.m. and 6:00 a.m. during the months of June through September, and between 6:00 p.m. and 7:00 a.m. during the months of October through May, and on Sundays and Federal holidays.
- Construction and operation of logistics and/or warehouse/distribution uses on site for buildings that exceed 250,000 s.f. in size shall be subject to compliance with the Riverside County Board of Supervisors' Policy F-3 ("Good Neighbor Policy" for Logistics and Warehouse/Distribution Uses).

Mitigation

MM 4.13-1 Prior to issuance of grading permits or improvement plans for the construction of the off-site water line within Walnut Street, and in order to reduce construction noise during its installation, the Riverside County Building and Safety Department shall review to ensure that the following note is included on the plans:

"During the construction of the proposed water main within Walnut Street, all stationary construction equipment shall be surrounded by a temporary noise barrier such as a flexible sound curtain, an 18-ounce tarp, or a two-inch-thick fiberglass blanket. The height of noise control barrier shrouds shall be adequate to obstruct the line-of-site between the construction equipment and nearby sensitive receptors (i.e., residential and school uses)."

The Project construction contractor shall be responsible for enforcing this requirement, which also shall be specified in bid documents issued to prospective construction contractors. The Project construction contractor shall permit inspections by Riverside County to verify compliance with this measure.

MM 4.13-2 Prior to the issuance of grading permits, and in the event that residential uses have been constructed adjacent to the western or eastern Project boundary, the Project Applicant shall prepare and Riverside County shall review and approve a construction-related vibration impact assessment. The required study shall evaluate whether construction activities on the Project



site would expose any existing residential structures to the east or west of the Project site to vibration levels exceeding the County's standard of 0.01 inches/second Route Mean Square (RMS). In the event that the vibration analysis determines that any structures would be exposed to excessive vibration levels, then the grading permits shall be conditioned to incorporate measures as necessary to reduce vibration levels to below 0.01 inches/second RMS at the nearest structures. Measures to reduce the anticipated vibration levels may include, but are not limited to, the prohibition of the use of drilling equipment, large bulldozers, or loaded heavy duty trucks within close proximity to the existing structures. The Project construction contractor shall be responsible for enforcing any of the vibration-attenuation measures identified in the assessment, which also shall be specified in bid documents issued to prospective construction contractors. The Project construction contractor shall permit inspections by Riverside County to verify compliance with the applicable requirements.

- MM 4.13-3 Prior to issuance of grading permits or improvement plans for the construction of the off-site water main within the existing alignment of Walnut Street, the Riverside County Building and Safety Department shall review the improvement plans to ensure that a note is included prohibiting the use of drilling equipment, large bulldozers, or loaded heavy duty trucks within 65 feet of any existing structure. The Project construction contractor shall be responsible for enforcing this requirement, which also shall be specified in bid documents issued to prospective construction contractors. The Project construction contractor shall permit inspections by Riverside County to verify compliance with this measure.
- MM 4.13-4 Prior to the issuance of any blasting permits for the construction of the off-site water tanks, the Project Applicant shall prepare and Riverside County shall review and approve a proposed blasting plan. The blasting plan shall be accompanied by an analysis prepared by a qualified acoustical consultant that demonstrates that Project-related blasting activities would not expose nearby sensitive receptors (i.e., residential and school uses) to groundborne vibration levels exceeding 0.01 inches/second RMS. Riverside County shall condition any required blasting permits to require compliance with the noise analysis recommendations, including recommendations related to the size of the blast charge.
- MM 4.13-5 Prior to approval of any plot plans for proposed light industrial, business park, or commercial retail uses within Planning Areas 1, 2, 3, 4, 5, 6, 8A, or 8B of Specific Plan No. 239, Amendment No. 1, the Project Applicant shall prepare and Riverside County shall review and approve a site-specific noise impact analysis. The analysis shall evaluate the proposed plot plan application materials to determine whether future operations on-site would expose nearby planned sensitive receptors (i.e., residential units), including sensitive receptors within the McCanna Hills Specific Plan or in areas designated for residential uses by the General Plan to the east of the Project site, to noise levels exceeding the County's residential standard of 55 dBA Leq during daytime hours (i.e., between 7:00 a.m. and 10:00 p.m.) and 45 dBA Leq during nighttime hours (i.e., between 10:00 p.m. and 7:00 a.m.). If significant operational-related



noise impacts are anticipated, the County shall ensure that the noise impact analysis identifies and that the plot plans incorporate any noise attenuation measures that may be necessary to reduce operational-related noise impacts affecting off-site residential uses to below the County's residential standard during both daytime and nighttime hours. Noise attenuation measures may include, but are not necessarily limited to, the incorporation of screen walls or other barriers (such as berms). Prior to issuance of building permits, the Riverside County Building and Safety Department shall ensure that any required noise attenuation measures have been incorporated into the plans, and shall verify that the noise attenuation measures have been implemented prior to final building inspection.

4.13.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold c.: Significant and Unavoidable Cumulatively-Considerable Impact. Implementation of Mitigation Measure MM 4.13-1 would ensure that temporary noise barriers are utilized to shield Project-related construction equipment from nearby sensitive receptors (i.e., residences and schools) during the construction of the off-site water main within Walnut Street, and would reduce Project-related construction noise impacts to less-than-significant levels.

Implementation of Mitigation Measure MM 4.13-5 would ensure that site-specific noise impact analyses are prepared in conjunction with future plot plans for light industrial, business park, and commercial retail uses within SP 239A1 Planning Areas 1, 2, 3, 4, 5, 6, 8A, or 8B. The required noise impact analyses would evaluate site-specific development components based on the plot plan application materials, and would identify measures, such as screen walls or other barriers (such as berms), to preclude significant operational-related noise impacts affecting existing or planned residential uses within the adjacent McCanna Hills Specific Plan or on lands located east of the Project site and that are designated by the County's General Plan for residential development. With implementation of the required mitigation, Project impacts due to operational noise increases affecting residential sensitive receptors would be reduced to less-than-significant levels.

Mitigation measures are not available to address the Project's significant traffic-related noise impact to the roadway segment of Nuevo Road between the Project site entrance and Dunlap Road, which would occur under EAP 2030 conditions with implementation of the Primary Land Use Plan/Primary Truck Route, Alternative Land Use Plan, and Primary Land Use Plan/Southern Truck Route. The only means of reducing Project-related noise levels along this segment would be to construct physical barriers (e.g., noise walls or berms) to obstruct the line of sight between the existing residences and traffic along Nuevo Road. However, most of the affected residences have driveway access points along this segment of Nuevo Road, which would require large gaps in the noise attenuation barriers in order to accommodate vehicular access to the driveways. These large gaps in the noise attenuation barriers would maintain a direct line-of-sight between the affected homes and traffic along this segment of Nuevo Road, which would render the noise attenuation barriers ineffective in reducing traffic-related noise levels along this segment to less-than-significant levels. Accordingly, Project traffic-related noise along the segment of Nuevo Road between Antelope Road and Dunlap Drive under EAP 2030 conditions would represent a significant and unavoidable direct impact for which feasible mitigation is not available.



Threshold d.: Less-than-Significant Impact with Mitigation Incorporated: Implementation of Mitigation Measure MM 4.13-2 would ensure that measures are incorporated, if necessary, to preclude the exposure of existing structures to on-site construction-related vibration levels exceeding 0.01 inches/second RMS. Implementation of the required mitigation would reduce the Project's on-site construction-related vibration impacts to below a level of significance.

Implementation of Mitigation Measure MM 4.13-3 would prohibit drilling equipment, large bulldozers, and loaded heavy duty trucks from operating within 65 feet of any existing structure during the construction of the proposed water main within Walnut Street. Implementation of the required mitigation would reduce Project vibration-related impacts along this roadway segment to below the County's threshold of 0.01 inches/second RMS, and would reduce Project impacts to less-than-significant levels.

Implementation of Mitigation Measure MM 4.13-4 would ensure that a blasting plan is prepared for the off-site construction of the proposed water tanks, and that the blasting plan is evaluated by a qualified acoustical consultant. The mitigation would require that conditions of approval be imposed on the blasting permit, if necessary, to preclude blasting-related vibration levels exceeding the County's standard of 0.01 inches/second RMS peak particle velocity. Implementation of the required mitigation and implementation of the measures identified by the acoustical consultant would reduce the Project's potential blasting-related vibration impacts to below a level of significance.



4.14 PALEONTOLOGICAL RESOURCES

The analysis in this Subsection is based in part on a Project-specific Paleontological Resources Monitoring and Mitigation Program (PRMMP) report prepared ECORP Consulting, Inc. (herein, “ECORP”), dated July 31, 2019, and appended to this EIR as *Technical Appendix K* (ECORP, 2019b). The analysis provided herein also is based in part on a Project-specific Updated Geotechnical Evaluation prepared by LGC Geotechnical, Inc., dated August 18, 2021, and appended to this EIR as *Technical Appendix F* (LGC, 2021).

4.14.1 EXISTING CONDITIONS

A. Geological Setting

1. *Regional Geology*

The Project site is located in the Peninsular Range Geomorphic Province of California. This province encompasses western Riverside County. The Project sits near the eastern margin of the Perris Block, which is bounded on the east by the San Jacinto Fault. Crystalline rocks in Moreno Valley include late Jurassic and Cretaceous granitic rocks of the southern California Batholith. These resistant rocks weather to form gray- or tan-colored, boulder covered, conical buttes and hills. (ECORP, 2019b, p. 2)

2. *Local Geology*

Based on the Geologic Map of the 7.5-foot Perris Quadrangle, the Project site is underlain by Very Old Fan Deposits of the late Pleistocene. In addition, Lakeview Mountain plutonic bedrock is present along and adjacent to the western boundary of the Project site. The presence of some minor amounts of artificial fill (not mapped) associated with existing “dirt” roadway construction and past agricultural uses likely occur on site. The approximate lateral limits of the geologic units are depicted on the Geotechnical Maps included in the Project’s Geotechnical Evaluation (refer to Sheets 1 through 3 of EIR *Technical Appendix F*) prepared by LGC Geotechnical, Inc. (herein, “LGC”). Provided below is a description of the geologic units mapped on site. (LGC, 2021, p. 6)

- **Quaternary Very Old Fan Deposits (Map Symbol - Qvof):** Quaternary Very Old Fan deposits generally flank steep bedrock slopes and consist of reddish brown, well indurated sand deposits. During the subsurface field evaluation conducted by LGC, these deposits were observed to generally consist of brown, gray brown, and reddish-brown sand, silty sand and clayey sand. The upper approximately 1-foot of the alluvial material was observed to be desiccated and contained rootlets. (LGC, 2021, p. 6)
- **Cretaceous Lakeview Mountain Tonalite (Map Symbol – Klmt):** The Lakeview Mountain Tonalite is described as a medium to coarse grained biotite-hornblende tonalite with an absence of potassium (alkali) feldspar. During the subsurface field evaluation conducted by LGC, these materials were observed to generally be gray to brown, medium to coarse grained rock with abundant hornblende and biotite. The bedrock ranged from moderately to slightly weathered. (LGC, 2021, p. 6)



Multiple sites within seven miles of the Project have produced Pleistocene mammals and other fossils. In addition, an extensive late Pleistocene biota was recovered from excavations at Diamond Valley Reservoir in Hemet. (ECORP, 2019b, p. 2)

B. Paleontological Resources

1. Records Search

ECORP requested a paleontological records search from the Natural History Museum of Los Angeles County (LACM). The report stated that the museum does not have any fossil localities within one (1) mile of the Project boundaries. The LACM has a record of horse fossil (*Equus*) approximately 10 miles south of the Project site at Railroad Canyon Reservoir. Based on a review of this site it was concluded that shallow excavations in both the coarse older Quaternary Alluvium and the finer-grained younger Quaternary Alluvium found at the surface in the eastern portions of the proposed Project area probably would not contain any near-surface significant vertebrate fossils. Deeper excavations in the latter areas that extend down into the older and perhaps finer-grained sedimentary deposits, however, may well encounter significant fossil vertebrate remains. (ECORP, 2019b, p. 3)

2. Literature Review

Geologic units mapped on site as part of the Project's site-specific updated geotechnical evaluation (EIR *Technical Appendix F*) include Quaternary Very Old Fan Deposits (Qvof) and Cretaceous Lakeview Mountain Tonalite (Klmt). The updated geotechnical evaluation reports that the upper 4 to 12 inches of the Qvof showed rootlets due to agricultural disturbances and uses. No geologic structure was observed in either deposit; the deposits were described as massive. The deepest deposits of Qvof were on the east side of the Project site. One of the test pits did produce caliche (pedogenic calcium carbonate) at a depth of 1.75 to 7.5 feet, and toward the western edge of the Qvof. Caliche can be an indicator of the presence of Pleistocene fossil soils (paleosols).

There are numerous fossil specimens from Diamond Valley Lake, located about 10 miles from the Project site to the southeast. The biota from these localities include spruce trees, mammoths, mastodons, ground sloths, dire wolves, short-faced bears, sabre-toothed cats, large and small horses, large and small camels, and bison.

Recent discoveries in Riverside and other counties in southern California have revealed that paleosols produce vertebrate fossils in some places. There are no published fossils from paleosols in the Perris area, but Pleistocene paleosols have been observed less than 4 miles west and two miles northwest of the Project site in Perris, and also have been observed at Grand Terrace and Moreno Valley.

3. Paleontological Sensitivity

Riverside County has been inventoried for geologic formations known to potentially contain paleontological resources. Lands with high, low, or undetermined potential for finding paleontological resources are mapped on Figure OS-8 (Paleontological Sensitivity Resources Map) of the County's General Plan as well as the County's GIS system. The paleontological sensitivity map is used in the environmental assessment of



development proposals and the determination of required impact mitigation. (Riverside County, 2019a, p. OS-51)

Areas mapped on General Plan Figure OS-8 with a “Low” potential for containing paleontological resources include lands for which previous field surveys and documentation demonstrate as having a low potential for containing significant paleontological resources subject to adverse impacts. The mapping of low potential was determined based on actual documentation and was not generalized to cover all areas of a particular rock unit on a geologic map. (Riverside County, 2015, p. 4.9-11)

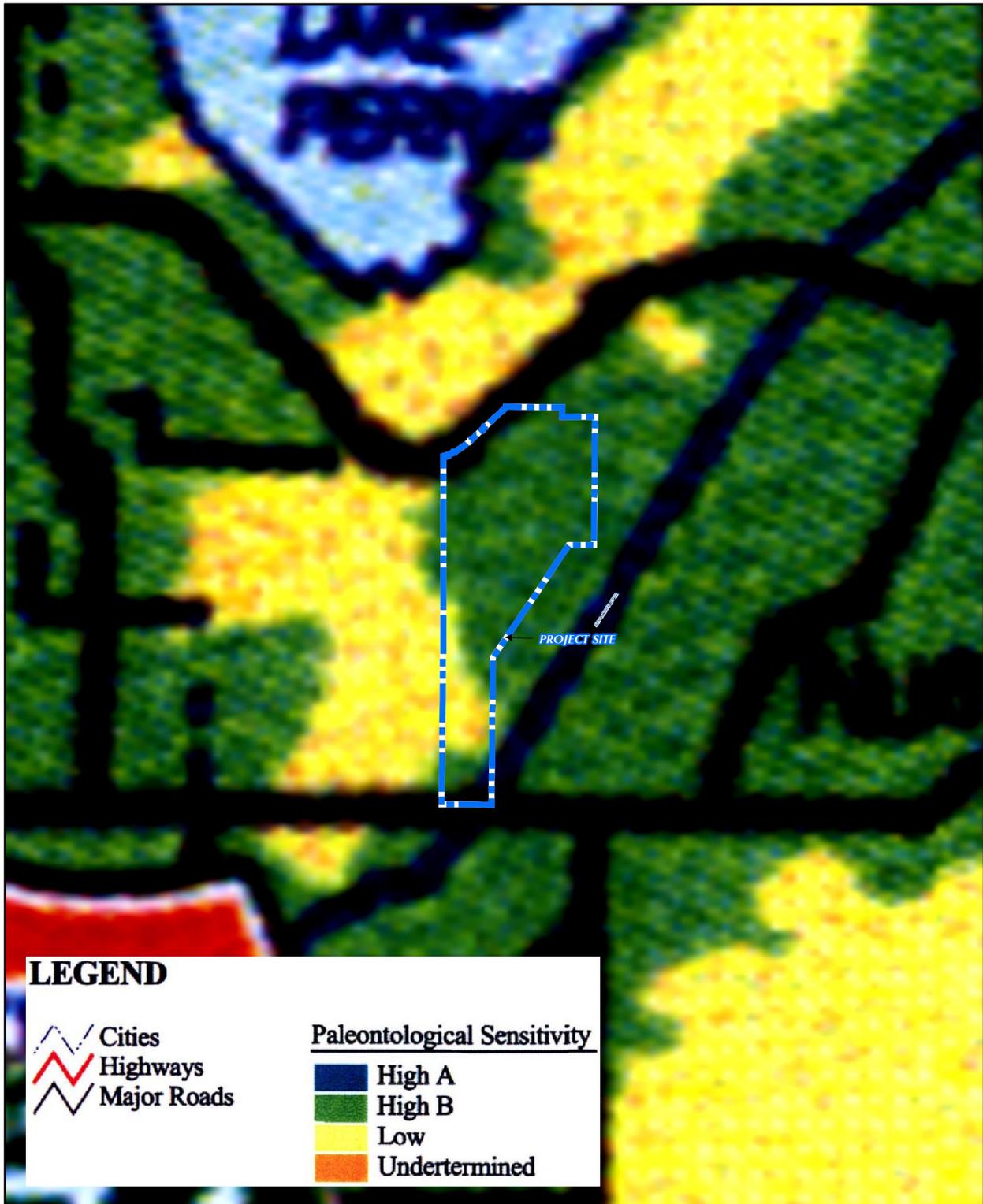
General Plan Figure OS-8 also identifies areas within the County with a “High” potential for containing paleontological resources. Sedimentary rock units with high potential for containing significant non-renewable paleontological resources include rock units in which vertebrate or significant invertebrate fossils have been found or determined likely to be present. These units include, but are not limited to, sedimentary formations which contain significant nonrenewable paleontological resources anywhere within their geographical extent and sedimentary rock units temporally or lithologically suitable for the preservation of fossils. High sensitivity includes not only the potential for yielding abundant vertebrate fossils, but also for production of a few significant fossils that may provide new and significant data. High sensitivity areas are mapped by the General Plan as either “High A” or “High B,” according to the following criteria: (Riverside County, 2015, p. 4.9-11)

- **High Sensitivity A (Ha):** High A is based on geologic formations or mapped rock units that are known to contain or have the correct age and depositional conditions to contain significant paleontological resources. These include rocks of Silurian or Devonian age and younger that have potential to contain remains of fossil fish, and Mesozoic and Cenozoic rocks that contain fossilized body elements and trace fossils such as tracks, nests, and eggs. (Riverside County, 2015, p. 4.9-11)
- **High Sensitivity B (Hb):** High B is a sensitivity equivalent to High A, but is based on the occurrence of fossils at a specified depth below the surface. This category indicates fossils that are likely to be encountered at or below 4 feet of depth and may be impacted during construction activities. (Riverside County, 2015, p. 4.9-11)

As depicted on Figure 4.14-1, *Paleontological Sensitivity Map*, 453.6 acres of the 582.6-acre Project site are mapped as having a “High B (Hb)” sensitivity for containing paleontological resources, while 129.0 acres within the southern and northern areas of the Project site are mapped as having a “Low” sensitivity for containing paleontological resources. (Riverside County, 2019a, Figure OS-8)

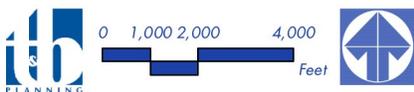
4.14.2 APPLICABLE REGULATORY REQUIREMENTS

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



Source(s): RCIP (2002)

Figure 4.14-1



Paleontological Sensitivity Map



A. Federal Regulations

1. *Paleontological Resources Preservation Act*

The Paleontological Resources Preservation Act (PRPA) was signed into law on March 30, 2009 (Public Law 111-11, Title VI, Subtitle D; 16 U.S.C. §§ 470aaa - 470aaa-11). PRPA directs the Department of Agriculture (U.S. Forest Service) and the Department of the Interior (National Park Service, Bureau of Land Management, Bureau of Reclamation, and Fish and Wildlife Service) to implement comprehensive paleontological resource management programs. Section 6310 of PRPA specifically states, "As soon as practical after the date of enactment of this Act, the Secretary shall issue such regulations as are appropriate to carry out this subtitle, providing opportunities for public notice and comment." (NPS, n.d.)

B. State Regulations

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

Section 4308, *Archaeological Features*, of Title 14 of the California Administrative Code provides that: "No person shall remove, injure, disfigure, deface, or destroy any object of archaeological, or historical interest or value." (CDPR, 2020)

2. *California Public Resources Code*

Public Resources Code § 5097.5 states that "A person shall not knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands." Public Resources Code § 30244 states that, "Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required." (FindLaw, 2020a)

C. Local Regulations

1. *Riverside County Planning Department Procedures*

In order to ensure the review and protection of paleontological resources for projects subject to CEQA and not otherwise categorically exempt, the Riverside County Geologist performs an initial review of the County of Riverside's database and mapped information for the subject site. When existing information indicates that a site proposed for development has high paleontological sensitivity, a paleontological resource impact mitigation program (PRIMP) is required for the project. The PRIMP shall specify the steps to be taken to mitigate impacts to paleontological resources. If the site warrants protection, then an "Environmental Constraint" is placed on the approved map for the project, stating that: (Riverside County, 2015, pp. 4.9-26 and -27)



“This site, as delineated on this [Environmental Constraint Sheet] map and as indicated in the county’s General Plan, has been mapped as having a high potential for containing significant nonrenewable fossil material. The proposed project’s potential to impact paleontological resources has been determined to be possible. Therefore, mitigation of this potential impact in the form of monitoring of all site earth-moving activities and collection/curation of all significant fossils unearthed is required unless proven unnecessary through comprehensive literature research and site inspection.”

When existing information indicates that a site proposed for development has low paleontological sensitivity, no direct mitigation is required unless a fossil is encountered during site development. Should a fossil be encountered, the Riverside County Geologist must be notified and a paleontologist must be retained by the project proponent. The paleontologist documents the extent and potential significance of the paleontological resources on the site and establishes appropriate mitigation measures for further site development. (Riverside County, 2015, p. 4.9-27)

When existing information indicates that a site proposed for development has undetermined paleontological sensitivity, a report is filed with the Riverside County Geologist documenting the extent and potential significance of the paleontological resources on site and identifying mitigation measures for the fossil and for impacts to significant paleontological resources. (Riverside County, 2015, p. 4.9-27)

4.14.3 BASIS FOR DETERMINING SIGNIFICANCE

Section VII of Appendix G to the State CEQA Guidelines addresses typical adverse effects paleontological resources, and includes the following threshold question to evaluate the Project’s impacts to paleontological resources (OPR, 2018a):

- Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Significance thresholds are set forth in Riverside County’s Environmental Assessment Checklist, as modified based on the 2018 updates to Section VII of Appendix G to the State CEQA Guidelines (listed above), and indicate significant impacts would occur if the Project or any Project-related component would:

- a. Directly or indirectly destroy a unique paleontological resources, site, or unique geologic feature.*

The significance threshold set forth in Riverside County’s Environmental Assessment Checklist, as modified by the 2018 updates to the State CEQA Guidelines, was used to evaluate the significance of the proposed Project’s impacts on paleontological resources.



4.14.4 IMPACT ANALYSIS

Threshold a.: Would the Project directly or indirectly destroy a unique paleontological resources, site, or unique geologic feature?

There are no unique geologic features on site. Although there is an existing hillform that partially occurs along the western Project boundary in the southern portions of the site, this hillform does not exhibit any unique geologic features. Furthermore, a majority of the on-site portions of this hillform would be preserved in open space planning areas, as proposed by SP 239A1. As such, no impacts to unique geologic features would occur with Project implementation.

Based on the paleontological records search and historical document review conducted by ECORP, the geologic mapping shows some Pleistocene sediments at the surface, Pleistocene fossil soils have been found in several nearby areas, and Pleistocene vertebrate fossils have been found in the vicinity. Furthermore, Riverside County General Plan Figure OS-8 indicates that a majority of the Project site has a “High B” potential for containing paleontological resources. As such, implementation of the Project has the potential to result in direct and indirect impacts to unique paleontological resources. This is evaluated as a significant impact for which mitigation would be required.

4.14.5 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development in the vicinity of the Project site, including buildout of the Riverside County General Plan Land Use Plan and the general plans of cities throughout western Riverside County. This cumulative study area was selected for analysis because it encompasses a region in which geological conditions, and thus paleontological sensitivity, are similar to what occurs in the immediate vicinity of the Project site.

As indicated under the analysis of Threshold a., the Project site is mapped as containing geological formations that have a “High B” sensitivity for containing paleontological resources, and the Project has the potential to directly impact unique paleontological resources that may be present on the Project site. Additionally, Pleistocene fossil soils have been found in several nearby areas, and Pleistocene vertebrate fossils have been found in the vicinity. Other developments within the region occurring on soils/geologic units with a “high” potential for containing paleontological resources also have the potential to impact subsurface unique paleontological resources during grading and excavation. Therefore, the Project’s potential impacts to paleontological resources on site would be cumulatively considerable.

4.14.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a.: Significant Direct and Cumulatively-Considerable Impact. The Project would not impact any known paleontological resources or unique geological features. However, the Project site is underlain by soils and geologic units with a “High B” potential for containing unique paleontological resources. Thus, there is a



potential for impacts to paleontological resources that during Project grading and excavation. This is evaluated as a significant impact on both a direct and cumulatively-considerable basis.

4.14.7 COUNTY REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

Mitigation

MM 4.14-1 Prior to the issuance of grading permits, the Project Applicant shall retain a qualified paleontologist approved by the County to create and implement a Project-specific plan for monitoring site grading/earthmoving activities (Project paleontologist). The Project paleontologist retained shall review the approved development plan and grading plan and conduct any pre-construction work necessary to render appropriate monitoring and mitigation requirements as appropriate. These requirements shall be documented by the project paleontologist in a Paleontological Resource Impact Mitigation Program (PRIMP). This PRIMP shall be submitted to the County Geologist for approval prior to issuance of a Grading Permit. Information to be contained in the PRIMP, at a minimum and in addition to other industry standards and Society of Vertebrate Paleontology standards, are as follows:

- Prior to issuance of grading permits, a qualified vertebrate paleontologist (“Project Paleontologist”) shall review the Project grading plans and geotechnical report data, with particular regard to location and depth of earth moving and the rock unit(s) being encountered. The review is for the purpose of assessing potential for fossil remains being encountered by earth moving. If previously undisturbed strata with potential for containing fossil remains will be encountered by earth moving, the following measures shall be implemented.
 - Museum Storage Agreement. The Western Science Center (WSC), Natural History Museum of Los Angeles County (LACM), San Diego Natural History Museum (SDNHM), San Bernardino County Museum (SBCM), or Riverside Municipal Museum (RMM) shall be the designated museum repository for any vertebrate, invertebrate, and plant fossil remains and associated specimen data and corresponding geologic and geographic site data that might be recovered from the site as a result of the PRIMP. Prior to any earth moving at the Project site, the paleontologist shall develop a formal agreement with the museum regarding final disposition and permanent storage and maintenance of the fossil collection and associated data. The agreement shall cover, but not necessarily be limited to, museum requirements regarding: 1) level of treatment of the collection; 2) storage and maintenance fees, if any; 3) purchase of specimen storage cabinets and drawers, as well as specimen trays, vials, specimen data cards, and other curatorial supplies, if required.
 - Discovery Clause/Treatment Plan. As part of the PRIMP, the Project Paleontologist shall develop a discovery clause/treatment plan (DC/TP) to allow for the additional



tasks (recovery, geologic mapping, fossiliferous rock sample processing, specimen preparation, identification, curation, cataloguing, data entry, specimen storage, and maintenance by museum) and manpower required to treat a large or productive fossil occurrence that cannot be treated without diverting the monitor from routine monitoring. The DC/TP shall also include approved procedures and lines of communication to be followed by specific individuals if fossil remains are uncovered by earth moving, particularly when a paleontologic monitor is not present at the site. Names and telephone numbers of contact personnel shall be included in the lines of communication. The preparation of the required PRIMPs for future grading permits would ensure compliance with these requirements.

- Pre-Construction Meeting. The Project Paleontologist or field supervisor, as well as a paleontologic construction monitor, shall attend a preconstruction meeting to explain the PRIMP to construction contractor and the developer's construction workers. The presentation shall summarize mitigation procedures to be employed by PRIMP personnel and shall detail procedures and lines of communication to be followed by specific Project personnel when fossil remains are found at the site.

The Project Paleontologist or field supervisor shall inform the construction contractor and the developer's construction workers of the following items:

- 1) Routine mitigation measures (primarily monitoring and test screening) to be employed by a monitor during earth moving.
- 2) The potential for fossil remains being uncovered by earth moving in particular areas of the site and the need to implement specific actions and additional mitigation measures when a fossil occurrence is uncovered by earth moving.
- 3) Functions and responsibilities of the monitor when fossil remains are uncovered by earth moving and can be recovered without diverting the monitor from monitoring (temporarily divert earth moving around fossil site until remains evaluated, recovered, and earth moving allowed to proceed through site by monitor; if approved by construction contractor, enlist assistance of earth-moving equipment and operator to expedite recovery of remains, obviate need for additional personnel, and reduce any potential construction delay).
- 4) Functions and responsibilities of the monitor when a fossil occurrence is uncovered by earth moving and is sufficiently large or productive that it cannot be recovered without diverting the monitor from monitoring.
 - 4a) Flag the site.
 - 4b) Advise construction contractor to avoid fossil site until further notice.
 - 4c) Call the Project Paleontologist or field supervisor to site.



- 5) Functions and responsibilities of the Project Paleontologist or field supervisor when notified by the monitor that a large or productive fossil occurrence has been uncovered by earth moving and cannot be recovered without diverting the monitor from monitoring. Evaluate occurrence to determine if recovery is warranted.
 - 5a) If recovery is warranted, notify construction contractor and the Project developer of necessity for implementing additional mitigation measures specified in DC/TP initiating increased level of monitoring, if not already in effect, in immediate vicinity of fossil site and assigning additional personnel to PRIMP.
 - 5b) Within 24 hours, mobilize recovery crew to recover occurrence; supervise recovery of occurrence and its transport to laboratory facility or to location elsewhere at site approved by construction contractor for initial/field processing of a fossiliferous rock sample or to laboratory facility for preparation of a fossil specimen.
 - 5c) If warranted and approved by construction contractor, enlist assistance of the earth-moving equipment and operator to expedite recovery of occurrence.
 - 5d) To obviate need for additional personnel and reduce any potential construction delay, after recovery of occurrence, have construction contractor allow earth moving to proceed through fossil site.
 - 5e) Notify Project developer of recovery (or of decision not to recover fossil occurrence, if appropriate) and of authorization for earth moving to proceed through fossil site.
- 6) Responsibilities of the construction contractor and earth-moving equipment operators if fossil remains are uncovered by earth moving, particularly if a monitor is not present at the site when the remains are encountered.
 - 6a) Avoid disturbance of fossil site by earth moving.
 - 6b) Notify monitor, the Project Paleontologist or the field supervisor and Project developer of the fossil occurrence.
 - 6c) Avoidance of fossil site by earth-moving activities.
 - 6d) Assist with equipment and operator to expedite recovery of occurrence.

If warranted, the Project Paleontologist or field supervisor and a monitor shall give a similar presentation to the earth-moving equipment operators at one of their earliest safety meetings. The operators shall be instructed on recognizing fossil remains in the field, informed of their responsibilities if they observe fossil remains when the monitor is not present at the site (avoid disturbance of occurrence by earth moving; have construction contractor call monitor to fossil site; expedite recovery of



occurrence, if requested), and advised that unauthorized collecting of fossil remains is illegal.

- Monitoring Earth Moving. Earth moving shall be monitored by a paleontologic monitor only in those areas of the site where earth moving will disturb soils greater than 5 feet deep (monitoring will not be conducted in areas in which soils will be buried, but not disturbed). Monitoring shall not be implemented until earth moving has reached a depth of 5 feet below current grade. Monitoring shall consist of visually inspecting freshly exposed rock and debris for larger fossil remains and periodically dry test screening a small (25 pound) sample of rock and debris with a 20-mesh box screen for smaller vertebrate fossil remains. Monitoring shall be conducted on a full-time basis. However, if too few or no fossil remains are uncovered by earth moving in areas underlain by a particular rock unit, monitoring can be reduced, generally, to half or quarter time or suspended once 50% of earth moving in the area underlain by the rock unit has been completed. Alternatively, if sufficient fossil remains are uncovered by earth moving, monitoring may be increased in areas underlain by the fossil-bearing rock unit, at least in the immediate vicinity of the fossil site.

- Large-Specimen Evaluation and Recovery Option.

- 1) If a large fossil specimen is found as a result of monitoring earth moving and the specimen can be recovered without significantly diverting the monitor from monitoring, earth moving shall be temporarily diverted around the fossil site and the specimen shall be evaluated, and, if warranted, excavated, covered with a protective plaster-impregnated burlap jacket, if required, and recovered.

If necessary, earth-moving equipment and an operator shall be enlisted to expedite recovery of the specimen and obviate the need for additional personnel, and the construction contractor shall be allowed to have earth moving proceed through the fossil site immediately after recovery of the specimen. A temporary field number shall be assigned to the specimen; the field number, a preliminary field identification, and pertinent specimen (field number, identification by taxon and element) and geologic (particularly stratigraphic level within rock unit) and geographic site data (location, elevation) recorded in the monitor's daily monitoring log; and the field number recorded and the fossil site location plotted on a map of the site.

At the end of the day the monitor or (following his next site inspection) the field supervisor shall transport the fossil remains and associated data to a laboratory facility for further treatment. If appropriate, samples of fossil wood will be submitted for carbon-14 dating analysis.



- 2) If a fossil specimen is found and is sufficiently large that it cannot be recovered without significantly diverting the monitor from monitoring, the fossil site shall be flagged with colored survey ribbon to temporarily divert earth moving around the site, the construction contractor shall be advised to avoid the site until further notice, and the Project Paleontologist or field supervisor shall be called to the site. The grading contractor will notify the Project developer and Project Paleontologist of the occurrence and of the avoidance of the site. The Project Paleontologist or field supervisor in turn shall evaluate the specimen to determine if recovery is warranted.
 - 2a) If specimen recovery is not warranted, no further action will be taken to preserve the fossil site or remains, and the construction contractor will be allowed to have earth moving proceed through the site immediately.
 - 2b) If specimen recovery is warranted, the Project Paleontologist or field supervisor shall notify the construction contractor and Project developer of the necessity for implementing additional mitigation measures specified in the DC/TP, initiating full-time monitoring, if not already in effect, at least in the immediate vicinity of the site in areas underlain by the fossil-bearing rock unit, and assigning additional personnel to the PRIMP. Within 24 hours a recovery crew shall be mobilized to recover the specimen. The size of the crew shall reflect the size of the specimen and the need to recover the specimen as quickly as possible.

The specimen shall be excavated with hand tools, covered with a protective plaster-impregnated burlap jacket, and recovered. If necessary and approved by the construction contractor, earth-moving equipment and an operator shall be enlisted to expedite recovery of the specimen, reduce any potential construction delay, and obviate the need for additional personnel. The construction contractor shall be allowed to have earth moving proceed through the fossil site immediately after recovery of the specimen.

A temporary field number shall be assigned to the specimen; the field number, a preliminary field identification, and pertinent specimen (field number, identification by taxon and element) and geologic (particularly stratigraphic level within rock unit) and geographic site data (location, elevation) recorded in the monitor's daily monitoring log; and the field number recorded and the fossil site location plotted on a map of the site. The field supervisor and, if necessary, a crew member shall transport the fossil specimen and associated site data to a laboratory facility for further treatment.

- Small-Specimen Sample Evaluation, Recovery, and Processing. If a sufficient number of smaller vertebrate fossil remains are found at one (1) site as a result of test screening



by the paleontological monitor, the fossil site shall be flagged with colored survey ribbon to temporarily divert earth moving around the site. The construction contractor shall be advised to avoid the site until further notice, and if requested by the monitor to expedite recovery of a fossiliferous rock sample reduce any potential construction delay and obviate the need for additional personnel, the construction contractor shall have earth-moving equipment and an operator acquire a rock sample from the fossil site and transport the sample, if possible, to a nearby temporary location at the site approved by the construction contractor.

If a sample is recovered, the construction contractor shall be allowed to have earth moving proceed through the fossil site immediately after recovery of the sample. The Project Paleontologist or field supervisor shall be called to the fossil/storage site to determine if the fossil site/sample is sufficiently productive to warrant recovery of a large sample of fossiliferous rock to process for additional small remains.

- 1) If the site/sample is determined too unproductive or the remains too poorly preserved or insufficiently diagnostic, no further action will be taken to preserve the fossil site/sample or remains, and the construction contractor will be allowed to have earth moving proceed through the fossil/storage site immediately.
- 2) If sample recovery is warranted, the Project Paleontologist or field supervisor shall notify the construction contractor and Project developer of the necessity for implementing additional mitigation measures specified in the DC/TP and assigning additional personnel to the PRIMP.
 - 2a) Within 24 hours, a recovery crew shall be mobilized to recover the sample. The size of the crew shall reflect the need to recover the sample as quickly as possible. The field supervisor shall record the size and supervise recovery of the sample. Up to 3 tons of fossiliferous rock shall be recovered. The sample shall be excavated with hand tools for recovery. If necessary and if approved by the construction contractor, earth-moving equipment and an operator shall be enlisted to expedite transportation of the sample to the processing facility site, obviate the need for additional personnel, and reduce any potential construction delay and the construction contractor will be allowed to have earth moving proceed through the fossil site immediately after recovery of the sample.
 - 2b) A temporary field number shall be assigned to the sample; the field number and pertinent specimen (field number, identification by taxon and element) and geologic (particularly stratigraphic level within rock unit) and geographic site data (location, elevation) recorded in the monitor's daily monitoring log; and the field number recorded and the fossil site location plotted on a map of the site. The field supervisor and, if necessary, a crew



member will transport the sample to a location elsewhere at the site approved by the construction contractor or to an offsite location for initial/field processing (wet screening) of the sample. The total weight of all samples from each fossil-bearing rock unit at the site shall not exceed 3 tons.

- 2c) If warranted, the field supervisor shall setup a field processing facility for wet screening the sample at a site location approved by the construction contractor. Wet screening shall consist of sieving rock through a 20- (and/or finer) mesh box screen immersed in a tub of water to remove the smaller (clay and silt) particles from the larger (sand and rock) particles and small fossil remains, and could result in a reduction in sample weight/volume in excess of 90%. If necessary, rock shall be soaked in an environmentally safe dispersant (citrus oil) prior to screening to improve the separation of the clay particles from the rest of the sample during screening. The monitor shall conduct wet screening if screening can be accomplished without diverting the monitor from monitoring. If it is not possible to have the monitor perform the wet screening, a field technician shall be assigned to the task. Following the next site inspection, the field supervisor will transport the concentrate (larger particles and small fossil remains) generated by initial processing to a laboratory facility for final/laboratory processing.
- 2d) If the fossil remains in the concentrate are sufficiently fossilized (dense), an environmentally safe heavy liquid (sodium polytungstate), if appropriate, shall be used by the senior vertebrate paleontologist to separate the remains from the remaining sand and rock particles. When added to a beaker filled with heavy liquid, the concentrate will separate, the particles floating to the surface, and the remains sinking to the bottom, from where they are retrieved. This technique can result in a further sample weight/volume reduction in excess of 90% (less than 1% of original sample size). The final concentrate shall be examined under a microscope and fossil specimens recovered from any remaining sand and rock particles. If the fossil bone in the original concentrate is not sufficiently dense for use of the heavy-liquid separation technique, the entire sample of concentrate shall be sorted under a microscope for fossil remains. Recovered fossil remains shall then be treated as outlined herein.
- 2e) During the final processing of a sample, the senior vertebrate paleontologist shall continually evaluate the results of field and laboratory processing. If the sample is insufficiently productive or the fossil remains, too poorly preserved, the senior vertebrate paleontologist shall have the option of discontinuing further laboratory processing of the sample, having field processing of the remainder of the sample suspended, and disposing of the remainder of the sample and unprocessed concentrate. Similarly, processing



shall be discontinued if, after preliminary identification of some specimens, the remains are determined insufficiently diagnostic or diverse taxonomically, or the species represented are the same as those in another sample from the fossil-bearing rock unit. If appropriate, small splits from one or more samples shall be submitted for palynological analysis.

- Fossil Treatment. Final treatment of all fossil specimens recovered from the site as a result of the PRIMP shall be conducted at a laboratory facility. Larger vertebrate fossil specimens shall be removed from their protective jackets, prepared to the point of identification using hand tools, and hardened or stabilized with a penetrating solution by a preparator. All recovered fossil specimens shall be identified to the lowest taxonomic level possible by knowledgeable vertebrate and invertebrate paleontologists and, if required, other knowledgeable paleontologists (i.e., paleobotanists, micropaleontologists, palynologists). The specimens shall then be curated (assigned and labeled with museum specimen data and corresponding site numbers, placed in specimen trays and, if appropriate, vials with completed specimen data cards), catalogued (specimen and site numbers and specimen data and corresponding geologic and geographic site data, respectively, archived [entered into appropriate catalogs and computerized databases]), and accessioned into the museum fossil collection, where they will be permanently stored, maintained, and, along with associated data, made available for future study by qualified investigators. With the possible exception of those tasks (curation, cataloging) that might be conducted by museum staff, all treatment of the fossil specimens shall be conducted by a laboratory technician. Fossil specimen preparation, identification, curation, and cataloging are now required before a fossil collection will be accepted by most museum repositories, including the WSC, LACM, SDNHM, SBCM, and RMM. Moreover, the scientific importance of a fossil specimen cannot be evaluated until the specimen has been identified to the lowest taxonomic level possible, and specimen identification often is not possible without prior preparation.
- Final Report. A final technical report of findings shall be prepared by the Project Paleontologist and shall describe the site's stratigraphy, summarize field and laboratory methods employed during the PRIMP, include a taxonomic list and an inventory of catalogued fossil specimens recovered as a result of the PRIMP, evaluate the scientific importance of the specimens, and discuss the relationship of the fossil assemblage from any newly recorded fossil site at the project site to relevant fossil assemblages from fossil sites in other areas. The report shall be submitted to the contractor and County Geologist. Submission of the final report will signify completion of the PRIMP and will ensure Project compliance with Public Resources Code Section 21081.6 (mitigation monitoring, reporting, and compliance).



All reports shall be signed by the Project paleontologist and all other professionals responsible for the report's content (e.g. Project Geologist), as appropriate. One original signed copy of the report(s) shall be submitted to the County Geologist along with a copy of this condition and the grading plan for appropriate case processing and tracking. These documents should not be submitted to the Project Planner, Plan Check staff, Land Use Counter or any other County office. In addition, the Project Applicant shall submit proof of hiring (i.e. copy of executed contract, retainer agreement, etc.) a Project paleontologist for the in-grading implementation of the PRIMP.

4.14.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a.: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.14-1 would ensure that a PRIMP is prepared prior to issuance of any grading permits that have the potential to affect subsurface paleontological resources. Implementation of a PRIMP would ensure that paleontological resources, if uncovered during site grading activities, are appropriately treated, and would reduce the Project's direct and cumulatively-considerable impacts to paleontological resources to less-than-significant levels.



4.15 POPULATION AND HOUSING

The following analysis discloses existing population and housing data from Riverside County and assesses the potential for impacts on population and housing associated with implementation of the Project. The analysis in this Subsection is based on information contained in the Riverside County General Plan (Riverside County, 2019a) and addresses population and housing projections and requirements from the Southern California Association of Governments (SCAG). Refer to Section 7.0, *References*, for a complete list of reference sources.

4.15.1 EXISTING CONDITIONS

Under existing conditions, the 582.6-acre Project site is vacant and undeveloped. A majority of the flatter portions of the Project site were previously subject to agricultural activity, and are routinely disced for fire abatement purposes.

As indicated in Section 2.0 of this EIR, the Project site is located within the Lakeview/Nuevo Area Plan (LNAP) of the Riverside County General Plan. The Project site also is located within the boundaries of the Stoneridge Commerce Center Specific Plan (SP 239). Though the entire Project site is vacant and undeveloped, the General Plan and LNAP designate the property for “Community Center (CC),” “Commercial Retail (CR),” “Medium Density Residential (MDR),” “Medium High Density Residential (MHDR),” “Very High Density Residential (VHDR),” “Open Space – Recreation (OS-R),” “Open Space – Conservation (OS-C),” “Open Space – Conservation Habitat (OS-CH),” and “Open Space – Water” land uses. The adopted SP 239 allows for up to 718 “Medium Residential (2-5 du/ac)” dwelling units on 185.0 acres; 903 “Medium-High Residential (5-8 du/ac)” dwelling units on 185.0 acres; 446 “Very High Residential (14-20 du/ac)” dwelling units on 30.0 acres; “Commercial” uses on 75.0 acres, which also allows for up to 169 dwelling units in Planning Area 1; “Parks” on 33.7 acres; “Open Space – Natural” on 20.8 acres; “Open Space – Recreational” on 8.6 acres; three planning areas designated for “Schools” on 27.0 acres; and 40.3 acres of major circulation facilities

A. Population Projections

The Project site is located within unincorporated Riverside County, immediately east of the City of Perris. According to SCAG’s draft 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (“RTP/SCS”; also referred to as “Connect SoCal”), and as shown in Table 4.15-1, *SCAG Region Projected 2000-2045 Growth Forecast*, in 2000 the SCAG region had a population of approximately 16,574,000 persons. The population within the County is expected to increase to 22,504,000 persons by 2045, reflecting a 35.7% increase in population over the 45-year period. While the annual rate of household growth has steadily tracked upward since its low of 0.2 percent in 2010, household growth in the SCAG region remains much flatter than before the Great Recession (0.6 percent from 2017-2019). After losing over 700,000 jobs between 2007 and 2010, the region has experienced tremendous job growth between 2010 and 2019, reaching nearly 8.7 million jobs and cresting the previous high of 8.1 million reached in 2007. (SCAG, 2020d, Demographics and Growth Forecast Technical Appendix)



Table 4.15-1 SCAG Region Projected 2000-2045 Growth Forecast

	2000	2010	2016	2045
Population	16,574,000	18,076,000	18,832,000	22,504,000

(SCAG, 2020d, Demographics and Growth Forecast Technical Appendix, Table 3)

4.15.2 APPLICABLE ENVIRONMENTAL REGULATIONS

The following is a brief description of the federal, State, and local environmental laws and related regulations governing environmental topics related to population and housing.

A. Federal Plans, Policies, and Regulations

1. *Fair Housing Act*

The federal Fair Housing Act protects people from discrimination when they are renting or buying a home, getting a mortgage, seeking housing assistance, or engaging in other housing-related activities. Additional protections apply to federally-assisted housing. (HUD, n.d.)

2. *U.S. Census Bureau*

The U.S. Census Bureau is the leading source of statistical information about the nation’s people. Population statistics come from decennial censuses, which count the entire U.S. population every ten years, along with several other surveys. The American Community Survey (ACS) is an ongoing annual survey intended to help communities decide where to target services and resources. Demographic surveys measure income, poverty, education, health insurance coverage, housing quality, crime victimization, computer usage, and many other subjects. Economic surveys are conducted monthly, quarterly, and yearly, and cover selected sectors of the nation’s economy. (USCB, n.d.)

B. State and Regional Plans, Policies, and Regulations

1. *State Housing Law*

The State law regulating residential occupancies is entitled the “State Housing Law” and is found in Division 13, Part 1.5 of the California Health and Safety Code (HSC), Sections 17910 to 17998.3 Regulations implementing the State Housing Law mandate statewide residential building standards for new construction, which are found in the California Code of Regulations, Title 24, also referred to as the California Green Building Standards Code (CalGreen). (CA Legislative Info, n.d.)

2. *Southern California Association of Governments (SCAG)*

SCAG determines regional housing needs and the share of the regional needs to be addressed by Riverside County and its constituent cities. SCAG is a Joint Powers Agency and is the designated Council of Governments (COG), Regional Transportation Planning Agency (RTPA), and Metropolitan Planning Organization (MPO) for the six-county region of Los Angeles, Orange, Ventura, San Bernardino, Riverside, and Imperial counties. SCAG’s Regional Comprehensive Plan and Guide (RCPG) and Regional Housing



Needs Assessment (RHNA) are tools for coordinating regional planning and housing development strategies in southern California. (SCAG, 2020a)

3. *Regional Housing Needs Assessment (RHNA)*

State Housing Law (California Government Code Article 10.6, Sections 65580-65590) mandates that local governments, through Councils of Governments (COGs), identify existing and future housing needs in a Regional Housing Needs Assessment (RHNA). The RHNA provides recommendations and guidelines to identify housing needs within counties and cities. The County of Riverside addresses its RHNA allocation through its General Plan Housing Element. The RHNA prepared by SCAG projects the County’s share of regional housing need for 2014-2021 as 30,303 homes, as summarized in Table 4.15-2, *Regional Housing Needs Allocation Unincorporated County (2014-2021)*. (SCAG, 2020c; Riverside County, 2017, Table H-31)

Table 4.15-2 Regional Housing Needs Allocation Unincorporated County (2014-2021)

Income Category	Allocation
Extremely Low	3,586
Very Low	3,587
Low	4,871
Moderate	5,534
Above Moderate	12,725
Total	30,303

(Riverside County, 2017, Table H-31)

C. Local Plans, Policies, and Regulations

1. *Riverside County General Plan Housing Element*

The 2017-2021 Housing Element identifies and establishes County policies intended to fulfill the housing needs of existing and future residents in Riverside County. It establishes policies that guide County decision-making and set forth an action plan to implement its housing goals. The Housing Element includes a review of previous housing goals, an assessment of the effectiveness of those goals, and an assessment of housing needs. Additionally, the Housing Element includes an inventory of resources and constraints related to meeting housing needs in the County; an analysis of affordable housing developments and programs intended to preserve such housing; community goals for the maintenance, preservation, improvement and development of housing; and a program which sets forth a five-year schedule of actions that the County is undertaking or intends to undertake in implementing the polices set forth in the Housing Element. (Riverside County, 2017, p. H-3)

2. *SCAG Regional Transportation Plan/Sustainable Communities Strategy*

SCAG is a joint-powers authority (JPA) under California State law, established as an association of local governments and agencies that convene as a forum to address regional issues. On May 7, 2020, SCAG’s Regional Council adopted Connect SoCal (2020-2045 Regional Transportation Plan/Sustainable Communities Strategy) for federal transportation conformity purposes, with the full plan scheduled for adoption within 120



days from May 7, 2020. The draft RTP/SCS is intended to create a plan for defining and solving regional problems including housing, traffic, water, air quality, and other regional challenges. The draft RTP/SCS builds upon the elements of existing local general plans and provides a blueprint for where and how the Southern California area will grow. (SCAG, 2020d)

4.15.3 BASIS FOR DETERMINING SIGNIFICANCE

Section XIV of Appendix G to the State CEQA Guidelines addresses typical adverse effects due to population and housing, and includes the following threshold questions to evaluate the Project’s impacts due to population and housing (OPR, 2018a):

- *Induce substantial unplanned population growth in an area, either directly (for example by proposing new homes and businesses) or indirectly (for example, through the extension of infrastructure); or*
- *Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.*

Significance thresholds are set forth in Riverside County’s Environmental Assessment Checklist, are derived from Section XIV of Appendix G to the State CEQA Guidelines (listed above), and state that the proposed Project would have a significant impact to population and housing if construction and/or operation of the Project would:

- a. *Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere;*
- b. *Create a demand for additional housing, particularly housing affordable to households earning 80% or less of the County’s median income; or*
- c. *Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).*

The significance thresholds set forth in Riverside County’s Environmental Assessment Checklist were used to evaluate the significance of the proposed Project’s impacts on population and housing.

4.15.4 IMPACT ANALYSIS

Threshold a: Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Under existing conditions, the Project site consists of undeveloped land with no dwelling units or structures located on the Project site. Accordingly, the Project would have no potential to displace substantial numbers



of existing people or housing, necessitating the construction of replacement housing else-where. No impacts would occur.

Threshold b: Would the Project create a demand for additional housing, particularly housing affordable to households earning 80% or less of the County's median income?

Under existing conditions, the Project site is designated for urban development by adopted SP 239, although SP 239 designates the site for a mixture of residential uses with some areas of commercial retail land uses. The Project proposes to amend the land use designations as applied to the Project site to instead provide for a mixture of light industrial, business park, and commercial retail land uses. Although the Project would result in an increase in employment within this portion of Riverside County by between 10,256 and 10,044 and jobs (for the Primary Land Use Plan and Alternative Land Use Plan, respectively), Riverside County currently suffers from a poor jobs-housing ratio, wherein there are not enough jobs within the County to prevent the need for County residents to travel outside the region for employment (Riverside County, 2019a, p. LU-27). Thus, with the reduction in the number of planned dwelling units planned on site and a substantial increase in employment opportunities, the Project would assist the County in improving its jobs-housing balance. Furthermore, the Riverside County General Plan designates areas of the County in which lower-income housing can be accommodated to meet the County's RHNA obligations, and does not rely on residential development on the Project site in order to meet its RHNA obligations. Moreover, it is anticipated that any future employees generated by the Project could be accommodated by existing residential communities and/or by future residential uses to be constructed in accordance with the General Plan Land Use Plan or the general plans of cities within the County, and that no additional housing, including housing affordable to households earning 80% or less of the County's median income, would be required to accommodate Project-related employees. Impacts would be less than significant.

Threshold c: Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Under existing conditions, the Project site is designated for future development as a master-planned residential community that would include commercial retail land uses. The Project Applicant proposes to amend the land use designations for the 582.6-acre Project site to provide for a mixture of light industrial, business park, and commercial retail land uses. Although the Project would result in a change in planned land uses, the Project site already is targeted for urban development under existing conditions. Thus, the Project would not result in substantial unplanned population growth in the area. Moreover, Riverside County currently suffers from a poor jobs-housing ratio. The Project would replace planned residential uses on site with light industrial, business park, and commercial retail land uses, and would result in the generation of between 10,246 and 10,044 new and recurring jobs (for the Primary Land Use Plan and Alternative Land Use Plan, respectively). Thus, the Project would serve to improve the County's jobs-housing ratio, which in turn would reduce the need for County residents to commute outside of the County for employment. Furthermore, the Project's proposed roadway and other infrastructure (e.g., water, sewer, etc.) improvements have been designed and sized to serve



the proposed Project, and would not indirectly induce growth in the local area. Thus, the Project would not induce substantial unplanned population growth in the area, either directly or indirectly, and impacts would be less than significant.

4.15.5 CUMULATIVE IMPACT ANALYSIS

For purposes of analysis, the cumulative study area for the issue of population and housing encompasses western Riverside County as well as the various cities within western Riverside County. This study area is appropriate because growth in the region is largely controlled by the Riverside County General Plan and the general plans of the various cities within the County.

The Project site does not contain any existing residential units on site under existing conditions. As such, the Project would not result in the displacement of existing residents or housing, and cumulatively-considerable impacts would not occur.

The Project would result in the generation of between 10,256 and 10,044 jobs at full buildout. Although the Project would result in an increase in the number of employment opportunities, the County currently exhibits a low jobs-to-housing ratio. Implementation of the proposed Project is anticipated to help improve the jobs-to-housing ratio, thereby reducing the need for County residents to travel outside of the region for employment. Although the Project may result in an incremental increase in the demand for housing, including housing for lower-income households, it is expected that such an increase could be accommodated by existing housing within the County, or by housing that is already planned for as part of the County's General Plan and the general plans of local cities within the County. Furthermore, the Riverside County General Plan designates areas of the County in which lower-income housing can be accommodated to meet the County's RHNA obligations, and does not rely on residential development on the Project site in order to meet its RHNA obligations. Other cumulative developments within the region would either result in the establishment of new housing units, including those affordable to lower-income households, or would result in the creation of new employment opportunities that would serve to assist the County in improving its jobs-to-housing balance. As such, the Project's contribution to cumulatively-considerable impacts due to the creation of demand for additional housing, including affordable housing, would be less than significant.

Under existing conditions, the Project site is designated by the General Plan, LNAP, and SP 239 for urban development. Although the Project Applicant proposes to amend the land use designations for the 582.6-acre Project site to provide for a mixture of light industrial, business park, and commercial retail land uses, the employment opportunities generated by the Project are expected to largely be filled by existing County residents, and thus would not create a substantial new demand for housing within the County. The Project would serve to improve the County's jobs-housing ratio, which in turn would reduce the need for County residents to commute outside of the County for employment. Furthermore, the Project's proposed roadway and other infrastructure (e.g., water, sewer, etc.) improvements have been designed to serve the proposed Project, and would not contribute to or indirectly induce growth in the local area. As such, the Project would not induce substantial unplanned population growth in the area, and impacts would therefore be less-than-cumulatively considerable.



4.15.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: No Impact. The Project site does not contain any existing residences or housing, and the Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

Threshold b: Less-than-Significant Impact. The employment-generating land uses proposed as part of the Project (i.e., light industrial, business park, and commercial retail land uses) would replace the site's existing residential and commercial land use designations, and would result in between 10,256 and 10,044 jobs at full buildout. However, it is anticipated that any future employees generated by the Project could be accommodated by existing residential communities and/or by future residential uses to be constructed in accordance with the General Plan Land Use Plan, and that no additional housing, including housing affordable to households earning 80% or less of the County's median income, would be required to accommodate Project-related employees. Impacts would be less than significant.

Threshold c: Less-than-Significant Impact. Because the Project site is designated for development with urban uses by the General Plan, LNAP, and SP 239, and because the Project would accommodate employment opportunities in a portion of Riverside County that has a relatively low ratio of jobs to housing, the Project would not directly induce substantial unplanned population growth in the area, and impacts would be less than significant. The Project also would not indirectly induce substantial unplanned population growth due to infrastructure improvements, as all proposed infrastructure improvements would be sized to serve only the proposed Project; thus, indirect population growth impacts would be less than significant.

4.15.7 APPLICABLE REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

No significant environmental impacts related to population and housing would occur as a result of the proposed Project. Thus, no mitigation measures are required.



4.16 PUBLIC SERVICES

This Subsection provides information on existing public services and service levels for fire protection, police protection, schools, libraries, and public health facilities, and evaluates impacts to the environment that may result from the demand the Project may have on such services.

4.16.1 EXISTING CONDITIONS

A. Fire Protection/Emergency Medical Services

Fire protection services for the Project site are provided by the Riverside County Fire Department (RCFD). The RCFD provides a full range of fire services within the County and contracting cities. The level of service provided is dependent on response times, travel distance, and staffing workload levels established in the Riverside County Fire Protection and Emergency Medical Aid Plan. The Fire Protection Master Plan contains four fire response categories that are used to determine the response times/travel distances for primary and secondary fire stations. The response categories are based on the amount of community build-out presumed in the Master Fire Plan. The Fire Department assumes in any given region that three or more fire engines respond to any reported fire.

The fire station that would serve the Project is Station 3 (Nuview), which is located approximately 1.5 miles east of the Project site. The Project site also could be served by Station 90 ((North Perris City), which is located approximately 2.8 miles west of the Project site, or Station 1 (Perris), located approximately 3.6 miles southwest of the Project site. All of the fire stations that could serve the Project site are staffed full-time, 24 hours per day, 7 days per week with a minimum three-person crew, including paramedics, operating a “Type 1” structural firefighting apparatus. (Google Earth, 2018)

B. Sheriff Services

The Riverside County Sheriff’s Department provides community policing for the Project area. The Sheriff Station serving the Project area is the Perris Station, located at 137 North Perris Boulevard in Perris, CA, 92570, approximately 3.3 miles southwest of the Project site (Google Earth, 2018). In addition to community policing, other services provided by the Sheriff’s Department include, but are not limited to, operating of the emergency 911 system, operating correctional facilities, performing traffic control, and providing crime prevention education. Also, the Sheriff’s Department coordinates with volunteer groups such as Neighborhood Watch Programs and the Community Oriented and Policing Problem Solving (COPPS) Program and the Community Oriented Policing (COP) Program. COPPS shifts the focus of police work from a solely reactive mode by supplementing traditional law enforcement methods with proactive problem-solving approaches that involve the community as well as the police.

Unincorporated Riverside County has set a minimum standard of 1.0 deputy per 1,000 residents. This standard was adopted as part of the “Commitment to Public Safety and Citizens’ Option for Public Safety,” by the Board of Supervisors on September 17, 1996. The Sheriff’s Department has indicated that their desired staffing level



is 1.2 deputies per 1,000 residents, while Mitigation Measure 4.15.C of EIR No. 441, which was prepared for the County's 2003 General Plan, establishes a standard of 1.5 sworn peace officers per 1,000 population.

C. Schools

The northern portions of the Project site are located within the Val Verde Unified School District (VVUSD), while the southern portions of the Project site are located within the Nuvew Union School District (NUSD) and the Perris Union High School District (PUHSD). The nearest schools to the Project site include the Sierra Vista Elementary School, located 0.5 mile west of the Project site; the Lakeside Middle School, located 0.4 mile west of the Project site; and the Perris High School, located 3.0 miles west of the Project site. As of the 2017/2018 school year, the VVUSD had a total capacity of 22,016 students, including 11,482 elementary school students, 3,094 middle school students, and 7,440 high school students (VVUSD, 2018). In the 2010-2011 school year, the NUSD had a total enrollment of 2,016 students, while the PUHSD had an enrollment of 10,610 students (Riverside County, 2015a, Table 4.17-Q).

D. Libraries

The Project site is located within the Riverside County Public Library System (RCPLS) service area. The County of Riverside operates a system of 35 libraries and two book mobiles (one serving Coachella Valley and one serving western Riverside County) to serve unincorporated populations. In addition, the Riverside County Library System operates an automated network that currently deploys over 350 computer/terminal workstations in the library branches of the Riverside County Library System, Riverside Public Library, Moreno Valley Library, Murrieta Public Library, Murrieta Valley High School and College of the Desert. The network can also be accessed by Riverside County residents via the Internet. The library system manages the library catalog of the 1.3 million items in the library system and the annual checkout of over 3.5 million books, audios, and videos. For 2010, the Riverside County Library System reported a total of 681,117 'registered borrowers' utilizing County library services. (Riverside County, 2015a, pp. 4.17-65 and 4.17-66)

The Riverside County library system does not maintain a specific numerical factor to analyze the needs created by new development. However, the American Library Association suggests that an appropriate service criterion would be availability of convenient library facilities and book reserves at a rate of 0.5 square foot of library space and 2.5 volumes per capita. The County's ability to support the needs of future growth is dependent upon its ability to secure sites for, construct and stock new libraries on a timely basis. As of 2015, there was no specific funding mechanism for expansion of library facilities. Based on 2010 reported registered borrowers (681,117) and current square footage of library facilities available (333,884), as of 2015 facilities provided approximately 0.49 square feet of space per registered borrower (not the Riverside County population as a whole). (Riverside County, 2015a, p. 4.17-66)

E. Health Services

Public health services in Riverside County are provided by the County Department of Public Health. However, most health services are provided by the private sector. The nearest medical facilities to the Project site are the Riverside County Regional Medical Center, located at 26520 Cactus Avenue in Moreno Valley, or



approximately 5.7 miles north of the Project site; and the Menifee Valley Medical Center, located at 28400 McCall Blvd in the City of Menifee, or approximately 5.7 miles south of the Project site.

4.16.2 APPLICABLE REGULATORY REQUIREMENTS

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

A. State Regulations

1. Fire Protection Services Regulations and Plans

Public Resources Code (PRC) Sections 4290-4299

These sections establish minimum statewide fire safety provisions pertaining to: roads for fire equipment access; signs identifying streets, roads, and buildings; minimum private water supply reserves for emergency fire use; and fire fuel breaks and greenbelts. With certain exceptions, all new construction after July 1, 1991, in potential wildland fire areas, is required to meet these statewide standards. The state requirements, however, do not supersede more restrictive local regulations. (CA Legislative Info, n.d.)

As defined by CalFire, wildland areas defined as State Responsibility Areas (SRAs) may contain substantial wildfire risks and hazards. They consist of lands exclusive of cities and federal lands regardless of ownership. The primary financial responsibility for preventing and suppressing fires within wildlands belongs to the State of California. However, it is not the State of California's responsibility to provide fire protection services to buildings or structures located within the wildlands unless CalFire has entered into a cooperative agreement with a local agency for those purposes pursuant to PRC Section 4142, which allows for such cooperative agreements for the purpose of preventing and suppressing forest fires or other fires. As such, wildland areas require disclosure of these fire hazards in real estate transactions, and owners of properties in wildland areas are subject to PRC Section 4291 maintenance requirements. The law requires CalFire every five years (1991, 1996, 2001, etc.) to provide maps identifying the boundaries of lands classified as SRAs to the Riverside County Assessor. (CA Legislative Info, n.d.)

PRC Sections 4102 and 4127 - State Responsibility Areas (SRAs)

PRC Section 4102 specifies that "'State responsibility areas' means areas of the state in which the financial responsibility of preventing and suppressing fires has been determined by the [State Fire] Board pursuant to Section 4125, to be primarily the responsibility of the state." These areas may contain State or privately-owned forest, watershed, and rangeland. §§ 4126-4127 of the PRC further specify the standards that define what does and does not constitute an SRA. (CA Legislative Info, n.d.)

California Code of Regulations (CCR) Title 24, Parts 2 and 9 – Fire Codes

Part 2 of Title 24 of the CCR refers to the California Building Code which contains complete regulations and general construction building standards of State of California adopting agencies, including administrative, fire



and life safety and field inspection provisions. Part 9 refers to the California Fire Code, which contains other fire safety-related building standards. In particular, Chapter 7A, “Materials and Construction Methods for Exterior Wildfire Exposure,” in the 2019 California Building Code addresses fire safety standards for new construction and Section 701A.3.2 addresses “New Buildings Located in Any Fire Hazard Severity Zone.” (BSC, n.d.)

CCR Title 14 – Natural Resources

These regulations constitute the basic wildland fire protection standards of the California Board of Forestry. They were prepared and adopted to establish minimum wildfire protection standards in conjunction with building, construction, and development within SRAs. Among other things, Title 14 requires the design and construction of structures, subdivisions, and developments in an SRA provide for basic emergency access and perimeter wildfire protection measures (fire fuel modification zones, etc.). (Westlaw, n.d.)

California Government Code (CGC) Sections 51178-51179 – Very High Fire Hazard Severity Zones

Section 51178 specifies that the Director of CalFire, in cooperation with local fire authorities, must identify areas that are Very High Fire Hazard Severity Zones (VHFHSZs) in Local Responsibility Areas (LRAs), based on consistent statewide criteria and the expected severity of fire hazard. It further specifies that VHFHSZs “shall be based on fuel loading, slope, fire weather and other relevant factors,” including areas subject to Santa Ana winds which are a “major cause of wildfire spread.” Section 51179 states that a local agency (such as a county) must also designate (and map) the VHFHSZs in its jurisdiction by ordinance. (See the discussion on Ordinance No. 787, below, regarding Riverside County’s VHFHSZs). Other portions of the Government Code outline when a local agency may use its discretion to exclude areas from VHFHSZ requirements or add areas not designated by the State of California to its VHFHSZ areas. (CA Legislative Info, n.d.)

CGC Section 51182 – Defensible Space

Pursuant to this code, a person who “owns, leases, controls, operates or maintains an occupied dwelling or occupied structure in, upon or adjoining a mountainous area, forest-covered land, brush-covered land, grass-covered land or land that is covered with flammable material” in a very high fire hazard severity zone designated by the local agency pursuant to § 51182, shall at all times maintain a specified amount of “defensible space” to protect structures in high fire hazard areas. (CA Legislative Info, n.d.)

PRC Section 4213 - Fire Prevention Fees

Pursuant to PRC Section 4213, in July of 2011, the State of California began assessing an annual “Fire Prevention Fee” for all habitable structures within the State’s Responsibility Area (SRA) to pay for fire prevention services. The SRA is the portion of the state where the State of California is financially responsible for the prevention and suppression of wildfires. The SRA does not include lands within incorporated city boundaries, Tribal or federally owned land. As of 2013, the fee is up to \$150 per habitable structure (i.e., a



building that can be occupied for residential use, which does not include incidental buildings such as detached garages, barns, outdoor bathrooms, sheds, etc.). (FindLaw, 2020b)

2. *School Services Regulations and Plans*

Assembly Bill (AB) 16

In 2002, AB 16 created the Critically Overcrowded School Facilities program, which supplements the new construction provisions within the School Facilities Program (SFP). The SFP provides State of California funding assistance for new facility construction projects and modernization projects. The Critically Overcrowded School Facilities program allows school districts with critically overcrowded school facilities, as determined by the California Department of Education (CDE), to apply for new construction projects in advance of meeting all SFP new construction program requirements. Districts with SFP new construction eligibility and school sites included on a CDE list of source schools may apply. (CA Legislative Info, 2002)

Leroy F. Greene School Facilities Act of 1998 (Senate Bill [SB] 50)

Senate Bill 50 (SB 50) was enacted by the State Legislature in 1998, which amended existing state law governing school fees. In particular, SB 50 amended prior California Government Code (CGC) Section 65995(a) to prohibit state or local agencies from imposing school impact mitigation fees, dedications, or other requirements in excess of those provided in the statute in connection with “any legislative or adjudicative act...by any state or local agency involving...the planning, use, or development of real property....” (CA Legislative Info, 1998)

The legislation also amended CGC Section 65996(b) to prohibit local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any “legislative or adjudicative act [involving] the planning, use or development of real property.” Further, SB 50 established the base amount of allowable developer fees: \$1.93 per square foot for residential construction and \$0.31 per square foot for commercial. These base amounts are commonly called “Level 1 fees” and are the same caps that were in place at the time SB 50 was enacted. Level 1 fees are subject to inflation adjustment every two years. (CA Legislative Info, 1998)

In certain circumstances, for residential construction, school districts can impose fees that are higher than Level 1 fees. School districts can impose Level 2 fees, which are equal to 50% of land and construction costs if they: (1) prepare and adopt a school needs analysis for facilities; (2) are determined by the State Allocation Board to be eligible to impose these fees; and (3) meet at least two of the following four conditions: (CA Legislative Info, 1998)

- At least 30% of the district’s students are on a multi-track year-round schedule.
- The district has placed on the ballot within the previous four years a local school bond that received at least 50% of the votes cast.
- The district has passed bonds equal to 30% of its bonding capacity.



- Or, at least 20% of the district’s teaching stations are relocatable classrooms.

Additionally, if the State of California’s bond funds are exhausted, a school district that is eligible to impose Level 2 fees is authorized to impose even higher fees. Commonly referred to as “Level 3 fees,” these fees are equal to 100% of land and construction costs of new schools required as a result of new developments. (CA Legislative Info, 1998)

4.16.3 BASIS FOR DETERMINING SIGNIFICANCE

Section XV of Appendix G to the State CEQA Guidelines addresses typical adverse effects to public services, and includes the following threshold question to evaluate the Project’s impacts to public services (OPR, 2018a):

- *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental, impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:*
 - *Fire protection?*
 - *Police protection?*
 - *Schools?*
 - *Parks?*
 - *Other public facilities?*

Significance thresholds are set forth in Riverside County’s Environmental Assessment Checklist, and have been updated to reflect the 2018 updates to Section XV of Appendix G to the State CEQA Guidelines (listed above). Accordingly, the following threshold questions are used to evaluate the Project’s impacts to public services:

- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection facilities?*
- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered sheriff facilities or the need for new or physically altered sheriff facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for sheriff services?*



- c. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities or the need for new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for school services?*
- d. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered library facilities or the need for new or physically altered library facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for library services?*
- e. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered health care facilities or the need for new or physically altered health care facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for health care services?*

The significance thresholds set forth in Riverside County’s Environmental Assessment Checklist, as modified/updated per the 2018 updates to the State CEQA Guidelines, were used to evaluate the significance of the proposed Project’s impacts on public services.

4.16.4 IMPACT ANALYSIS

Threshold a.: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection facilities?

The Project, which would entail development of the 582.6-acre Project site with light industrial, business park, and commercial retail land uses, would place additional demand on the Riverside County Fire Department (RCFD), which provides fire protection services in the Project area. Implementation of the Project would cumulatively affect the Department’s ability to service the planned population. The Project would require an “Urban-Category II” level of service as defined by the Riverside County Fire Protection Master Plan. This classification requires a fire station be within three roadway miles of the Project site, and a full first alarm assignment team operating on the scene within 15 minutes of dispatch. The fire station that would serve the Project is Station 3 (Nuvview), which is currently located approximately 1.5 miles east of the Project site. The Project site also could be served by Station 90 ((North Perris City), which is located approximately 2.8 miles west of the Project site, or Station 1 (Perris), located approximately 3.6 miles southwest of the Project site. With buildout of General Plan Circulation Element roadways, including Orange Avenue and the Mid-County Parkway (MCP), the Project site would be located within 3.0 roadway miles of the nearest fire station, and a full first alarm assignment team could operate on site within 15 minutes of dispatch. Thus, the RCFD would



be able to meet the Urban-Category II Land Use protection goals of the Fire Protection Master Plan for the Project.

As a condition of Project approval, the proposed Project would be required to conform to all mandatory local, State, and federal laws, ordinances, and standards relating to fire safety. Among other items, these requirements include conformance with the Uniform Building Code Section 1503, which requires that all buildings be constructed with fire retardant roofing material, as well as standard Riverside County Fire Department conditions of approval (COAs) for specific plans, which prohibit flag lots and require alternative/secondary access routes to neighborhoods. The alternative/secondary access routes would be required to be maintained throughout construction and buildout of the Project. Additionally, the Project would be subject to the fire code standards established as part of Riverside County Ordinance No. 787 (Fire Code Standards).

Nonetheless, development of the proposed Project would impact fire services by placing an additional demand on existing County Fire Department resources and personnel. As set forth by the Riverside County Fire Protection Master Plan, a new fire station and/or appropriate fire company is required for the development of 2,000 dwelling units or more. No residential uses are proposed as part of the Project, and thus the Project would not result in the need for a new fire station in the local area based on this standard. Notwithstanding, buildout of the Primary Land Use Plan would result in the construction of up to 8,476,776 s.f. of light industrial building area, 1,069,398 s.f. of Business Park building area, and up to 121,968 s.f. of commercial retail building area, while buildout of the Alternative Land Use Plan would result in up to 8,476,776 s.f. of light industrial building area, 936,540 s.f. of business park building area, and up to 126,542 s.f. of commercial retail building area. The proposed land uses on site would generate up to between 10,256 and 10,044 new jobs on site. Project impacts to fire protection services would include an increased number of emergency and public service calls due to the increased presence of structures, traffic, and population. Although new fire protection facilities ultimately may be needed in the Project area to serve the Project and other future development in the area, it is not possible to identify environmental impacts that may be associated with the development of any new fire protection facilities until a specific proposal and design for the facility is prepared by the RCFD. Accordingly, impacts due to the construction of new or expanded fire protection facilities are too speculative for evaluation in this EIR (State CEQA Guidelines § 15145). Environmental effects of such fire protection facilities and any associated mitigation would be identified through a future CEQA process required in association with any future proposals for new or expanded fire protection facilities.

However, the Project is required to adhere to Riverside County Ordinance No. 659, which requires payment of a Development Impact Fee (DIF) to assist the County in providing for fire protection facilities, including fire stations. Payment of the DIF fee would ensure that funds are available for capital improvements, such as land/equipment purchases and fire station construction. Accordingly, Project-related impacts to fire protection services are evaluated as less than significant and no mitigation beyond payment of DIF fees would be required.

Threshold b.: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered sheriff facilities or the need for new or physically altered sheriff



facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for sheriff services?

Buildout of the Primary Land Use Plan would result in the construction of up to 8,476,776 s.f. of light industrial building area, 1,069,398 s.f. of Business Park building area, and up to 121,968 s.f. of commercial retail building area, while buildout of the Alternative Land Use Plan would result in up to 8,476,776 s.f. of light industrial building area, 936,540 s.f. of business park building area, and up to 126,542 s.f. of commercial retail building area. The proposed land uses on site would generate up to between 10,256 and 10,044 new jobs on site. Development of the property and the introduction of new businesses on site could result in an incremental increase in criminal activity such as burglaries, thefts, auto thefts, vandalism, etc. However, according to the Riverside County Sheriff’s Department (RCSD), there is not a direct correlation between population growth, the number of crimes committed, and the number of RCSD personnel needed to respond to these increases. As the population and use of an area increases, however, additional financing of equipment and manpower needs are required to meet the increased demand. The proposed Project would result in an increase in the cumulative demand for services from the RCSD, which provides police protection services to the Project site. Specifically, the Project would generate a demand for up to approximately 15 new sworn officers (10,256 employees x 1.5 officers/1,000 population = 15 officers), based on the 1.5 per 1,000 population service standard (Riverside County, 2015a, Table 4.17-H). Staff necessary to support the additional deputy would include an appropriate level of civilian, investigation, and supervisory personnel. The proposed Project would not, however, in and of itself result in the need for new or expanded sheriff facilities to accommodate new personnel.

The Project is required to adhere to Riverside County Ordinance No. 659, which requires payment of a Development Impact Fee (DIF) to assist the County in providing for sheriff protection services, including new or expanded facilities. Payment of the DIF fee would ensure that funds are available for capital improvements, such as land/equipment purchases and sheriff facilities construction. Accordingly, Project-related impacts to sheriff protection services are evaluated as less than significant and no mitigation beyond payment of DIF fees would be required.

Therefore, implementation of the Project would not result in the need for new or expanded sheriff facilities, and impacts would be less than significant. The Project’s incremental demand for sheriff protection services also would be less than significant because the Project would be required to contribute DIF fees. Accordingly, a less-than-significant impact would occur with respect to sheriff protection services or facilities as a result of implementation of the proposed Project.

Threshold c.: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities or the need for new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order



to maintain acceptable service ratios, response times or other performance objectives for school services?

As previously indicated, the northern portions of the Project site are located within the VVUSD, while the southern portions of the Project site are located within the NUSD and the PUHSD. However, no residential uses are proposed as part of the Project. As such, the Project would not result in a direct demand for new or expanded school services in the local area. Notwithstanding, the Project may indirectly result in new residents within the County, which could place additional demand on school facilities in the surrounding areas. Although the VVUSD, NUSD, and/or PUHSD may need to construct new school facilities to meet the growing demand within this portion of unincorporated Riverside County, there are no current publicly-available plans detailing where such facilities would be built. The Project would not directly cause or contribute to the need for new or expanded school facilities, and it is not possible to identify environmental impacts that may be associated with the construction of new or expanded school facilities until a specific proposal and design for the facility is prepared by the applicable school district, and an analysis of potential physical environmental impacts resulting from the construction and operation of new or expanded school facilities would be speculative in nature (see State CEQA Guidelines § 15145). Environmental effects of such school facilities and any associated mitigation would be identified through a future CEQA process required in association with any future proposals for new or expanded school facilities. Any mitigation measures required for new or expanded school facilities could be funded, in part, from property taxes and/or through payment of school impact fees (as discussed below).

Although it is not possible to identify physical environmental effects that may result from new or expanded school facilities, the Project Applicant would be required to contribute fees to the VVUSD, NUSD, and/or PUHSD in accordance with Riverside County Ordinance No. 575. Pursuant to the Leroy F. Greene School Facilities Act of 1998, payment of school impact fees constitutes full and complete mitigation for project-related impacts to school services. Although the Project would not result in a direct increase in demand for school services, mandatory payment of school impact fees still would be required and would ensure that the Project’s impacts to school facilities and services would be less than significant. Accordingly, impacts would be less than significant and no mitigation beyond payment of fees would be required.

Threshold d.: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered library facilities or the need for new or physically altered library facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for library services?

Buildout of the Primary Land Use Plan in up to 8,476,776 s.f. of light industrial building area, 1,069,398 s.f. of Business Park building area, and up to 121,968 s.f. of commercial retail building area, while buildout of the Alternative Land Use Plan would result in up to 8,476,776 s.f. of light industrial building area, 936,540 s.f. of business park building area, and up to 126,542 s.f. of commercial retail building area. Land uses proposed as part of the Project would not result in a direct increase in the County’s population.



Although use of the internet has resulted in decreased demand being placed on library services nation-wide, the County continues to maintain its standards for book titles and library square footage. Library services in the County of Riverside are provided by the Riverside County Public Library System (RCPLS). Buildout of the Project would result in up to 10,256 new employees under the Primary Land Use Plan and up to 10,044 employees under the Alternative Land Use Plan. Assuming that all of the jobs produced by the Project would consist of new residents within the County, in order to attain the RCPLS level of service standard of 2.5 titles-per-capita, the Project-generated employees would require an additional 25,640 titles (2.5 titles-per-capita x 10,256 employees = 25,640 titles) under the Primary Land Use Plan, and 25,110 titles (2.5 titles-per-capita x 10,044 employees = 25,110 titles) under the Alternative Land Use Plan. To attain the RCPLS standard of 0.5 square foot of library space per capita, the Project would create the demand for 5,128 s.f. of additional library space (0.5 s.f. of library space per capita x 10,256 employees = 5,128 s.f.) under the Primary Land Use Plan and 5,022 s.f. of additional library space (0.5 s.f. of library space per capita x 10,044 employees = 5,022 s.f.). However, these estimates are conservative in nature because the majority of jobs that would be generated by the Project likely would be filled by existing County residents, given the County’s generally poor jobs-to-housing ratio. Thus, the Project’s impacts to the local library system likely would be substantially less than described above. (Riverside County, 2015a, Table 4.17-W)

The provision of additional library space would be addressed through the County’s compliance with the adopted level of service standards. Additionally, mandatory compliance with Riverside County Ordinance No. 659 would require the payment of impact fees. These fees would provide funding for library books and library expansion projects. Although new library facilities may be under consideration by the RCPLS in the Project area, it is not possible to identify environmental impacts that may be associated with the development of any new library facilities until a specific proposal and design for the facility is prepared by the RCPLS. Accordingly, impacts due to the construction of new or expanded library facilities are too speculative for evaluation in this EIR (State CEQA Guidelines § 15145). Environmental effects of such library facilities and any associated mitigation would be identified through a future CEQA process required in association with any future proposals for new or expanded library facilities. Any mitigation measures required for new or expanded library facilities could be funded, in part, from property taxes to such purposes. As such, Project impacts to library facilities and resources are evaluated as less than significant.

Threshold e.: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered health care facilities or the need for new or physically altered health care facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for health care services?

As previously indicated, the nearest medical facilities to the Project site are the Riverside County Regional Medical Center, located at 26520 Cactus Avenue in Moreno Valley, or approximately 5.7 miles north of the Project site; and the Menifee Valley Medical Center, located at 28400 McCall Blvd in the City of Menifee, or approximately 5.7 miles south of the Project site. The majority of jobs that would be generated by the Project are anticipated to be filled by existing County residents. The Primary Land Use Plan would result in up to



approximately 10,256 employees, while the Alternative Land Use Plan would result in up to 10,044 employees. Using a 1.9 hospital beds per 1,000 persons generation factor, the Project would generate the need for approximately 19 hospital beds under both the Primary Land Use Plan and Alternative Land Use Plan. However, as most of the future jobs on the Project site would be filled by existing County residents, a majority of the projected demand for health care services and hospital beds would not represent a new demand for such resources within the County.

The provision of private health care is largely based on economic factors and demand and is beyond the scope of analysis required for this EIR. However, EIR No. 521 concluded impacts associated with buildout of the General Plan would be less than significant, and further notes that: “compliance with...existing General Plan policy and existing Mitigation Measures 4.15.7A and 4.15.7B from EIR No. 441, would further reduce or avoid the insignificant impacts...” (Riverside County, 2015a, p. 4.17-18). Mitigation Measure 4.15.7A requires the County to perform periodic medical needs assessments to evaluate the current medical demand and level of medical service provided within each Area Plan every three years. Mitigation Measure 4.15.7B requires the County to fund the new construction and/or expansion of existing medical facilities according to the level of demand for medical services based on the needs assessment required as part of Mitigation Measure 4.15.7A. Furthermore, mandatory compliance with County Ordinance No. 659 requires a development impact fee payment to the County that is partially allocated to public health services and facilities. While new or expanded health care facilities may ultimately be needed within the County due to the anticipated growth in population, it is not possible to identify environmental impacts that may be associated with the development of any new health care facilities until a specific proposal and design for the facility is prepared. Accordingly, impacts due to the construction of new or expanded health care facilities are too speculative for evaluation in this EIR (State CEQA Guidelines § 15145). As such, impacts to public medical facilities and resources associated with the proposed Project would be less than significant.

4.16.5 CUMULATIVE IMPACT ANALYSIS

The cumulative study area for public services encompasses the service area of the RCFD, RCSD, VVUSD, NUSD, PUHSD and/or RCPLS, and assumes full buildout of the General Plans for jurisdictions within these service areas.

Although the proposed Project would be adequately served by fire protection services, based on the proximity and response times estimated from nearby fire station facilities, the Project would nonetheless result in an incremental increase in requests for service, which would affect the fire department’s ability to provide acceptable levels of service. These impacts include an increased number of emergency and public service calls due to the increased presence of structures, increased traffic volumes, and increased population. When considered in the context of on-going cumulative development throughout western Riverside County, such impacts would be cumulatively considerable. However, the proposed Project and all cumulative developments within unincorporated Riverside County would be required to contribute DIF fees pursuant to County Ordinance No. 659. Mandatory DIF fee contributions by the Project and cumulative developments would ensure that adequate funding is provided to the Riverside County Fire Department for the acquisition of



additional facilities, equipment, and personnel. Accordingly, the proposed Project's impact to the RCFD is evaluated as less-than-cumulatively considerable.

Although the Project site would be adequately served by sheriff facilities, the increased population that would be generated by the Project, when considered in conjunction with other on-going development throughout western Riverside County, has the potential to adversely affect service response times. However, the proposed Project and all cumulative developments would be required to contribute DIF fees pursuant to County Ordinance No. 659, which would help to provide for adequate equipment and personnel in the Project area. Therefore, with mandatory payment of DIF fees, Project impacts to police protection services would be less-than-cumulatively considerable.

The proposed Project would entail development of the site with light industrial, business park, and commercial retail land uses, and therefore the Project would not result in a direct demand for school services or new or expanded school facilities. Although the Project may indirectly result in an increase in the population within the VVUSD, NUSD, and/or PUHSD, the Project Applicant would be required to contribute fees in accordance with Riverside County Ordinance No. 575. Other cumulative developments, including both residential and non-residential developments, would similarly be required to contribute fees pursuant to Riverside County Ordinance No. 575, or similar ordinances within cities within the service area of these school districts. Pursuant to the Leroy F. Greene School Facilities Act of 1998, payment of school impact fees constitutes full and complete mitigation for project-related impacts to school services. As such, and with mandatory fee payment, the Project's impacts to school services and facilities would be less-than-cumulatively considerable.

The Project would entail development of the Project site with light industrial, business park, and commercial retail land uses, and therefore the Project would not result in a direct demand for library services. Although the Project may result in an indirect increase in the County's population, the Project is not expected to result in the need for new or expanded library services or facilities. Furthermore, it is not possible to identify environmental impacts that may be associated with such new or expanded library facilities until a specific proposal and design for such facilities are prepared by Riverside County. Accordingly, impacts due to the construction of new or expanded library facilities are too speculative for evaluation in this EIR (State CEQA Guidelines § 15145). Environmental effects of such library facilities and associated mitigation would be identified through a future CEQA process required in association with any future proposals for new or expanded library facilities. However, the Project and all cumulative developments would contribute property taxes and would be required to contribute DIF fees to Riverside County pursuant to County Ordinance No. 659, which could be used for the purpose of acquiring book titles and/or additional library square footage. Any mitigation measures required for new or expanded library facilities also could be funded, in part, from property taxes allocated by Riverside County to such purposes. Therefore, because environmental impacts associated with new or expanded library facilities cannot be known at this time and would be determined in the future once Riverside County identifies a specific proposal for new or expanded library facilities, Project impacts to library services and facilities are evaluated as less than significant on a cumulatively-considerable basis.



The proposed Project, when considered in conjunction with on-going growth and development in western Riverside County, would cumulatively impact the ability of local medical facilities that provide health services. However, the Project and all cumulative developments would be required to comply with County Ordinance No. 659, which requires a development impact fee payment to the County that is partially allocated to public health services and facilities. With mandatory compliance with Ordinance No. 659, the Project's impacts to health services and facilities would be less than significant on a cumulative basis.

4.16.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Less-than-Significant Impact. Although the Project would contribute to a need for new or expanded fire protection facilities, it is not possible to identify environmental impacts that may be associated with such new or expanded fire protection facilities until a specific proposal and design for such facilities are prepared by the RCFD. Accordingly, impacts due to the construction of new or expanded fire protection facilities are too speculative for evaluation in this EIR (State CEQA Guidelines § 15145). Environmental effects of such fire protection facilities and associated mitigation would be identified through a future CEQA process required in association with any future proposals for new or expanded fire protection facilities. Additionally, with payment of mandatory DIF fees, the proposed Project's potential direct and cumulatively-considerable impacts to the Riverside County Fire Department would be reduced to less-than-significant levels.

Threshold b: Less-than-Significant Impact. With payment of mandatory DIF fees, the proposed Project's potential direct and cumulatively-considerable impacts to the Riverside County Sheriff's Department would be reduced to less-than-significant levels, and the Project would not result in or require the construction of new police protection facilities that could result in a significant impact to the environment.

Threshold c: Less-than-Significant Impact. The Project would not directly generate a resident population, and thus would not directly impact school services in the local area. Although the Project may indirectly result in new residents within the service area of the VVUSD, NUSD, and/or PUHSD, and thus may indirectly result in an incremental increase in demand for new school facilities, there are no current publicly-available plans detailing where such facilities would be built. As such, it is not possible to identify environmental impacts that may be associated with the construction of new or expanded school facilities until a specific proposal and design for the facility is prepared by the VVUSD, NUSD, and/or PUHSD, and an analysis of potential physical environmental impacts resulting from the construction and operation of new or expanded school facilities would be speculative in nature (see State CEQA Guidelines § 15145). Environmental effects of such school facilities and any associated mitigation would be identified through a future CEQA process required in association with any future proposals for new or expanded school facilities. Any mitigation measures required for new or expanded school facilities could be funded, in part, from property taxes and/or through payment of school impact fees. Furthermore, the payment of mandatory school impact fees would ensure that the Project would result in less-than-significant direct or cumulatively-considerable impacts to the ability of the VVUSD, NUSD, and/or PUHSD to provide for school services.

Threshold d: Less-than-Significant Impact. The Project would not directly generate a resident population, and thus would not directly impact library services in the local area. Although the Project may indirectly result in



new residents within the local area, and thus could result in an incremental demand for increased library facilities, it is not possible to identify environmental impacts that may be associated with such new or expanded library facilities until a specific proposal and design for such facilities are prepared by Riverside County. Accordingly, impacts due to the construction of new or expanded library facilities are too speculative for evaluation in this EIR (State CEQA Guidelines § 15145). Environmental effects of such library facilities and associated mitigation would be identified through a future CEQA process required in association with any future proposals for new or expanded library facilities. However, the Project would be required to contribute DIF fees, which would be used in part to provide for library space and/or new book volumes. Accordingly, with payment of DIF fees, Project impacts to library services and facilities are evaluated as less than significant on both a direct and cumulatively-considerable basis.

Threshold e: Less-than-Significant Impact. With payment of mandatory DIF fees, the Project would result in less-than-significant direct and cumulatively-considerable impacts to health services facilities, and the Project would not result in or require the construction of new health services facilities that could result in a significant impact to the environment.

4.16.7 COUNTY REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

Applicable County Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

- The Project is required to comply with the following applicable Mitigation Measures identified by County EIR No. 441 related to public services:
 - EIR No. 441 Mitigation Measure 4.15.2A: The County shall require as a part of the development review process, proponents of new businesses, recreational, and commercial land uses such as shopping centers, health clubs, large hotels over 200 rooms, convention centers, and commercial recreational activities be required to provide on-site security.
 - EIR No. 441 Mitigation Measure 4.15.2D: The County shall require the development applicant to pay the County Sheriff's established development mitigation fee prior to issuance of a certificate of occupancy on any structure as they are developed. The fees are for the acquisition and construction of public facilities.
 - EIR No. 441 Mitigation Measure 4.15.3E: The County shall require all future commercial, industrial and multifamily residential development to provide for adequate areas for the collection and loading of recyclable materials (i.e., paper products, glass, and other recyclables) in compliance with the State Model Ordinance, implemented on September 1, 1994, in accordance with AB 1327, Chapter 18, California Solid Waste Reuse and Recycling Access Act of 1991.
 - EIR No. 441 Mitigation Measure 4.15.3F: The County shall require all development projects to coordinate with appropriate County departments and/or agencies to ensure that there is adequate



waste disposal capacity to meet the waste disposal requirements of the project, and the County shall recommend that all development projects incorporate measures to promote waste reduction, reuse, recycling, and composting.

- As a condition of Project approval, the proposed Project would be required to conform to all mandatory local, State, and federal laws, ordinances, and standards relating to fire safety.
- The Project would be required to adhere to Riverside County Ordinance No. 659, which requires payment of a development impact fee (DIF) to assist the County in providing for fire protection facilities, including fire stations. Payment of the DIF fee would ensure that funds are available for capital improvements, such as land/equipment purchases and fire station construction.
- The Project would be required to adhere to Riverside County Ordinance No. 659, which requires payment of a development impact fee (DIF) to assist the County in providing for sheriff protection facilities, including sheriff stations. Payment of the DIF fee would ensure that funds are available for additional sheriff personnel as well as capital improvements, such as land/equipment purchases and sheriff station construction.
- The Project is required to comply with Riverside County Ordinance No. 575, which requires mandatory payment of school impact fees pursuant to Public Education Code § 17072.10-18.
- The Project would be required to adhere to Riverside County Ordinance No. 659, which requires payment of a development impact fee (DIF) to assist the County in providing for library facilities. Payment of the DIF fee would ensure that funds are available for capital improvements, such as land/equipment purchases and library construction or expansion.
- The Project would be required to adhere to Riverside County Ordinance No. 659, which requires payment of a development impact fee (DIF) to assist the County in providing for health facilities. Payment of the DIF fee would ensure that funds are available for capital improvements, such as land/equipment purchases and health facility construction.

Mitigation

Impacts would be less-than-significant; therefore, no mitigation is required.



4.17 RECREATION

This Subsection provides an overview of the existing parks and recreational facilities that exist within the Project vicinity and that could potentially be directly or indirectly physically affected by implementation of the proposed Project. The analysis herein is based in part on the Riverside County General Plan Multipurpose Open Space Element and Healthy Communities Element.

4.17.1 EXISTING CONDITIONS

A. Federal Parks

There are no federal parks located within the area surrounding the Project site. The nearest federal park is the Cleveland National Forest located approximately 15.2 miles southwest of the Project site. Additionally, the San Bernardino National Forest is located approximately 17.0 miles northeast of the Project site. (Google Earth, 2018) (Riverside County, 2019a, p. OS-2)

B. State Parks

The nearest California State Park is the Lake Perris State Recreation Area located approximately 0.5 mile north of the Project site. This 9,615-acre park provides recreational activities such as hiking, horseback riding, camping and bird watching as well as numerous recreational water activities on Lake Perris. (Google Earth, 2018; Riverside County, 2015a, p. 4.16-8)

C. Regional and Local Parks

Several regional and local parks occur within a two-mile radius of the Project site. These facilities are depicted on Figure 4.17-1, *Existing Local and Regional Parks and Recreation Facilities*, and are described below:

- **May Ranch Park.** May Ranch Park, which is located approximately 1.0 mile west of the Project site, contains barbeques, a playground, a basketball court, and a baseball field within its 6.9 acres.
- **Frank Eaton Memorial Park.** Frank Eaton Memorial Park, which is located approximately 1.4 miles northwest of the Project site, offers a shaded picnic area, a field, and a playground within its 4.4 acres.
- **Basin Park.** Basin Park, which is located approximately 1.7 miles west of the Project site, offers a playground, walking trail, and large field area within its 9.0 acres.

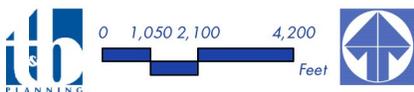
D. Regional Trails and Bikeway Systems

The Lakeview/Nuevo Area Plan (LNAP) identifies the County's long-term objectives for recreational trails and bikeways within the Lakeview/Nuevo Area. As previously shown on EIR Figure 2-11, *LNAP Trails and Bikeway System*, the General Plan Circulation Element and LNAP identify numerous planned trails on and



Source(s): ESRI, Nearmap Imagery (2020), RCLMA (2019)

Figure 4.17-1



**Existing Local and Regional Parks
and Recreation Facilities**



adjacent to the Project site. A “Combination Trail (Regional Trail/Class I Bike Path)” is planned to traverse the southern and northeastern portions of the Project site. A “Community Trail” is planned to traverse the central portions of the Project site in a west-east orientation, with this trail continuing in a north-south alignment in the eastern portion of the site up to the northern site boundary, where it would connect to a proposed “Design Guidelines Trail.” The “Design Guidelines Trail” is planned along the southern alignment of the Ramona Expressway, and east along the northern Project boundary where it would connect to off-site portions of the Combination Trail (Regional Trail/Class I Bike Path). A “Regional Trail: Open Space” trail segment also is planned in the western portions of the site, primarily associated with the on-site hillform located in the southern portion of the site along the western Project boundary. (Riverside County, 2019b, Figure 8)

4.17.2 APPLICABLE ENVIRONMENTAL REGULATIONS

The following is a brief description of the State and local environmental laws and related regulations associated with recreation and parks.

A. State Regulations

1. Quimby Act, California Government Code § 66477

The State of California’s Quimby Act was established by the California Legislature for the purpose of preserving open space and providing park facilities for California’s growing communities. The Quimby Act allows local agencies to establish ordinances requiring residential subdivisions to provide land or “in-lieu-of” fees for park and recreation purposes. This State Act requires the dedication of land and/or imposes a requirement of fees for park and recreational purposes as a condition of approval of tentative tract map or parcel map. (CA Legislative Info, n.d.)

B. Local Regulations

1. Riverside County Ordinance No. 460

Riverside County Ordinance No. 460, Section 10.35 (Park and Recreation Fees and Dedications) implements the Quimby Act by establishing a requirement for dedication of three acres of parkland per 1,000 residents, or payment of a fee in lieu of such dedication. An exception exists in cases where a Community Parks and Recreation Plan, as approved by the Board of Supervisors, applies and has determined that the amount of existing neighborhood and community park area exceeds that limit, in which case the Board may determine that the public interest, convenience, health, welfare and safety requires that a higher standard, not to exceed five acres of land per 1,000 persons residing within the County, shall be devoted to neighborhood and community park purposes. In the case of the proposed Project, there are no Community Parks and Recreation Plans applicable to the Project area.

4.17.3 BASIS FOR DETERMINING SIGNIFICANCE

Section XVI of Appendix G to the State CEQA Guidelines addresses typical adverse effects to parks and recreation, and includes the following threshold questions to evaluate the Project’s impacts to recreational resources (OPR, 2018a):



- *Would the 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?*
- *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

Significance thresholds are set forth in Riverside County’s Environmental Assessment Checklist, are derived from Section XVI of Appendix G to the State CEQA Guidelines (listed above), and state that the proposed Project would have a significant impact to parks and recreation if construction and/or operation of the Project would:

- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment;*
- Increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated;*
- Be located within a Community Service Area (CSA) or recreation and park district with a Community Parks and Recreation Plan (Quimby fees); or*
- Include the construction or expansion of a trail system.*

The significance thresholds set forth in Riverside County’s Environmental Assessment Checklist were used to evaluate the significance of the proposed Project’s impacts on parks and recreation.

4.17.4 IMPACT ANALYSIS

Threshold a: *Would the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

Threshold d: *Would the Project include the construction or expansion of a trail system?*

The Project proposes a mixture of light industrial, business park, and commercial retail land uses, which would not directly result in an increased demand for recreational facilities. As such, because the Project does not include any residential uses, the Project would not result in a direct demand for recreational resources. Thus, the Project would not directly require the construction or expansion of recreational facilities off site that may have an adverse physical effect on the environment due to new Project-generated population growth in the area.

However, proposed SP 239A1 includes a conceptual non-vehicular circulation and mobility plan, as previously depicted on Figure 3-6. As shown, the western side of Antelope Road would have an enhanced parkway that includes an 8-foot bike lane and 5-foot meandering sidewalk along the eastern edge of the roadway, with a community trail proposed along the western side of the roadway. On-site portions of Orange Avenue would include meandering sidewalks along both sides of the roadway. Street “A” would include non-curb adjacent



sidewalks along both sides of the roadway. A Class I bike lane also is proposed along the Project site’s frontage with Ramona Expressway. A Regional Trail also is proposed around proposed Planning Area 9, while a trail easement would be accommodated along the northern boundary of proposed Planning Area 11. Although the Project would result in the construction of trail facilities on site, these trails would occur in areas already planned for physical disturbance as part of the Project, and there would be no impacts to the environment specifically related to the construction of proposed trails and pedestrian facilities that have not already been addressed throughout this EIR (i.e., for impacts to biological or cultural resources). As such, and assuming implementation of the mitigation measures identified throughout this EIR, impacts associated with proposed trails and pedestrian facilities on site would be less than significant.

Threshold b: Would the Project include the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The Project does not propose any residential uses or other land use that may directly or indirectly generate a population that would increase the use of existing neighborhood and regional parks or other recreational facilities, as a majority of the Project’s future jobs are anticipated to be filled by existing or future planned residents within the County. Accordingly, implementation of the proposed Project would not result in the increased use or substantial physical deterioration of an existing neighborhood or regional park, and impacts would be less than significant.

Threshold c: Would the Project be located within a Community Service Area (CSA) or recreation and park district with a Community Parks and Recreation Plan (Quimby fees)?

The Project site is located within County Service Area (CSA) No. 146; however, CSA 146 was established for the purposes of lighting and library services, and was not established for purposes of recreational facilities (RCIT, 2020). The Project site is not located within a Community Parks and Recreation Plan. Additionally, the provisions of Section 10.35 of Riverside County Ordinance No. 460, which addresses parkland dedication and in-lieu fees, are not applicable to the proposed Project because the Project does not include any residential subdivision of land; thus, the Project would not be subject to payment of in-lieu fees for recreational resources. Accordingly, impacts due to a conflict with a Community Parks and Recreation Plan and due to the need for payment of in-lieu fees for parkland acquisition and construction would be less than significant.

4.17.5 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development within two miles of the Project site. Although it is not anticipated that future Project employees would substantially utilize recreational facilities in the local area, this study area was selected because any use of local recreation facilities by future Project employees likely would occur in close proximity to the Project site.



As discussed under the analysis of Thresholds a. and d., cumulatively-considerable impacts associated with the construction of proposed trails and pedestrian facilities on site have been evaluated throughout this EIR under the appropriate subject heading (e.g., air quality, biological resources, etc.). Where cumulatively-considerable impacts have been identified associated with Project implementation, mitigation measures have been identified to reduce construction-related impacts to the maximum feasible extent. There are no components of the planned trails or pedestrian facilities on site that have not already been addressed and accounted for throughout this EIR for the Project site. Accordingly, cumulatively-considerable impacts due to the construction of on-site trails and pedestrian facilities would be less than significant.

The Project does not propose any residential uses or other land use that may generate a population that would directly increase the use of existing neighborhood and regional parks or other recreational facilities. Although there may be a nominal increase in the use of local recreation facilities, Project employees are not expected to utilize local recreational facilities to the extent that physical deterioration would occur or be accelerated, even when considered in the context of cumulative developments in the area. Although other cumulative developments in the local area that involve residential use and that don't accommodate adequate recreational facilities may result in physical deterioration of existing recreational facilities, the Project's contribution to such effects would be de minimus and would be less than significant on both a direct and cumulatively-considerable basis.

The Project site is not located within a recreational-related Community Service Area (CSA), and is not located within a park district with a Community Parks and Recreation Plan. The Project also would not be subject to payment of Quimby fees or fees pursuant to Section 10.35 of Riverside County Ordinance No. 460 because the Project does not include any residential uses. Accordingly, impacts due to a conflict with a CSA, due to Quimby fees, or due to a conflict with the park dedication requirements of Riverside County Ordinance No. 460 would be less-than-cumulatively considerable.

4.17.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Thresholds a. and d.: Less-than-Significant Impact. The physical construction of the on-site trails and pedestrian facilities has been addressed under the relevant issue areas identified throughout this EIR (e.g., air quality, biological resources, cultural resources, etc.). Under each of these topics, the Project impacts are determined to be less than significant, or mitigation measures have been identified to reduce impacts to the maximum feasible extent. There are no components of the planned trails or pedestrian facilities on site that have not already been addressed and accounted for throughout this EIR. Accordingly, Project impacts due to parkland development on site would be less than significant, requiring no mitigation beyond that which is identified in other portions of this EIR.

Threshold b.: Less-than-Significant Impact. The Project does not propose any residential uses or other land use that may generate a population that would directly increase the use of existing neighborhood and regional parks or other recreational facilities. Accordingly, implementation of the proposed Project would not result in the increased use or substantial physical deterioration of an existing neighborhood or regional park, and impacts would be less than significant.



Threshold c.: Less-than-Significant Impact. The Project site is not located within a CSA that was established for recreational facilities, the Project site is not located within a Community Parks and Recreation Plan, and the Project is not subject to payment of in-lieu fees (Quimby fees) for recreational facilities pursuant to Section 10.35 of Riverside County Ordinance No. 460. Accordingly, impacts due to a conflict with a Community Parks and Recreation Plan and due to the need for payment of in-lieu fees for parkland acquisition and construction would be less than significant.

4.17.7 APPLICABLE REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

Impacts to recreation would be less than significant; thus, mitigation measures are not required.



4.18 TRANSPORTATION

The following analysis is based on technical reports prepared by Urban Crossroads, Inc. The first report, entitled, “Stoneridge Commerce Center Specific Plan (SP No. 239, A1) Traffic Impact Analysis” (herein, “TIA”), is dated March 8, 2022, and is included as *Technical Appendix L1*. The TIA evaluates the potential operating deficiencies of transportation facilities in the proposed Project’s Study Area and identifies improvements that would be needed to relieve operational deficiencies. As directed by Riverside County staff, the TIA has been prepared in accordance with the County of Riverside’s *Traffic Analysis Guidelines for Level of Service and Vehicle Miles Traveled* (December 2020), and consultation with Riverside County staff during the scoping process. The approved Traffic Study Scoping agreement is provided in Appendix 1.1 of the TIA. (Urban Crossroads, 2022c) The second report, entitled “Stoneridge Commerce Center Specific Plan (SP No. 239, A1) Vehicle Miles Travelled (VMT) Analysis” (herein, “VMT Analysis”), is dated December 23, 2020, and is included as *Technical Appendix L2*. The VMT Analysis assesses the Project’s potential impacts due to Vehicle Miles Travelled (VMTs), as required pursuant to State Senate Bill 743 (SB 743). (Urban Crossroads, 2020b) An additional technical report was prepared by Urban Crossroads, Inc., to address the “Southern Truck Route,” as described in EIR subsection 3.6.2.B.2 (herein, “Southern Truck Route Analysis”). This report is entitled, “Stoneridge Commerce Center Specific Plan (SP No. 239A1) Alternative Truck Access Route Assessment (Southern Truck Route),” is dated March 8, 2022, and is included as *Technical Appendix L3* to this EIR (Urban Crossroads, 2022d).

On December 28, 2018, updates to the State CEQA Guidelines were approved by the Office of Administrative Law (OAL). As part of the updates to the State CEQA Guidelines, thresholds of significant for evaluation of impacts to transportation have changed. As required by California Senate Bill (SB) 743, new Threshold b. of the State CEQA Guidelines for Transportation requires an evaluation of impacts due to Vehicle Miles Travelled (VMTs), which replaced the Level of Service (LOS) criteria (i.e., automobile delay) that have been utilized in the past to evaluate potential effects to transportation under CEQA. Accordingly, although this Subsection evaluates the Project’s potential effects to LOS and associated consistency with the LOS standards identified in the Riverside County General Plan, Caltrans, and the general plans of cities within the Project’s Study Area, it should be noted that pursuant to State CEQA Guidelines Section 15064.3(a), “...a project’s effect on automobile delay shall not constitute a significant environmental impact.”

In addition, the Riverside County Transportation Commission (RCTC) is undertaking a planning effort for a new east-west transportation corridor referred to as the Mid-County Parkway (MCP). If constructed, a portion of the MCP would traverse the northern portions of the Project site. However, it is currently unknown when or even if RCTC would construct the MCP. As such, the analysis in the Project’s TIA evaluates different scenarios based on whether the MCP is anticipated to be in place. For near-term conditions (2030), it is assumed that the RCTC will not have finalized plans for the MCP; thus, the analysis of near-term conditions assumes that the MCP is not in place and that no development within the potential MCP alignment would be allowed on site. For long-term conditions, two analysis scenarios are presented, with one scenario evaluating potential LOS effects without the construction of the MCP, and a second scenario evaluating potential LOS effects with implementation of the MCP. Under the long-term scenario without construction of the MCP, business park and commercial retail land uses would be developed within the MCP alignment (i.e., the Primary



Land Use Plan). Under long-term conditions with construction of the MCP, no development of business park and commercial uses would occur within the MCP alignment (i.e., the Alternative Land Use Plan). Refer to Section 3.0 of this EIR for a description of the Primary Land Use Plan and Alternative Land Use Plan.

Additionally, and as discussed in EIR Subsection 3.6.2.B.2, two alternative truck routes are evaluated for the scenario in which the MCP is not constructed. These alternative truck routes were evaluated for both near- and long-term conditions, but only would occur in the event that the MCP is not constructed. The “Primary Truck Route” assumes that truck traffic associated with the Project would utilize Ramona Expressway to access designated truck routes within the City of Perris, including Redlands Avenue, Harley Knox Boulevard, Indian Avenue, Morgan Street, and Placentia Avenue. EIR Figure 3-12 (previously presented) depicts the truck traffic distribution assumed for the Primary Truck Route. The “Southern Truck Route” assumes that all Project-related truck trips that would head south on I-215 would utilize the Redlands Avenue Interchange via Nuevo Road, Dunlap Drive, and San Jacinto Drive, while truck trips heading north on I-215 would access I-215 in a manner similar to what is described above for the Primary Truck Route. EIR Figure 3-14 (previously presented) depicts the truck traffic distribution assumed for the Southern Truck Route. Refer to EIR subsection 3.6.2.B.2 for additional discussion of the truck routes evaluated herein.

4.18.1 EXISTING VEHICLE MILES TRAVELLED

The method of VMT analysis utilized herein is based on VMTs per employee for home-based work (HBW) trips. HBW VMT per Worker is a measure of all auto trips between home and work and does not include heavy duty truck trips or freight, which is consistent with the Governor’s Office of Planning and Research (OPR) direction and Riverside County VMT calculation guidelines. The existing County-wide average VMT per employee is 14.24 for office and industrial uses. (Urban Crossroads, 2020b, p. 6)

4.18.2 STUDY AREA DESCRIPTION

As noted above, two scenarios are evaluated by the Project’s TIA. The first scenario assumes that the MCP would not be constructed, in which case Project-related traffic is routed to other existing and planned circulation facilities within the Study Area. The second scenario assumes that the MCP would be constructed, in which case a portion of Project traffic is routed to the MCP. Additionally, for the condition in which the MCP is not constructed, three alternative truck routes are considered, as discussed above. Figure 4.18-1, *Project Study Area (Without Mid-County Parkway) – Primary Truck Route*, depicts the Study Area assumed for the scenario in which the MCP is not developed by Riverside County and assuming Project truck traffic utilizes the Primary Truck Route to access I-215. For the Southern Truck Route, Study Area intersections are the same as shown on Figure 4.18-1, but also include the following intersections:

- Dunlap Drive & San Jacinto Avenue (Intersection #68);
- Evans Road & San Jacinto Avenue (Intersection #69);
- Murrieta Road & San Jacinto Avenue (Intersection #70);
- Redlands Avenue & San Jacinto Avenue (Intersection #71);
- Redlands Avenue & I-215 Northbound Ramps (Intersection #72); and



- Redlands Avenue & I-215 Southbound Ramps (Intersection #73).

The Study Area depicted on Figure 4.18-1, in addition to the additional intersections evaluated for the Southern Truck Route (listed above), is utilized for evaluation of the Project's near-term and long-term effects to LOS for the scenario in which the MCP is not constructed. Figure 4.18-2, *Project Study Area (With Mid-County Parkway)*, depicts the Study Area assumed for the scenario in which the MCP is developed and constructed through a portion of the Project site, and is utilized for evaluation of the Project's potential long-term effects to LOS, only. No alternative truck routes are studied for the scenario in which the MCP is constructed, as it is assumed that once the MCP is constructed a majority of Project-related truck traffic would utilize the MCP to access I-215.

4.18.3 METHODOLOGIES FOR DETERMINING TRANSPORTATION EFFECTS

This subsection presents the methodologies used to perform the traffic analyses summarized in the Project's TIA and VMT Analysis. The methodologies described for analysis of LOS generally are consistent with County of Riverside and Caltrans traffic study guidelines.

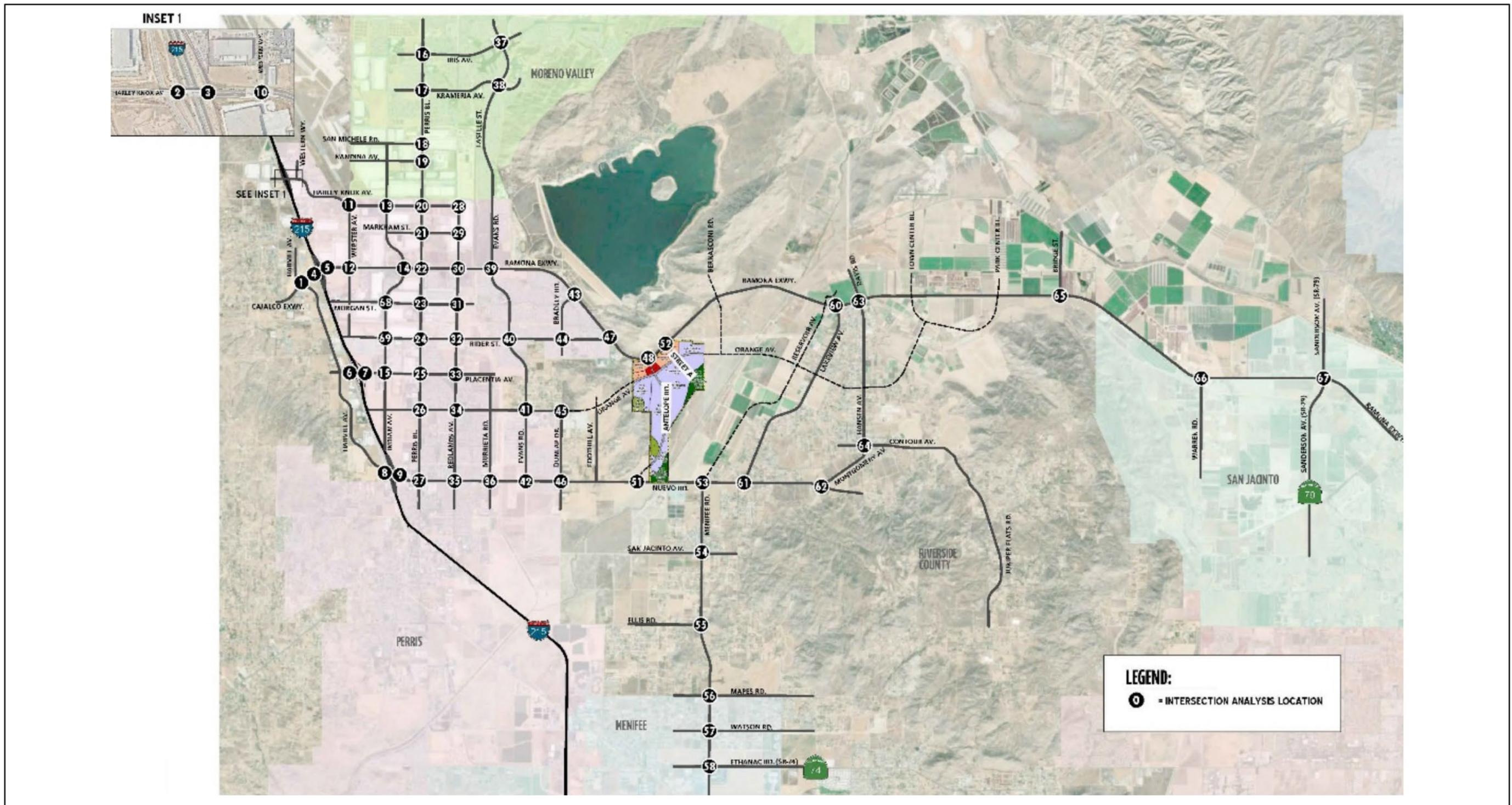
A. Level of Service

Traffic operations of roadway facilities are described using the term "Level of Service" (LOS). LOS is a qualitative description of traffic flow based on several factors such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined ranging from LOS A, representing completely free-flow conditions, to LOS F, representing breakdown in flow resulting in stop-and-go conditions. LOS E represents operations at or near capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow. It should be noted that pursuant to SB 743 and Appendix G to the State CEQA Guidelines, a project's effects on automobile delay (i.e., LOS) shall not constitute a significant environmental effect. The analysis included herein addressing LOS is intended to demonstrate consistency with applicable General Plan policies related to LOS, although a determination of significance is not made herein based on LOS standards. (Urban Crossroads, 2022c, p. 27)

B. Analysis Methodologies

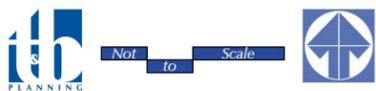
1. Vehicle Miles Travelled (VMT) Evaluation Criteria and Methodology

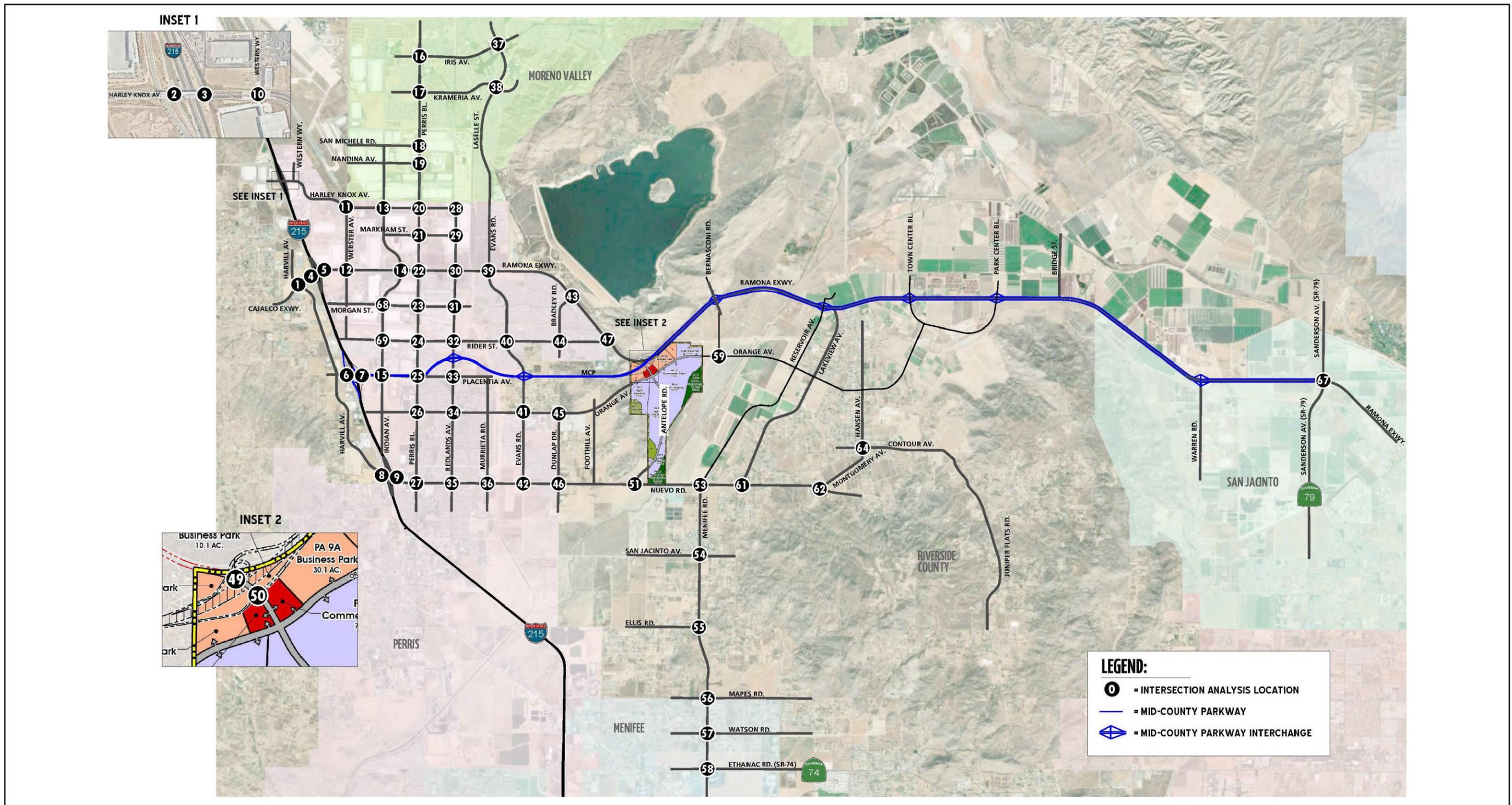
Changes to the State CEQA Guidelines were adopted in December 2018, which require all lead agencies to adopt VMT as a replacement for automobile delay-based level of service (LOS) as the new measure for identifying transportation impacts for land use projects. This Statewide mandate took effect July 1, 2020. To aid in this transition, in December 2018 the Governor's Office of Planning and Research (OPR) released a "*Technical Advisory on Evaluating Transportation Impacts in CEQA*" (Technical Advisory). Based on OPR's Technical Advisory, the County of Riverside has adopted their *Transportation Analysis Preparation Guide* (County Guidelines). As outlined in the County Guidelines, mixed-use projects should evaluate each land use component of the project separately and apply the relevant significance threshold for each land use type (i.e.,



Source(s): Urban Crossroads (03-03-2022)

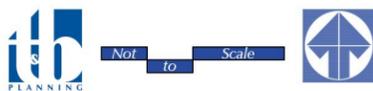
Figure 4.18-1





Source(s): Urban Crossroads (03-03-2022)

Figure 4.18-2





office, retail, etc.). For the purposes of evaluating the Project's impacts due to VMTs, the evaluation of VMT is separated into two assessments, one to focus on the employment uses (i.e., light industrial and business park uses) and a separate assessment of the Project's retail component. (Urban Crossroads, 2020b, pp. 2-3)

Consistent with County Guidelines, projects should evaluate available screening criteria based on their location and project type to determine if a presumption of a less than significant transportation impact can be made. The following project screening thresholds were selected for review based on their applicability to the proposed Project (refer to subsection 4.18.6 for a complete discussion of the screening thresholds): (Urban Crossroads, 2020b, p. 3)

- Small Projects Screening;
- High Quality Transit Areas (HQTA) Screening;
- Map-Based Screening; and
- Local-Serving Retail Screening.

A land use project need only meet one of the above screening criteria to result in a less than significant impact. If none of the above screening criteria are met, then a project-level VMT analysis is required. For a project-level VMT analysis, RIVTAM is a useful tool to estimate VMT as it considers interaction between different land uses based on socio-economic data such as population, households, and employment. RIVTAM is a travel forecasting model that represents a sub-area (Riverside County) of the Southern California Association of Governments (SCAG) regional traffic model. RIVTAM was designed to provide a greater level of detail and sensitivity in the Riverside County area as compared to the regional SCAG model. County Guidelines identifies RIVTAM as the appropriate tool for conducting VMT modeling for land use projects within the County of Riverside. (Urban Crossroads, 2020b, p. 5)

Project VMT has been calculated using the most current version of RIVTAM. Adjustments in socio-economic data (SED) (i.e., employment) have been made to a separate traffic analysis zones (TAZs) within the RIVTAM model to reflect the Project's proposed land uses (i.e., light industrial, business park, and retail). Since the retail land use will be evaluated separately from the light industrial and business park land uses, two separate TAZs were utilized to model the Project, which allows for the ability to isolate the VMT generated by each component of the Project from other land use in the model. As previously indicated in EIR subsection 3.6.2, implementation of the Primary Land Use Plan is anticipated to generate approximately 10,256 new, recurring jobs within the County, while the Alternative Land Use Plan would result in approximately 10,044 employees. (Urban Crossroads, 2020b, p. 5)

2. Level of Service Evaluation Criteria and Methodology

Refer to Section 2 of the Project's TIA (*Technical Appendix LI*) for a description of the methodology and LOS definitions/criteria used to evaluate operational deficiencies to signalized intersections, unsignalized intersections, due to traffic signal warrants, freeway off-ramp queuing locations, freeway mainline segments, and freeway merge/diverge ramp locations. (Urban Crossroads, 2022c, pp. 45-51)



4.18.4 EXISTING CONDITIONS

The Project site is largely vacant and undeveloped under existing conditions, and generates no measurable amount of traffic. A description of the existing circulation network in the Project area is provided below.

A. Existing Circulation Network

Pursuant to the scoping agreement with County of Riverside staff (Appendix 1.1 to the Project's TIA), the Study Area includes a total of 67 existing and future intersections where the Project is anticipated to contribute 50 or more peak hour trips or has been added at the direction of County staff. An additional six (6) intersections are evaluated for the Southern Truck Route. Refer to *Technical Appendices L1 and L3* for a discussion of the existing number of through lanes and intersection controls at Study Area intersections. (Urban Crossroads, 2022c, p. 37)

B. General Plan Circulation Elements

As noted previously, the Project site is located within the County of Riverside. The roadway classifications and planned (ultimate) roadway cross-sections of the major roadways within the Study Area, as identified on County of Riverside General Plan Circulation Element, are described subsequently. Exhibit 3-2 of the Project's TIA shows the County of Riverside General Plan Circulation Element and Exhibit 3-3 of the Project's TIA illustrates the County of Riverside General Plan roadway cross-sections. Refer to Subsection 3.2 of the Project's TIA for a detailed description of the facilities within the Project's Study Area. (Urban Crossroads, 2022c, p. 37)

Exhibits 3-4 and 3-5 of the Project's TIA show the City of Perris General Plan Circulation Element and roadway cross-sections, respectively. Exhibits 3-6 and 3-7 of the Project's TIA show the City of Moreno Valley General Plan Circulation Element and roadway cross-sections, respectively. Exhibits 3-8 and 3-9 of the Project's TIA show the City of Menifee General Plan Circulation Element and roadway cross-sections, respectively. Exhibits 3-10 and 3-11 of the Project's TIA show the City of San Jacinto General Plan Circulation Element and roadway cross-sections, respectively. (Urban Crossroads, 2022c, p. 46)

C. Truck Routes

The County of Riverside's General Plan does not provide designated truck routes. Truck routes for the proposed Project have been determined based on discussions with County staff. Exhibit 3-12 of the Project's TIA shows the currently-adopted City of Perris truck routes. The City of Moreno Valley and City of Menifee truck routes are shown on Exhibits 3-13 and 3-14, respectively, of the Project's TIA. These truck routes serve both the proposed Project and future cumulative development projects throughout the Study Area. For purposes of analysis herein, two alternative truck routes are evaluated. For the "Primary Truck Route," Project truck traffic has been limited to only utilize Ramona Expressway to access Redlands Avenue. Redlands Avenue is the closest available truck route to provide truck access to the north and south from Ramona Expressway. For the "Southern Truck Route," it is assumed that all Project-related truck traffic heading south on I-215 would access I-215 via the Redlands Avenue interchange instead of heading west on the Ramona Expressway to



access I-215. Under the “Southern Truck Route,” truck trips heading north on I-215 would utilize Ramona Expressway only to access Redlands Avenue and other designated truck routes within the City of Perris, similar to what is described above for the Primary Truck Route. Truck trips heading south on I-215 under the “Southern Truck Route” would utilize the Redlands Avenue Interchange via Nuevo Road, Dunlap Drive, and San Jacinto Drive. Refer to EIR subsection 3.6.2.B.2 for a discussion of the three truck route alternatives evaluated herein. (Urban Crossroads, 2022c, p. 46)

D. Existing Vehicle Miles Travelled

According to the County Guidelines for VMT, existing county-wide average VMT per employee is 14.24 for office and industrial uses (Urban Crossroads, 2020b, p. 6).

E. Existing Conditions Analysis

Refer to Section 3 of the Project’s TIA (*Technical Appendix L2*) and *Technical Appendix L3* for a discussion of intersection operations, traffic signal warrants, off-ramp queuing operations, and freeway facility operations for existing conditions.

1. Bicycle and Pedestrian Facilities

In an effort to promote alternative modes of transportation, the County of Riverside also includes a trails and bikeway system. The trails and bikeway system, shown on Exhibit 3-15 of the Project’s TIA, shows the proposed trails connected with major features within the County. There is a proposed community trail and design guidelines trail along Ramona Expressway, along the Project’s frontage. There is a proposed community trail that bisects the Project site. Field observations conducted in March 2020 indicates nominal pedestrian and bicycle activity within the Study Area. The City of Perris proposed bikeways and trails are shown on Exhibit 3-16 of the Project’s TIA, the City of Moreno Valley Bike Plan is shown on TIA Exhibit 3-17, the City of Menifee Bikeway and Community Pedestrian network is shown on TIA Exhibit 3-18, and the City of San Jacinto Bikeway Plan is shown on TIA Exhibit 3-19. (Urban Crossroads, 2022c, p. 46)

2. Transit Service

The County of Riverside is currently served by the Riverside Transit Authority (RTA), a public transit agency serving the unincorporated Riverside County region. RTA Route 30 runs along Walnut Avenue, Sherman Road, and Rider Street, as shown on Exhibit 3-20 of the Project’s TIA. However, there are currently no existing bus routes that serve the roadways within the Study Area in close proximity to the proposed Project. Transit service is reviewed and updated by RTA periodically to address ridership, budget, and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate. (Urban Crossroads, 2022c, p. 64)



4.18.5 APPLICABLE REGULATORY REQUIREMENTS

A. State Regulations

1. **Complete Streets Act – Assembly Bill 1358 (AB 1358)**

In September 2008, Gov. Arnold Schwarzenegger signed into law Assembly Bill 1358, the Complete Streets Act. AB 1358 requires that the legislative body of a city or county, upon any substantive revision of the circulation element of the general plan, modify the circulation element to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan. By requiring new duties of local officials, AB 1358 imposes a state-mandated local program. (CA Legislative Info, 2008)

AB 1358 required the Office of Planning and Research (OPR) to prepare or amend guidelines for a legislative body to accommodate the safe and convenient travel of users of streets, roads, and highways in a manner that is suitable to the rural, suburban, or urban context of the general plan, and in doing so to consider how appropriate accommodation varies depending on its transportation and land use context. It authorizes OPR, in developing these guidelines, to consult with leading transportation experts, including, but not limited to, bicycle transportation planners, pedestrian planners, public transportation planners, local air quality management districts, and disability and senior mobility planners. (CA Legislative Info, 2008)

2. **Statewide Transportation Improvement Program (STIP)**

The Statewide Transportation Improvement Program (STIP) is a multi-year capital improvement program of transportation projects on and off the State Highway System, funded with revenues from the Transportation Investment Fund and other funding sources. STIP programming generally occurs every two years. The programming cycle begins with the release of a proposed fund estimate in July of odd-numbered years, followed by California Transportation Commission (CTC) adoption of the fund estimate in August (odd years). The fund estimate serves to identify the amount of new funds available for the programming of transportation projects. Once the fund estimate is adopted, Caltrans and the regional planning agencies prepare transportation improvement plans for submittal by December 15th (odd years). Caltrans prepare the Interregional Transportation Improvement Plan (ITIP) and regional agencies prepare Regional Transportation Improvement Plans (RTIPs). Public hearings are held in January (even years) in both northern and southern California. The STIP is adopted by the CTC by April (even years). (Caltrans, 2020a)

3. **Senate Bill 743 (SB 743)**

Senate Bill 743 (Steinberg, 2013), which was codified in Public Resources Code section 21099, required changes to the guidelines implementing State CEQA Guidelines regarding the analysis of transportation impacts. As one appellate court explained: “During the last 10 years, the Legislature has charted a course of long-term sustainability based on denser infill development, reduced reliance on individual vehicles and improved mass transit, all with the goal of reducing greenhouse gas emissions. Section 21099 is part of that



strategy...” (*Covina Residents for Responsible Development v. City of Covina* (2018) 21 Cal.App.5th 712, 729.) Pursuant to Section 21099, the criteria for determining the significance of transportation impacts must “promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.” (*Id.*, subd. (b)(1); see generally, adopted State CEQA Guidelines, § 15064.3, subd. (b) [Criteria for Analyzing Transportation Impacts].) To that end, in developing the criteria, OPR has proposed, and the California Natural Resources Agency (Agency) has certified and adopted, changes to the State CEQA Guidelines that identify vehicle miles traveled (VMT) as the most appropriate metric to evaluate a project’s transportation impacts. With the California Natural Resources Agency’s certification and adoption of the changes to the State CEQA Guidelines, automobile delay, as measured by “level of service” and other similar metrics, generally no longer constitutes a significant environmental effect under CEQA as of July 1, 2020. (Pub. Resources Code, § 21099, subd. (b)(3).) (OPR, 2018b)

4. Senate Bill 325 - Transportation Development Act (Mills-Alquist-Deddeh Act; SB 325)

The Mills-Alquist-Deddeh Act (SB 325) was enacted by the California Legislature to improve existing public transportation services and encourage regional transportation coordination. Known as the Transportation Development Act (TDA) of 1971, this law provides funding to be allocated to transit and non-transit related purposes that comply with regional transportation plans. TDA established two funding sources; the Local Transportation Fund (LTF), and the State Transit Assistance (STA) fund. Providing certain conditions are met, counties with a population under 500,000 (according to the 1970 federal census) may also use the LTF for local streets and roads, construction, and maintenance. The STA funding can only be used for transportation planning and mass transportation purposes. (Caltrans, 2020b)

5. Road Repair and Accountability Act of 2017 (Senate Bill 1)

On April 28, 2017 Governor Brown signed Senate Bill (SB) 1 (Chapter 5, Statutes of 2017), known as the Road Repair and Accountability Act of 2017. Senate Bill 1 (SB 1) augments the base of the State Transit Assistance program essentially doubling the funding for this program. To provide for SB 1 reporting and transparency, transit agencies are asked to work with Caltrans to report on planned expenditures for these augmented funds. (Caltrans, 2020b)

B. Regional Regulations

1. SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

The Southern California Association of Governments (SCAG) is a regional agency established pursuant to California Government Code § 6500, also referred to as the Joint Powers Authority law. SCAG is designated as a Council of Governments (COG), a Regional Transportation Planning Agency (RTPA), and a Metropolitan Planning Organization (MPO). The Project site is within SCAG’s regional authority. On April 7, 2016, SCAG adopted the *2016-2040 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS)* with goals to: 1) Align the plan investments and policies with improving regional economic development and competitiveness; 2) Maximize mobility and accessibility for all people and goods in the region; 3) Ensure travel safety and reliability for all people and goods in the region; 4) Preserve and ensure a sustainable regional transportation system; 5) Maximize the productivity of our transportation system; 6) Protect the environment



and health of our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking); 7) Actively encourage and create incentives for energy efficiency, where possible; 8) Encourage land use and growth patterns that facilitate transit and active transportation; and 9) Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies (SCAG, 2016). Performance measures and funding strategies also are included to ensure that the adopted goals are achieved through implementation of the RTP.

On May 7, 2020, SCAG’s Regional Council adopted *Connect SoCal (2020-2045 Regional Transportations Plan/Sustainable Communities Strategy* (herein, “draft RTP/SCS”), for federal transportation conformity purposes only. Due to the COVID-19 pandemic, the Regional Council will consider approval of Connect SoCal in its entirety and for all other purposes within 120 days from May 7, 2020. For purposes of analysis herein, it is assumed that Connect SoCal will be adopted prior to Project approval.

The draft RTP/SCS includes long-range regional transportation plans, regional transportation improvement programs, regional housing needs allocations, and other plans for the region. The RTP/SCS also provides objectives for meeting emissions reduction targets set forth by the California Air Resources Board (ARB); these objectives were provided in a direct response to Senate Bill 375 (SB 375) which was enacted to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use, housing and environmental planning. (SCAG, 2020d) The RTP/SCS is updated periodically to allow for the consideration and inclusion of new transportation strategies and methods.

The draft 2020-2045 RTP/SCS includes a Technical Appendix titled “Goods Movement” that is applicable to the Project because the Project entails a use that is closely associated with, and relies directly on the goods movement system (e.g., manufacturing, construction, retail trade, wholesale trade and transportation, and warehousing). In April 2018 SCAG published *Industrial Warehousing in the SCAG Region*. According to the document, the SCAG region is a vibrant hub for international and domestic trade because of its large transportation base and extensive multimodal transportation system. The SCAG region’s freight transportation system includes warehouses and distribution centers; the Ports of Los Angeles, Long Beach, and Hueneme; airports; rail intermodal terminals; rail lines, and local streets, state highways and interstates. Together the system enables the movement of goods from source to market, facilitating uninterrupted global commerce. The region is home to approximately 34,000 warehouses with 1.17 billion square feet of warehouse building space, and undeveloped land that could accommodate an additional 338 million square feet of new warehouse building space. These regions attract robust logistics activities, and are a major reason the region is a critical mode in the global supply chain. (SCAG, 2018, p. ES-1)

2. Riverside County Congestion Management Program (CMP)

The intent of a Congestion Management Program (CMP) is to more directly link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related deficiencies, and improve air quality. The County of Riverside CMP became effective with the passage of Proposition 111 in 1990 and updated most recently



updated in 2011. The RCTC adopted the 2011 CMP for the County of Riverside in December 2011. There are no Study Area intersections identified as a Riverside County CMP facility. (Urban Crossroads, 2022c, p. 8)

C. Western Riverside County Association of Governments Transportation Uniform Mitigation Fee

The Western Riverside Council of Governments (WRCOG) established a consolidated Transportation Uniform Mitigation Fee (TUMF) program for all of western Riverside County, which commenced in 2003. The establishment of TUMF was based on the desire to establish a single, uniform fee program to mitigate the cumulative impacts of new development on the sub-region's arterial highway system rather than having multiple and potentially uncoordinated fee programs across the region. WRCOG is responsible for establishing and updating TUMF payment rates, based on a TUMF Program Nexus Study, which is periodically updated to consider the impact of future development on the subregion's system of highways and arterial roads. The most recent Nexus Study update was approved by the WRCOG Executive Committee in July 2017. The updated Nexus Study continues to demonstrate the relationship between the TUMF fee levels and the cost of anticipated improvements to the Regional System of Highways and Arterials (RSHA) necessitated by new development throughout western Riverside County. (WRCOG, 2018, p. 3)

D. Local Regulations

Ordinances specifically applicable to the circulation system are presented below (Riverside County, 2015, p. 4.18-28)

- Ordinance No. 413 – Vehicle Parking: Ordinance No. 413 establishes regulations to vehicle parking on Riverside County roadways.
- Ordinance No. 452 – Speed Limits: Ordinance No. 452 pertains to prima facie speed limits on Riverside County roadways and establishes or amends prima facie speed limits on certain Riverside County roads.
- Ordinance No. 460 – Subdivision of Land: Ordinance No. 460, in conjunction with the Subdivision Map Act, establishes regulations for the division of land and describes procedures. The ordinance also includes the provisions for the establishment of Road and Bridge Benefit Districts and associated fees.
- Ordinance No. 461 – Road Improvement Standards and Specifications: Ordinance No. 461 adopts Road Improvement Standards and Specifications.
- Ordinance No. 499 – Encroachments in County Highways: Ordinance No. 499, subject to the control of the Board of Supervisors, delegates to the Riverside County Transportation Director the administration of the use of county highways, including county roads, for excavations and encroachments; construction, operation and maintenance of utility facilities; planting, maintenance and removal of trees; and the issuance, modification, and revocation of permits for such uses.
- Ordinance No. 500 – Reducing the Permissible Weight of Vehicles on Unimproved County Highways: Upon recommendation of the Director of Transportation, based on an engineering study, Ordinance



No. 500 authorizes the Board of Supervisors to identify by resolution County highways, unimproved County highways, CSA roads, and County bridges to which the weight prohibitions and reductions apply.

- Ordinance No. 659 – Development Mitigation Fee for Residential Development (DIF Program): Ordinance No. 659 establishes a development impact fee (DIF) for the development of infrastructure, including County roadways and the installation of traffic signals.
- Ordinance No. 671 – Consolidated Fees for Land Use and Related Functions: Ordinance No. 671 establishes a consolidated fee program for land use and related functions. This is a deposit-based fee (DBF) program and provides for unused fees to be refunded to the applicant.
- Ordinance No. 748 – Mitigation of Traffic Congestion Through Signalization: Ordinance No. 748 establishes a fee program for the installation of traffic signals based on a priority list. The fee would also have a component for the installation of traffic signal interconnect, and a component for the application of intelligent transportation systems technologies.
- Ordinance No. 824 – Western Riverside County Transportation Uniform Mitigation Fee (TUMF) Program: Ordinance No. 824 establishes a TUMF program for the western portion of Riverside County. The fees are collected by the County of Riverside and administered by WRCOG to make roadway improvements in the WRCOG area. TUMF funds are intended for use solely for the engineering, construction, and right-of-way acquisition for regional facilities. TUMF funds may not be used to defray operational and maintenance expenses. Facilities eligible for TUMF are designated by WRCOG and updated periodically. They include streets, arterials and road improvements as defined in the ordinance.

4.18.6 BASIS FOR DETERMINING SIGNIFICANCE

A. *Thresholds of Significance*

According to Section XVII of Appendix G to the State CEQA Guidelines, the proposed Project would result in a significant impact to transportation if the Project or any Project-related component would (OPR, 2018a)

- Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;
- Conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- Result in inadequate emergency access or access to nearby uses.



The following thresholds are derived from Riverside County's Environmental Assessment Checklist, which incorporate the current Appendix G thresholds pursuant to the 2018 changes to the State CEQA Guidelines, in order to evaluate the significance of the proposed Project's impacts on transportation. The proposed Project would result in a significant impact to transportation if the Project or any Project-related component would:

- a. *Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;*
- b. *Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).*
- c. *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment);*
- d. *Cause an effect upon, or a need for new or altered maintenance of roads;*
- e. *Cause an effect upon circulation during the project's construction;*
- f. *Result in inadequate emergency access or access to nearby uses; or*
- g. *Include the construction or expansion of a bike system or bike lanes.*

The significance thresholds set forth in Riverside County's Environmental Assessment Checklist, as modified/updated per the 2018 updates to the State CEQA Guidelines, were used to evaluate the significance of the proposed Project's impacts on transportation.

B. Thresholds of Significance for Vehicle Miles Travelled (VMTs)

As previously discussed, and consistent with County Guidelines, projects should evaluate available screening criteria based on their location and project type to determine if a presumption of a less than significant transportation impact can be made. The following project screening thresholds were selected for review based on their applicability to the proposed Project. A land use project need only meet one of the following screening criteria to result in a less-than-significant impact. (Urban Crossroads, 2020b, p. 3)

- **Small Projects Screening:** The County Guidelines identify that projects that generate fewer than 110 daily vehicle trips are presumed to have a less than significant impact absent substantial evidence to the contrary. In addition, small projects anticipated to generate low traffic volumes and by association greenhouse gas (GHG) emissions less than 3,000 Metric Tons of Carbon Dioxide Equivalent (MTCO₂e) per year are also assumed to cause a less than significant transportation impact. (Urban Crossroads, 2020b, p. 3)



- High Quality Transit Areas (HQTA) Screening: Projects located within a Transit Priority Area (TPA) (i.e., within ½ mile of an existing “major transit stop”¹ or an existing stop along a “high-quality transit corridor”²) may be presumed to have a less than significant impact absent substantial evidence to the contrary. However, the presumption may not be appropriate if a project: a) Has a Floor Area Ratio (FAR) of less than 0.75; b) Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking); c) Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization); or d) Replaces affordable residential units with a smaller number of moderate- or high-income residential units. (Urban Crossroads, 2020b, pp. 3-4)
- Map-Based Screening: The Technical Advisory notes that “residential and office projects that locate in areas with low VMT, and that incorporate similar features (i.e., density, mix of uses, transit accessibility), will tend to exhibit similarly low VMT.” The County Guidelines also note that the use of map-based screening for low VMT generating areas is also applicable for other employment uses such as the Project’s light industrial and business park development. (Urban Crossroads, 2020b, p. 4)
- Local-Serving Retail Screening: As noted in the County Guidelines, local-serving retail has been determined to reduce VMT by shortening trips. (Urban Crossroads, 2020b, p. 4)

If none of the above screening criteria are met, then a project-level VMT analysis is required. For project-level VMT analyses for office and industrial uses, the County Guidelines state that Work VMT per employee that exceeds the existing county-wide average Work VMT per employee (i.e., County threshold) may result in a significant transportation impact. The existing county-wide average VMT per employee is 14.24 for office and industrial uses. (Urban Crossroads, 2020b, p. 6)

For retail uses, and consistent with County Guidelines, it is appropriate to measure the net regional change in VMT related to the implementation of a retail land use project using the entire Riverside County area as the regional boundary. A net increase in regional total VMT is identified as the County’s adopted impact threshold for retail land uses. (Urban Crossroads, 2020b, p. 6)

C. Applicable Level of Service (LOS) Standards

The definition of an intersection deficiency has been obtained from each of the applicable surrounding jurisdictions. Refer to Subsection 2.7 of the Project’s TIA (*Technical Appendix LI*) for a description of the LOS standards applicable to study area facilities within unincorporated Riverside County, the City of Perris,

¹ Pub. Resources Code, § 21064.3 (“Major transit stop’ means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.”).

² Pub. Resources Code, § 21155 (“For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.”).



the City of Moreno Valley, City of Menifee, City of San Jacinto, and Caltrans. As previously indicated, intersection deficiencies based on delay (LOS) shall not constitute a significant environmental impact under CEQA (see State CEQA Guidelines § 15064.3).

D. Deficiency Criteria

1. Deficiency Criteria for Intersections

To determine whether the addition of Project-related traffic at a study intersection would result in a deficiency, the following will be utilized (Urban Crossroads, 2022c, p. 35):

- *A deficiency occurs at Study Area intersections if the pre-Project condition is at or better than LOS D (i.e., acceptable LOS), and the addition of project trips causes the peak hour LOS of the Study Area intersection to operate at unacceptable LOS (i.e., LOS E or F). Per the County of Riverside traffic study guidelines, for intersections currently operating at unacceptable LOS (LOS E or F), a deficiency will occur if the Project contributes 50 or more peak hour trips to pre-project traffic conditions.*

2. Deficiency Criteria for Caltrans Facilities

To determine whether the addition of project traffic to the SHS freeway segments would result in a deficiency, the following will be utilized (Urban Crossroads, 2022c, p. 35):

- *The analysis finds that the LOS of a segment will degrade from D or better to E or F.*
- *The analysis finds that the project will exacerbate an already deficient condition (i.e., contributing 50 or more peak hour trips). A segment that is operating at or near capacity is deemed to be deficient.*

E. Project Fair Share Calculation Methodology

Improvements found to be included in the TUMF and/or DIF are identified as such. For improvements that do not appear to be in either of the pre-existing fee programs, a fair share contribution based on the Project's proportional share may be imposed in order to address the Project's share of deficiencies in lieu of construction. It should be noted that fair share calculations are for informational purposes only and the County Traffic Engineer would determine the appropriate improvements to be implemented by a project (to be identified in the conditions of approval). (Urban Crossroads, 2022c, p. 35)

If the intersection is currently operating at acceptable LOS under Existing traffic conditions, the Project's fair share cost of improvements would be determined based on the following equation, which is the ratio of Project traffic to new traffic, where new traffic is total future traffic less existing baseline traffic (Urban Crossroads, 2022c, p. 36):

$$\text{Project Fair Share \%} = \text{Project Traffic} / (\text{Horizon Year (2040) Total Traffic} - \text{Existing (2020) Traffic})$$



If the intersection does not currently exist, but will be constructed sometime in the future, the Project’s fair share cost of improvements would be determined based on the following equation, which is the ratio of Project traffic to total future traffic (Urban Crossroads, 2022c, p. 36):

$$\text{Project Fair Share \%} = \text{Project Traffic} / (\text{Horizon Year (2040) Total Traffic})$$

4.18.7 IMPACT ANALYSIS

Threshold a: Would the Project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

In addition to LOS standards established by the Riverside County General Plan, City of Perris General Plan, City of Moreno Valley General Plan, City of Menifee General Plan, City of San Jacinto General Plan, and Caltrans, which are discussed below, the only applicable programs, plans, ordinances, or policies addressing the circulation system are the County’s General Plan, Lakeview/Nuevo Area Plan (LNAP), and Riverside County ordinances. Future development on site would be required to comply with all applicable Riverside County ordinances related to the circulation system, including, but not limited to, Ordinance No. 460 (relating to required access, roadway dedications, roadway design, etc.) and Ordinance No. 726 (relating to transportation demand management). In addition, EIR *Technical Appendix I* includes a detailed analysis of the proposed Project’s consistency with the Riverside County General Plan and LNAP policies. As demonstrated in the analysis therein, with approval of the Project’s proposed General Plan Amendment No. 190008, the proposed Project would not conflict with any applicable policies of the General Plan or LNAP, including policies within the General Plan Circulation Element and LNAP that relate to the circulation system, transit, roadway, bicycle, and/or pedestrian facilities. Based on the detailed analysis contained in EIR *Technical Appendix I*, the proposed Project clearly would be compatible with the objectives, policies, and programs specified in the Riverside County General Plan and LNAP, and also would be in general agreement and harmony with the terms and requirements of the General Plan and LNAP. Accordingly, impacts would be less than significant.

With respect to the LOS standards, the Project’s TIA (*Technical Appendix L1*) and Southern Truck Route Analysis (*Technical Appendix L3*) were prepared in order to demonstrate compliance with the LOS standards established by the Riverside County General Plan, City of Perris General Plan, City of Moreno Valley General Plan, City of Menifee General Plan, City of San Jacinto General Plan, and Caltrans. Refer to the Project’s TIA and Southern Truck Route Analysis for a discussion of the methodology used to evaluate the Project’s effects on LOS, a summary of existing traffic conditions within the Study Area, and for the results of the analysis of the Project’s contributions to deficiencies at study area intersections, traffic signal warrant locations, off-ramp queuing locations, and freeway facilities.

As indicated in the Project’s TIA and Southern Truck Route Analysis, although the Project would contribute to projected LOS deficiencies and the need for signalization of Study Area facilities, the Project would be conditioned to require construction of improvements, payment of DIF and TUMF fees, and payment of fair-



share contributions towards improvements not included in any existing fee programs. With exception of facilities under the jurisdiction of Caltrans, the improvements to be constructed as part of the Project, as part of the DIF or TUMF programs, or as the result of Project fair-share contributions would provide for an acceptable LOS at all Study Area facilities, as shown in Tables 5-4, 6-4, 7-7, and 7-8 of the Project's TIA. However, it is anticipated that certain improvements planned through DIF, TUMF, or fair share contributions may not be in place in the near term, resulting in LOS deficiencies at study area facilities until such a time that the planned improvements are constructed. Additionally, although it is expected that segments of I-215 and associated off-ramp queuing locations would not achieve Caltrans' LOS standards under near- or long-term conditions, Caltrans does not have any fee programs in place to address impacts to freeways or ramp junctions. Additionally, the LOS standards identified by the Riverside County General Plan, City of Perris General Plan, City of Moreno Valley General Plan, City of Menifee General Plan, City of San Jacinto General Plan, and Caltrans are aspirational, and indirect effects associated with the Project's contribution to LOS deficiencies already are addressed throughout this EIR (refer specifically to EIR Subsections 4.3, *Air Quality*, 4.6, *Energy*, 4.8, *Greenhouse Gas Emissions*, and 4.13, *Noise*). Furthermore, pursuant to SB 743 and State CEQA Guidelines § 15064.3(a), "...a project's effect on automobile delay shall not constitute and environmental impact." As such, for purposes of CEQA, the Project's contribution to the projected LOS deficiencies at Study Area facilities would be less than significant.

Accordingly, and based on the preceding analysis, the proposed Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Impacts would be less than significant.

Threshold b: Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

As previously discussed, SB 743, approved in 2013, was intended to change the way transportation impacts are determined according to CEQA. Updates to the State CEQA Guidelines that were approved in December 2018 included the addition of State CEQA Guidelines Section 15064.3, of which Subdivision b establishes criteria for evaluating a project's transportation impacts based on project type and using automobile VMT as the metric. As a component of OPR's revisions to the State CEQA Guidelines, lead agencies were required to adopt VMT thresholds of significance by July 1, 2020. Based on OPR's Technical Advisory, the County of Riverside has adopted their Transportation Analysis Preparation Guide (County Guidelines). The analysis herein is based on the County Guidelines for evaluating the Project's impacts due to VMT. As outlined in the County Guidelines, mixed-use projects should evaluate each land use component of the project separately and apply the relevant significance threshold for each land use type (i.e., office, retail, etc.). For the purposes of this VMT analysis, the evaluation of VMT will be separated into two assessments, one to focus on the employment uses (i.e., light industrial and business park uses) and a separate assessment of the Project's retail component. (Urban Crossroads, 2020b, pp. 2-3)



Project Screening

Consistent with County Guidelines, projects should evaluate available screening criteria based on their location and project type to determine if a presumption of a less than significant transportation impact can be made. The following project screening thresholds were selected for review base on their applicability to the proposed Project: (Urban Crossroads, 2020b, p. 3)

- Small Projects Screening
- High Quality Transit Areas (HQTA) Screening
- Map-Based Screening
- Local-Serving Retail Screening

A land use project need only to meet one of the above screening thresholds to result in a less-than-significant impact. Each is discussed below. (Urban Crossroads, 2020b, p. 3)

Small Projects Screening

The County Guidelines identify that projects that generate fewer than 110 daily vehicle trips are presumed to have a less than significant impact absent substantial evidence to the contrary. In addition, small projects anticipated to generate low traffic volumes and by association greenhouse gas (GHG) emissions less than 3,000 Metric Tons of Carbon Dioxide Equivalent (MTCO_{2e}) per year are also assumed to cause a less than significant transportation impact. The Project is forecast to generate significantly more than 110 daily vehicle trips. Additionally, and as previously discussed in EIR Subsection 4.8, the Project would generate approximately 179,382 MTCO_{2e} per year under the Primary Land Use Plan and 177,107 MTCO_{2e} per year under the Alternative Land Use Plan, Accordingly, the Project does not meet the Small Projects screening threshold. (Urban Crossroads, 2020b, p. 3)

High-Quality Transit Areas (HQTA) Screening

As previously indicated, projects located within a Transit Priority Area (TPA) (i.e., within ½ mile of an existing “major transit stop” or an existing stop along a “high-quality transit corridor”) may be presumed to have a less than significant impact absent substantial evidence to the contrary. However, the presumption may not be appropriate if a project: (Urban Crossroads, 2020b, pp. 3-4)

- Has a Floor Area Ratio (FAR) of less than 0.75;
- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking);
- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization); or
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units.



The Project is not located within ½ mile of an existing major transit stop, or along a high-quality transit corridor. Additionally, the Project would have a FAR of less than 0.75. Accordingly, the Project does not meet the HQTAs screening threshold.

(Urban Crossroads, 2020b, p. 4)

Map-Based Screening

The Technical Advisory notes that “residential and office projects that locate in areas with low VMT, and that incorporate similar features (i.e., density, mix of uses, transit accessibility), will tend to exhibit similarly low VMT.” The County Guidelines also note that the use of map-based screening for low VMT generating areas is also applicable for other employment uses such as the Project’s light industrial and business park development. Urban Crossroads has obtained a map from County staff that identifies VMT for the traffic analysis zone (TAZ) that contains the Project. The map utilizes the sub-regional Riverside Transportation Analysis Model (RIVTAM) to measure current VMT performance within individual TAZ’s and compares them to the applicable impact threshold (e.g., VMT per employee for office or industrial land uses and VMT per capita for residential land uses). As shown in Attachment A to the Project’s VMT Analysis (*Technical Appendix L2*), a portion of the Project is located within a TAZ that is below the County’s threshold of 14.2 VMT per employee. However, the underlying land use assumptions for the TAZ within the RIVTAM base year (2012) model indicates nominal levels of employment (6 total employees), which would not be consistent with the Project’s proposed land use. Regardless, the Project does not meet the Map-Based screening threshold. (Urban Crossroads, 2020b, p. 4)

Local-Serving Retail Screening

As noted in the County Guidelines, local-serving retail has been determined to reduce VMT by shortening trips. A project is presumed to cause a less-than-significant impact if no single store on-site exceeds 50,000 square feet in size and is deemed local serving. Although no formal development plan for the retail component is proposed at this time, the Project would allow up to 126,542 square feet of retail use. Thus, it is possible that future commercial retail development on site could include commercial retail buildings larger than 50,000 s.f. in size. Accordingly, it is conservatively evaluated that the proposed Project would not meet the Local-Serving Retail screening threshold. (Urban Crossroads, 2020b, p. 4)

Project VMT Assessment

Since none of the project-level VMT screening criteria are met, a Project-level VMT analysis has been prepared.

The Riverside Transportation Analysis Model (RIVTAM) is a useful tool to estimate VMT as it considers interaction between different land uses based on socio-economic data such as population, households, and employment. RIVTAM is a travel forecasting model that represents a sub-area (Riverside County) of the Southern California Association of Governments (SCAG) regional traffic model. RIVTAM was designed to provide a greater level of detail and sensitivity in the Riverside County area as compared to the regional SCAG



model. County Guidelines identifies RIVTAM as the appropriate tool for conducting VMT modeling for land use projects within the County of Riverside. (Urban Crossroads, 2020b, p. 5)

Project VMT has been calculated using the most current version of RIVTAM. Adjustments in socio-economic data (SED) (i.e., employment) have been made to separate traffic analysis zones (TAZs) within the RIVTAM model to reflect the Project’s proposed land uses (i.e., light industrial, business park, and retail). Since the retail land use will be evaluated separately from the light industrial and business park land uses, two separate TAZs were utilized to model the Project, which allows for the ability to isolate the VMT generated by each component of the Project from other land use in the model. (Urban Crossroads, 2020b, p. 5)

As previously indicated in EIR Table 3-3, implementation of the proposed Project is expected to generate up to 10,256 employees.

Project Light Industrial & Business Park VMT Assessment

Adjustments to employment for the Project’s TAZ were made to the RIVTAM base year model. Project-generated home-based work VMT was then calculated following the VMT calculation procedures identified in Appendix E of the County Guidelines and includes home-based work trips that are both internal and external to the RIVTAM model boundaries. The home-based work VMT value is then normalized by dividing by the number of Project employees. As shown in Table 4.18-1, *Project HBW VMT per Worker*, the Project generated VMT per employee is 19.30. (Urban Crossroads, 2020b, pp. 5-6)

Table 4.18-1 Project HBW VMT per Worker

	Project
Industrial Employment	10,012
HBW VMT	193,232
HBW VMT / Employee ¹	19.30

1. HBW VMT/Worker is a measure of all auto trips between home and work and does not include heavy duty truck trips or freight, which is consistent with OPR direction and Riverside County VMT calculation guidelines
(Urban Crossroads, 2020b, Table 2)

As shown in Table 4.18-2, *Project VMT per Employee Comparison*, the Project generated Work VMT per employee would exceed the County’s adopted threshold of 14.24 VMT per employee by 26.22 percent. The transportation impact based on the assessment of Project generated VMT as compared to the County’s adopted threshold is therefore potentially significant.



Table 4.18-2 Project VMT per Employee Comparison

	Base Year
County Threshold	14.24
Project VMT per Employee	19.30
Percent Change	+26.22%
Potentially Significant?	Yes

(Urban Crossroads, 2020b, Table 4)

Project Retail VMT Assessment

Consistent with County Guidelines, it is appropriate to measure the net change in VMT related to the implementation of a retail land use project using the entire Riverside County area as the regional boundary. A net increase in regional total VMT is identified as the County’s adopted impact threshold for retail land uses. To make this assessment, total link-level VMT was extracted from the “with Project” model runs for the base year (2012) and cumulative year (2040) RIVTAM models. This calculation is commonly referred to as “boundary method” and includes the total VMT for all vehicle trips with one or both trip ends within a specific geographic area. (Urban Crossroads, 2020b, p. 6)

As shown in Table 4.18-3, *Riverside County VMT per Service Population*, there is a net regional increase in total VMT for base year (2012) and a net decrease in total VMT for cumulative year (2040). The findings for base year and cumulative year are different because the RIVTAM base year (2012) model includes sparse levels of development in the Project’s vicinity, which results in longer trips for customers of the shopping center to travel to the proposed retail shopping component. Conversely, the cumulative (2040) model includes increases in residential development within the region and in the vicinity of the proposed retail component, thereby providing future residential communities more efficient options for retail trip purposes. Accordingly, the Project’s retail VMT impacts under near-term conditions would be significant, while the Project’s retail VMT under long-term conditions would be less than significant. (Urban Crossroads, 2020b, pp. 6-7)

Table 4.18-3 Riverside County VMT per Service Population

	Base Year (2012)	Cumulative (2040)
VMT Without Project	53,661,883	92,640,327
VMT With Project	53,686,355	92,580,741
Change	+24,472	-59,585
Net Increase?	Yes	No

(Urban Crossroads, 2020b, Table 4)

VMT Assessment Conclusion

In summary, for the Project’s light industrial and business park uses, the Project-generated Work VMT per employee would exceed the County’s adopted threshold of 14.24 VMT per employee by 26.22 percent; thus, VMT associated with the Project’s proposed light industrial and business park uses represent a significant impact of the proposed Project. The Project’s retail component under near-term conditions would result in a net increase in VMT within the County, although under long-term conditions the Project’s retail component



would result in a net decrease in VMT within the County. Accordingly, VMT associated with the Project's retail component would represent a significant near-term impact of the proposed Project. Thus, prior to mitigation, Project impacts due to VMT would be potentially significant.

Threshold c: Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?

The proposed Project as evaluated in this EIR consists of a proposed General Plan Amendment (GPA 190008), proposed Amendment No. 1 to Specific Plan No. 239 (SP 239A1), and a proposed Change of Zone (CZ 1900024). As such, the Project only provides general requirements with respect to roadway improvements that may be needed for future implementing developments within the Project site, such as future roadway classifications as shown on EIR Figure 3-4, and roadway cross-sections as depicted on EIR Figure 3-5. Specific improvements to the surrounding circulation network would be determined as part of future implement projects within the Project site, such as tentative tract maps and plot plans. At that time, Riverside County would review the plans to ensure that there would be no substantial increase in hazards due to a geometric design feature, such as sharp curves or dangerous intersections. Impacts would be less than significant.

The Project proposes light industrial, business park, commercial retail, and open space uses. Land uses in the vicinity of both portions of the Project site include a mixture of open space, agricultural uses, rural residential uses, and master-planned residential communities. Although the truck trips that would be generated by the Project have the potential to conflict with traffic related to residential uses, the majority of the Project's truck traffic would be routed to the Ramona Expressway and/or the Mid-County Parkway, and would be directed away from residential streets. As such, the Project would not result in increased hazards to transportation as a result of incompatible uses, and impacts due to incompatible uses would be less than significant.

Threshold d: Would the Project cause an effect upon, or a need for new or altered maintenance of roads?

Implementation of the proposed Project would result in the establishment of new roadways requiring maintenance, including Antelope Road, Orange Avenue, and Street "A." Additionally, it is anticipated that roadways internal to the Project site also would be public roadways. In addition, Project traffic would utilize existing and future planned roadways, and would thereby incrementally increase the need for maintenance of these facilities. Although the Project would result in the need for new or altered maintenance of roadways and would increase traffic on existing and planned roadways, any incremental increase in the need to maintain public roadway facilities would be offset by tax revenue generated by the Project's proposed land uses. There are no components of the proposed Project that would result in or require a substantial increase in expenditures by Riverside County for public road maintenance such that environmental impacts would result. As such, Project impacts would be less than significant.



Threshold e: Would the Project cause an effect upon circulation during the project's construction?

Aside from Ramona Expressway and Nuevo Road, planned roadways within and abutting the Project site are unimproved. Thus, with exception of these roadways, the Project would have no potential to cause an effect upon circulation during the Project's construction. Although it is unlikely that improvements planned to Ramona Expressway and Nuevo Road would adversely affect circulation during the Project's construction phase, a significant impact is nonetheless identified requiring mitigation in the form of a traffic control plan for implementing developments. Additionally, a significant impact could occur if roadways planned on and abutting the Project site are improved prior to the commencement of Project construction activities. Accordingly, prior to mitigation, a significant direct impact would result from Project implementation.

Threshold f: Would the Project result in inadequate emergency access or access to nearby uses?

The Project Applicant proposes a network of internal roadways within and abutting the Project site that would be constructed to County standards. During the County's review of the proposed Project, the County reviewed the proposed design plans to ensure that adequate emergency access would be available at the site. Additionally, the County would review future implementing development applications (e.g., tentative maps, parcels maps, plot plans, etc.) to ensure that adequate emergency access is accommodated. Furthermore, proposed roadway improvements to abutting roadways, including Ramona Expressway, Nuevo Road, and internal roadways would substantially improve emergency access in the local area. Accordingly, the proposed Project would not result in inadequate emergency access during long-term operation of the Project and impacts would be less than significant.

Due to temporary lane closures that may occur during the Project's construction phase, Project-related construction activities may conflict with emergency access routes and access to nearby uses during frontage improvements to Ramona Expressway, Nuevo Road, and other roadways on or abutting the site that may be improved prior to the start of Project construction. Although it is anticipated a less-than-significant impact would occur, out of an abundance of caution, a temporary significant impact is identified. Accordingly, near-term impacts to emergency access would be significant prior to mitigation.

Threshold g: Would the Project include the construction or expansion of a bike system or bike lanes?

According to the Non-Vehicular Circulation Plan included as part of SP 239A1, which was designed to implement Figure 8, *Trails and Bikeway System*, of the LNAP, the Project would accommodate a Community Trail and an enhanced parkway (including an 8-foot bike lane and meandering sidewalk) along Antelope Road, and would accommodate a Class I bike lane along the site's frontage with Ramona Expressway. However, impacts associated with the construction of these on-site trails are inherent to the Project's construction phase, and such impacts have been evaluated throughout this EIR. Where significant impacts have been identified, feasible mitigation measures have been identified to reduce impacts to the maximum feasible extent. There are no impacts associated with the construction of bike systems or bike lanes that have not already been addressed herein. As such, impacts would be less than significant.



4.18.8 CUMULATIVE IMPACT ANALYSIS

Cumulative impacts associated with transportation were largely evaluated in the preceding subsection (subsection 4.18.7). A summary of the impacts identified therein is provided below. Direct impacts are identified in subsection 4.18.7 and are not discussed below. Additionally, impacts that were shown to be less than significant in subsection 4.18.7 are not discussed below.

A. Threshold a.

As discussed under the analysis of Threshold a., future development on site would be required to comply with all applicable Riverside County ordinances related to the circulation system. In addition, EIR *Technical Appendix I* demonstrates that with approval of the Project's proposed General Plan Amendment No. 190008, the proposed Project would not conflict with any applicable policies of the General Plan or LNAP, including policies within the General Plan Circulation Element and LNAP that relate to the circulation system, transit, roadway, bicycle, and/or pedestrian facilities. Other cumulative projects similarly would be required to comply with all applicable ordinances, and would be required to comply with all applicable General Plan and LNAP policies (or the policies of the general plans of cities within the Project's Study Area). Impacts would be less-than-cumulatively considerable.

With respect to LOS standards established by the Riverside County General Plan, City of Perris General Plan, City of Moreno Valley General Plan, City of Menifee General Plan, City of San Jacinto General Plan, and Caltrans, the Project would cause or contribute to LOS deficiencies at a number of Study Area facilities. In addition to physical construction of required improvements to achieve an acceptable LOS, the Project Applicant also would be conditioned to contribute TUMF and DIF fees as well as fair-share contributions for required improvements that are not currently included in existing fee programs. With exception of facilities under the jurisdiction of Caltrans, the Project-related improvements as well as improvements to occur as part of existing fee programs and/or Project fair-share contributions would achieve an acceptable LOS at all Study Area facilities. Other projects within the cumulative Study Area similarly would be required to construct improvements, pay fair-share fees, or contribute funds to existing fee programs as necessary to achieve acceptable LOS. As such, and with exception of facilities under the jurisdiction of Caltrans, the Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, and impacts would be less-than-cumulatively considerable.

With respect to Caltrans facilities, Caltrans has long-range plans for improvements to the I-215, which are expected to improve LOS along the I-215 and associated ramp junctions. However, there are some Study Area freeway segments and ramp junctions that are anticipated to continue to operate at an unacceptable LOS during the peak hours. Although this represents a potential conflict with Caltrans' LOS standards, Caltrans does not currently have a mitigation fee program in place to address impacts to freeway facilities. Furthermore, pursuant to SB 743 and State CEQA Guidelines § 15064.3(a), "...a project's effect on automobile delay shall not constitute and environmental impact." As such, for purposes of CEQA, the Project's contribution to the



projected LOS deficiencies at freeway mainline segments and merge/diverge locations would be less-than-cumulatively considerable.

Accordingly, and based on the preceding analysis, the proposed Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Impacts would be less than significant on a cumulatively-considerable basis.

B. Threshold b.

As indicated under the analysis of Threshold b., for the Project's light industrial and business park uses, the Project-generated Work VMT per employee would exceed the County's adopted threshold of 14.24 VMT per employee by 26.22 percent. Additionally, the Project's retail component would result in a net increase in VMT within the County under near-term conditions, although the Project's retail components would result in a net decrease in VMT within the County under long-term conditions. Other cumulative projects within the Project region also have the potential to exceed the County's thresholds of significance for VMT. Accordingly, VMTs associated with the Project's light industrial and business park components (under both near- and long-term conditions), and VMTs associated with near-term operations of the Project's retail components, would result in cumulatively-considerable impacts due to VMT.

C. Threshold c.

As indicated under the analysis of Threshold c., future implementing projects (e.g., tentative tract maps, plot plans, etc.) within the Project site would be reviewed by Riverside County to ensure that no hazards due to a geometric design feature would result from roadway improvements planned as part of implementing development. Other cumulative developments would similarly be required to demonstrate to Riverside County that no unsafe geometric design features would result. As such, cumulatively-considerable impacts would be less than significant.

As also indicated under the analysis of Threshold c., although the truck trips that would be generated by the Project have the potential to conflict with traffic related to residential uses, the majority of the Project's truck traffic would be routed to the Ramona Expressway and/or the Mid-County Parkway, and would be directed away from residential streets. Other cumulative developments involving a large number of truck trips similarly would be required to route truck traffic away from residential streets. As such, the Project would not result in increased hazards to transportation as a result of incompatible uses, and impacts due to incompatible uses would be less-than-cumulatively considerable.

D. Threshold d.

Tax revenue generated by the Project and cumulative developments would offset any increased need for roadway maintenance as a result of new development within Riverside County. There are no components of the proposed Project or other cumulative developments within the Project vicinity that would result in or require a substantial increase in expenditures by Riverside County for public road maintenance such that environmental impacts would result. As such, impacts would be less-than-cumulatively considerable.



E. Threshold e.

Although it is not anticipated, it is possible that Project construction activities could overlap with construction activities associated with other cumulative developments. Both the Project and other cumulative developments would be required to implement appropriate traffic control measures during construction so as not to significantly adversely affect the circulation system. Nonetheless, in the absence of mitigation, the Project's potential impacts during construction would be cumulatively considerable.

F. Threshold f.

Proposed roadway improvements to abutting roadways, including Ramona Expressway, Nuevo Road, and internal roadways, would substantially improve emergency access in the local area. Accordingly, the proposed Project would not result in inadequate emergency access during long-term operation of the Project and impacts would be less-than-cumulatively considerable. However, temporary lane closures that may occur during the Project's construction phase could overlap with construction activities associated with cumulative developments. Although it is anticipated a less-than-significant impact would occur, out of an abundance of caution, a significant temporary impact is identified. Accordingly, impacts would be cumulatively-considerable prior to mitigation.

G. Threshold g.

The Project would accommodate a Community Trail and an enhanced parkway (including an 8-foot bike lane and meandering sidewalk) along Antelope Road, and would accommodate a Class I bike lane along the site's frontage with Ramona Expressway. However, impacts associated with the construction of these on-site trails are inherent to the Project's construction phase, and such impacts have been evaluated throughout this EIR. Where significant cumulatively-considerable impacts have been identified, feasible mitigation measures have been identified to reduce impacts to the maximum feasible extent. There are no cumulatively-considerable impacts associated with the construction of bike systems or bike lanes that have not already been addressed by this EIR. As such, impacts would be less than significant on a cumulatively-considerable basis.

4.18.9 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a.: Less-than-Significant Impact. The proposed development on site would be required to comply with all applicable Riverside County ordinances related to the circulation system. In addition, EIR *Technical Appendix I* includes a detailed analysis of the proposed Project's consistency with the Riverside County General Plan and LNAP policies. As demonstrated in the analysis therein, with approval of the Project's proposed General Plan Amendment No. 190008, the proposed Project would not conflict with any applicable policies of the General Plan or LNAP, including policies within the General Plan Circulation Element and LNAP that relate to the circulation system, transit, roadway, bicycle, and/or pedestrian facilities. With respect to the LOS standards, the Project would be conditioned to require construction of improvements, payment of DIF and TUMF fees, and payment of fair-share contributions towards improvements not included in any existing fee programs. With exception of facilities under the jurisdiction of Caltrans, the improvements to be



constructed as part of the Project, as part of the DIF or TUMF programs, or as the result of Project fair-share contributions would provide for an acceptable LOS at all Study Area facilities. Although it is expected that segments of I-215 and associated merge/diverge junctions would not achieve Caltrans' LOS standards under near- or long-term conditions, Caltrans does not have any fee programs in place to address impacts to freeways or ramp junctions. Furthermore, pursuant to SB 743 and State CEQA Guidelines § 15064.3(a), "...a project's effect on automobile delay shall not constitute an environmental impact." As such, for purposes of CEQA, the Project's contribution to the projected LOS deficiencies at freeway mainlines and merge/diverge locations would be less than significant.

Threshold b.: Significant Direct and Cumulatively-Considerable Impact. For the Project's light industrial and business park uses, the Project-generated Work VMT per employee would exceed the County's adopted threshold of 14.24 VMT per employee by 26.22 percent; thus, VMT associated with the Project's proposed light industrial and business park uses represent a significant impact of the proposed Project. The Project's retail component under near-term conditions would result in a net increase in VMT within the County, although under long-term conditions the Project's retail component would result in a net decrease in VMT within the County. Accordingly, VMT associated with the Project's retail component would represent a significant near-term impact of the proposed Project. Thus, prior to mitigation, Project impacts due to VMT would be potentially significant.

Threshold c.: Less-than-Significant Impact. Improvements planned as part of the Project would be constructed to County standards, and would not increase hazards due to a geometric design feature. Although the Project's light industrial and business park land uses have the potential to result in conflicts with traffic from surrounding rural residential and master-planned residential communities, the majority of Project-related truck traffic would be directed to the Ramona Expressway and/or the Mid-County Parkway, and would be directed away from residential streets. As such, the Project would not result in increased hazards to transportation as a result of incompatible uses, and impacts due to incompatible uses would be less than significant.

Threshold d.: Less-than-Significant Impact. There are no components of the proposed Project that would result in or require a substantial increase in expenditures by Riverside County for public road maintenance such that environmental impacts would result. As such, Project impacts would be less than significant.

Threshold e.: Significant Direct and Cumulatively-Considerable Impact. Although it is unlikely that improvements planned to Ramona Expressway and Nuevo Road would adversely affect circulation during the Project's construction phase, a significant impact is nonetheless identified requiring mitigation in the form of a traffic control plan for implementing developments. Additionally, a significant impact could occur if roadways planned on and abutting the Project site are improved prior to the commencement of Project construction activities. Accordingly, prior to mitigation, a significant direct impact would result from Project implementation.

Threshold f.: Significant Direct and Cumulatively-Considerable Impact. Due to temporary lane closures that may occur during the Project's construction phase, Project-related construction activities may conflict with



emergency access routes and access to nearby uses during frontage improvements to Ramona Expressway, Nuevo Road, and other roadways on or abutting the site that may be improved prior to the start of Project construction. Although it is anticipated a less-than-significant impact would occur, out of an abundance of caution, a temporary significant impact is identified. Accordingly, near-term impacts to emergency access would be significant prior to mitigation.

Threshold g.: Less-than-Significant Impact. Impacts associated with the construction of on-site trails and bicycle facilities are inherent to the Project's construction phase, and such impacts have been evaluated throughout this EIR. Where significant impacts have been identified, feasible mitigation measures have been identified to reduce impacts to the maximum feasible extent. There are no impacts associated with the construction of bike systems or bike lanes that have not already been addressed herein. As such, impacts would be less than significant.

4.18.10 COUNTY REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

Applicable County Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

- Prior to issuance of building permits, the Project Applicant shall pay appropriate Development Impact Fee Program (DIF) fees at the rates then in effect in accordance with Riverside County Ordinance No. 659.
- Prior to final building inspection, the Project Applicant shall pay appropriate Western Riverside County Transportation Uniform Mitigation Fee Program Ordinance (TUMF) fees at the rates then in effect in accordance with Riverside County Ordinance No. 824.
- Prior to approval of any implementing developments (i.e., tentative tract maps, plot plans, conditional use permits, etc.), the Project Applicant or implementing developer shall prepare a Traffic Impact Analysis (TIA) in compliance with the Riverside County Transportation Department's "Transportation Analysis Guidelines for Level of Service and Vehicle Miles Traveled" (December 2020). Appropriate conditions of approval shall be imposed on future implementing developments based on the results of the future-required TIA(s) to address projected Level of Service (LOS) deficiencies along the transportation network. Anticipated Project-related responsibilities for improvements, fee payments, and fair-share contributions associated with the Primary Land Use Plan, without the construction of the Mid-County Parkway (MCP), and with implementation of the Primary Truck Route (as described subsection 3.6.2.B.2 of the Project's EIR) are summarized in Table 1-4 of the Project's Traffic Impact Analysis (*Technical Appendix L1* to the Project's EIR). Anticipated Project-related responsibilities for improvements, fee payments, and fair-share contributions with implementation of the Primary Land Use Plan, without the construction of the MCP, and with implementation of the Southern Truck Route



(as described subsection 3.6.2.B.2 of the Project's EIR) are summarized in Table 14 of the Project's Southern Truck Route Analysis (*Technical Appendix L3* to this EIR). Estimated Project-related responsibilities for improvements, fee payments, and fair-share contributions with implementation of the Alternative Land Use Plan and with the construction of the MCP are summarized in Table 1-5 of the Project's Traffic Impact Analysis (*Technical Appendix L1* to the Project's EIR). The actual improvements, fee payments, and fair-share contributions shall be based on the results of the TIA(s) required for each implementing development, and may vary from the list of improvements, fee payments, and/or fair-share contributions listed in the Project's Traffic Impact Analysis and Southern Truck Route Analysis.

Mitigation

MM 4.18-1 Prior to approval of future implementing projects (i.e., plot plans, conditional use permits, etc.), the Project Applicant shall prepare a project-level Vehicle Miles Travelled (VMT) analysis to identify site-specific Transportation Demand Management (TDM) measures to reduce VMTs associated with the Project's proposed uses to the maximum feasible extent. TDM strategies that may be applicable at the implementing project level may include:

- Reduced parking supply.
- Transit Rerouting and Transit Stops.
- Commute trip reduction (CTR) programs offered by individual building tenants that would encourage the use of vanpools, carpooling, public transit, and biking.
- CTR programs may also provide for alternative work or compressed work schedules to reduce the number of days an employee commutes to work.
- Provision of on-site facilities to provide end of trip services for bicycling such as secure bike parking, storage lockers and showering facilities.

Riverside County shall condition the future implementing projects to implement the TDM strategies identified as part of the future-required VMT analyses.

MM 4.18-2 Prior to the issuance of grading permits or improvement plans affecting Ramona Expressway, Nuevo Road, or any other roadways within the Project site that have been improved, the Project Applicant shall prepare and the County of Riverside shall approve a temporary traffic control plan. The temporary traffic control plan shall comply with the applicable requirements of the California Manual on Uniform Traffic Control Devices (CA MUTCD). A requirement to comply with the temporary traffic control plan shall be noted on all grading and building plans and also shall be specified in bid documents issued to prospective construction contractors.

MM 4.18-3 All owner users and future tenants shall participate in Riverside County's Rideshare Program. The purpose of this program is to encourage 2+ person occupancy vehicle trips and encourage other alternative modes of transportation. Carpooling opportunities and public transportation information shall be advertised to employees of the building tenant. Developer and all



successors shall include the provisions of this obligation in all leases of the Project so that all tenants shall fulfill the terms and conditions of this mitigation measure.

4.18.11 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold b.: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. Project-generated VMT per employee for the Project's proposed light industrial and business park uses was found to exceed the existing county-wide average VMT per employee threshold by 26.22%, while near-term operation of the Project's retail component was found to result in a net increase in the County's total VMT. Mitigation Measure MM 4.18-1 requires that a VMT assessment be prepared for future implementing developments (i.e., plot plans, conditional use permits, etc.) in order to identify feasible site-specific TDM strategies that would serve to reduce VMT. However, inclusion of such VMT reduction measures in areas that are characteristically suburban in context are limited to a maximum VMT reduction of 15%. This maximum reduction for cross-category transportation-related mitigation measures of 15% for suburban settings is also noted in the County Guidelines. Therefore, even with the implementation of all feasible VMT reduction measures, Project-generated VMT cannot be reduced to a level of less than significant. (Urban Crossroads, 2020b, p. 8)

Threshold e.: Less-than-Significant Impact with Mitigation Incorporated. Mitigation Measure MM 4.18-2 requires the Project Applicant to prepare and obtain Riverside County approval of a temporary traffic control plan prior to issuance of grading permits. Implementation of the required mitigation would ensure that Project-related construction activities would not substantially affect circulation during the Project's construction. With implementation of the required mitigation, impacts would be reduced to less-than-significant levels.

Threshold f.: Less-than-Significant Impact with Mitigation Incorporated. Mitigation Measure MM 4.18-2 requires the Project Applicant to prepare and obtain Riverside County approval of a temporary traffic control plan prior to issuance of grading permits. With implementation of the required mitigation, the Project would not result in inadequate emergency access or access to nearby uses during the Project's construction phase. Accordingly, with implementation of the required mitigation, impacts would be reduced to less-than-significant levels.



4.19 TRIBAL CULTURAL RESOURCES

The analysis in this Subsection documents the results of the County’s consultation with local Native American Tribes. It should be noted that much of the written and oral communication between Native American tribes and Riverside County is considered confidential in respect to places that have traditional tribal cultural significance (Gov. Code § 65352.4), and although relied upon in part to inform the preparation of this EIR Subsection, those communications are treated as confidential and are not available for public review. Under existing law, environmental documents must not include information about the location of archeological sites or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records Act (Cal. Code Regs. § 15120(d)).

4.19.1 EXISTING CONDITIONS

Refer to EIR subsection 4.5.1 for a complete description of the cultural setting existing site conditions, and the archaeological and historical resources assessment.

4.19.2 REGULATORY SETTING

The following is a brief description of the State environmental laws and related regulations addressing Tribal Cultural Resources (TCRs). Refer also to EIR subsection 4.5.2 for a complete description of federal, State, and local environmental laws and regulations governing the protection of cultural resources.

A. *Traditional Tribal Cultural Places Act (Senate Bill 18, “SB 18”)*

Senate Bill 18 (SB 18) requires local (city and county) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places (“cultural places”) through local land use planning. SB 18 also requires the Governor’s Office of Planning and Research (OPR) to include in the General Plan Guidelines advice to local governments for how to conduct these consultations. (OPR, 2005)

The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. The purpose of involving tribes at these early planning stages is to allow consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level land use decisions are made by a local government. (OPR, 2005)

SB 18 requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code § 65300 et seq.) and specific plans (defined in Government Code § 65450 et seq.). Although SB 18 does not specifically mention consultation or notice requirements for adoption or amendment of specific plans, existing state planning law requires local governments to use the same processes for adoption and amendment of specific plans as for general plans (see Government Code § 65453). Therefore, where SB 18 requires consultation



and/or notice for a general plan adoption or amendment, the requirement extends also to a specific plan adoption or amendment. (OPR, 2005)

1. Assembly Bill 52 (AB 52)

California Assembly Bill 52 (AB 52) (2014) Chapter 532 amended Section 5097.94 of, and added Sections 21073, 21074, 21080.3.1, 21080.3.2, 21802.3, 21083.09, 21084.2 and 21084.3 to the California Public Resources Code, relating to Native Americans. AB 52 was approved on September 25, 2014. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process. (OPR, 2017b)

The Public Resources Code now establishes that “[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.” (Pub. Resources Code, § 21084.2.) To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. (Pub. Resources Code, § 21080.3.1.) (OPR, 2017b)

If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact. Public Resources Code § 20184.3 (b)(2) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to tribal cultural resources. These rules apply to projects that have a notice of preparation for an environmental impact report or negative declaration or mitigated negative declaration filed on or after July 1, 2015. (OPR, 2017b)

§ 21074 of the Public Resources Code defines “tribal cultural resources.” In brief, in order to be considered a “tribal cultural resource,” a resource must be either:

- (1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or
- (2) a resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource. (OPR, 2017b)

In the latter instance, the lead agency must determine that the resource meets the criteria for listing in the state register of historic resources. In applying those criteria, a lead agency must consider the value of the resource to the tribe. (OPR, 2017b)



4.19.3 BASIS FOR DETERMINING SIGNIFICANCE

Section XVIII of Appendix G to the State CEQA Guidelines addresses typical adverse effects on tribal cultural resources, and includes the following threshold question to evaluate the Project’s impacts to tribal cultural resources (OPR, 2018a):

- Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - 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)?
 - 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Significance thresholds are set forth in Riverside County’s Environmental Assessment Checklist, as modified based on the 2018 updates to Section XVIII of Appendix G to the State CEQA Guidelines, and indicate significant impacts would occur if the Project or any Project-related component would:

- a. *Cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is*
 1. *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1 (k); or*
 2. *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

4.19.4 IMPACT ANALYSIS

Threshold a: *Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the*



landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- 1. Listed or eligible for listing in the California Register of Historical resources or in a local register of historical resources as defined in Public Resources Code section 5020.1(k); or*
- 2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?*

Changes in the California Environmental Quality Act, effective July 2015, require that the County address another category of cultural resources – tribal cultural resources. Tribal Cultural Resources (TCRs) are those resources with inherent tribal values that are difficult to identify through the same means as archaeological resources. These resources can be identified and understood through direct consultation with the tribes who attach tribal value to the resource. Tribal cultural resources may include Native American archaeological sites, but they may also include other types of resources such as a cultural landscape. Also relevant is the category termed “traditional cultural property” (TCP) which is typically associated with cultural resource management performed under federal auspices. “Traditional” in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property, then, is significance derived from the role the property plays in a community’s historically rooted beliefs, customs, and practices. A TCP can be defined, generally, as one that is eligible for inclusion in the National Register of Historic Places (NRHP) because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community’s history, and (b) are important in maintaining the continuing cultural identity of the community. A landscape can be a TCP and by extension a TCR, provided the cultural landscape meets the criteria and that the landscape is geographically defined in terms of the size and scope. The appropriate treatment of tribal cultural resources is determined through consultation with tribes.

In compliance with Assembly Bill 52 (AB 52), notices regarding this project were mailed to all requesting tribes on March 26, 2020. Requests to consult were received from the Agua Caliente Band of Cahuilla Indians (Agua Caliente), Temecula Band of Luiseño Indians (Pechanga), Rincon Band of Luiseño Indians (Rincon) and the Soboba Band of Luiseño Indians (Soboba). No response was received from the Cabazon Band of Cahuilla Indians, Cahuilla Band of Indians, Colorado River Indian Tribes (CRIT), Morongo Band of Mission Indians. The Pala Band of Mission Indians (Pala) response was received after the 30-day response period. An email was sent to Pala on September 30, 2020 offering consultation with the tribe, but Pala did not request to consult.

The Agua Caliente Band of Cahuilla Indians responded in a letter dated April 17, 2020. The proposed Project was discussed during a meeting held on May 4, 2020. All Project cultural reports were provided to Agua Caliente and the Project was again discussed on August 25, 2020. During this meeting the tribe expressed concern that the Project is situated in a very sensitive area. Further, the Project is situated in within and adjacent to a Tribal Cultural Resource. This resource is a landscape and is composed of multiple contributing cultural



locations and archaeological sites. It is considered a Traditional Cultural Property to the Agua Caliente Band of Cahuilla Indians and is identified by the name “South Bernasconi Hills Complex”. The TCR includes ethnobotanical food sources such as plants, berries, seeds and nuts, animals, and other naturally occurring resources.

This landscape level Tribal Cultural Resource is extremely significant to the history of the Tribe. Agua Caliente Cahuilla were an integral part of the natural world, tended the land through a reciprocal relationship with the land. It is tangible evidence of the ancestors' ability to prosper in an unpredictable environment, a focus on subsisted acquisition, their resiliency in a harsh place, and exhibits reciprocity with adjacent tribal communities.

Agua Caliente recommends the presence of an approved Agua Caliente Native American Cultural Resource Monitor(s) during any ground disturbing activities (including archaeological testing and surveys). Should buried cultural deposits be encountered, the Monitor may request that destructive construction halt and the Monitor shall notify a Qualified Archaeologist (Secretary of the Interior’s Standards and Guidelines) to investigate and, if necessary, prepare a mitigation plan for submission to the State Historic Preservation Officer and the Agua Caliente Tribal Historic Preservation Office.

Rincon requested to consult in a letter dated April 3, 2020 and consultation was initiated on June 18, 2020. All of the Project exhibits and cultural reports were provided to Rincon. Rincon expressed concern that the Project is situated within a sensitive area and recommended avoidance of all cultural sites and resources. Soboba requested to consult in a letter dated March 31, 2020. An initiation meeting was held on September 23, 2020. The tribe requested all of the cultural reports and site plans. These were provided to Soboba. Soboba was provided with the cultural report and the conditions of approval. Soboba provided specific information that the Project is situated within the boundaries of a Traditional Cultural Place/Tribal Cultural Landscape (TCP/TCL), named Ta’awila.

Pechanga requested to consult in a letter dated April 28, 2020 and consultation was initiated on May 20, 2020. Pechanga told Riverside County Planning staff that the Project is in a Traditional Cultural Property (TCP). The Phase I and Phase II reports, site exhibits and the Phase I addendum were provided to Pechanga several times. Several meetings were held including July 02, 2020, August 12, 2020, August 28, 2020, and March 29, 2021. During these meetings Pechanga told County Planning staff that the project was situated within a Traditional Cultural Property/Traditional Cultural Landscape. Pechanga provided the following information:

“...The cultural landscape includes permanent residential village sites, short-term residence sites, and resource procurement and processing areas, ritual/ ceremonial areas, private and communal space, and geographic features including valleys, springs, bodies of water and mountain ranges, and trail systems. Within that cultural landscape there may have existed numerous village complexes or clusters, which could have contained multiple neighborhoods, each with their own communal territory.”

Pechanga asserts that the Project lies within a portion of the village of Páyve:



“A striking aspect of this village site is its association with the spirit Táakwish and, associated with Táakwish, Páavo’ itself. As described, this being had several well-known long-standing roosts scattered throughout Luiseño territory and beyond, aside from its Táakwish Póki near San Jacinto Peak. One of these roosts was on the top of the south flank of Bernasconi Pass, essentially in the heart of the village of Páyve. The horrific diet of this being, consisting of cannibalizing his relatives among the Káamalam during Origin Times, and of human souls during the current age of humans, is made visible by a vertical rock outcrop representing a stream of “Táakwish’ Shit” running down the hill. This feature was pointed out by both Vincent Ibanez (personal communication 2017) and William Pink (personal communication 2017). Both consultants, when asked about the advisability of locating a community directly below the roost of such a monster, stated that this could be managed by maintaining an alertness to when Táakwish was present and making sure to live in a manner that did not cause him to notice people breaking the social norms of society which might invite punishment. One of the several notable features of the natural and spiritual landscape associated with Páyve is the view directly out from the Bernasconi Pass due east – this is to San Jacinto Peak itself and the slightly downslope home of Táakwish...”

Pechanga told Planning Department staff that the proposed Project has recorded sites with bedrock milling features, which are contributing elements of the TCP/TCL and are part of the village complex. Also, there is a high potential of finding subsurface cultural resources during any ground-disturbing activities associated with the proposed Project. Pechanga expressed concern that the Project may impact the viewshed of this portion of the TCP and might have a cumulative impact on the TCP by disturbing contributing elements of the TCP (the bedrock milling sites) found within the Project site.

Planning Department staff have determined that the Project would impact the viewshed (aesthetics) but would not significantly damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features. Although the Project site and surrounding areas would be developed in the long-term with a mixture of urban and rural land uses, future development is not anticipated to obstruct views of any scenic vistas or views. The future development in the area would not adversely affect views of the existing hill forms that occur on and off site near the Project’s western boundary or the Bernasconi Hills that surround the Lake Perris State Recreation Area. However, while the viewshed to the peaks may not be impacted by development, the views to the San Jacinto River, the large village of Páyve and Páavo, Mystic Lake would be obstructed. This viewshed is important to the tribes and connects the area with other important places within the viewshed. Currently, there is very little development in the area and although development of the Project would add to obstruction of the viewshed this would not be a significant impact.

Based on the design of the proposed Project, and as documented more fully in EIR Subsection 4.5, *Cultural Resources*, the Project would avoid impacts to most of the previously-identified cultural resources within the Project site. Specifically, Sites P-33-003743, P-33-003744, Temp-1, and Temp-2 occur within areas planned for long-term conservation as open space as part of the Project, and Project-related grading activities would not impact these sites. Furthermore, although impacts to Site SR-001 would be less than significant, the Project Applicant has agreed to a requirement to design future grading plans to completely avoid disturbance to Site



SR-001 (refer to EIR Mitigation Measure MM 4.5-1). Although the Project would result in direct impacts to Site SR-002, a significance assessment of the site according to the criteria listed in Section 15064.5 of the State CEQA Guidelines clarifies that the site does not qualify as a significant archaeological resource under any of the stated criteria. (BFSA, 2020, p. 4.0-14)

However, all the consulting tribes expressed concern that the Project area is sensitive for cultural resources and there is the possibility that previously unidentified resources might be found during ground disturbing activities. The Project would be subject to compliance with EIR Mitigation Measure MM 4.5-1, which requires a Tribal Monitor from the consulting Tribe(s) to be present during grading activities so that any Tribal Cultural Resources found during project construction activities will be handled in a culturally appropriate manner.

Additionally, and as required by EIR Mitigation Measure 4.5-2, the Project also would be required to adhere to State Health and Safety Code Section 7050.5 in the event that human remains are encountered and by ensuring that no further disturbance occur until the County Coroner has made the necessary findings as to origin of the remains. Furthermore, pursuant to Mitigation Measure 4.5-2 and Public Resources Code Section 5097.98 (b), remains shall be left in place and free from disturbance until a final decision as to the treatment and their disposition has been made.

In addition, EIR Mitigation Measure MM 4.5-1 requires the identification of the procedures to be followed should any unanticipated cultural resources be identified during ground disturbing activities. With implementation of EIR Mitigation Measures MM 4.5-1 and MM 4.5-2, impacts to any previously unidentified Tribal Cultural Resources would be reduced to less-than-significant levels.

Notwithstanding, because mitigation measures are required, Project impacts to tribal cultural resources would be significant prior to implementation of the mitigation measures identified in EIR Subsection 4.5.

4.19.5 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development within western Riverside County. This study area was selected for evaluation because it encompasses a broad region with similar geological, biological, and climatic conditions.

As indicated under the analysis of Threshold a., the Project has the potential to result in impacts to previously-unidentified Tribal Cultural Resources that may be present beneath the ground surface of the Project site. Other developments envisioned with buildout of the Riverside County General Plan and the general plans of cities within the County also have the potential to result in impacts to Tribal Cultural Resources, including sites or resources that may be buried beneath the ground surface. As such, Project impacts to Tribal Cultural Resources would be cumulatively considerable prior to mitigation.



4.19.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a.: Significant Direct and Cumulatively-Considerable Impact. The Project has the potential to result in significant impacts to previously-undiscovered Tribal Cultural Resources, and could result in significant impacts to previously-identified Tribal Cultural Resources within the Project site in the absence of protective measures. As such, Project impacts to Tribal Cultural Resources represent a potentially significant impact for which mitigation would be required.

4.19.7 COUNTY REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

Applicable County Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

- Unless otherwise required by law, the site of any reburial of Native American human remains or associated grave goods shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, pursuant to the specific exemption set forth in California Government Code Section 6254 (r), parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code Section 6254 (r).

Mitigation

Mitigation Measures MM 4.5-1 and MM 4.5-2 shall apply (refer to EIR Subsection 4.5, *Cultural Resources*). The mitigation measures included in EIR Subsection 4.5 have been drafted to include all of the mitigation requirements requested during the Project's Tribal Consultation process. No additional mitigation measures are required.

4.19.8 SIGNIFICANCE OF IMPACT AFTER MITIGATION

Threshold a.: Less-than-Significant Impact with Mitigation. Implementation of EIR Mitigation Measures MM 4.5-1 and MM 4.5-2 would ensure appropriate treatment of any Tribal Cultural Resources that may be identified during Project-related ground-disturbing activities, including human remains. Implementation of the required mitigation would reduce Project impacts to Tribal Cultural Resources to below a level of significance.



4.20 UTILITIES AND SERVICE SYSTEMS

This Subsection evaluates the Project’s potential to result in impacts on existing utilities and service systems and/or impacts to the environment that could result from the Project’s proposed utilities and service system improvements. The analysis in this section is based in part upon the EMWD 2015 Urban Water Management Plan (UWMP), dated June 2016, which is herein incorporated by reference and is available for public review at EMWD, 2270 Trumble Road, Perris, California 92570 (EMWD, 2016b). The analysis in this Subsection also relies on a Project-specific Water Supply Assessment (WSA) prepared for the Project by EMWD, titled “Water Supply Assessment Report – Stoneridge Commerce Center SP 239, Amendment #1,” dated June 11, 2020, and included as *Technical Appendix M* to this EIR (EMWD, 2020a).

4.20.1 EXISTING CONDITIONS

The Project site is located within the service boundaries of the Eastern Municipal Water District (EMWD) for water and sewer service, Southern California Edison for electricity, and the Southern California Gas Company (SoCal Gas) for natural gas, with numerous service providers for cable television and telephone services. Solid waste hauling service to the Project site is provided by the Waste Management of the Inland Empire.

A. Water Service and Supply

Water service to the Project area is provided by the EMWD. EMWD provides potable water, recycled water, and wastewater services to an area of approximately 555 square miles in western Riverside County. EMWD is both a retail and wholesale agency, serving a retail population of 546,146 people and a wholesale population of 215,075 people. The majority of EMWD’s supplies are imported water purchased through the Metropolitan Water District (MWD) from the State Water Project (SWP) and the Colorado River Aqueduct (CRA). Imported water is delivered to EMWD either as potable water treated by MWD, or as raw water that EMWD can either treat at one of its two local filtration plants or deliver as raw water for non-potable uses. (EMWD, 2016b, p. xii)

There are four (4) sources of water supply to the EMWD: imported water from Metropolitan Water District of Southern California (MWD), local groundwater, desalinated groundwater, and recycled water. Potable imported water is treated and delivered to EMWD directly from MWD’s two large filtration plants: The Henry J. Mills (Mills) Water Treatment Plant and the Robert F. Skinner (Skinner) Water Treatment Plant. The Mills Water Treatment Plant treats water from Northern California and provides it to EMWD through two connection points located in the northeast portion of EMWD’s service area. The Skinner Water Treatment Plant treats a blend of Colorado River water and water from Northern California and provides it to EMWD through a connection point in the southwest portion of EMWD’s service area. (EMWD, 2016b, p. 3-3)

EMWD owns and operates two (2) microfiltration plants (the Perris Water Filtration Plant and the Hemet Water Filtration Plant) that filter raw imported water delivered through MWD, removing particulate contaminants to achieve potable water standards. Raw water from MWD also is used for groundwater replenishment in the eastern part of EMWD. Untreated water from MWD used for agricultural purposes is delivered in the northeast for use by EMWD retail and wholesale accounts and in the south for Rancho California Water District (RCWD) agricultural accounts. (EMWD, 2016b, p. 3-3)



EMWD produces potable and brackish groundwater from two (2) management plan areas within the San Jacinto Groundwater Basin that underlie the EMWD service area: The West San Jacinto Groundwater Basin Management Plan area (West San Jacinto Basin) and the Hemet/San Jacinto Water Management Plan area (Hemet/San Jacinto Basin). The West San Jacinto Basin in which the Project site is located includes the Perris North, Perris South, San Jacinto Lower Pressure, and Menifee Management Zones, and the Lakeview portion of the Lakeview/Hemet North Management Zone. The Hemet/San Jacinto Basin is composed of the Hemet South, Canyon, and San Jacinto Upper Pressure Management Zones, as well as the Hemet North portion of the Lakeview/Hemet North Management Zone. EMWD produces water for potable use or blending in four (4) of the management zones: Perris North, Hemet South, San Jacinto Upper Pressure, and Canyon. EMWD owns and operates two (2) desalination plants in the Project area: The Menifee Desalter and the Perris I Desalter, which treat brackish groundwater through reverse osmosis to achieve potable water standards. (EMWD, 2016b, p. 3-3)

EMWD also maintains a regional recycled water system that provides tertiary-treated recycled water to customers for agricultural, landscape irrigation, environmental, and industrial use. EMWD's recycled water system consists of four (4) regional water reclamation facilities (RWRFs) that treat municipal sewage and produce water for recycling. The four RWRFs include: The San Jacinto Valley RWRf, the Moreno Valley RWRf, the Temecula Valley RWRf, and the Perris Valley RWRf. The four RWRFs are connected via a network of pipelines and several distribution storage ponds which manage the delivery of recycled water. (EMWD, 2016b, p. 3-3)

Table 4.20-1, *Historic Water Consumption within the EMWD Urban Water Service Area*, depicts the recent water deliveries within the EMWD Urban Water Service Area. As shown, although the population has increased from 292,123 to 500,589 between 1999 and 2008 (or an increase of 71.3%), total water usage only increased by 40.1% from 61,906,352 gallons per day (gpd) to 86,702,794 gpd, representing a reduction in the per-capita consumption rate from 212 gallons per capita per day (GPCD) in 1999 to 173 GPCD in 2008. As shown in Table 4.20-1, the average baseline GPCD during this 10-year period is 197 GPCD. Additionally, Table 4.20-2, *Total EMWD Demand Projections*, presents projected water demand within the EMWD service area through year 2040.

Table 4.20-3, *EMWD Projected Water Supplies*, presents the projected water supply up to year 2040 for urban water use within the EMWD in daily per capita water use in acre feet. As shown, the EMWD forecasts being able to meet water demands from its wholesale and retail customers through the year 2040, primarily through purchasing or importing water from MWD.

B. Sewer Service and Treatment

EMWD provides wastewater collection, treatment, and recycled water services throughout the Project area. Five (5) operational RWRFs are operated throughout EMWD, and include the San Jacinto Valley RWRf, the Moreno Valley RWRf, the Temecula Valley RWRf, the Sun City RWRf, and the Perris Valley RWRf. As shown below in Table 4.20-4, *Wastewater Treatment Capacity*, the four RWRFs have a combined capacity of 55,000,000 gallons per day (gpd). In addition to treatment facilities, EMWD has several recycled water storage ponds throughout EMWD service area. (EMWD, 2016b, pp. 6-16 and 6-17)



Table 4.20-1 Historic Water Consumption within the EMWD Urban Water Service Area

Base Years	Service Area Population	Gross Water Use (AF)	Daily Per Capita Water Use (GPCD)
1999	292,123	69,390	212
2000	303,678	72,005	212
2001	317,457	70,059	197
2002	357,783	81,283	203
2003	364,893	86,289	211
2004	389,897	79,977	183
2005	430,314	94,677	196
2006	468,467	100,831	192
2007	486,901	104,378	191
2008	500,589	97,184	173
10-Year Average Baseline GPCD			197

(EMWD, 2016b, Table 5-4)

Table 4.20-2 Total EMWD Demand Projections

	2015	2020	2025	2030	2035	2040
Retail Potable and Raw Water Demand	78,937	100,500	111,500	122,900	134,000	144,500
Wholesale Potable and Raw Water Demand	21,768	50,500	54,100	57,700	61,200	64,800
Total Potable and Raw Water Demand	100,705	151,000	165,600	180,600	195,200	209,300
Retail Recycled Water Demand	44,150	45,245	48,334	50,017	51,800	53,300
Wholesale Recycled Water Demand	1,235	1,656	4,766	5,183	5,600	5,600
Total Recycled Water Demand	45,385	46,901	53,100	55,200	57,400	58,900
Total Water Demand	146,090	197,901	218,700	235,800	252,600	268,200

(EMWD, 2016b, Table ES-2)

Table 4.20-3 EMWD Projected Water Supplies

Supply	2015	2020	2025	2030	2035	2040
Retail						
Imported Water	56,397	81,197	89,097	100,497	111,597	122,097
Groundwater	15,252	12,303	12,303	12,303	12,303	12,303
Desalinated Groundwater	7,288	7,000	10,100	10,100	10,100	10,100
Recycled Water	44,150	45,245	48,334	50,017	51,800	53,300
Total Retail Supply	123,087	145,745	159,834	172,917	185,800	197,800
Wholesale						
Imported Water	21,768	50,500	54,100	57,700	61,200	64,800
Recycled Water	1,235	1,656	4,766	5,183	5,600	5,600
Total Wholesale Supply	23,003	52,156	58,866	62,883	66,800	70,400
Total Water Supply	146,090	197,901	218,700	235,800	252,600	268,200

(EMWD, 2016b, Table ES-3)



Table 4.20-4 Wastewater Treatment Capacity

Facility	Typical Daily Flows (gpd)	Current Capacity (gpd)	Planned Capacity (gpd)
Moreno Valley Regional Water Reclamation Facility	10,600,000	16,000,000	41,000,000
Perris Valley Regional Water Reclamation Facility	13,800,000	22,000,000	100,000,000
San Jacinto Valley Regional Water Reclamation Facility	7,000,000	14,000,000	27,000,000
Sun City Regional Water Reclamation Facility	2,400,000	3,000,000	15,000,000+

(EMWD, n.d.)

Collectively, the RWRFs within EMWD collect and treat approximately 33.8 million gpd of wastewater, and have a capacity to treat approximately 55.0 million gpd. Sewer flows from the Project site would be treated by the Perris Valley RWRf, which has a daily capacity of 22.0 million gpd and typical daily flows of 13.8 million gpd. (EMWD, n.d.) EMWD treats all of the wastewater collected in its service area to tertiary standards and disposes of its recycled water in one of three ways: 1) customer sales; 2) discharge to Temescal Creek; or, 3) through percolation and evaporation while stored in ponds throughout EMWD. In 2015, EMWD collected and treated a total of 48,665 Acre-Feet (AF) of wastewater at four of its RWRFs. All of the recycled water sold by EMWD originates from wastewater collected and treated within EMWD’s retail service area. Therefore, these volumes are accounted for in the 48,655 AF. (EMWD, 2016b, p. 6-19)

C. Stormwater Drainage

Under existing conditions, runoff from the Project site generally flows in a west to east direction and discharges directly into the San Jacinto River, which traverses the southeastern corner of the Project site.

D. Solid Waste Collection and Disposal

Solid waste collection and disposal is provided by the Riverside County Department of Waste Resources (RCDWR) through a franchise agreement with a private company, Waste Management Inc. of the Inland Empire (WMIE). Waste within the Project area is sent to transfer stations and landfills managed by the RCDWR and WMIE. Solid Waste from the Project site would be taken to the Moreno Valley Transfer Station (MVTs) before being loaded into larger trucks and transferred to either the El Sobrante Landfill, Lamb Canyon Landfill, or the Badlands Landfill for disposal. The following is a description of these facilities:

- El Sobrante Landfill. The El Sobrante Landfill is located in the southeast area of the City of Corona at 10910 Dawson Canyon Road and accessed from Interstate-15 (I-15) at Temescal Canyon Road. The landfill is operated and owned by USA Waste Services of California, Inc. of which WMIE is a subsidiary. The existing landfill encompasses 1,322 acres, of which 486 acres are permitted for refuse disposal. The landfill is currently permitted to receive 16,054 tons per day (tpd), and data from April 2020 shows that the El Sobrante Landfill received an average of 10,074 tons per day (including an average of 3,400 tons per day for in-County waste) (RCDWR, 2020a). If needed, 5,000 tpd must be reserved for waste produced within Riverside County, leaving the maximum commitment of non-Riverside County waste at 11,054 tpd. As of April 1, 2018, the landfill had a total remaining disposal



capacity of 143,977,170 cubic yards. The El Sobrante Landfill is projected to reach capacity in 2051. (CalRecycle, 2019a)

- Lamb Canyon Landfill. The Lamb Canyon Landfill is located between the City of Beaumont and the City of San Jacinto at 16411 Lamb Canyon Road (State Route 79), south of Interstate 10 and north of Highway 74. The landfill is owned and operated by RCDWR. The landfill encompasses approximately 703.4 acres, of which approximately 144.6 acres are permitted for waste disposal. The landfill is currently permitted to receive 5,000 tpd and had an estimated total disposal capacity of approximately 38.9 million cubic yards. Data from April 2020 shows that the Lamb Canyon Landfill received approximately 1,940 tpd (including 1,924 tpd of in-County waste) (RCDWR, 2020b). As of January 8, 2015 (the most recent date for which data are available), the landfill had a total remaining capacity of approximately 19.2 million cubic yards. The current landfill remaining disposal capacity is estimated to last until approximately April 2029. (CalRecycle, 2019b)
- Badlands Landfill. The Badlands Landfill is located northeast of the City of Moreno Valley at 31125 Ironwood Avenue and accessed from State Highway 60 at Theodore Avenue. The landfill is owned and operated by RCDWR. The existing landfill encompasses 278 acres, of which 150 acres are permitted for refuse disposal. The landfill is currently permitted to receive 4,800 tpd. Data from April 2020 shows that the Badlands Landfill received an average of 2,729 tpd (including 2,045 tpd of in-County waste) (RCDWR, 2020c). As of January 1, 2015, the landfill had a total remaining disposal capacity of approximately 15.7 million cubic yards. The Badlands Landfill is projected to reach capacity at the earliest in 2022. (CalRecycle, 2019c)

4.20.2 APPLICABLE REGULATORY REQUIREMENTS

The following is a brief description of the federal, State, and local environmental laws and related regulations related to utilities and service systems.

A. Federal Regulations

1. Applicable Water Supply Regulations

Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was substantially reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1972. Under the CWA, the Environmental Protection Agency (EPA) has implemented pollution control programs such as setting wastewater standards for industry, and also has set water quality standards for all contaminants in surface waters. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have



a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. (EPA, 2020a)

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) was established to protect the quality of drinking water in the U.S. This law focuses on all waters actually or potentially designed for drinking use, whether from above ground or underground sources. The Act authorizes EPA to establish minimum standards to protect tap water and requires all owners or operators of public water systems to comply with these primary (health-related) standards. The 1996 amendments to SDWA require that EPA consider a detailed risk and cost assessment, and best available peer-reviewed science, when developing these standards. State governments, which can be approved to implement these rules for EPA, also encourage attainment of secondary standards (nuisance-related). Under the Act, EPA also establishes minimum standards for state programs to protect underground sources of drinking water from endangerment by underground injection of fluids. (EPA, 2020d)

B. State Regulations

1. Applicable Water Supply Regulations

Water Conservation in Landscaping Act

The Water Conservation in Landscaping Act was established to ensure adequate water supplies are available for future uses. To promote the conservation and efficient use of water, the Act requires local agencies to adopt a water efficient landscape ordinance. When such an ordinance had not been adopted, a finding as to why (based on the climatic, geologic, or topographical conditions) such an ordinance is not necessary, must be adopted. In the absence of such an ordinance or findings, the policies and requirements contained in the “model” ordinance drafted by the State of California shall apply within the affected jurisdiction. (CA Legislative Info, 2016)

Water Recycling in Landscaping Act

In 2000, Senate Bill 2095 (Water Recycling in Landscaping Act) was approved by Governor Davis requiring any local public or private entity that produces recycled water and determines that within 10 years it will provide recycled water within the boundaries of a local agency, to notify the local agency of that fact. In turn, local agencies are required to adopt and enforce within 180 days a specified recycled water ordinance, unless the local agency adopted a recycled water ordinance or other regulation requiring the use of recycled water in its jurisdiction prior to January 1, 2001. (CA Legislative Info, 2000)

Urban Water Management Planning Act

The Urban Water Management Planning Act (UWMP Act) was proposed and adopted to ensure that water planning is conducted at the local level, as the State of California recognized that two water agencies in the same region could have very different impacts from a drought. The UWMP Act requires water agencies to develop Urban Water Management Plans (UWMPs) over a 20-year planning horizon, and further required UWMPs to be updated every five years. UWMPs are exempt from compliance with CEQA. (DWR, 2016, p. 1-2)



The UWMPs provide a framework for long term water planning and inform the public of a supplier’s plans for long-term resource planning that ensures adequate water supplies for existing and future demands. This part of the California Water Code (CWC) requires urban water suppliers to report, describe, and evaluate:

- Water deliveries and uses;
- Water supply sources;
- Efficient water uses;
- Demand management measures; and
- Water shortage contingency planning. (DWR, 2016, p. 1-3)

The UWMP Act has been modified over the years in response to the State’s water shortages, droughts, and other factors. A significant amendment was made in 2009, after the drought of 2007-2009 and as a result of the governor’s call for a statewide 20 percent reduction in urban water use by the year 2020. This was the Water Conservation Act of 2009, also known as SB X7-7. This Act required agencies to establish water use targets for 2015 and 2020 that would result in statewide savings of 20 percent by 2020. Beginning in 2016, retail water suppliers are required to comply with the water conservation requirements in SB X7-7 in order to be eligible for State water grants or loans. Retail water agencies are required to set targets and track progress toward decreasing daily per capita urban water use in their service area, which will assist the State in meeting its 20 percent reduction goal by 2020. (DWR, 2016, p. 1-2)

☐ Government Code § 66473.7(b)(2) (Senate Bill 221)

Under Senate Bill (SB) 221, approval by a city or county of certain residential subdivisions requires an affirmative written verification of sufficient water supply. SB 221 is intended as a ‘fail safe’ mechanism to ensure that collaboration on finding the needed water supplies to serve a new large subdivision occurs before construction begins. SB 221 requires the legislative body of a city or county or the advisory agency, to the extent that it is authorized by local ordinance to approve, conditionally approve, or disapprove a tentative map, must include as a condition in any tentative map that includes a subdivision a requirement that a sufficient water supply shall be available. Proof of the availability of a sufficient water supply must be requested by the subdivision applicant or local agency, at the discretion of the local agency, and is based on written verification from the applicable public water system within 90 days of a request. SB 221 does not apply to any residential project proposed for a site that is within an urbanized area and has been previously developed for urban uses, or where the immediate contiguous properties surrounding the residential project site are, or previously have been, developed for urban uses, or housing projects that are exclusively for very low and low-income households. (DWR, 2003; CA Legislative Info, n.d.)

☐ California Senate Bill 610

The California Water Code (Water Code) §§ 10910 through 10915 were amended by the enactment of SB 610 in 2002. SB 610 requires an assessment of whether available water supplies are sufficient to serve the demand generated by a proposed project, as well as the reasonably foreseeable cumulative demand in the region over the next 20 years under average normal year, single dry year, and multiple dry year conditions. Under SB 610, water assessments must be furnished to local governments for inclusion in any environmental documentation



for certain projects (as defined in Water Code 10912 [a]) subject to CEQA. (DWR, 2003; CA Legislative Info, n.d.) For the purposes of SB 610, “project” means any of the following:

- (1) A proposed residential development of more than 500 dwelling units.
- (2) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
- (3) A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
- (4) A proposed hotel or motel, or both, having more than 500 rooms.
- (5) A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
- (6) A mixed-use project that includes one or more of the projects specified in this subdivision.
- (7) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project. (DWR, 2003; CA Legislative Info, n.d.)

Because the Project Applicant proposes light industrial and business park land uses on more than 40 acres of land and with more than 650,000 s.f. of building area, a water supply assessment was required for the Project and is included in *Technical Appendix M*.

CA. Water Code § 10610 et seq. (Senate Bill 901)

Signed into law on October 16, 1995, Senate Bill (SB) 901 required every urban water supplier to identify as part of its urban water management plan, the existing and planned sources of water available to the supplier over a prescribed 5-year period. The code requires the water service purveyor to assess the projected water demand associated with a proposed project under environmental review. Later provisions of SB 901 required compliance in the event that a proposed project involves the adoption of a specific plan, amendment to, or revision of the land use element of a general plan or specific plan that would result in a net increase in the State population density. Upon completion of the water assessment, cities and counties may agree or disagree with the conclusions of the water service purveyors, but cannot approve projects in the face of documented water shortfalls without first making certain findings. (CA Legislative Info, n.d.)

Executive Order B-29-15

Executive Order (EO) B-29-15 ordered the State Water Resources Control Board (SWRCB) to impose restrictions to achieve a 25-percent reduction in potable urban water usage through February 28, 2016; directed the California Department of Water Resources (DWR) to lead a statewide initiative, in partnership with local agencies, to collectively replace 50 million square feet of lawns and ornamental turf with drought tolerant landscapes; and directed the California Energy Commission to implement a statewide appliance rebate program to provide monetary incentives for the replacement of inefficient household devices. (SWRCB, 2020)



Executive Order B-37-16

Signed on May 9, 2016, EO B-37-16 established a new water use efficiency framework for California. The order bolstered the State's drought resilience and preparedness by establishing longer-term water conservation measures that include permanent monthly water use reporting, new urban water use targets, reducing system leaks and eliminating clearly wasteful practices, strengthening urban drought contingency plans, and improving agricultural water management and drought plans. (SWRCB, 2020)

Executive Order B-40-17

Signed on April 7, 2017, EO B-40-17 ended the drought state of emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne, where emergency drinking water projects will continue to help address diminished groundwater supplies. It maintains water reporting requirements and prohibitions on wasteful practices. The order was built on actions taken in Executive Order B-37-16, which remains in effect. In a related action, state agencies, including the Department of Water Resources (DWR), released a plan to continue making water conservation a way of life. (SWRCB, 2020)

Sustainable Groundwater Management Act (SGMA)

The Sustainable Groundwater Management Act (SGMA) established a new structure for managing California's groundwater resources at a local level by local agencies. SGMA required, by June 30, 2017, the formation of locally-controlled groundwater sustainability agencies (GSAs) in the State's high- and medium-priority groundwater basins and subbasins (basins). A GSA is responsible for developing and implementing a groundwater sustainability plan (GSP) to meet the sustainability goal of the basin to ensure that it is operated within its sustainable yield, without causing undesirable results. The GSP Emergency Regulations for evaluating GSPs, the implementation of GSPs, and coordination agreements were adopted by DWR and approved by the California Water Commission on May 18, 2016. (DWR, 2020)

2. *Applicable Solid Waste Regulations*

California Solid Waste Integrated Waste Management Act (AB 939, 1989)

The Integrated Waste Management Act (IWMA) established an integrated waste management hierarchy to guide the California Integrated Waste Management Board (CIWMB) and local agencies in implementation, in order of priority: (1) source reduction, (2) recycling and composting, and (3) environmentally safe transformation and land disposal (it should be noted that the CIWMB no longer exists, and its duties have been assumed by CalRecycle). As part of the IWMA, the CIWMB was given a purpose to mandate the reduction of disposed waste. (CalRecycle, 2018a) The IWMA also required:

- the establishment of a task force to coordinate the development of city Source Reduction and Recycling Elements (SRREs) and a countywide siting element. (CalRecycle, 2018a)
- each city, by July 1, 1991, to prepare, adopt and submit a SRRE to the county which includes the following components: waste characterization; source reduction; recycling; composting; solid waste facility capacity; education and public information; funding; special waste (asbestos, sewage sludge, etc.); and household hazardous waste. (CalRecycle, 2018a)



- each county, by January 1, 1991, to prepare a SRRE for its unincorporated area, with the same components described above, and a countywide siting element, specifying areas for transformation or disposal sites to provide capacity for solid waste generated in the jurisdiction which cannot be reduced or recycled for a 15-year period.
- each county to prepare, adopt, and submit to the Board an Integrated Waste Management Plan (IWMP), which includes all of the elements described above. (CalRecycle, 2018a)
- each city or county plan to include an implementation schedule which shows: diversion of 25 percent of all solid waste from landfill or transformation facilities by January 1, 1995 through source reduction, recycling, and composting activities; and, diversion of 50 percent of all solid waste by January 1, 2000 through source reduction, recycling, and composting activities. (CalRecycle, 2018a)
- the CIWMB to review the implementation of each SRRE at least once every two years. (CalRecycle, 2018a)
- The IWMA required the CIWMB, in conjunction with an inspection conducted by a Lead Enforcement Agency (LEA), to conduct at least one inspection per year of each solid waste facility in the state. (CalRecycle, 2018a)

Additionally, the IWMA established a comprehensive statewide system of permitting, inspections, enforcement, and maintenance for solid waste facilities. (CalRecycle, 2018a)

Waste Reuse and Recycling Act (AB 1327)

The Waste Reuse and Recycling Act (WRRRA) required the CIWMB to approve a model ordinance for adoption by any local government for the transfer, receipt, storage, and loading of recyclable materials in development projects by March 1, 1993. The WRRRA also required local agencies to adopt a local ordinance by September 1, 1993 or allow the model ordinance to take effect. The WRRRA requires all development projects that are commercial, industrial, institutional, or marina in nature and where solid waste is collected and loaded, to provide an adequate area for collecting and loading recyclable materials over the lifetime of the project. The area is required to be provided before building permits are issued. (CalRecycle, 2018b)

Mandatory Commercial Recycling Program (AB 341)

Assembly Bill (AB) 341 (Chapter 476, Statutes of 2011 [Chesbro, AB 341]) directed CalRecycle to develop and adopt regulations for mandatory commercial recycling. CalRecycle initiated formal rulemaking with a 45-day comment period beginning Oct. 28, 2011. The final regulation was approved by the Office of Administrative Law on May 7, 2012. AB-341 was designed to help meet California's recycling goal of 75% by the year 2020. AB 341 requires all commercial businesses and public entities that generate 4 cubic yards or more of waste per week to have a recycling program in place. In addition, multi-family apartments with five or more units are also required to form a recycling program. (CalRecycle, 2020)



3. *Applicable Energy Conservation Regulations*

California Energy Efficiency Standards for Residential and Nonresidential Buildings (24 CA, Code Regs. 6)

The Building Energy Efficiency Standards were first adopted in 1976 and have been updated periodically since then as directed by statute. In 1975 the Department of Housing and Community Development adopted rudimentary energy conservation standards under their State Housing Law authority that were a precursor to the first generation of the Standards. However, the Warren-Alquist Act was passed one year earlier with explicit direction to the Energy Commission (formally titled the State Energy Resources Conservation and Development Commission) to adopt and implement the Standards. The Energy Commission's statute created separate authority and specific direction regarding what the Standards are to address, what criteria are to be met in developing the Standards, and what implementation tools, aids, and technical assistance are to be provided. (CEC, 2018)

The Standards contain energy and water efficiency requirements (and indoor air quality requirements) for newly constructed buildings, additions to existing buildings, and alterations to existing buildings. Public Resources Code Sections 25402 subdivisions (a)-(b) and 25402.1 emphasize the importance of building design and construction flexibility by requiring the Energy Commission to establish performance standards, in the form of an "energy budget" in terms of the energy consumption per square foot of floor space. For this reason, the Standards include both a prescriptive option, allowing builders to comply by using methods known to be efficient, and a performance option, allowing builders complete freedom in their designs provided the building achieves the same overall efficiency as an equivalent building using the prescriptive option. Reference Appendices are adopted along with the Standards that contain data and other information that helps builders comply with the Standards. (CEC, 2018)

The 2019 update to the Building Energy Efficiency Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The most significant efficiency improvements to the residential Standards include the introduction of photovoltaic into the prescriptive package, improvements for attics, walls, water heating, and lighting. The most significant efficiency improvements to the nonresidential Standards include alignment with the ASHRAE 90.1 2017 national standards. The 2019 Standards also include changes made throughout all of its sections to improve the clarity, consistency, and readability of the regulatory language. (CEC, 2018)

Public Resources Code Section 25402.1 also requires the Energy Commission to support the performance standards with compliance tools for builders and building designers. The Alternative Calculation Method (ACM) Approval Manual adopted by regulation as an appendix of the Standards establishes requirements for input, output, and calculational uniformity in the computer programs used to demonstrate compliance with the Standards. From this, the Energy Commission develops and makes publicly available free, public domain building modeling software in order to enable compliance based on modeling of building efficiency and performance. The ACM Approval Manual also includes provisions for private firms seeking to develop



compliance software for approval by the Energy Commission, which further encourages flexibility and innovation. (CEC, 2018)

□ **2016 California Green Building Standards Code (CAL Green; Part 11 of Title 24, California Code of Regulations)**

California Code of Regulations, Title 24, Part 11 is referred to as the California Green Building Standards Code (CALGreen Code). CALGreen became effective January 1, 2017, and is applicable to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout the State of California (including residential structures and elementary schools). The purpose of the CALGreen Code is to “improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality.” The CALGreen Code is not intended to substitute or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission (CBSC). Section 5.408.3 of the CALGreen Code requires that 100 percent of trees, stumps, rocks, and associated vegetation and soils resulting from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on-site until the storage site is developed. Unless otherwise noted in the regulation, all newly constructed buildings in California are subject of the requirements of the CALGreen Code. (CEC, 2018)

4.20.3 BASIS FOR DETERMINING SIGNIFICANCE

A. **Thresholds of Significance**

According to Section XIX of Appendix G to the State CEQA Guidelines, the proposed Project would result in a significant impact to utilities and service systems if the Project or any Project-related component would (OPR, 2018a):

- *Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;*
- *Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;*
- *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments;*
- *Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or*



- *Fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste.*

The following thresholds are derived from Riverside County's Environmental Assessment Checklist, as modified by the 2018 updates to Appendix G to the State CEQA Guidelines, in order to evaluate the significance of the proposed Project's impacts on utilities and service systems. The proposed Project would result in a significant impact to utilities and service systems if the Project or any Project-related component would:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage systems, whereby the construction or relocation would cause significant environmental effects;*
- Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;*
- Require or result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, whereby the construction or relocation would cause significant environmental effects;*
- Result in a determination by the wastewater treatment provider that serves or may service the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments;*
- 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;*
- Fail to comply with federal, state, and local management and reduction statutes and regulations related to solid wastes including the CIWMP (County Integrated Waste Management Plan);*
- Impact the following facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities, whereby the construction or relocation would cause significant environmental effects:*
 - Electricity;*
 - Natural gas;*
 - Communications systems;*
 - Street lighting;*
 - Maintenance of public facilities, including roads; or*
 - Other governmental services.*



The significance thresholds set forth in Riverside County’s Environmental Assessment Checklist, as modified/updated per the 2018 updates to the State CEQA Guidelines, were used to evaluate the significance of the proposed Project’s impacts to utilities and service systems.

4.20.4 IMPACT ANALYSIS

Threshold a.: Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage systems, whereby the construction or relocation would cause significant environmental effects?

A. Water Service

As discussed in EIR subsection 3.5.2.E, a total of four (4) points of connection are proposed to existing EMWD water mains located off-site: (1) at the intersection of Old Evans Road and Walnut Ave; (2) at the intersection of the Ramona Expressway and the proposed Street “A”; (3) within Nuevo Road, approximately 1 mile west of the intersection of Nuevo Road and proposed Antelope Road; and (4) at the intersection of Nuevo Road and Olivas Avenue. As depicted on EIR Figure 3-8, a proposed 36-inch line would be constructed within Walnut Avenue and a portion of the Ramona Expressway between the existing point of connection at Old Evans Road and proposed Antelope Road on site. An existing water tank located near the eastern terminus of Walnut Avenue, south of Ramona Expressway, would be demolished and replaced with two 2.5-3.0 million-gallon water tanks. As also shown on Figure 3-8, the Project Applicant would construct an off-site 36-inch water main within Nuevo Road between the existing point of connection in Nuevo Road (west of the Project site) and Antelope Road, which would be extended north to the on-site portions of Antelope Road. An additional 24- to 30-inch water main would be constructed within Nuevo Road between the existing point of connection at Olivas Avenue and proposed Antelope Road, which would extend northerly to the on-site portions of Antelope Road.

Within the Project site, a series of water lines and a booster station would be constructed. Specifically, a 30- to 36-inch water main (Pressure Zone 1720) would be constructed within the on-site portions of Antelope Road, with a booster station planned near proposed Planning Area 4. A 36-inch water main (Pressure Zone 1720) would be constructed within Orange Avenue, east of Antelope Road, and would extend off-site to planned domestic water infrastructure located east of the Project site. A 12-inch water line (Pressure Zone 1720) would be constructed within Street “A” between the existing point of connection in Ramona Expressway and Orange Avenue, and would connect to the proposed 36-inch main within Orange Avenue. Under the Alternative Land Use Plan, Street “A” would not be constructed, and the 12-inch water line would be installed within an internal roadway that would provide access to Planning Areas 6 and 7. To the west of Antelope Road, a 12-inch water line (Pressure Zone 1720) is proposed within Orange Avenue and would serve the northwestern portions of the Project site. A 36-inch water main within Antelope Road (Pressure Zone 1627) would extend on site and would provide potable water services to the southern portions of the Project site.

Impacts associated with the above-described Project-related water facilities are inherent to the Project’s construction phase, and impacts have been evaluated throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). Where significant direct or cumulative impacts are



identified, mitigation measures have been imposed to reduce the Project's impacts to the maximum feasible extent. There are no environmental impacts that would occur specifically related to the Project's proposed water improvements, with exception of impacts due to the construction of the two off-site water tanks; however, impacts associated with these off-site water tanks are addressed in EIR Subsections 4.4, *Biological Resources*, and 4.5, *Cultural Resources*, which include mitigation to reduce impacts to biological and cultural resources to less-than-significant levels. As such, with the mitigation measures specified in this EIR, Project impacts due to water improvements would be less than significant.

B. Wastewater Facilities

As discussed in EIR subsection 3.5.2.E, a series of sewer lines and sewer lift stations are proposed to divert flows toward an existing 27-inch gravity main in Pico Avenue that flows to the existing Perris Valley Regional Water Reclamation Facility (PVRWRF) to the south. A series of sewer lines, force mains, and lift stations would be constructed to convey wastewater generated on site to the existing 27-inch gravity main. Impacts associated with the proposed sewer system are inherent to the Project's construction phase, and impacts have been evaluated throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). Where significant direct or cumulative impacts are identified, mitigation measures have been imposed to reduce the Project's impacts to the maximum feasible extent. There are no environmental impacts that would occur specifically related to the Project's proposed sewer improvements that have not already been addressed by this EIR. As such, with the mitigation measures specified in this EIR, Project impacts due to sewer improvements would be less than significant.

C. Wastewater Treatment

Wastewater generated by the Project would be conveyed to the Perris Valley Regional Water Reclamation Facility (PVRWRF). As previously indicated in Table 4.20-4, the PVRWRF receives typical flows of 13.8 million gpd with an overall capacity of 22 million gpd, resulting in an excess capacity of 8.2 million gpd. As shown in Table 4.20-5, *Project-Related Wastewater Generation – Primary Land Use Plan*, and Table 4.20-6, *Project-Related Wastewater Generation – Alternative Land Use Plan*, at buildout the Project is anticipated to generate between approximately 658,260 gpd and 667,050 gpd, based on the rates used in EIR No. 521, which was prepared in conjunction with the County's 2015 General Plan Update. The Project's wastewater generation would represent between approximately 8.0% and 8.1% of the PVRWRF's current excess capacity (under the Alternative Land Use Plan and Primary Land Use Plan, respectively), and would represent approximately 0.7% of the ultimate planned capacity at the PVRWRF of 100 million gpd (under both the Primary and Alternative Land Use Plans). Accordingly, the Project would not result in or require the expansion of the existing facilities at the PVRWRF, and impacts would therefore be less than significant.

D. Storm Water Drainage System

As discussed in EIR subsection 3.5.2.D, on-site flows would be conveyed to the three (3) "primary" drainage basins onsite: two (2) "primary" basins located within proposed Planning Area 3 and one (1) "primary" basin located within proposed Planning Area 4. Additionally, catch basins and/or infiltration BMPs are proposed within Orange Avenue and Antelope Road in order to reduce the mitigation required within the primary



Table 4.20-5 Project-Related Wastewater Generation – Primary Land Use Plan

Land Use	Acreage	Generation Factors	Wastewater Generation (gpd)
Industrial ¹	438.8 acres	1,500 gpd/acre	657,450
Commercial	8.0 acres	1,200 gpd/acre	9,600
Total:	--	--	667,050

1. “Industrial” includes both proposed “Light Industrial” and “Business Park” land uses. (Riverside County, 2015, Table 4.19-BJ)

Table 4.20-6 Project-Related Wastewater Generation – Alternative Land Use Plan

Land Use	Acreage ²	Generation Factors	Wastewater Generation (gpd)
Industrial ¹	432.2 acres	1,500 gpd/acre	648,300
Commercial	8.3 acres	1,200 gpd/acre	9,960
Total:	--	--	658,260

1. “Industrial” includes both proposed “Light Industrial” and “Business Park” land uses.
 2. Acreage shown for Business Park excludes 7.1 acres within Planning Area 6 and 1.4 acres within Planning Area 7, and acreage shown for Commercial Retail excludes 0.2 acres within Planning Area 8A. These areas would be located within the alignment of the MCP, and thus would not be developed with Business Park or Commercial Retail uses. (Riverside County, 2015, Table 4.19-BJ)

drainage basins identified above. After the flows are captured by the drainage basins, mitigated flows would then outlet towards the San Jacinto River. Impacts associated with the proposed drainage system are inherent to the Project’s construction phase, and impacts have been evaluated throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). Where significant direct or cumulative impacts are identified, mitigation measures have been imposed to reduce the Project’s impacts to the maximum feasible extent. There are no environmental impacts that would occur specifically related to the Project’s proposed storm drainage improvements. As such, with the mitigation measures specified in this EIR, Project impacts due to stormwater drainage improvements would be less than significant.

Threshold b.: Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

EMWD is responsible for supplying the region with its potable and non-potable water needs. In June of 2016, the EMWD Board of Directors adopted the 2015 UWMP. This plan provides information on EMWD's projected supplies and demands in five-year increments through the year 2040, and reports EMWD's progress on water use efficiency targets as defined in the Water Conservation Act of 2009. The 2015 UWMP shows that the majority of EMWD's existing and future planned demand is to be met through imported water delivered by MWD. Demand for EMWD shown in the 2015 UWMP is projected across the District as a whole and is not project specific. The 2015 UWMP relies heavily on information and assurances contained within MWD's 2015 Urban Water Management Plan (UWMP-MWD) when determining supply reliability. The 2015 UWMP-MWD is herein incorporated by reference and is available for public review at EMWD, 2270 Trumble Road, Perris, California 92570. (EMWD, 2016b)



To assess the ultimate effect of the Project's water demands and service needs, the EMWD has prepared a WSA for the Project (included as *Technical Appendix M* to this EIR), in accordance with Senate Bill 610 (SB 610) and Senate Bill 221 (SB 221). SB 610 requires the preparation of a water supply assessment report for projects that propose to construct the equivalent of 500 or more residential dwelling units. SB 221 requires affirmative written verifications of sufficient water supply. Provided below is a summary of EMWD's water supplies and water demand projections based on the UWMP and the Project-specific WSA.

Population Projection

In 2015, EMWD updated the population projections from its 2010 UWMP using information from EMWD's Database of Proposed Projects and the 2015 Empire Economics Absorption Study. EMWD's prior UWMP used the Riverside County Center for Demographic Research (RCCDR) 2010 Projection, which considers land use and land agency information to develop future population projections, which was adopted by the Western Riverside Council of Governments. (EMWD, 2020a, p. 4)

Consistent with the significant percentage of undeveloped land within EMWD's service area, growth is anticipated to continue throughout the 2015 UWMP's 25-year planning horizon, as shown in Table 4.20-7, *EMWD Service Area Projected Population – 2020-2040*. Currently, approximately 40 percent of the District's service area is built out. As population and the associated water demands increase, EMWD will increase the amount of water imported via MWD. Alternatively, local supply projects may eventually offset some of the imported water increases. (EMWD, 2020a, p. 4)

Overview of Supplies

EMWD has four sources of water supply: imported water purchased from MWD, local potable groundwater, local desalinated groundwater, and recycled water. On average from 2010 through 2015, EMWD's water supply portfolio averaged approximately 57 percent imported water, 10 percent groundwater, four percent desalinated groundwater, and 29 percent recycled water. These figures include water that was indirectly served as wholesale water. Please note that the average proportion of imported water in EMWD's water supply portfolio was affected by sizeable reductions in 2015 (relative to prior years) due to the mandatory water use restrictions enacted by the State Water Resources Control Board in response to severe Statewide drought conditions. An annual breakdown of EMWD's supplies is shown in Table 4.20-8, *EMWD Water Supply Portfolio (AF)*, which supplements information from the 2015 UWMP. General locations of EMWD's water supplies are shown in Figure 1 of the Project's WSA (*Technical Appendix M*). (EMWD, 2020a, p. 5)

As future development increases the water demands within EMWD's service area, it is anticipated that the majority of the new demands will be met through additional imported water from MWD. Imported supply sources will be supplemented by local supply projects increasing the desalination of brackish groundwater and use of recycled water. EMWD also plans to continue its efforts to enhance water use efficiency within its service area. Table 4.20-9, *EMWD Projected Water Supplies – Average Year Hydrology*, shows EMWD's projected water supplies for both retail and wholesale service throughout the planning horizon set within its



Table 4.20-7 EMWD Service Area Projected Population – 2020-2040

	2020	2025	2030	2035	2040
EMWD – Retail Service Area	617,100	699,800	784,100	864,200	939,100
City of Hemet Water Department	26,900	27,900	28,900	29,800	30,800
City of Perris / North Perris Water System	13,100	13,800	14,500	15,100	15,800
City of San Jacinto Water Department	16,100	18,500	20,800	23,100	25,500
Lake Hemet Municipal Water District	47,200	51,400	55,500	59,400	63,700
Nuevo Water Company	2,600	3,000	3,400	3,900	4,300
Other (Murrieta Division, etc.)	5,000	6,200	7,600	8,700	10,100
Rancho California Water District	128,500	146,500	160,400	174,400	185,300
Total	856,500	967,100	1,075,200	1,178,600	1,274,600

(EMWD, 2020a, Table 1)

Table 4.20-8 EMWD Water Supply Portfolio (AF)

Type	Source	2015	2016	2017	2018	2019
Imported – MWD Treated	Metropolitan Water District	41,800	51,200	61,600	57,100	55,200
Imported – EMWD Treated	Metropolitan Water District	18,600	15,500	12,900	18,300	19,000
Imported – Raw ⁽¹⁾	Metropolitan Water District	16,200	13,300	10,900	14,900	12,400
Groundwater ⁽²⁾	San Jacinto River Groundwater Basin	14,600	14,200	13,300	13,600	8,000
Desalination ⁽³⁾	San Jacinto River Groundwater Basin	7,300	6,500	6,300	7,500	7,400
Recycled Water ⁽⁴⁾	Regional Water Reclamation Facilities	45,400	45,200	44,100	45,900	42,300
Total		143,900	145,900	149,100	157,300	144,300

(1) Total does not include water that was recharged under the Soboba Settlement Agreement.

(2) Groundwater totals may include raw, brackish groundwater used to augment recycled water system (served to agricultural customers). Portions of the groundwater basin from which EMWD pumps potable groundwater are adjudicated under the Hemet-San Jacinto Watermaster and subject to adjusted base production rights.

(3) Refers to flow effluent from EMWD’s desalination facilities (as opposed to total pumping from brackish wells, which are the influent flow).

(4) Recycled water total excludes discharge but includes system losses (such as storage pond evaporation and incidental recharge).

(EMWD, 2020a, Table 2)



Table 4.20-9 EMWD Projected Water Supplies – Average Year Hydrology

Type	Source	2020	2025	2030	2035	2040
Imported Water ⁽¹⁾	Metropolitan Water District	131,697	143,197	158,197	172,797	186,897
Groundwater ⁽²⁾	San Jacinto River Groundwater Basin	12,303	12,303	12,303	12,303	12,303
Desalination	San Jacinto River Groundwater Basin	7,000	10,100	10,100	10,100	10,100
Recycled Water	Regional Water Reclamation Facilities	46,901	53,100	55,200	57,400	58,900
Total		197,901	218,700	235,800	252,600	268,200

(1) Includes 7,500 acre-feet annually to be delivered by MWD to meet the Soboba Settlement Agreement.

(2) Portions of the groundwater basin from which EMWD pumps potable groundwater are adjudicated under the Hemet-San Jacinto Watermaster and subject to adjusted base production rights.

(EMWD, 2020a, Table 3)

UWMP under the assumption that new demands will primarily be met with increases in imported water. These estimates do not account for all potential new local supply projects under development by EMWD or by agencies to which EMWD provides wholesale service. (EMWD, 2020a, p. 7)

EMWD’s water supply reliability is primarily established through MWD, of which EMWD is a member agency. In the 2015 UWMP prepared by the MWD, the reliability of water delivery through the State Water Project (SWP) and the Colorado River Aqueduct (CRA) was assessed by MWD. MWD determined that its water sources will continue to provide a reliable supply to its member agencies during normal, single-dry, and multiple-dry years during the UWMP planning horizon. Unprecedented shortages are addressed in the Water Shortage Contingency Analysis and Catastrophic Supply Interruption Planning portions of the UWMP-MWD. (EMWD, 2020a, p. 7)

EMWD Projected Demands

EMWD’s primary retail customers for potable/raw water can be divided into residential, commercial, industrial, institutional, and landscape sectors. The residential sector is EMWD’s largest customer segment; however, each sector plays a role in the growth and development of EMWD’s service area. The historic and projected customer distribution and water use by the various potable/raw retail customer types are shown in Table 4.20-10, *Retail Potable/Raw Water Deliveries by Customer Type (2005 - 2040)*. (EMWD, 2020a, p. 16)

EMWD also provides wholesale water service to a number of sub-agencies, serves recycled water, and imports water for recharge purposes. These demands, along with system losses, are shown in Table 6 and Table 7 of the Project’s WSA (*Technical Appendix M*). Total demands are shown in Table 4.20-11, *Summary of System Water Demands (2005 - 2040)*. (EMWD, 2020a, p. 17)



Table 4.20-10 Retail Potable/Raw Water Deliveries by Customer Type (2005 - 2040)

Use Type ⁽¹⁾	Actual Deliveries - AF			Projected Deliveries – AF ⁽²⁾				
	2005	2010	2015	2020	2025	2030	2035	2040
Single Family	62,300	54,000	45,700	64,800	72,900	81,100	89,000	96,800
Multi-Family	5,500	6,100	5,800	8,300	9,300	10,300	11,400	12,300
Commercial	3,900	4,200	4,600	6,500	7,300	8,100	8,900	9,700
Industrial	400	400	300	400	400	500	500	600
Institutional	2,900	2,300	2,000	3,000	3,300	3,700	4,100	4,400
Landscape ⁽³⁾	7,500	8,900	7,700	7,500	7,500	7,500	7,500	7,300
Agriculture (Potable)	2,400	1,800	1,900	1,900	1,900	1,900	1,900	1,900
Agriculture (Raw)	100	500	900	1,000	1,000	1,000	1,000	1,000
Total	85,000	78,200	68,900	93,400	103,600	114,100	124,300	134,000

(1) Figures do not include system losses.

(2) Passive water savings due to restrictions outlined in the Administrative Code are included in the demand projections.

(3) Landscape demands remain constant or decrease over time as landscape accounts are offset by conversion to the recycled water system.

(4) Demand growth in the District’s service area has been below the projections completed for the 2015 UWMP. Retail potable/raw water deliveries in 2019 totaled approximately 71,140 AF.

(EMWD, 2020a, Table 5)

Table 4.20-11 Summary of System Water Demands (2005 - 2040)

Category	Actual Demands - AF			Projected Demands - AF				
	2005	2010	2015	2020	2025	2030	2035	2040
Retail Demands	85,000	78,200	68,900	93,400	103,600	114,100	124,300	134,000
Wholesale Demands	29,300	27,100	21,700	50,500	54,100	57,700	61,200	64,800
Other Water Uses ⁽¹⁾	47,300	36,600	55,200	54,000	61,000	64,000	67,100	69,400
Total	161,600	141,900	145,800	197,900	218,700	235,800	252,600	268,200

(1) Includes retail and wholesale recycled water demands.

(EMWD, 2020a, Table 8)

Project Water Demands

According to the Project’s WSA (*Technical Appendix M*), the Project would result in an annual demand for approximately 1,101 acre-feet per year (AF/yr), as summarized in Table 4.20-12, *Project Water Demand Estimate*. The demand evaluated in the 2015 UWMP for the Project site is shown in Table 4.20-13, *Water Demand Estimates Accounted for the Project Site by the 2015 UWMP*. As shown, the 2015 UWMP anticipated that the Project site would be developed with a mixture of Medium Density, Medium High Density, and Very



High Density Residential, Public Facilities, Commercial Retail, and Open Space Conservation and Recreation land uses, with a future estimated water demand of approximately 1,059 AF/yr. Thus, the proposed Project’s water demand would exceed the 2015 UWMP forecasts for the site by approximately 42 AF/yr. (EMWD, 2020a, p. 20)

Table 4.20-12 Project Water Demand Estimate

Category	Average Day Demand (gpd)	Annual Demand (MG)	Annual Demand (AF)
Business Park/Light Industrial	964,260	352.2	1,080.8
Commercial Retail	17,820	6.5	20.0
Open Space Conservation	-	-	-
Circulation (Roads)	-	-	-
Total	982,080	359	1,101

(EMWD, 2020a, Table 9)

Table 4.20-13 Water Demand Estimates Accounted for the Project Site by the 2015 UWMP

Category	Average Day Demand (gpd)	Annual Demand (MG)	Annual Demand (AF)
Medium Density Residential	272,424	99.5	305.4
Medium High Density Residential	364,915	133.3	409.0
Very High Density Residential	23,926	8.7	26.8
Public Facilities	118,351	43.2	132.7
Commercial Retail	86,277	31.5	96.7
Open Space Recreation	79,137	28.9	88.7
Open Space Conservation	-	-	-
Total	945,031	345	1,059

(EMWD, 2020a, Table 10)

Although the Project’s water demand would exceed the 2015 UWMP growth forecasts, the rate of demand growth in EMWD’s service area has occurred at a lower rate than the projections used in the 2015 UWMP, which forecast retail potable/raw water demands to reach 93,400 AF (without system losses) by calendar year 2020. Retail potable/raw water deliveries (including temporary construction meters but excluding system losses) in 2019 totaled approximately 71,140 AF, well below the demands projected for 2020. Since growth demands have not kept up with the 2015 UWMP projected deliveries, EMWD has determined that it would be able to meet the additional 42 AF demand presented by the Project. (EMWD, 2020a, p. 20)



Evaluation of Supply and Demand

EMWD's 2015 UWMP includes estimates of EMWD's demand during average, single and multiple dry years. The estimates for EMWD's retail system are documented in Table 11, Table 12, and Table 13 of the Project's WSA (*Technical Appendix M*), and are taken directly from the 2015 UWMP document. Similar estimates for EMWD's wholesale system are shown in Table 14, Table 15, and Table 16 of the WSA. More details on this analysis can be found in Section 7.6 (Supply and Demand Assessment) of the 2015 UWMP. (EMWD, 2020a, p. 21)

EMWD's 2015 UWMP discusses the supply reliability for EMWD during dry years. It is anticipated that the majority of water for future development will be supplied by imported water from MWD during single dry years. Typically, MWD does not place imported water limits on a member agency but predicts the future water demand based on regional growth information. The 2015 UWMP prepared by MWD shows that MWD would have the ability to meet all of its member agencies' project supplemental demand through 2040, even under a repeat of historic drought scenarios. (EMWD, 2020a, p. 23)

EMWD maintains a Water Shortage Contingency Plan (WSCP) that aims to reduce demand during water shortage using significant penalties for wasteful water use. EMWD's WSCP details demand reductions for several stages of shortage through a 50 percent or greater reduction. Additional information about contingency planning is included in Chapter 8 of EMWD's 2015 UWMP. The WSCP was last updated on January 20, 2016, and is located in Title 5, Article 10 of the EMWD Administrative Code, which is available on EMWD's website (www.emwd.org). (EMWD, 2020a, p. 23)

EMWD is currently in Stage 2 of the WSCP in response to improved statewide water supply conditions and the declared end of the drought emergency. (EMWD, 2020a, p. 23)

Water Supply Assessment

Potable Water

From a facilities perspective, the Project would be conditioned to construct off-site and on-site water facilities needed to distribute water throughout the Project area. Prior to construction and as part of future implementing developments, the developer(s) would be required to contact EMWD staff to establish development design conditions and determine if any revisions are required to the preliminary master plan. Figure 3 of the Project's WSA (*Technical Appendix M*) shows existing water facilities in relation to the Project. (EMWD, 2020a, p. 23)

The Project demand would be served using imported water from MWD, supplemented with new local supply projects during multiple-dry years, if needed. Allocation from MWD may result in water supplies being made available at a significantly higher cost depending on circumstances. (EMWD, 2020a, p. 23)

Recycled Water

EMWD policy recognizes recycled water as the preferred source of supply for all non-potable water demands, including irrigation of recreation areas, greenbelts, open space common areas, commercial landscaping, and



supply for aesthetic impoundment or other water features. According to EMWD's policies, the Project may be conditioned to construct a recycled water system separately from the potable water system. The system would need to be constructed to recycled water standards. The Project also may be conditioned to construct off-site recycled water facilities. EMWD would make a final determination on requirements for recycled water use and facilities during the development design conditions phase of the Project (i.e., as part of future implementing tentative tract maps, plot plans, etc.). However, as it is not currently known whether such facilities would be required or what such facilities would consist of, it is not possible to assess environmental effects that may be associated with such improvements (State CEQA Guidelines § 15145). Such improvements may be subject to additional evaluation per CEQA as appropriate with future discretionary review for future implementing developments. (EMWD, 2020a, p. 24)

Conclusion

EMWD relies on MWD and local resources to meet the needs of its growing population. MWD stated in its 2015 UWMP that with the addition of all water supplies, existing and planned, MWD has the ability to meet all of its member agencies' projected supplemental demand through 2040, even under a repeat of historic multiple-year drought scenarios. (EMWD, 2020a, p. 24)

In the event that the lead agency determines adequate water supply exists for the proposed Project, the developer of the proposed Project is required to meet with EMWD Development Services Staff to establish development design conditions. Based on the results of the Project's WSA (*Technical Appendix M*), the EMWD has determined that it has adequate water supplies to serve the proposed Project. The development design conditions would detail water, wastewater, and recycled water requirements to serve the Project. An agreement developed prior to construction would determine whether additional funding is required to reduce existing customer demand on imported supplies through the expansion of local resources. The reduction of existing customer demand on imported water supplies would free up allocated imported water to be used to serve this Project under multiple dry year conditions. The amount of funding would be determined by EMWD (if required) and may take the form of a new component of connection fees or a separate charge. (EMWD, 2020a, pp. 24-25)

Based on present information and the assurance that MWD is engaged in identifying solutions that, when combined with the rest of its supply portfolio, will ensure a reliable long-term water supply for its member agencies, EMWD has determined that it will be able to provide adequate water supplies to meet the potable water demand for the proposed Project as part of its existing and future demands. (EMWD, 2020a, p. 24) Accordingly, sufficient water supplies are available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. The Project's effect on EMWD's regional water network would be less than significant.



Threshold c.: Would the Project require or result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, whereby the construction or relocation would cause significant environmental effects?

No septic systems are proposed as part of the Project. As discussed under the analysis of Threshold a., the Project would be provided sanitary sewer service by the EMWD, and no septic tanks are proposed as part of the Project. A description of proposed sewer improvements is provided in EIR subsection 3.5.2.E and are depicted on EIR Figure 3-9. As discussed therein, a series of sewer lines, lift stations, and force mains are proposed to convey sewer flows generated on site to an existing 27-inch gravity main in Pico Avenue that flows to the existing Perris Valley Regional Water Reclamation Facility (PVRWRF) to the south. Impacts associated with the Project's proposed sewer improvements are inherent to the Project's construction phase, and impacts have been evaluated throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). Where significant direct or cumulative impacts are identified, mitigation measures have been imposed to reduce the Project's impacts to the maximum feasible extent. There are no environmental impacts that would occur specifically related to the Project's proposed sewer improvements that have not already been addressed in pertinent sections of this EIR. As such, with the mitigation measures specified in this EIR, Project impacts due to proposed sewer improvements would be less than significant.

Threshold d.: Would the Project result in a determination by the wastewater treatment provider that serves or may service the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

As discussed under the analysis of Threshold a., wastewater generated by the Project would be conveyed to the PVRWRF. As previously indicated in Table 4.20-4, the PVRWRF receives typical flows of 13.8 million gpd with an overall capacity of 22 million gpd, resulting in an excess capacity of 8.2 million gpd. As previously shown in Table 4.20-5 and Table 4.20-6, at buildout the Project is anticipated to generate between approximately 658,260 gpd and 667,050 gpd, based on the rates used in EIR No. 521, which was prepared in conjunction with the County's 2015 General Plan Update. The Project's wastewater generation would represent between approximately 8.1% and 8.0% of the PVRWRF's current excess capacity (under the Primary Land Use Plan and Alternative Land Use Plan, respectively), and would represent approximately 0.7% of the ultimate planned capacity at the PVRWRF of 100 million gpd (under both the Primary and Alternative Land Use Plans). Accordingly, the Project would not result in or require the expansion of the existing facilities at the PVRWRF, and impacts would therefore be less than significant.

Threshold e.: Would the Project generate solid waste in excess of State or Local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Solid waste generated by the Project would be disposed of at either the El Sobrante Landfill, Lamb Canyon Landfill, or the Badlands Landfill. The El Sobrante Landfill is permitted to receive 16,054 tpd, and data from April 2020 shows that the El Sobrante Landfill received an average of 10,074 tons per day (including an average of 3,400 tons per day for in-County waste) (RCDWR, 2020a). The Lamb Canyon Landfill is permitted



to receive 5,000 tpd, and data from April 2020 shows that the Lamb Canyon Landfill received approximately 1,940 tpd (including 1,924 tpd of in-County waste) (RCDWR, 2020b). The Badlands Landfill is permitted to receive 4,800 tpd, and data from April 2020 shows that the Badlands Landfill received an average of 2,729 tpd (including 2,045 tpd of in-County waste) (RCDWR, 2020c).

As shown in Table 4.20-14, *Project Solid Waste Generation – Primary Land Use Plan*, and Table 4.20-15, *Project Solid Waste Generation – Alternative Land Use Plan*, buildout and occupancy of the Project is estimated to produce between 279.1 and 283.1 tons per day (tpd) of solid waste, or between 101,967.5 tons per year (tpy) and 103,391.4 tpy. Per the Riverside Countywide Integrated Waste Management Plan (CIWMP), which applies to the Project, up to 50 percent of its solid waste would need to be diverted from area landfills. In conformance with the CIWMP, the Project Applicant is required to work with future contract refuse haulers to implement recycling and waste reduction programs for solid wastes.

Table 4.20-14 Project Solid Waste Generation – Primary Land Use Plan

Land Use	Square Footage (s.f.)	Generation Factors	Total Solid Waste Generated (tpy)	Average Solid Waste per Day (tpd)
Industrial ¹	9,546,174	10.8 tons/1,000 s.f.	103,098.7	282.3
Commercial	121,968	2.4 tons/1,000 s.f.	292.7	0.8
Totals:	11,606,914 s.f.	--	103,391.4 tpy	283.1 tpd

1. “Industrial” includes both Light Industrial and Business Park land uses.

Notes: s.f. = square feet; tpy = tons per year; tpd = tons per day.
(Riverside County, 2015, Table 4.17-N)

Table 4.20-15 Project Solid Waste Generation – Alternative Land Use Plan

Land Use	Square Footage	Generation Factors	Total Solid Waste Generated (tpy)	Average Solid Waste per Day
Industrial ¹	9,413,316	10.8 tons/1,000 s.f.	101,663.8	278.3
Commercial	126,542	2.4 tons/1,000 s.f.	303.7	0.8
Totals:	11,068,948	--	101,967.5 tpy	279.1 tpd

1. “Industrial” includes both Light Industrial and Business Park land uses.

Notes: s.f. = square feet; tpy = tons per year; tpd = tons per day.
(Riverside County, 2015, Table 4.17-N)

Solid waste generated by the Project would be transported to a local solid waste transfer facility, the Moreno Valley Transfer Station (MVTS). At full buildout, waste generated by the Project would represent between 11.2 and 11.3 percent of the permitted daily capacity at the MVTS (2,500 tpd). Given the estimated volume of solid waste generated by the Project on a daily basis during the buildout condition, it is anticipated that the MVTS would have sufficient capacity to accept solid waste to be disposed by the Project. As noted above, the CIWMP would require that up to 50 percent of the solid waste be diverted from area landfills, which would further ensure the Project’s solid waste generation does not exceed available landfill capacity. (CalRecycle, 2019d)



Waste from the MVTs would be ultimately disposed at either the El Sobrante Landfill, Lamb Canyon Landfill, and/or Badlands Landfill. The El Sobrante Landfill has a permitted disposal capacity of 16,054 tpd, the Lamb Canyon Landfill has a permitted disposal capacity of 5,000 tpd, and the Badlands Landfill has a permitted disposal capacity of 4,800 tpd. In the buildout condition, the Project would generate approximately 1.8 percent of the permitted daily disposal capacity at the El Sobrante Landfill (under both the Primary and Alternative Land Use Plans), 5.7 percent of the daily disposal capacity at the Lamb Canyon Landfill (under both the Primary and Alternative Land Use Plans), and between 5.8 and 5.9 percent (for the Alternative Land Use Plan and Primary Land Use Plan, respectively) of the daily disposal capacity at the Badlands Landfill. Because the Project would generate a relatively small amount of solid waste per day, as compared to the permitted daily capacities for the El Sobrante Landfill, Lamb Canyon Landfill, and Badlands Landfill, it is anticipated that these regional landfill facilities would have sufficient daily capacity to accept solid waste generated by the Project. (CalRecycle, 2019d)

Summary of Project Solid Waste Impacts

As indicated above, regional solid waste facilities would have adequate capacity to handle solid waste generated by the Project's construction and operational phases. Accordingly, impacts would be less than significant.

Threshold f.: Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid wastes including the CIWMP (County Integrated Waste Management Plan)?

The proposed Project would be regulated by the Riverside Countywide Integrated Waste Management Plan (RCWRMD, 1996). The CIWMP outlines goals, policies, and programs Riverside County and its cities would implement to create an integrated and cost-effective waste management system that complies with the provisions of AB 939 and its diversion mandates. Additionally, AB 341 made a legislative declaration that it is the policy goal of the state that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020, although the California Department of Resources Recycling and Recovery may not establish or enforce a diversion rate greater than the 50 percent diversion rate as set forth by the CIWMP (per Public Resources Code § 41780.01[b]).

The proposed Project would be regulated by the RCDWR and would be required to comply with the CIWMP's requirement to divert up to 50 percent of its solid waste from area landfills. In conformance with the CIWMP, the Project Applicant is required to work with future contract refuse haulers to implement recycling and waste reduction programs for solid wastes. Implementation of a waste disposal strategy for the proposed Project would assist Riverside County in achieving the mandated goals of the Integrated Waste Management Act by developing feasible waste programs that encourage source reduction, recycling, and composting. The RCDWR is specifically charged with the responsibility of implementing programs that ensure that unincorporated Riverside County achieves 50% diversion of solid waste from landfill disposal as well as monitoring and reporting unincorporated Riverside County's compliance with CIWMB and AB 939. With mandatory compliance to AB 939, AB 341, and RCDWR's programs and policies, the Project would result in



a less-than-significant impact due to a conflict with federal, State, and local management and reduction statutes and regulations related to solid wastes, including the CIWMP.

Threshold g.: *Would the Project impact the following facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities, whereby the construction or relocation would cause significant environmental effects:*

- 1. Electricity;*
- 2. Natural Gas;*
- 3. Communications systems;*
- 4. Street lighting;*
- 5. Maintenance of public facilities, including roads; or*
- 6. Other governmental services?*

Electric service is currently available to the proposed Project site through Southern California Edison, although existing facilities would need to be expanded as necessary to provide service to the Project. However, the Project area already is served by existing electrical lines; therefore, the construction of electricity facilities as necessary to serve the proposed Project would occur within the areas already planned for impact by the Project or within existing, improved roadways. Therefore, the construction of electrical facilities necessary to serve the proposed Project would not result in any significant impacts to the environment that are not already addressed by this EIR. No additional mitigation would be required.

There are no anticipated capacity restrictions which could limit the ability of the SoCal Gas Company to provide service to the proposed Project. Points of connection to SoCal Gas Company main lines would be resolved as the proposed Project and other projects planned for the area commence their utility design and interconnection plans. It is anticipated that construction of any off-site natural gas utility connections would occur within existing disturbed public rights-of-way. As such, the construction of these utility connections is evaluated under the appropriate subject headings within this EIR, and no new impacts would occur specifically related to natural gas service that have not already been addressed.

Due to long-range planning efforts by the energy purveyors, Project implementation is not anticipated to result in the need for the construction or expansion of off-site gas generation facilities, although some new distribution lines would be necessary (as discussed above). Any future need for regional energy facilities related to cumulative growth in the service areas of SoCal Gas would be determined by the service agencies as part of their long-range growth projections. Accordingly, provision of gas service to the proposed Project site would not result in any significant environmental impacts not already addressed under relevant sections of this EIR.

Points of connection to telecommunication facilities would be resolved as the proposed Project and other projects planned for the area commence their utility design and interconnection plans. It is anticipated that any off-site construction of communication utility connections would occur within existing disturbed public



rights-of-way. As such, the construction of communication utility connections is evaluated under the appropriate subject headings within this EIR. No environmental impacts would occur from the provision of these utilities, as all lines would be installed within the disturbance areas of existing roadway rights-of-way and/or on site within areas already planned for physical impacts as part of the Project.

The Project would require a number of detention/water quality basins throughout the site, including the three primary drainage basins as well as potential smaller detention/water quality features within individual planning areas on site. However, the detention/water quality basins would be located in on-site areas, impacts to which have been evaluated throughout this EIR, and mitigation is identified where necessary to reduce impacts to a level below significance. Therefore, the construction of storm water drainage facilities needed to serve the Project would not result in any impacts to the environment beyond what is evaluated, disclosed, and mitigated by other sections of this EIR. Additional mitigation would not be required.

The Project would provide street lighting as required by the County in accordance with Ordinance No. 461 (Roadway Standards) and Ordinance No. 460 (Subdivision of the Land). All physical environmental impacts associated with street lighting and maintenance would occur within the boundaries of the on- and off-site improvement areas, the impacts of which are described throughout this EIR. Therefore, no additional impacts to the environment would occur that are not already addressed by this EIR, and additional mitigation would not be required.

Implementation of the proposed Project would result in the establishment of new public roadways within the Project site that would require maintenance by the County. Maintenance of the public roadways within the proposed Project would not result in any significant impacts to the environment. Impacts associated with the physical construction of these roadways already are evaluated in appropriate sections of this EIR, and any identified impacts have been mitigated to the maximum feasible extent. Maintenance of the major roadway facilities within the Project site would be funded through the Project developer's payment of Development Impact Fees (DIF) and future building owners' payment of property taxes. Therefore, the maintenance of roadways proposed by the Project would not result in any new impacts to the environment beyond that which is already disclosed and mitigated by this EIR, and a less-than-significant impact would occur.

No known other facilities would require off-site construction or maintenance as a result of the proposed Project.

Based on the foregoing analysis, impacts associated with the construction or expansion of utility facilities would be less than significant or otherwise mitigated to the maximum feasible extent by this EIR. No additional mitigation would be required.

4.20.5 CUMULATIVE IMPACT ANALYSIS

The cumulative study area used for the analysis of water and wastewater includes areas within EMWD's service area for water and wastewater services, and is based on the buildout of the County General Plan and the general plans of cities within EMWD's service area. The cumulative study area for solid waste comprises western Riverside County, as all areas of western Riverside County are served by WMIE, and is based on the buildout of the County General Plan and the general plans of cities within western Riverside County. For the



remaining issue areas, the cumulative impact analysis considers development of the Project in conjunction with other development projects and planned development in the vicinity of the Project site.

As discussed under the analysis of Threshold a., the Project would require a number of improvements related to water, wastewater treatment, and storm drainage systems, although such improvements are inherent to the Project's construction phase. Cumulatively-considerable impacts associated with Project construction activities have been evaluated throughout this EIR, and where necessary mitigation measures have been identified to reduce the Project's cumulatively-considerable effects to the maximum feasible extent. There are no components of the Project's proposed water, wastewater, or storm drainage systems that could result in impacts not already evaluated by other sections of this EIR. Accordingly, impacts associated with the construction of new or expanded water, wastewater treatment, and stormwater drainage systems would be less-than-cumulatively considerable.

The analysis of Threshold b., which is based on the Project-specific WSA (*Technical Appendix M*), demonstrates that the EMWD would have sufficient water supplies available to serve the Project as well as other reasonably foreseeable future development during normal, dry, and multiple dry years. Because the WSA evaluates the water demands of both the Project and other cumulative developments within EMWD's service area, the WSA demonstrates that cumulatively-considerable impacts to water supply would be less than significant. Other future projects within the service area of the EMWD would be required to evaluate effects on availability of water supplies and, if applicable to the type of development, prepare a WSA to ensure that significant cumulative effects are minimized or avoided.

As discussed under the analysis of Thresholds c. and d., the Project would require a number of improvements to provide sewer service to the Project site, although impacts associated with such improvements are inherent to the Project's construction phase. Cumulatively-considerable impacts associated with Project construction activities have been evaluated throughout this EIR, and where necessary mitigation measures have been identified to reduce the Project's cumulatively-considerable effects to the maximum feasible extent. There are no components of the Project's proposed wastewater improvements that would result in impacts not already evaluated by other sections of this EIR. Accordingly, impacts associated with the construction of new or expanded wastewater treatment conveyance facilities would be less-than-cumulatively considerable.

The Project's wastewater generation would represent between approximately 8.1% and 8.0% of the PVRWRF's current excess capacity (under the Primary Land Use Plan and Alternative Land Use Plan, respectively), and would represent approximately 0.7% of the ultimate planned capacity at the PVRWRF of 100 million gpd (under both the Primary and Alternative Land Use Plans). Accordingly, the Project would not result in or require the expansion of the existing facilities at the PVRWRF. Although the Project and other cumulative developments ultimately would contribute to the need for expanded capacity at the PVRWRF, the EMWD already has plans to expand the PVRWRF to provide a total treatment capacity of 100 million gpd. Impacts associated with such expansion would be subject to CEQA once plans for such expansion have been prepared by the EMWD. As no such plans are currently available, it would be speculative to evaluate potential cumulatively-considerable impacts associated with the proposed expansion (State CEQA Guidelines § 15145). As such, Project impacts due to wastewater capacity would be less-than-cumulatively considerable.



As previously discussed in the analysis provided under Threshold e., solid waste generated by construction and operation of the Project would represent nominal proportions of the daily disposal capacity at the potential transfer station (MVTs) and landfills (El Sobrante Landfill, Lamb Canyon Landfill, and/or Badlands Landfill). The transfer station and landfills are currently projected to remain open until as far into the future as 2051 (El Sobrante Landfill) and have sufficient daily capacity to handle solid waste generated by the Project and other cumulative developments both during construction and long-term operation. The Project would not directly result in the need for expanded solid waste disposal facilities, as the MVTs, El Sobrante Landfill, Lamb Canyon Landfill, and Badlands Landfill have sufficient existing capacity to handle solid waste generated by the Project. Rather, the Project's incremental contribution to solid waste generation may contribute to an ultimate need for expanding the solid waste disposal facilities that would serve the Project and/or the construction of additional solid waste disposal facilities. Moreover, it is possible that as other developments in the region are proposed, the RCDWR and WMIE may opt to construct new solid waste disposal facilities to serve those developments, and such facilities may or may not receive solid waste generated by the Project. Although the Project has the potential to cumulatively contribute to the demand for new/expanded solid waste disposal facilities, the construction of which could significantly impact the environment, it is too speculative for evaluation in the absence of a proposed expansion or development plan (State CEQA Guidelines § 15145). Therefore, the Project's cumulatively-considerable impacts to solid waste disposal facilities are evaluated as less than significant.

The Project would adhere to regulations set forth by local and state regulations (including AB 341 and AB 939) during both construction and long-term operations. Other cumulative developments would also be required to comply with such regulations. As such, the Project as well as other cumulative developments in the area would not result in cumulative impacts with respect to compliance with federal, State, and local statutes and regulations related to solid wastes. Impacts would be less-than-cumulatively considerable.

Cumulative impacts associated with the provision of facilities for electricity, natural gas, communications systems, storm water drainage, street lighting, maintenance of facilities, construction of off-site sewer and water lines, and other governmental services are evaluated throughout the appropriate issue areas in this EIR. In all cases, where cumulatively-considerable impacts associated with any Project component are identified, mitigation measures have been imposed to reduce such impacts to the maximum feasible extent. Accordingly, cumulatively-considerable impacts associated with the provision of utility facilities to serve the proposed Project would be less than significant.

4.20.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a.: Less-than-Significant Impact. Although the Project would require construction of new or expanded water, wastewater conveyance, and storm water drainage systems, impacts associated with the construction of such facilities have been evaluated throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). Where significant direct or cumulative impacts are identified, mitigation measures have been imposed to reduce the Project's impacts to the maximum feasible extent. There are no environmental impacts that would occur specifically related to the Project's proposed water, sewer, and drainage improvements that have not already been addressed. As such, with the mitigation measures specified



in this EIR, Project impacts due to water, sewer, and drainage improvements would be less than significant. Additionally, the Project's wastewater generation would represent approximately between approximately 8.0% and 8.1% of the PVRWRF's current excess capacity (under the Alternative Land Use Plan and Primary Land Use Plan, respectively), and would represent approximately 0.7% of the ultimate planned capacity at the PVRWRF of 100 million gpd. Accordingly, the Project would not result in or require the expansion of the existing facilities at the PVRWRF, and impacts would therefore be less than significant.

Threshold b.: Less-than-Significant Impact. Based on present information and the assurance that MWD is engaged in identifying solutions that, when combined with the rest of its supply portfolio, will ensure a reliable long-term water supply for its member agencies, EMWD has determined that it will be able to provide adequate water supplies to meet the potable water demand for the proposed Project as part of its existing and future demands. (EMWD, 2020a) Accordingly, sufficient water supplies are available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. Furthermore, the use of recycled water on-site would serve to further reduce the Project's water demand. The Project's effect on EMWD's regional water network would be less than significant.

Thresholds c. and d.: Less-than-Significant Impact. Impacts associated with proposed wastewater conveyance facilities are inherent to the Project's construction phase, and impacts have been evaluated throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). Where significant direct or cumulative impacts are identified, mitigation measures have been imposed to reduce the Project's impacts to the maximum feasible extent. There are no environmental impacts that would occur specifically related to the Project's proposed sewer/wastewater improvements. As such, with the mitigation measures specified in this EIR, Project impacts due to proposed sewer improvements would be less than significant. Additionally, the Project's wastewater generation would represent between approximately 8.0% and 8.1% of the PVRWRF's current excess capacity (under the Alternative Land Use Plan and Primary Land Use Plan, respectively), and would represent approximately 0.7% of the ultimate planned capacity at the PVRWRF of 100 million gpd (for both land use plans). Accordingly, the Project would not result in or require the expansion of the existing facilities at the PVRWRF, and impacts would therefore be less than significant.

Threshold e.: Less-than-Significant Impact. Regional solid waste facilities would have adequate capacity to handle solid waste generated by the Project's construction and operational phases. The Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Accordingly, impacts would be less than significant.

Threshold f.: Less-than-Significant Impact. With mandatory compliance to AB 939, AB 341, and RCDWR's programs and policies, the Project would not result in a significant impact due to noncompliance with regulations related to solid waste. A less-than-significant impact would occur.

Threshold g.: Less-than-Significant Impact. Impacts associated with the construction or expansion of utility facilities would be less than significant or otherwise mitigated to the maximum feasible extent by this EIR. No additional mitigation would be required.



4.20.7 COUNTY REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

Applicable County Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

- The Project is required to comply with the provisions of the California Solid Waste Integrated Waste Management Act, (AB 939, 1989) which mandates a reduction of disposed waste throughout California.
- The Project is required to comply with the provisions of the California Solid Waste Reuse and Recycling Act (AB 1327) which developed a model ordinance for adoption of recyclable materials in development projects. This Act requires all development projects that are commercial, industrial, institutional, or marina in nature and where solid waste is collected and loaded, to provide an adequate area for collecting and loading recyclable materials over the lifetime of the project. The area is required to be provided before building permits are issued.
- The Project is required to comply with the provisions of the Mandatory Commercial Recycling Program (AB 341): AB 341 made a legislative declaration that it is the policy goal of the state that not less than 75% of solid waste generated be source reduced, recycled, or composted by the year 2020, and required the Department of Resources Recycling and Recovery, by January 1, 2014, to provide a report to the Legislature that provides strategies to achieve that policy goal and also includes other specified information and recommendations.
- The Project would be subject to the following applicable standard conditions of approval imposed on the Project by the RCDWR:
 - Prior to issuance of a building permit, a Waste Recycling Plan (WRP) shall be submitted to the Riverside County Department of Waste Resources for approval. At a minimum, the WRP must identify the materials (i.e., cardboard, concrete, asphalt, wood, etc.) that will be generated by construction and development, the projected amounts; the measures/methods that will be taken to recycle, reuse, and/or reduce the amount of materials; the facilities and/or haulers that will be utilized; and the targeted recycling or reduction rate. During Project construction, the Project site shall have, at a minimum, two (2) bins: one for waste disposal and the other for the recycling of Construction and Demolition (C&D) materials. Additional bins are encouraged to be used for further source separation of C&D recyclable materials. Accurate record keeping (receipts) for recycling of C&D recyclable materials and solid waste disposal must be kept. Arrangements can be made through the franchise hauler.
 - Prior to final building inspection, evidence (i.e., receipts or other type of verification) to demonstrate project compliance with the approved WRP shall be presented by the project proponent to the Planning Division of the Riverside County Department of Waste Resources in



order to clear the project for occupancy permits. Receipts must clearly identify the amount of waste disposed and Construction and Demolition (C&D) materials recycled.

- Hazardous materials are not accepted at Riverside County landfills. In compliance with federal, state, and local regulations and ordinances, any hazardous waste generated in association with the Project shall be disposed of at a permitted Hazardous Waste disposal facility. Hazardous waste materials include, but are not limited to, paint, batteries, oil, asbestos, and solvents.

Mitigation

The mitigation measures identified throughout this EIR for Project-related construction impacts (e.g., air quality, etc.) shall apply. Project impacts to utilities and service systems would be less than significant; therefore, no additional mitigation is required related to utilities and service system improvements proposed as part of the Project.



4.21 WILDFIRE

Information in this Subsection is also based in part on a technical study for wildfire protection titled, “Fire Protection Plan, Stoneridge Commerce Center” (herein, “FPP”), prepared by Dudek, dated November 2019, and included as *Technical Appendix N* (Dudek, 2019). Refer to Section 7.0, *References*, for a complete list of reference sources.

4.21.1 EXISTING CONDITIONS

A. Fire Hazard Classification

The Project site and surrounding areas have largely been disturbed by past agricultural activities and on-going fire abatement, with exception of the hillform that straddles the western Project boundary in the southern portion of the Project site. According to Riverside County GIS, and as shown on Figure 4.21-1, *Fire Hazard Severity Areas*, a portion of the Project site, generally corresponding to proposed Planning Area 9, along with small portions of proposed Planning Areas 2 and 5, are classified as having a “High” fire hazard severity. The remaining portions of the Project site are not identified as being subject to wildland fire hazards. However, areas off-site and west of the Project site are classified as having a “High” fire hazard severity, while lands to the north of the Project site are classified as having a “Moderate” to “Very High” fire hazard severity. (RCIT, 2020)

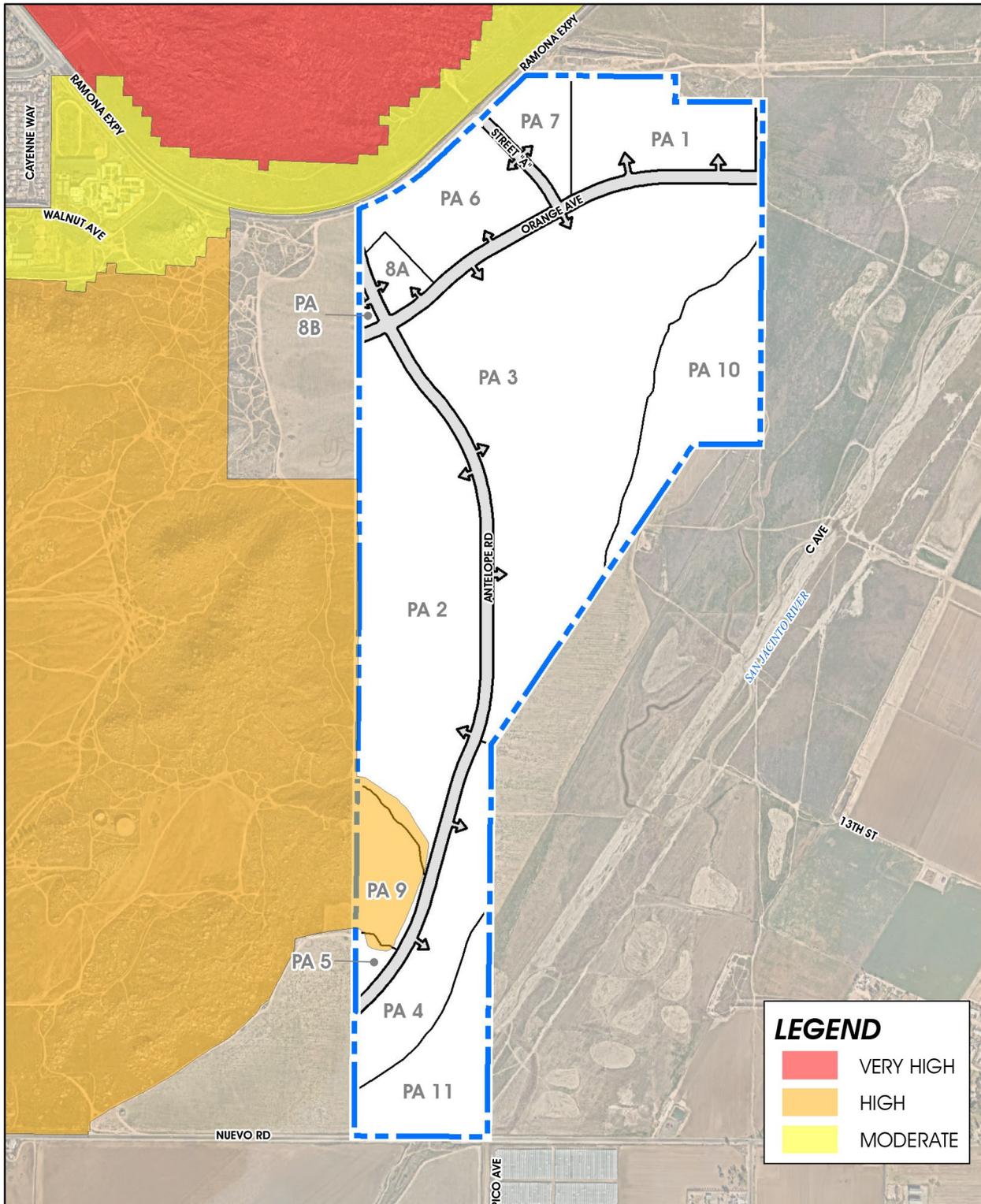
B. Topography

The Project site is generally situated along the eastern flank of relatively small hills associated with Lakeview Mountain plutonic rock and gently slopes southeast toward the San Jacinto River. The elevations on the site range from approximately 1,425 feet above mean sea level (amsl) in the southeastern corner of the Project site (i.e., within the San Jacinto River) to 1,695 feet amsl along the western Project boundary.

C. Climate

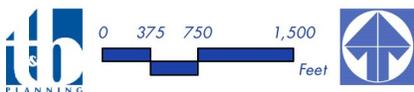
Throughout southern California, and specifically at the Project site, climate has a large influence on fire risk. The climate of Riverside County is typical of a Mediterranean area, with warm, dry summers and cold, wet winters. Temperatures average (average annual) around 61° F and reach up to 100°F. Precipitation has been averaging less than 16 inches and typically occurs between December and March. The prevailing wind is an on-shore flow between 7 and 11 mph from the Pacific Ocean. (Dudek, 2019, p. 12)

Fires can be a significant issue during summer and fall, before the rainy period, especially during dry Santa Ana wind events. The seasonal Santa Ana winds can be particularly strong in the Project area as warm and dry air is channeled through nearby Cajon Pass from the dry, desert land to the east. Although Santa Ana events can occur anytime of the year, they generally occur during the autumn months, although the last few years have resulted in spring (April-May) and summer events. Santa Ana winds may gust up to 75 miles per hour (mph) or higher. This phenomenon markedly increases the wildfire danger and intensity in the Project



Source(s): ESRI, Nearmap Imagery (2021), RCLMA (2021).

Figure 4.21-1



Fire Hazard Severity Areas



area by drying out and preheating vegetation (fuel moisture of less than 5% for 1-hour fuels is possible) as well as accelerating oxygen supply, and thereby, making possible the burning of fuels that otherwise might not burn under cooler, moister conditions. (Dudek, 2019, p. 12)

D. Vegetation

1. Fuels (Vegetation)

The Project site and surrounding areas primarily support disturbed habitat, non-native grasslands, and sage scrub plant community. Vegetation types were derived from an on-site field assessment of the Project site conducted by Dudek. The majority of the south and east facing slopes adjacent to the site are vegetated with sage scrub interspersed with large rock outcropping and boulder areas. The flat lands are primarily disturbed, non-native grasslands. The vegetation cover types were assigned corresponding fuel models for use during site fire behavior modeling. (Dudek, 2019, p. 12)

2. Vegetation Dynamics

Variations in vegetative cover type and species composition have a direct effect on fire behavior. Some plant communities and their associated plant species have increased flammability based on plant physiology (resin content), biological function (flowering, retention of dead plant material), physical structure (bark thickness, leaf size, branching patterns), and overall fuel loading. For example, non-native grass dominated plant communities become seasonally prone to ignition and produce lower intensity, higher spread rate fires. In comparison, sage scrub can produce higher heat intensity and higher flame lengths under strong, dry wind patterns, but does not typically ignite or spread as quickly as light, flashy grass fuels. (Dudek, 2019, pp. 12-13)

Vegetation plays a significant role in fire behavior, and is an important component to the fire behavior models used in the Project's FPP. A critical factor to consider is the dynamic nature of vegetation communities. Fire presence and absence at varying cycles or regimes disrupts plant succession, setting plant communities to an earlier state where less fuel is present for a period of time as the plant community begins its succession again. In summary, high frequency fires tend to convert shrublands to grasslands or maintain grasslands, while fire exclusion tends to convert grasslands to shrublands, over time. In general, biomass and associated fuel loading will increase over time, assuming that disturbance (fire or grading) or fuel reduction efforts are not diligently implemented. It is possible to alter successional pathways for varying plant communities through manual alteration. (Dudek, 2019, p. 13)

E. Fire History

According to the site-specific FPP, there have been 50 fires recorded since 1953 by CALFIRE in their Fire and Resource Assessment Program (FRAP) database in the vicinity of the Project site, including in the upper northwest third of the site. These fires, occurring in 1953, 1958 (x3), 1973, 1974, 1977, 1978, 1979 (x9), 1981 (x2), 1982, 1986, 1988 (x2), 1989, 1991, 1992, 1993, 1994, 1995, 1996 (x4), 1997 (x2), 1998 (x2), 2005, 2011 (x2), 2012, 2014, 2015 (x2), and 2016, burned within a five-mile radius of the Project Area. A total of two fires, ranging from 1,145 acres (Yeager Fire in 1958) to 228 acres (#10 Fire), have burned onto the northwest



portion of the Project site. Based on an analysis of the CALFIRE FRAP fire history data set, specifically the years in which the fires burned, the average interval between wildfires within roughly 5 miles from the Project site was calculated to be 2 years with intervals ranging between 1 and 7 years. (Dudek, 2019, pp. 13-14)

F. Project Area Fire Risk Assessment

Wildland fires are a common natural hazard in most of southern California with a long and extensive history. The southern California landscapes include a diverse range of plant communities, including vast tracts of grasslands and shrublands, like those found on and adjacent to Project site. Wildfire in this Mediterranean-type ecosystem ultimately affects the structure and functions of vegetation communities and will continue to have a substantial and recurring role. Supporting this are the facts that 1) native landscapes, from forest to grasslands, become highly flammable each fall; and 2) the climate of southern California has been characterized by fire climatologists as the worst fire climate in the United States with high winds (Santa Ana) occurring during autumn after a six-month drought period each year. Based on research, the anticipated growing population of northwest Riverside County Wildland-Urban Interface (WUI) areas, and the region's fire history, it can be anticipated that periodic wildfires may start on, burn onto, or spot into the Project site. The most common type of fire anticipated in the vicinity of the Project area is a wind-driven fire from the north/northeast, moving through the nonnative grasses and sage scrub shrubs found on the slopes and base of the Bernasconi Hills. (Dudek, 2019, p. 17)

G. Existing Conditions Fire Behavior Summary

Wildfire behavior in non-treated sage scrub and non-native grasslands varies based on timing of fire. A worst-case fire in the Project area under gusty Santa Ana winds and low fuel moistures is expected to be fast moving between 7.4 (sage scrub fuel type) and 16.7 mph (grass fuel type). Flame length values with intense radiant heat would range between 38.6 feet to 46.9 feet for grass and sage scrub fuels burning, respectively, in specific portions adjacent to the Project site. Spotting is projected to occur up to nearly 1.3 miles during a fire influenced by onshore winds and nearly 2.5 miles during a fire fanned by offshore, gusty winds. (Dudek, 2019, p. 17)

4.21.2 APPLICABLE REGULATORY REQUIREMENTS

A. Federal Regulations

1. Healthy Forests Restoration Act of 2003

On August 22, 2002, President Bush established the Healthy Forests Initiative, directing the Departments of Agriculture and the Interior, and the Council on Environmental Quality, to improve regulatory processes to ensure more timely decisions, greater efficiency, and better results in reducing the risk of catastrophic wildland fires. On June 5, 2003, the Departments of Agriculture and the Interior adopted two new categorical exclusions from documentation in an environmental assessment or environmental impact statement (EIS): an exclusion for hazardous-fuel reduction and another for rehabilitation of resources and infrastructure damaged by wildfire (68 FR 33814).



This act also defines “communities at risk” as those “wildland urban interface communities within the vicinity of federal lands that are at high risk from wildfire.” For California, CalFire has expanded this definition to include all communities (regardless of distance from federal lands) for which a significant threat to human life or property exists as a result of a wildland fire event. According to the 2010 California Strategic Fire Plan (page E-1), factors used to determine at-risk communities include: high fuel hazard, probability of a fire and proximity of intermingles wildland fuels, and urban environments near fire threats.

B. State Regulations

1. Public Resources Code (PRC) Sections 4290-4299

These sections establish minimum statewide fire safety provisions pertaining to: roads for fire equipment access; signs identifying streets, roads, and buildings; minimum private water supply reserves for emergency fire use; and fire fuel breaks and greenbelts. With certain exceptions, all new construction after July 1, 1991, in potential wildland fire areas, is required to meet these statewide standards. The State requirements, however, do not supersede more restrictive local regulations.

As defined by CalFire, wildland areas defined as State Responsibility Areas (SRAs) may contain substantial wildfire risks and hazards. They consist of lands exclusive of cities, and federal lands regardless of ownership. The primary financial responsibility for preventing and suppressing fires within wildlands belongs to the State of California. However, it is not the State of California’s responsibility to provide fire protection services to buildings or structures located within the wildlands unless CalFire has entered into a cooperative agreement with a local agency for those purposes pursuant to PRC Section 4142. As such, wildland areas require disclosure of these fire hazards in real estate transactions, and owners of properties in wildland areas are subject to PRC Section 4291 maintenance requirements. The law requires CalFire every five years (1991, 1996, 2001, etc.) to provide maps identifying the boundaries of lands classified as SRAs to the Riverside County Assessor.

2. PRC Section 4213 – Fire Prevention Fees

Pursuant to PRC Section 4213, in July of 2011, the State of California began assessing an annual “Fire Prevention Fee” for all habitable structures within SRAs to pay for fire prevention services. SRAs are the portions of California where the State of California is financially responsible for the prevention and suppression of wildfires. The SRA does not include lands within incorporated city boundaries, Tribal or federally owned land. As of 2013, the fee is up to \$150 per habitable structure (i.e., a building that can be occupied for residential use, which does not include incidental buildings such as detached garages, barns, outdoor bathrooms, sheds, etc.).

3. California Government Code (CGC) Section 51178

This section specifies that the Director of CalFire, in cooperation with local fire authorities, shall identify areas that are Very High Fire Hazard Severity Zones (VHFHSZ) in Local Responsibility Areas (LRAs), based on consistent statewide criteria, and the expected severity of fire hazard. Per CGC § 51178, a local agency may, at its discretion, exclude from the requirements of § 51182 an area within its jurisdiction that has been identified as a VHFHSZ, if it provides substantial evidence in the record that the requirements of § 51182 are



not necessary for effective fire protection within the area. Alternatively, local agencies may include areas not identified as VHFHSZ by CalFire, following a finding supported by substantial evidence in the record that the requirements of § 51182 are necessary for effective fire protection within the new area. According to § 51182, such changes made by a local agency shall be final, and shall not be rebuttable by CalFire.

4. California Code of Regulations (CCR) Title 14 – Natural Resources

These regulations constitute the basic wildland fire protection standards of the California Board of Forestry. They were prepared and adopted to establish minimum wildfire protection standards in conjunction with building, construction, and development within SRAs. Among other things, Title 14 requires the design, and construction of structures, subdivisions, and developments in an SRA provide for basic emergency access and perimeter wildfire protection measures (fire fuel modification zones, etc.).

5. CCR Title 24, Parts 2 and 9 – Fire Codes

Part 2 of Title 24 of the CCR refers to the California Building Code, which contains complete regulations and general construction building standards of state adopting agencies, including administrative, fire and life safety, and field inspection provisions. Part 9 refers to the California Fire Code, which contains other fire safety-related building standards. In particular, Chapter 7A, “Materials and Construction Methods for Exterior Wildfire Exposure,” in the 2019 California Building Code addresses fire safety standards for new construction. In addition, Section 701A.3.2, “New Buildings Located in Any Fire Hazard Severity Zone,” states:

“New buildings located in any Fire Hazard Severity Zone within State Responsibility Areas, any Local Agency Very-High Fire Hazard Severity Zone, or any Wildland-Urban Interface Fire Area designated by the enforcing agency for which an application for a building permit is submitted on or after January 1, 2008, shall comply with all sections of this chapter.”

4.21.3 BASIS FOR DETERMINING SIGNIFICANCE

Section XX of Appendix G to the State CEQA Guidelines, identifies the following thresholds for evaluating impacts due to wildfire (OPR, 2018a):

- If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan;
- If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risk, and thereby expose project occupants to pollutant concentrations for a wildfire or the uncontrolled spread of a wildfire;
- If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads,



fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or

- If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

The following thresholds are derived from Riverside County's Environmental Assessment Checklist, and supplemented by the thresholds listed in Appendix G to the State CEQA Guidelines, in order to evaluate the significance of the proposed Project's impacts due to wildfires:

- If located in or near a State Responsibility Area ("SRA"), lands classified as very high fire hazard severity zone, or other hazardous fire areas that may be designated by the Fire Chief, would the Project substantially impair an adopted emergency response plan or emergency evacuation plan;*
- If located in or near a State Responsibility Area ("SRA"), lands classified as very high fire hazard severity zone, or other hazardous fire areas that may be designated by the Fire Chief, would the 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;*
- If located in or near a State Responsibility Area ("SRA"), lands classified as very high fire hazard severity zone, or other hazardous fire areas that may be designated by the Fire Chief, would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment;*
- If located in or near a State Responsibility Area ("SRA"), lands classified as very high fire hazard severity zone, or other hazardous fire areas that may be designated by the Fire Chief, would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes; or*
- If located in or near a State Responsibility Area ("SRA"), lands classified as very high fire hazard severity zone, or other hazardous fire areas that may be designated by the Fire Chief, would the Project expose people or structures either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.*

The significance thresholds set forth in Riverside County's Environmental Assessment Checklist, as modified/updated per the 2018 updates to the State CEQA Guidelines, were used to evaluate the significance of the proposed Project's impacts due to wildfires.

4.21.4 IMPACT ANALYSIS

Threshold a.: If located in or near a State Responsibility Area ("SRA"), lands classified as very high fire hazard severity zone, or other hazardous fire areas that may be designated by the Fire Chief,



would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?

The existing hillform that straddles the western boundary in the southern portions of the Project site, as well as small areas surrounding the hillform, are within a State Responsibility Area (SRA), and lands located off site to the west and north also are within an SRA. Although the Project site is not classified as a “Very High” fire hazard severity zone, areas to the north of the Project site are classified as having a “Very High” fire hazard severity zone. (RCIT, 2020; CAL FIRE, 2019) However, there are no adopted emergency response plans or emergency evacuation plans applicable to the Project site or surrounding areas. Additionally, the Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route. Although Nuevo Road and the Ramona Expressway in the Project area may serve as unofficial emergency access routes, it is not expected that Project implementation would adversely affect the operations of these facilities during construction activities. During construction and at Project build-out, the proposed Project would be required to maintain adequate access for emergency vehicles. Accordingly, the Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan, and impacts would be less than significant.

Threshold b.: *If located in or near a State Responsibility Area (“SRA”), lands classified as very high fire hazard severity zone, or other hazardous fire areas that may be designated by the Fire Chief, would the 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?*

Threshold e.: *If located in or near a State Responsibility Area (“SRA”), lands classified as very high fire hazard severity zone, or other hazardous fire areas that may be designated by the Fire Chief, would the Project expose people or structures either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

Areas in the western portion of the Project site are within a State Responsibility Area (SRA), and lands located off site to the west and north also are within an SRA. Although the Project site is not classified as a “Very High” fire hazard severity zone, areas to the north of the Project site are classified as having a “Very High” fire hazard severity zone. (RCIT, 2020; CAL FIRE, 2019) In order to evaluate the Project’s potential to exacerbate wildfire risks, a Project-specific Fire Protection Plan (FPP) was prepared for the Project, the results and recommendations of which are discussed below. Refer to Section 3 of the Project’s FPP (*Technical Appendix N*) for a discussion of the methodology and computer software used to assess fire risks in the local area.

As previously noted, under existing conditions the Project site and surrounding areas are subject to wildland fire hazards. Based on the recommendations of the FPP, Section 2.8 of proposed SP 239A1 includes standards and requirements for addressing fire hazards as part of future implementing developments. Specifically, SP 239A1 requires the provision of 100 feet of Fuel Modification Zone (FMZ), where feasible. Two FMZ zones are identified, as follows:



- **FMZ Zone 1** would consist of an irrigated zone measuring 50 feet in width from the rear lot boundary for the properties located on the perimeter of the proposed Project. All highly flammable native vegetation, especially found on the Prohibited Plant List (which are identified on SP 239A1 Table 4-2, *Prohibited Plant Species*) shall be removed except for species approved by the fire marshal. This zone would be planted with drought-tolerant, less flammable plants. The Proposed Project's plant palette will be approved by the fire department. A permanent, automatic irrigation system will be installed in Zone 1 to maintain hydrated plants. Zone 1 would include the following components:
 - All trees shall be planted and maintained at a minimum of 10 feet from the tree's drip line to any combustible structure
 - Tree spacing of a minimum 10 feet between canopies
 - Mature trees shall be limbed to eight feet or 3x the height of understory plants to prevent ladder fuels, whichever is greater. No tree limb encroachment within 10 feet of a structure or chimney, including outside barbecues or fireplaces
 - Tree maintenance includes limbing-up (canopy raising) 6 feet or one-third the height of the tree
 - Maintenance including ongoing removal and/or thinning of undesirable combustible vegetation, replacement of dead/dying plantings, maintenance of the programming and functionality of the irrigation system, regular trimming to prevent ladder fuels¹.
 - A minimum of 36 inches wide pathway with unobstructed vertical clearance around the exterior of each structure (360°) provided for firefighter access (2016 CFC, Section 503.1.1). Within this clearance area, landscape such as low ground covers and shrubs are permitted so long as their placement and mature height do not impede firefighter access, consistent with purpose of this guideline.
 - Trees and tree form shrub species that naturally grow to heights that exceed 2 feet shall be vertically pruned to prevent ladder fuels.
 - Grasses shall be cut to 4 inches in height. Native grasses can be cut after going to seed.
 - Ground covers within first 3 feet from structure restricted to non-flammable materials, including stone, rock, concrete, bare soil, or other. Combustible ground covers, such as mulch or wood chips, are prohibited adjacent to structures with an exterior stucco wall and weep screed.
- **FMZ Zone 2** would measure 50 feet in width extending from the edge of FMZ 1, and would consist of a thinning zone to reduce the fuel load of wildland areas adjacent to FMZ Zone 1 in order to reduce

¹ Plant material that can carry a fire burning in low-growing vegetation to taller vegetation is called ladder fuel. Examples of ladder fuels include low-lying tree branches and shrubs, climbing vines, and tree-form shrubs underneath the canopy of a large tree.



heat and ember production from wildland fires; slow fire spread; and reduce fire intensity. Zone 2 would include the following key components where thinning of native vegetation is required:

- Zone 2 requires a minimum of 50% thinning or removal of plants (50% no fuel) focusing on removal of dead and dying plants and highly flammable species.
- Fuel continuity should be interrupted so that groupings of shrubs are separated from adjacent groupings.
- Maintenance including ongoing removal and thinning of dead/dying planting, and regular trimming to prevent ladder fuels.
- Trees and tree-form shrub species that naturally grow to heights that exceed 4 feet shall be vertically pruned to prevent ladder fuels.
- Grasses shall be cut to 4 inches in height. Native grasses can be cut after going to seed.
- Single specimen native shrubs, exclusive of chamise and sage, may be retained, on 20-foot centers.
- No vegetation found on the Prohibited Plant List, which is included in SP 239A1 as Table 4-2, *Prohibited Plant Species*, shall remain in Zone 2.

Required FMZ zones would be managed by the Project Applicant during interim conditions when the Project is in the process of being built out, and ultimately would be managed by future developers or a property owners association. The following maintenance activities would be required as part of the Project's Conditions of Approval:

- Regular maintenance of dedicated Open Space.
- Removal or thinning of undesirable combustible vegetation and replacement of dead or dying landscaping.
- Maintaining ground cover at a height not to exceed 18 inches. Annual grasses and weeds shall be maintained at a height not to exceed three inches.
- Removing accumulated plant litter and dead wood. Debris and trimmings produced by thinning and pruning should be removed from the site or chipped and evenly dispersed in the same area to a maximum depth of four-inches.
- Maintaining manual and automatic irrigation systems for operational integrity and programming.
- Effectiveness should be regularly evaluated to avoid over or under-watering.
- Complying with these FPP requirements on a year-round basis. Annual inspections are conducted following the natural drying of grasses and fine fuels, between the months of May and June, depending on precipitation during the winter and spring months.

Although the above-described requirements for FMZ Zones 1 and 2 would apply to most future buildings within the Project site, some of the future buildings likely would protrude into the 100-foot FMZ along the western boundary. Based on a preliminary site plan prepared by the Project Applicant, it is estimated that future buildings abutting fire hazard areas on and off site may be constrained to providing only between 20



and 77 feet of achievable on-site fuel modification between the western and eastern boundary lines. In addition, future buildings in Planning Area 3 would be located adjacent to Open Space in proposed Planning Area 10, and would be constrained to providing approximately 70 feet of achievable on-site fuel modification. (Dudek, 2019, p. 29)

For future buildings abutting natural open space areas in certain portions of the site, a reduced FMZ zone is allowed by SP 239A1 where necessary, based on the recommendations of the Project-specific FPP (*Technical Appendix N*). Such buildings would be subject to the applicable Fire and Building codes, including structure ignition resistance requirements and requirements for interior fire sprinkler systems, which would enable the structures to withstand the type of wildfire that may occur in the fuels outside areas proposed for development as part of the Project. As concluded by the Project's FPP, the combination of the above-described fire prevention measures would provide a functional safety equivalent to a 100-foot fuel modification zone. In addition to the above-mentioned design features, the following additional fire protection enhancement measures would be required by SP 239A1 to provide further justification for the reduced FMZ in areas where a 100-foot wide FMZ cannot be accommodated:

- Structures that have walls facing open space areas that would not meet the minimum 100-foot fuel modification requirement shall include enhanced exterior wall construction. Walls shall be a minimum one-hour rated construction (or greater rating), with no openings (windows or doors), unless openings are approved by the Riverside County Fire Department (RCFD). If exterior openings are provided in the walls abutting open space areas where a 100-foot FMZ cannot be accommodated, exterior fire sprinklers would be required.

The above-listed requirements would be enforced by the County as part of the Project's Conditions of Approval and through the County's future review of implementing developments, which would include a review for consistency with the requirements of SP 239A1. As concluded by the Project's FPP, implementation of the SP 239A1 requirements for fire abatement, including the provision of FMZs and additional measures where a 100-foot FMZ cannot be accommodated, as well as site design features (i.e., asphalt roads, parking areas, irrigated landscaping, etc.), would reduce the risk of wildfire hazards occurring on site to acceptable levels (Dudek, 2019, p. 37). Thus, with compliance with the fire abatement requirements of SP 239A1, the Project would not exacerbate wildfire risks, and would not expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Additionally, the Project would not expose people or structures either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. Impacts would be less than significant.

Threshold c.: If located in or near a State Responsibility Area ("SRA"), lands classified as very high fire hazard severity zone, or other hazardous fire areas that may be designated by the Fire Chief, would the Project require the installation or maintenance of associated infrastructure (such



as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

The on-site hillform along the western boundary in the southern portions of the Project site, as well as areas immediately abutting the hillform on site, are within a State Responsibility Area (SRA), and lands located off site to the west and north also are within an SRA. Although the Project site is not classified as a “Very High” fire hazard severity zone, areas to the north of the Project site are classified as having a “Very High” fire hazard severity zone. (RCIT, 2020; CAL FIRE, 2019)

As described under the analysis of Thresholds b. and e., the Project would accommodate 100-foot wide FMZ from future buildings where feasible, and would include additional fire protection measures for buildings where the 100-foot wide FMZ cannot be achieved. The proposed fire abatement measures would reduce the risk of fire in the local area as compared to existing conditions. While FMZ zones would be required throughout the proposed development, areas subject to fuel modification would occur in areas already planned for impact as part of site development. Thus, impacts to areas requiring FMZ zones have been evaluated throughout this EIR under the appropriate subject heading (e.g., biological resources, cultural resources, etc.), and where impacts are identified mitigation measures are identified to reduce impacts to the extent feasible. There are no components of the proposed FMZs that would result in impacts not already addressed by this EIR. Accordingly, the Project would not exacerbate fire risk, and would not result in temporary or ongoing impacts to the environment beyond what is already evaluated and disclosed by this EIR. Impacts would be less than significant.

Threshold d.: If located in or near a State Responsibility Area (“SRA”), lands classified as very high fire hazard severity zone, or other hazardous fire areas that may be designated by the Fire Chief, would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Areas in the western portion of the Project site are within a State Responsibility Area (SRA), and lands located off site to the west and north also are within an SRA. Although the Project site is not classified as a “Very High” fire hazard severity zone, areas to the north of the Project site are classified as having a “Very High” fire hazard severity zone. (RCIT, 2020; CAL FIRE, 2019)

As discussed under the analysis of Threshold b., pursuant to SP 239A1 the Project would accommodate 100-foot wide FMZ from future buildings where feasible, and would include additional fire protection measures for buildings where the 100-foot wide FMZ cannot be achieved. Implementation of the measures detailed in proposed SP 239A1 would reduce the risk of wildfire at this site and would improve the ability of firefighters to fight fires on the properties and protect property and neighboring resources, irrespective of the cause or location of ignition (Dudek, 2019, p. 37). Although during extreme fire conditions there still would remain a potential for wildland fires to affect future buildings on site, implementation of the required enhanced construction features provided by the applicable codes and the fuel modification requirements required by SP 239A1 would reduce the site's vulnerability to wildfire to less-than-significant levels.



Based on the site's hydrologic conditions, the Project site would not be subject to flood hazards associated with fire events, and with development of the site runoff on the site would be controlled by the Project's proposed drainage system, thereby precluding fire-related flooding impacts downstream. While fires on the hills in and adjacent to the western portions of the Project site would eliminate the existing vegetative cover, these hills have a very shallow depth to bedrock, and thus would not be subject to mass wasting (landslides) in the event of a wildfire. (LGC, 2021, p. 7) Refer also to EIR Subsection 4.7, *Geology and Soils*. Therefore, the Project would not 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, and impacts would be less than significant.

4.21.5 CUMULATIVE IMPACT ANALYSIS

The cumulative study area for the issue of wildfire includes areas within a five-mile radius of the Project site. This study area is appropriate for analysis because fire events located more than five miles from the Project site are unlikely to affect the Project, and any fires starting in the Project area likely would not affect lands located more than five miles away. This study area also is consistent with the Project's FPP, which evaluates historic fire events within approximately five miles of the Project site.

The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route, and the Project would not serve as an evacuation route under long-term conditions. During construction and at Project build-out, the proposed Project would be required to maintain adequate access for emergency vehicles. Other cumulative developments similarly would be required to accommodate emergency access and facilities. As such, cumulatively-considerable impacts would be less than significant.

As indicated under the discussion of Thresholds b. and e., future development on site would be required to comply with the fire abatement requirements specified by proposed SP 239A1, which includes the provision of Fuel Modification Zones (FMZs), and special building requirements for future buildings that cannot accommodate a full 100-foot wide FMZ. Compliance with the requirements of SP 239A1 would ensure that the Project does not exacerbate wildfire hazards or expose people or structures to a significant risk of loss, injury, or death involving wildland fire hazards. Other developments within the cumulative study area would similarly be required to address fire hazards as appropriate and to provide measures to avoid or reduce the potential risk of wildfire in the region. As such, Project impacts due to wildfire hazards would be less-than-cumulatively considerable.

As discussed under the analysis of Threshold c., although the Project would require FMZs, areas requiring fuel modification occur in areas already planned for impact as part of site development. Thus, cumulatively-considerable impacts to areas requiring FMZ zones have been evaluated throughout this EIR under the appropriate subject heading (e.g., biological resources, cultural resources, etc.), and where impacts are identified mitigation measures are identified to reduce cumulative impacts to the extent feasible. Other future developments in the cumulative study area that contain fire protection infrastructure similarly would be required to identify and mitigate any physical impacts to the environment resulting from fire protection



measures. Thus, with the mitigation measures presented throughout this EIR to address cumulatively-considerable impacts, the Project's cumulatively-considerable impacts due to the installation or maintenance of fire protection infrastructure would be less than significant.

As indicated under the discussion of Threshold d., with implementation of the Project the risk of wildfire hazards occurring on the Project site would be substantially reduced. Additionally, Project-related runoff, including runoff following fire events, would be controlled by the Project's proposed drainage system, which includes water quality/detention basins to preclude a substantial increase in the rate of runoff. There are no components of the Project that would result in increased potential for landslides, including during fire events. Thus, cumulatively-considerable impacts due to the 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.

4.21.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a.: Less-than-Significant Impact. The Project site and surrounding areas are not identified as evacuation routes, and there are no adopted emergency response plans or emergency evacuation plans applicable to the Project area. During construction and at Project build-out, the proposed Project would be required to maintain adequate access for emergency vehicles. Accordingly, the Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan, and impacts would be less than significant.

Thresholds b. and c.: Less-than-Significant Impact. The Project would be subject to the fire abatement requirements specified by SP 239A1, which includes requirements for the provision of a 100-foot wide FMZ around all buildings, and specifies additional fire protection measures for buildings where the 100-foot wide FMZ cannot be achieved. With mandatory compliance with the fire abatement requirements of SP 239A1, the Project would not exacerbate wildfire risks, and would not expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Additionally, the Project would not expose people or structures either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires with implementation of the Project's proposed fire protection measures, and the Project would accommodate adequate circulation facilities to allow for evacuation of the site in the event of wildfires in the area. Impacts would be less than significant.

Threshold c.: Less-than-Significant Impact. Impacts to areas requiring FMZ zones have been evaluated throughout this EIR under the appropriate subject heading (e.g., biological resources, cultural resources, etc.), and where impacts are identified mitigation measures are identified to reduce impacts to the extent feasible. There are no components of the proposed FMZs that would result in impacts not already addressed by this EIR. Accordingly, the Project would not exacerbate fire risk, and would not result in temporary or ongoing impacts to the environment beyond what is already evaluated and disclosed by this EIR. Impacts would be less than significant.



Threshold d.: Less-than-Significant Impact. Although during extreme fire conditions there still would remain a potential for wildland fires to affect future buildings on site, implementation of the required enhanced construction features provided by the applicable codes and the fuel modification requirements required by SP 239A1 would reduce the site's vulnerability to wildfire to less-than-significant levels. Additionally, with development of the site runoff on the site would be controlled by the Project's proposed drainage system, thereby precluding fire-related flooding impacts downstream. In addition, the Project site would not cause or be affected by fire-induced landslides. Therefore, the Project would not 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, and impacts would be less than significant.

4.21.7 COUNTY REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

Applicable County Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

- Future implementing developments within the Project site (e.g., plot plans, building permits, etc.) shall be reviewed by Riverside County for compliance with the fire protection measures included in Section 2.8, *Fire Protection Plan*, of SP 239A1.

Mitigation

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



5.0 OTHER CEQA CONSIDERATIONS

5.1 SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

The State CEQA Guidelines require that an EIR disclose the significant environmental effects of a project which cannot be avoided if the proposed project is implemented (State CEQA Guidelines § 15126[b]). As described in detail in Section 4.0 of this EIR, the proposed Project is anticipated to result in several impacts to the environment that cannot be reduced to below a level of significance after the implementation of relevant standard conditions of approval, compliance with applicable laws and regulations, and application of feasible mitigation measures. The significant environmental effects of the proposed Project that cannot be feasibly mitigated are as follows:

- Aesthetics: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. The Project vicinity exhibits a rural and agricultural character, and the development of the Project site with light industrial, business park, and commercial retail land uses would represent a substantial change to the existing visual character and quality of public views of the site and its surroundings. Although the Project would be required to comply with the design guidelines and development standards of proposed SP 239A1, the SP 239A1 zoning ordinance, and all other applicable requirements of the Riverside County Municipal Code, which would serve to ensure that the Project site is developed in a manner that is not visually offensive, mitigation measures are not available to address the Project's significant impacts due to substantial changes to the existing visual character and quality of public views of the site and its surroundings. Impacts would be significant and unavoidable on both a direct and cumulatively-considerable basis.
- Agriculture and Forestry Resources: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. Implementation of the proposed Project would result in direct and indirect permanent impacts due to the conversion of approximately 297.8 acres of "Prime Farmland," approximately 24.6 acres of "Farmland of Statewide Importance," approximately 4.0 acres of "Unique Farmland," and approximately 180.3 acres of "Farmland of Local Importance" to non-agricultural use. Feasible mitigation is not available to reduce these impacts to below a level of significance; thus, Project impacts to Farmland located on site would be significant and unavoidable on both a direct and cumulatively-considerable basis.
- Air Quality: Significant and Unavoidable Direct and Cumulatively-Considerable Impacts. Long-term operations of the proposed Project would result in daily emissions of NO_x and ROG_s that exceed the SCAQMD Regional Thresholds. Although mitigation measures are identified to reduce impacts to the maximum feasible extent, a majority of emissions associated with Project operations would result from vehicular traffic, and in particular truck traffic. Mobile source emissions are regulated by standards imposed by federal and State agencies, not local governments; thus, feasible mitigation is not available to reduce the Project's emissions of NO_x and ROG to below a level of significance. Impacts would be significant and unavoidable on both a direct and cumulatively-considerable basis. Additionally,



because Project operational-related emissions would exceed the SCAQMD Regional Thresholds and because the Project's proposed land uses are not consistent with the growth forecasts included in the 2016 SCAQMD AQMP, the Project also would result in a significant and unavoidable direct and cumulatively-considerable impact due to a conflict with the 2016 SCAQMD AQMP.

- Noise: Significant and Unavoidable Direct Impact. Implementation of the Project would result in significant and unavoidable traffic-related noise impacts affecting existing residential uses along the segment of Nuevo Road between the southern Project entrance and Dunlap Drive under Existing plus Ambient plus Project (EAP) 2030 conditions. Due to existing driveway access points along this roadway segment, feasible mitigation measures are not available to reduce the Project's traffic-related noise impacts to this segment of Nuevo Road to below a level of significance, as it would not be feasible to fully obstruct the line-of-sight between these existing residences and Project-related traffic along Nuevo Road. Accordingly, Project traffic-related noise impacts along the segment of Nuevo Drive between Antelope Road and Dunlap Drive would be significant and unavoidable under EAP 2030 conditions.
- Transportation: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. Project-generated VMT per employee for the Project's proposed light industrial and business park uses would exceed the existing county-wide average VMT per employee threshold by 26.22%, while near-term operation of the Project's retail component was found to result in a net increase in the County's total VMT. VMT reduction measures in areas that are characteristically suburban in context are limited to a maximum VMT reduction of 15%. This maximum reduction for cross-category transportation-related mitigation measures of 15% for suburban settings is also noted in the County Guidelines. Therefore, even with the implementation of all feasible VMT reduction measures, Project-generated VMT cannot be reduced to a level of less than significant.

5.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL IMPACTS WHICH WOULD BE INVOLVED IN THE PROPOSED ACTION SHOULD IT BE IMPLEMENTED

The State CEQA Guidelines require EIRs to address any significant irreversible environmental changes that would be involved in the proposed action should it be implemented (State CEQA Guidelines § 15126.2(c)). An environmental change would fall into this category if: a) the project would involve a large commitment of non-renewable resources; b) the primary and secondary impacts of the project would generally commit future generations to similar uses; c) the project involves uses in which irreversible damage could result from any potential environmental accidents; or d) the proposed consumption of resources is not justified (e.g., the project results in the wasteful use of energy).

Determining whether the proposed Project may result in significant irreversible environmental changes requires a determination of whether key non-renewable resources would be degraded or destroyed in such a way that there would be little possibility of restoring them. Natural resources in the form of construction materials and energy resources would be used in the construction of the proposed Project, but development of the Project site as proposed would have no measurable adverse effect on the availability of such resources,



including resources that may be non-renewable (e.g., fossil fuels). Construction and operation of the proposed Project would not involve the use of large sums or sources of non-renewable energy. Additionally, the Project is required by law to comply with the California Building Standards Code (CALGreen), compliance with which reduces a building operation's energy volume that is produced by fossil fuels. The Project would be subject to regulations to reduce the Project's reliance on non-renewable energy sources. The Project also would be subject to the Energy Independence and Security Act of 2007, which contains provisions designed to increase energy efficiency and availability of renewable energy. The Project also would be subject to California Energy Code, or Title 24, which contains measures to reduce natural gas and electrical demand, thus requiring less non-renewable energy resources. The Project would avoid the inefficient, wasteful, and unnecessary consumption of energy during Project construction, operation, maintenance, and/or removal. With mandatory compliance to the energy efficiency regulations and mitigation measures, the Project would not involve the use of large sums or sources of non-renewable energy.

EIR Subsection 4.9, *Hazards and Hazardous Materials*, provides an analysis of the proposed Project's potential to transport or handle hazardous materials which, if released into the environment, could result in irreversible damage. As concluded in the analysis, compliance with federal, State, and local regulation related to hazardous materials would be required of all contractors working on the property during the Project's construction and of all the future occupants of the Project's buildings. As such, construction and long-term operation of the proposed Project would not have the potential to cause significant irreversible damage to the environment, including damage that may result from upset or accident conditions.

5.3 GROWTH INDUCING IMPACTS OF THE PROPOSED PROJECT

CEQA requires a discussion of the ways in which the proposed Project would be growth inducing. The State CEQA Guidelines identify a project as growth inducing if it would foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment (State CEQA Guidelines § 15126.2(d)). New employees and new residential developments represent direct forms of growth. These direct forms of growth have a secondary effect of expanding the size of local markets and including additional economic activity in the area.

A project could indirectly induce growth at the local level by increasing the demand for additional goods and services associated with an increase in population or employment and thus reducing or removing the barriers to growth. This typically occurs in suburban or rural environments where population or employment growth results in increased demand for service and commodity markets responding to the new population of residents or employees. Economic growth would likely take place as a result of the proposed Project's operation as a light industrial, business park, and commercial retail development. The Project's construction- and operational-related employees would purchase goods and services in the region, but any secondary increase in employment associated with meeting these goods and services needs would be marginal, accommodated by existing goods and service providers, and highly unlikely to result in any new physical impacts to the environment. Therefore, while the Project would create economic opportunities caused by introducing new job opportunities to the Project site, this change would not induce substantial new growth in the region.



Under CEQA, growth inducement is not considered necessarily detrimental, beneficial, or of significance to the environment. Typically, growth-inducing potential of a project would be considered significant if it fosters growth or a concentration of population in excess of what is assumed in pertinent master plans, land use plans, or in projections made by regional planning agencies such as SCAG. Significant growth impacts also could occur if a project provides infrastructure or service capacity to accommodate growth beyond the levels currently permitted by local or regional plans and policies. In general, growth induced by a project is considered a significant impact if it directly or indirectly affects the ability of agencies to provide needed public services, or if it can be demonstrated that the potential growth significantly affects the environment in some other way.

The area surrounding the Project site is primarily characterized by residential, agricultural, open space uses, and undeveloped land within unincorporated Riverside County. Development of the Project site with light industrial, business park, and commercial retail land uses would not directly induce surrounding properties to develop, because areas surrounding the Project site are already developed with residential uses, or are otherwise planned for urban development. Furthermore, roadway and utility improvements proposed as part of the Project have been designed to serve the proposed Project, and would not remove infrastructure-related obstacles to development of other off-site properties. Additionally, and based on the analysis provided in EIR Subsections 4.18, *Transportation*, and 4.20, *Utilities and Service Systems*, with improvements, fee payments, and fair-share monetary contributions, all roadways that would serve the Project would have the capacity to accommodate Project and cumulative traffic, and the Project would be adequately served by water service, sewer service, drainage facilities, and other utilizes and service systems. Accordingly, the growth-inducing impacts of the Project would be less than significant. The Project is not expected to induce growth of land uses changes on the other parcels in the vicinity, as other lands surrounding the site are either already developed or planned to be developed consistent with their General Plan land use designations.

Furthermore, the proposed Project's improvements to the public infrastructure, including roads, drainage infrastructure, and other utility improvements are consistent with Riverside County's General Plan and would not indirectly induce substantial and unplanned population growth in the local area.

5.4 EFFECTS FOUND NOT TO BE SIGNIFICANT DURING THE INITIAL STUDY PROCESS

An Initial Study was not prepared and was not required for the Project. In accordance with CEQA requirements, this Program EIR evaluates all of the environmental topics contained in Appendix G to the State CEQA Guidelines, as well as the supplemental topics and thresholds of significance included in Riverside County's Environmental Assessment Checklist.



6.0 ALTERNATIVES

State CEQA Guidelines § 15126.6(a) describes the scope of analysis that is required when evaluating alternatives to proposed projects, as follows:

“An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selection of a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.”

As discussed in EIR Section 4.0, *Environmental Analysis*, the proposed Project would result in significant adverse environmental effects that cannot be mitigated to below levels of significance after the implementation of Project design features, mandatory regulatory requirements, and feasible mitigation measures. The unavoidable significant impacts are:

- Aesthetics: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. The Project vicinity exhibits a rural and agricultural character, and the development of the Project site with light industrial, business park, and commercial retail land uses would represent a substantial change to the existing visual character and quality of public views of the site and its surroundings. Although the Project would be required to comply with the design guidelines and development standards of proposed SP 239A1, the SP 239A1 zoning ordinance, and all other applicable requirements of the Riverside County Municipal Code, which would serve to ensure that the Project site is developed in a manner that is not visually offensive, mitigation measures are not available to address the Project’s significant impacts due to substantial changes to the existing visual character and quality of public views of the site and its surroundings. Impacts would be significant and unavoidable on both a direct and cumulatively-considerable basis.
- Agriculture and Forestry Resources: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. Implementation of the proposed Project would result in direct and indirect permanent impacts due to the conversion of approximately 297.8 acres of “Prime Farmland,” approximately 24.6 acres of “Farmland of Statewide Importance,” approximately 4.0 acres of “Unique Farmland,” and approximately 180.3 acres of “Farmland of Local Importance” to non-agricultural use. Feasible mitigation is not available to reduce these impacts to below a level of significance; thus, Project impacts to Farmland located on site would be significant and unavoidable on both a direct and cumulatively-considerable basis.



- Air Quality: Significant and Unavoidable Direct and Cumulatively-Considerable Impacts. Long-term operations of the proposed Project would result in daily emissions of NO_x and ROG_s that exceed the SCAQMD Regional Thresholds. Although mitigation measures are identified to reduce impacts to the maximum feasible extent, a majority of emissions associated with Project operations would result from vehicular traffic, and in particular truck traffic. Mobile source emissions are regulated by standards imposed by federal and State agencies, not local governments; thus, feasible mitigation is not available to reduce the Project's emissions of NO_x and ROG to below a level of significance. Impacts would be significant and unavoidable on both a direct and cumulatively-considerable basis. Additionally, because Project operational-related emissions would exceed the SCAQMD Regional Thresholds and because the Project's proposed land uses are not consistent with the growth forecasts included in the 2016 SCAQMD AQMP, the Project also would result in a significant and unavoidable direct and cumulatively-considerable impact due to a conflict with the 2016 SCAQMD AQMP.
- Noise: Significant and Unavoidable Direct Impact. Implementation of the Project would result in significant and unavoidable traffic-related noise impacts affecting existing residential uses along the segment of Nuevo Road between the southern Project entrance and Dunlap Drive under Existing plus Ambient plus Project (EAP) 2030 conditions. Due to existing driveway access points along this roadway segment, feasible mitigation measures are not available to reduce the Project's traffic-related noise impacts to this segment of Nuevo Road to below a level of significance, as it would not be feasible to fully obstruct the line-of-sight between these existing residences and Project-related traffic along Nuevo Road. Accordingly, Project traffic-related noise impacts along the segment of Nuevo Drive between Antelope Road and Dunlap Drive would be significant and unavoidable under EAP 2030 conditions.
- Transportation: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. Project-generated VMT per employee for the Project's proposed light industrial and business park uses would exceed the existing county-wide average VMT per employee threshold by 26.22%, while near-term operation of the Project's retail component was found to result in a net increase in the County's total VMT. VMT reduction measures in areas that are characteristically suburban in context are limited to a maximum VMT reduction of 15%. This maximum reduction for cross-category transportation-related mitigation measures of 15% for suburban settings is also noted in the County Guidelines. Therefore, even with the implementation of all feasible VMT reduction measures, Project-generated VMT cannot be reduced to a level of less than significant.

6.1 ALTERNATIVES UNDER CONSIDERATION

State CEQA Guidelines § 15126.6(e) requires that an alternative be included that describes what would reasonably be expected to occur on the property in the foreseeable future if the Project were not approved, based on current plans and consistent with available infrastructure and community services (i.e., "no project" alternative). For development projects that include a revision to an existing land use plan, the "no project" alternative is considered to be the continuation of the existing land use plan into the future. For projects other than a land use plan (for example, a development project on an identifiable property), the "no project"



alternative is considered to be a circumstance under which the project does not proceed (State CEQA Guidelines § 15126.6(e)(3)(A-B). For the alternatives analysis in this EIR, the potential scenario where the Project site remains in its current undeveloped condition is considered to be the “No Development Alternative (NDA),” while the potential scenario where the existing General Plan land use plan is implemented is considered to be the “No Project (Existing General Plan) Alternative.”

The following scenarios are identified by the County of Riverside as potential alternatives to implementation of the proposed Project. The Reduced Project Alternative is considered the Environmentally Superior Alternative pursuant to State CEQA Guidelines § 15126.6.

6.1.1 NO DEVELOPMENT ALTERNATIVE

The No Development Alternative (NDA) considers no development/disturbance on the Project site beyond that which occurs under existing conditions. As such, the Project site would continue to consist of 582.6 acres of vacant and undeveloped land. Under the NDA, no improvements would be made to the Project site and none of the Project’s roadway, utility, or other infrastructure improvements would occur. This Alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would leave the Project site in its existing condition.

6.1.2 NO PROJECT (EXISTING GENERAL PLAN) ALTERNATIVE

The No Project (Existing General Plan) Alternative (NPA), assumes development of the 582.6-acre property in accordance with the site’s existing General Plan and Specific Plan land uses. Figure 2-5 in EIR Subsection 2.0 depicts the site’s existing Specific Plan land use designations. Thus, under this alternative, and consistent with the adopted Stoneridge Specific Plan No. 239 (SP 239) for the portions of the adopted SP 239 that occur within the Project site, the Project site would be developed with approximately 671 “Medium Residential (2-5 du/ac)” dwelling units on approximately 172.9 acres; approximately 903 “Medium-High Residential (5-8 du/ac)” dwelling units on approximately 185.0 acres; approximately 446 “Very High Residential (14-20 du/ac)” dwelling units on approximately 30.0 acres; “Commercial” uses on approximately 68.1 acres, which also would allow for up to 153 dwelling units in Planning Area 1; “Parks” on approximately 33.7 acres; “Open Space – Natural” on approximately 20.8 acres; “Open Space – Recreational” on approximately 8.6 acres; three planning areas designated for “Schools” on approximately 27.0 acres; and approximately 36.5 acres of major circulation facilities. This Alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would allow for buildout of the Project site in accordance with the site’s existing General Plan and SP 239 land use designations.

6.1.3 REDUCED PROJECT ALTERNATIVE

The Reduced Project Alternative (RPA) considers development of the Project site with similar uses as the proposed Project, but at a much lower intensity. Specifically, under the proposed Project, Light Industrial and Business Park land uses may be developed at a Floor Area Ratio (FAR) up to 0.50, while Commercial Retail land uses can be developed at a FAR up to 0.35. Under the RPA, development of Light Industrial and Business Park land uses would be restricted to a maximum FAR of 0.35, while development in the Commercial Retail portions of the site would be limited to a maximum FAR of 0.25. For purposes of evaluation of the RPA, it is



assumed that the MCP would not be in place under long-term conditions, thereby allowing for more development on site than would occur if the MCP were to be implemented through the northern portions of the Project site. As summarized in Table 6-1, *Reduced Project Alternative Land Use Summary*, the RPA would allow for a maximum of 5,923,071 s.f. of light industrial building area, 748,579 s.f. of business park building area, and 87,120 s.f. of commercial retail building area. Thus, implementation of the RPA would result in a reduction of building area allowed on site by approximately 30% as compared to the proposed Project. Under the RPA, it is assumed that all areas proposed for grading and development both on and off site would be the same as for the proposed Project. This alternative was selected by the Lead Agency in order to evaluate an alternative that would reduce the Project’s significant and unavoidable impacts to aesthetics, air quality, noise, and transportation.

6.2 ALTERNATIVES CONSIDERED AND REJECTED

An EIR is required to identify any alternatives that were considered by the Lead Agency but were rejected as infeasible. Among the factors described by State CEQA Guidelines § 15126.6 in determining whether to exclude alternatives from detailed consideration in the EIR are: a) failure to meet most of the basic project objectives, b) infeasibility, or c) inability to avoid significant environmental impacts. With respect to the feasibility of potential alternatives to the proposed Project, State CEQA Guidelines § 15126.6(f)(1) notes:

Table 6-1 Reduced Project Alternative Land Use Summary

PA	Land Use Designation	Acres	Maximum Building Square Footage
1	LI	37.8	576,299
2	LI	114.0	1,738,044
3	LI	195.2	2,976,019
4	LI	37.8	576,299
5	LI	3.7	56,410
6	BP	34.4	524,462
7	BP	14.7	224,116
8A	CR	6.8	74,052
8B	CR	1.2	13,068
9	OS-C	18.1	--
10	OS-CH	47.0	--
11	OS-CH	34.6	--
--	Circulation	37.3	--
Total:		582.6	6,758,769

Notes: PA = Planning Area; LI = Light Industrial; BP = Business Park; CR = Commercial Retail; OS-C = Open Space – Conservation; OS-CH = Open Space – Conservation Habitat.

“Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries...and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site...”



In determining an appropriate range of alternatives to be evaluated in this EIR, a number of possible alternatives were initially considered and, for a variety of reasons, rejected. Alternatives were rejected because either: 1) they could not accomplish the basic objectives of the Project, 2) they would not have resulted in a reduction of significant adverse environmental impacts, and/or 3) they were considered infeasible to construct or operate. A summary of the alternatives that were considered but rejected are described below.

6.2.1 ALTERNATIVE SITES

CEQA does not require that an analysis of alternative sites always be included in an EIR. However, if the surrounding circumstances make it reasonable to consider an alternative site then this alternative should be considered and analyzed in the EIR. In making the decision to include or exclude analysis of an alternative site, the *“key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need to be considered for inclusion in the EIR”* (State CEQA Guidelines § 15126.6(f) (2)).

Based on a review of aerial photography, the Riverside County General Plan land use map and a list of approved/pending development proposals within Riverside County and nearby jurisdictions, there are no other available, undeveloped properties of similar size (i.e., approximately 582.6 acres) that are zoned for and adjacent to other properties designated for urban development and that would reduce or avoid the Project’s significant and unavoidable impacts. For example, development of the Project at an alternative site location would not reduce or avoid the Project’s significant and unavoidable air quality impacts due to operational-related NO_x and ROG emissions, as it would not be possible to develop 388.5 acres of Light Industrial land uses, 49.1 acres of Business Park land uses, 8.0 acres of Commercial Retail land uses without exceeding the SCAQMD Regional Thresholds for these pollutants under long-term operational conditions. Although a different site location would potentially avoid the Project’s significant and unavoidable impacts due to the conversion of Farmland to non-agricultural use, the fact is that the Project site is designated for urban development and ultimately would be developed with non-agricultural uses and/or ultimately would be surrounded by urban development that would render agricultural uses infeasible due to land use compatibility issues. Additionally, developing the Project at a different location may not avoid the Project’s significant and unavoidable impacts due to transportation-related noise, as the amount of traffic generated by the Project’s proposed land uses likely would result in significant unavoidable traffic-related noise impacts regardless as to where the Project is constructed. In addition, a different site location would merely shift the Project’s unavoidable impacts due to VMTs to a different location, and it is likely that similar or more severe near-term impacts could occur at off-site locations if the Project were instead to be developed in an area with a more balanced ratio of jobs and housing. For these reasons, Riverside County finds that evaluation of an alternative site location is not required for the Project because alternative site locations would not reduce or avoid the Project’s significant environmental effects.

6.3 ALTERNATIVE ANALYSIS

The following discussion compares the impacts of each alternative considered by the Lead Agency with the impacts of the proposed Project, as detailed in EIR Subsection 4.0, *Environmental Analysis*. A conclusion is



provided for each impact as to whether the alternative results in one of the following (1) reduction or elimination of the proposed Project's impact, (2) a greater impact than would occur under the proposed Project, (3) the same impact as the proposed Project, or (4) a new impact in addition to the proposed Project's impacts. Table 6-2, *Alternatives to the Proposed Project – Comparison of Environmental Impacts*, located at the end of this Section, compares the environmental hazard and resource impacts of the alternatives with those of the proposed Project and identifies the ability of the alternative to meet the basic objectives of the Project. As described in EIR Subsection 3.1, the underlying purpose of the proposed Project is to accomplish the orderly development of light industrial, business park, and commercial retail land uses to increase employment opportunities in a housing rich portion of unincorporated Riverside County. The specific objectives of the proposed Project are:

- A. To efficiently develop an underutilized property with a complementary mix of employment-generating land uses, including light industrial, business park, and commercial retail land uses in an area predominately composed of housing.
- B. To assist the SCAG region in attempting to achieve jobs/housing balance region-wide and the local area by providing additional job opportunities in a housing rich area of the Inland Empire.
- C. To attract new businesses to Riverside County and thereby provide a more equal jobs-housing balance in the Inland Empire region that will reduce the need for members of the local workforce to commute outside the area for employment.
- D. To establish development standards and design guidelines to ensure future development on site complements other existing and planned uses in the immediate vicinity and minimizes conflicts with other nearby land uses.
- E. To establish a unified thematic concept for future development through design elements such as architecture, monumentation, theme walls, and landscaping using a long-range comprehensive planning approach that cannot be accomplished on a parcel-by-parcel basis.
- F. To anticipate market demand by providing a mixture of light industrial, business park, and commercial retail land uses in a master-planned commerce center that would be marketable within the evolving economic profile of western Riverside County.
- G. To develop a mix of light industrial, business park, and commercial retail uses in unincorporated Riverside County that are designed to meet contemporary industry standards, can accommodate a wide variety of users, and are economically competitive with similar uses in the local area and region.
- H. To develop a property that has access to available infrastructure, including roads and utilities.



6.3.1 NO DEVELOPMENT ALTERNATIVE

The NDA considers no development/disturbance on the Project site beyond that which occurs under existing conditions. As such, the Project site would continue to consist of 582.6 acres of vacant and undeveloped land. Under the NDA, no improvements would be made to the Project site and none of the Project's roadway, utility, or other infrastructure improvements would occur. This Alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would leave the Project site in its existing condition.

A. Aesthetics

The NDA considers no development or disturbance on the Project site beyond that which occurs under existing conditions. As such, the 582.6-acre site would remain vacant and undeveloped. Thus, the Project's less-than-significant impacts to scenic vistas would be avoided under this Alternative. The Project site is not visible from any designated or eligible scenic highways; thus, impacts to scenic highways would be less than significant and similar to the proposed Project. However, because implementation of the NDA would retain the site's existing visual character, the Project's significant and unavoidable impacts due to a substantial change to the visual character and quality of public views in the Project area would be avoided with implementation of the NDA. Although the Project would be subject to compliance with Riverside County Ordinance No. 655 and would result in less-than-significant light and glare impacts, no new lighting sources or sources of potential glare would occur on site under the NDA; thus, impacts associated with light and glare would be reduced in comparison to the proposed Project.

B. Agriculture and Forestry Resources

Under the NDA, no new development would occur on site. Thus, implementation of the NDA would avoid the Project's significant and unavoidable impacts due to the conversion of approximately 297.8 acres of "Prime Farmland," approximately 24.6 acres of "Farmland of Statewide Importance," approximately 4.0 acres of "Unique Farmland," and approximately 180.3 acres of "Farmland of Local Importance" to non-agricultural use. Neither the Project nor the NDA would result in a conflict with existing agricultural zoning or land subject to a Williamson Act or Riverside County Agricultural Preserve, and impacts would be less than significant and similar. However, the NDA would avoid the Project's less-than-significant impacts due to a conflict with existing agricultural uses. Both the Project and the NDA would be subject to Riverside County Ordinance No. 625, which requires that when lands are developed adjacent to properties zoned primarily for agricultural purposes (that support agricultural operations that have been in place for at least three years and not considered a nuisance operation at the time the operation began), future land buyers must be notified of any agricultural operations that are on-going in the area, and mandates that such agricultural uses shall not be the subject of nuisance complaints. Thus, no conflicts with existing agricultural land uses would occur under the Project or the NDA, and impacts would be similar and less than significant. There are no other components of the Project that could result in the conversion of Farmland to non-agricultural use; however, because the NDA would allow for agricultural operations on site, impacts would be reduced. Neither the Project nor the NDA would result in impacts due to the conversion of forest land to non-forest uses, and the level of impact would be the same.



C. Air Quality

Under the NDA, there would be no new construction or development on the Project site. Although construction-related emissions under the proposed Project would be mitigated to below a level of significance, implementation of the NDA would not result in any construction-related emissions and impacts would therefore be reduced. Additionally, because the NDA would not involve any new development on site, implementation of the NDA would not result in any new air quality emissions and implementation of the NDA would avoid the Project's significant and unavoidable impacts due to operational-related emissions of NO_x and ROG. Furthermore, implementation of the NDA would avoid the Project's significant and unavoidable impacts due to a conflict with the 2016 SCAQMD AQMP. Although implementation of the proposed Project would result in less-than-significant impacts due to the exposure of sensitive receptors to substantial pollution concentrations, these less-than-significant impacts would be avoided under the NDA. Similarly, the Project's less-than-significant impacts due to construction or operational related odor emissions would be avoided under the NDA.

D. Biological Resources

With implementation of the NDA, there would be no new construction or development on the Project site. As such, the NDA would avoid all of the Project's significant but mitigable impacts to biological resources. Specifically, the NDA would avoid the Project's potential conflict with the MSHCP (prior to mitigation). The NDA also would not result in any construction-related impacts to nesting birds. The NDA also would avoid the Project's significant but mitigable impacts to 0.29 acre of Southern Riparian Scrub, 0.16 acre of wetlands within the San Jacinto River and associated floodplain, 0.97 acres of Corps jurisdiction, up to 0.981 acre of State waters under RWQCB jurisdiction (0.991 acre if the Southern Truck Route is implemented), up to 1.691 acres of CDFW jurisdiction (1.701 acres if the Southern Truck Route is implemented), and up to 1.691 acres of MSHCP Riparian/Riverine areas (1.701 acres if the Southern Truck Route is implemented).

E. Cultural Resources

Under the NDA, no new development would occur on site. Although the Project would not result in impacts to any known historical resources, the NDA would nonetheless avoid the Project's less-than-significant impacts (following mitigation) to subsurface historical resources that may be encountered during grading activities. Similarly, although there are no known archaeological resources on site, the NDA would avoid the Project's less-than-significant (with mitigation) impacts to subsurface archaeological resources that may be impacted during site grading operations. Additionally, because there would be no new grading on site, the NDA would avoid the Project's less-than-significant impacts (with mitigation) to buried human remains that may be uncovered during site grading activities. Thus, impacts to cultural resources would be reduced under the NDA in comparison to the Project.

F. Energy

Under the NDA, there would be no increase in demand from the Project site for energy resources. As such, the NDA would avoid the Project's less-than-significant impacts due to the wasteful, inefficient, or unnecessary consumption of energy resources. Neither the Project nor the NDA would conflict with a State



or local plan for renewable energy or energy efficiency, although impacts would be reduced under the NDA in comparison to the Project because the NDA would not result in an increase in use of energy resources.

G. *Geology and Soils*

Under the NDA, there would be no new development on site. There are no known faults on or trending towards the Project site; thus, impacts associated with rupture of a known fault would be less than significant and similar under the proposed Project and the NDA. However, because the Project would involve a substantial increase in the number of employees on site, the Project's less-than-significant impacts due to strong seismic ground shaking would be reduced under the NDA. Because no new development would occur, the NDA would result in reduced impacts as compared to the Project's less-than-significant impacts (with mitigation) due to unstable geologic units or soils that are unstable and that potentially could result in on- or off-site landslide, lateral spreading, collapse, or rockfall hazard. The Project's less-than-significant impacts (with mitigation) due to ground subsidence also would be reduced under the NDA. Neither the Project nor the NDA would be subject to geologic hazards, such as seiches, mudflow, or volcanic hazards; impacts would be less than significant and the level of impact would be similar. Because there would be no new development on site, the NDA would avoid the Project's less-than-significant impacts (after mitigation) due to cut or fill slopes greater than 2:1 or higher than 10 feet. Neither the Project nor the NDA would result in grading that affects or negates subsurface sewage disposal systems, and neither the Project nor the NDA would require septic tanks or alternative waste water disposal systems on unsuitable soils; thus, impacts would be less than significant and similar under the NDA and proposed Project. During construction of the proposed Project vegetative cover would be removed, increasing the potential for erosion as compared to the site's existing conditions; thus, the NDA would avoid the Project's less-than-significant erosion impacts during construction. However, for the proposed Project under long-term conditions, the Project site's potential for erosion would be substantially reduced as compared to existing conditions due to the introduction of impervious surfaces and landscaped areas on site; thus, impacts under long-term conditions due to erosion would be increased under the NDA as compared to long-term operations associated with the Project. Lastly, the NDA would avoid the Project's less-than-significant impacts (after mitigation) due to expansive soils.

H. *Greenhouse Gas Emissions*

Under the NDA, there would be no new development or construction activities on site. As such, the NDA would completely avoid the Project's less-than-significant impacts (after mitigation) due to GHG emissions. Similarly, the Project's less-than-significant impacts due to a conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs also would be avoided with implementation of the NDA.

I. *Hazards and Hazardous Materials*

Under the NDA, there would be no new development on site. As such, there would be no requirement under the NDA to remediate soil contamination due to pesticides on site; thus, impacts due to existing hazardous site conditions would be increased under the NDA as compared to the Project, although impacts still would remain below a level of significance because the site would not include any residential or other sensitive land uses under the NDA. There would be no construction activities or changes to operational conditions on site under



the NDA; thus, the NDA would result in reduced impacts in comparison to the Project's less-than-significant construction and operational impacts due to hazardous materials. Neither the Project nor the NDA would impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan; thus, impacts under the NDA and proposed Project would be less than significant and the level of impact would be similar. Although neither the Project nor the NDA would emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school, because there would be no change in the site's existing conditions impacts to nearby schools would be reduced in comparison to the Project's less-than-significant impacts. The Project site is not identified on any lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5; thus, no impact would occur under the Project or NDA, and the level of impact would be similar. Although the Project was found to be consistent with the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan (ALUCP), because the NDA would not introduce any new residents or workers on site impacts due to airport-related hazards would be reduced under the NDA in comparison to the proposed Project. The Project site is not located in the Airport Influence Area (AIA) of any private airports; thus, there would be no impacts due to private airport-related hazards and the level of impact would be the same.

J. Hydrology and Water Quality

With respect to water quality, the NDA would not involve any new development on site. With exception of erosion potential, the NDA would result in reduced impacts to water quality as compared to the proposed Project's less-than-significant water quality impacts. While the risk of erosion would increase during construction of the proposed Project, under long-term operating conditions the Project would result in the introduction of impervious surfaces and landscaped areas; thus, long-term operational erosion impacts would be increased under the NDA due to the lack of vegetative cover on portions of the Project site. While the Project would result in less-than-significant impacts due to groundwater recharge, impacts to groundwater recharge would be reduced under the NDA because there would be no new impervious surfaces on site. Although the Project would result in less-than-significant impacts to the site's existing drainage pattern, because there would be no changes to the site's drainage patterns under the NDA impacts would be reduced in comparison to the proposed Project. Similarly, although the Project would not exceed the capacity of any existing or planned stormwater drainage systems, because there would be no changes to site drainage under the NDA impacts would be reduced in comparison to the Project. The portions of the Project site proposed for development as part of the Project are not subject to flood hazards; thus, impacts due to flooding would be less than significant and would be similar under the Project and NDA. The Project site is not subject to inundation from flood hazards, tsunamis, or seiches; thus, impacts would be less than significant and would be similar under the Project and NDA.

K. Land Use and Planning

The NDA would not be consistent with the land use designations applied to the property by the Riverside County General Plan, LNAP, and SP 239. Impacts would be similar to the proposed Project. Neither the Project nor the NDA would conflict with the Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Additionally, neither the Project



nor the NDA would disrupt or divide the physical arrangement of an established community; thus, impacts would be less than significant and the level of impact would be similar.

L. Mineral Resources

The Project site does not contain any known mineral resources that would be of value to the region or the residents of the State. Accordingly, no impacts to mineral resources would occur under the Project or the NDA, and the level of impact would be similar. Additionally, neither the Project nor the NDA would represent an incompatible land use located adjacent to a State classified or designated area or existing surface mine, and the NDA and Project would not expose people or property to hazards from proposed, existing, or abandoned quarries or mines. No impacts would occur, and the level of impact would be similar.

M. Noise

The Project site is located outside of areas subject to public and private airport-related noise levels exceeding 55 dBA CNEL; thus, impacts due to airport-related noise would be less than significant under both the Project and the NDA. The NDA would avoid the Project's less-than-significant impacts (after mitigation) due to construction-related and operational noise levels and would avoid the Project's significant and unavoidable impact due to traffic-related noise increases along the segment of Nuevo Road between the Project site entrance and Dunlap Drive under EAP 2030 conditions because there would be no new development and no increase in traffic generated by the site under the NDA. Additionally, the NDA would avoid the Project's less-than-significant (with mitigation) impacts due to construction-related vibration, and also would avoid the Project's less-than-significant impacts due to operational-related vibration.

N. Paleontological Resources

Under the NDA, there would be no new construction or development on site. Therefore, the NDA would avoid the Project's less-than-significant construction-related impacts (after mitigation) to paleontological resources that may be buried beneath the site's surface.

O. Population and Housing

Neither the Project nor the NDA would eliminate any residents or housing or generate any demand for additional housing. Thus, impacts due to the displacement of substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere, would be less than significant under both the Project and the NDA, although the level of impact would be slightly increased under the Project due to the generation of employees and the potential indirect demand for new housing. Although the Project would result in less-than-significant impacts due to substantial unplanned population growth, the NDA would not result in any new development on site; thus, impacts under the NDA would be reduced in comparison to the proposed Project.



P. Public Services

There would be no new development on site under the NDA; thus, the NDA would avoid the Project's less-than-significant impacts to fire protection, police protection, school services, library services, and health services.

Q. Recreation

The Project does not propose any residential uses or other land use that may generate a population that would increase the use of existing neighborhood and regional parks or other recreational facilities. Likewise, the NDA would not result in any new development on site and thus would not generate any increase in demand for recreational resources, nor would any recreational resources be constructed on site under the NDA. Therefore, impacts to recreation would be similar under the Project and the NDA, although impacts due to the construction of recreational facilities (i.e., trails) would be reduced under the NDA as compared to the proposed Project.

R. Transportation

Under the NDA, there would be no new development on site and thus there would be no increase in traffic generated by the site. As such, the NDA would avoid the Project's significant and unavoidable impacts due to VMT and would avoid the Project's less-than-significant impacts to study area transportation facilities, including facilities included in the Riverside County Congestion Management Plan (CMP). Additionally, due to the lack of improvements, the NDA would avoid the Project's less-than-significant impacts due to increased hazards due to a geometric design feature or incompatible uses. The NDA also would avoid the Project's less-than-significant impacts due to the need for new or altered maintenance of roads. The NDA would not involve a construction phase, and thus would avoid the Project's less-than-significant (after mitigation) impacts to circulation during construction activities on site. The NDA would not result in any impacts due to emergency access or access to nearby uses; thus, the NDA would avoid the Project's less-than-significant (after mitigation) impacts to emergency access during construction activities. No new bike lanes or trails would be constructed under the NDA; thus, the NDA would avoid the Project's less-than-significant impacts due to bike lane and trail construction. The NDA would not result in an increase in Vehicle Miles Travelled (VMTs); thus, the NDA would avoid the Project's significant and unavoidable impacts due to VMTs.

S. Tribal Cultural Resources

There would be no new development on site under the NDA. Accordingly, the NDA would avoid the Project's less-than-significant impacts (after mitigation) to tribal cultural resources.

T. Utilities and Service Systems

Under the NDA, there would be no increased demand for water, wastewater treatment, or storm water drainage; thus, the NDA would avoid the Project's less-than-significant impacts due to the construction of such facilities and due to the provision of water or wastewater treatment services. There would be no increase in demand for water resources under the NDA; thus, the NDA would avoid the Project's less-than-significant impacts to water supply. Additionally, the NDA would avoid the Project's less-than-significant impacts due to the



construction of wastewater conveyance facilities on and off site, and would avoid the Project's less-than-significant impacts to wastewater treatment capacity. There would be no increase in solid waste generated on site; thus, the NDA would avoid the Project's less-than-significant impacts due to solid waste. There are no components of the NDA or the proposed Project that would conflict with federal, State, and local management and reduction statutes and regulations related to solid wastes, including the CIWMP (County Integrated Waste Management Plan); thus, impacts would be less than significant and the level of impact would be similar. The NDA also would avoid the Project's less-than-significant impacts due to the construction of facilities for electricity, natural gas, communication systems, street lighting, or due to increased roadway maintenance.

U. Wildfire

Under the NDA, there would be no new development on site. Although impacts due to wildfire would be less than significant under the proposed Project, the NDA would result in reduced impacts due to wildfires in comparison to the Project because no new structures would be developed on site. Additionally, under the NDA the Project site would remain in its existing condition, and would continue to contain natural vegetation that could serve as potential fuel for future wildfires in the local area.

V. Conclusion

Implementation of the NDA would result in no physical environmental impacts beyond those that have historically occurred on the property. Almost all effects of the proposed Project would be avoided or lessened by the selection of this Alternative, although a few new impacts, such as sedimentation impacts, would be increased under this Alternative. The NDA would conflict with the General Plan, LNAP, and Housing Element requirements, although such conflict would not result in any significant environmental effects. Because this Alternative would avoid most of the Project's impacts, it warrants consideration as the "environmentally superior alternative." However, pursuant to State CEQA Guidelines § 15126.6(e)(2), if a no project alternative is identified as the environmentally superior alternative," then the EIR shall also identify an environmentally superior alternative among the other alternatives. Accordingly, the Reduced Project Alternative, as discussed in subsection 6.3.3, is identified as the environmentally superior alternative.

The NDA would fail to meet all of the Project's objectives. Specifically, the NDA would not result in the efficient development of an underutilized property with a complementary mix of employment-generating land uses, including light industrial, business park, and commercial retail land uses. The NDA also would not assist the SCAG region in attempting to achieve jobs/housing balance region-wide and the local area by providing additional job opportunities in a housing rich area of the Inland Empire. The NDA also would not attract new businesses to Riverside County and would not provide a more equal jobs-housing balance in the Inland Empire region that will reduce the need for members of the local workforce to commute outside the area for employment. Additionally, the NDA would not establish development standards and design guidelines to ensure future development on site complements other existing and planned uses in the immediate vicinity and minimizes conflicts with other nearby land uses. The NDA would not establish a unified thematic concept for future development through design elements such as architecture, monumentation, theme walls, and landscaping using a long-range comprehensive planning approach that cannot be accomplished on a parcel-by-parcel basis. Additionally, the NDA would not respond to market demand by providing a mixture of light



industrial, business park, and commercial retail land uses in a master-planned commerce center that would be marketable within the evolving economic profile of western Riverside County. Furthermore, the NDA would not result in the development of a mix of light industrial, business park, and commercial retail uses in unincorporated Riverside County that are designed to meet contemporary industry standards, can accommodate a wide variety of users, and are economically competitive with similar uses in the local area and region. Finally, the NDA would not result in the development of a property that has access to available infrastructure, including roads and utilities.

6.3.2 NO PROJECT (EXISTING GENERAL PLAN) ALTERNATIVE (“NPA”)

The NPA assumes development of the 582.6-acre property in accordance with the site’s existing General Plan and Specific Plan land uses. Thus, under this alternative, and consistent with the adopted Stoneridge Specific Plan No. 239 (SP 239) for the portions of the adopted SP 239 that occur within the Project site, the Project site would be developed with approximately 671 “Medium Residential (2-5 du/ac)” dwelling units on approximately 172.9 acres; approximately 903 “Medium-High Residential (5-8 du/ac)” dwelling units on approximately 185.0 acres; approximately 446 “Very High Residential (14-20 du/ac)” dwelling units on approximately 30.0 acres; “Commercial” uses on approximately 68.1 acres, which also would allow for up to 153 dwelling units in Planning Area 1; “Parks” on approximately 33.7 acres; “Open Space – Natural” on approximately 20.8 acres; “Open Space – Recreational” on approximately 8.6 acres; three planning areas designated for “Schools” on approximately 27.0 acres; and approximately 36.5 acres of major circulation facilities. This Alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would allow for buildout of the Project site in accordance with the site’s existing General Plan and SP 239 land use designations.

A. Aesthetics

The Project site is not located within the viewshed of any officially designated State or County scenic highways or State-Eligible scenic highways. Development under the Project and NPA would be visible from Ramona Expressway, which is designated as a County-Eligible scenic highway; however, development on site under both the Project and NPA would be required to comply with the development standards and design guidelines included in the adopted or proposed SP 239 which have been designed to ensure that the property is developed in a manner that is not aesthetically offensive. Thus, impacts to scenic corridors would be less than significant under both the Project and NPA, and the level of impact would be similar. As with the proposed Project, the NPA would not substantially damage scenic resources; obstruct any prominent scenic vista or view open to the public; result in the creation of an aesthetically offensive site open to public view; or conflict with applicable zoning and other regulations governing scenic quality. However, the Project vicinity exhibits a rural and agricultural character, and the land uses proposed as part of the Project and the NPA would represent a substantial change to the existing visual character and quality of public views of the site and its surroundings. As with the proposed Project, the NPA would result in significant and unavoidable impacts to visual character and quality, although impacts under the NPA would be reduced in comparison to the Project due to the reduction in development intensity on site that would occur under the NPA as compared to the proposed Project.



B. Agriculture and Forestry Resources

Areas proposed for physical impact under the NPA would be similar to the proposed Project, except that under the Project the open space planned for proposed Planning Area 9 would be reduced in size from 20.8 acres under the adopted SP 239 to 18.1 acres under the proposed Project, while open space within proposed Planning Area 10 under the proposed Project would be developed with residential uses under the NPA. However, under both the Project and the NPA, agricultural activities throughout the 582.6-acre property would be precluded. Thus, both the Project and the NPA would result in direct and indirect impacts due to the conversion of approximately 297.8 acres of “Prime Farmland,” approximately 24.6 acres of “Farmland of Statewide Importance,” approximately 4.0 acres of “Unique Farmland,” and approximately 180.3 acres of “Farmland of Local Importance” to non-agricultural use, and the level of impact would be the same. Neither the Project nor the NPA would result in a conflict with existing agricultural zoning or land subject to a Williamson Act or Riverside County Agricultural Preserve, and impacts would be less than significant and similar. Both the Project and the NPA result in less-than-significant impacts due to a conflict with existing agricultural uses, although the level of impact under the NPA would be slightly increased due to the introduction of residential uses on site, which are more sensitive to land use compatibility impacts than the light industrial, business park, and commercial retail land uses proposed as part of the Project. Both the Project and the NPA would be subject to Riverside County Ordinance No. 625; thus, no conflicts with existing agricultural land uses would occur under the Project or the NPA, and impacts would be similar and less than significant. There are no other components of the Project or NPA that could result in the conversion of Farmland to non-agricultural use; thus, impacts would be less than significant and the level of impact would be similar. Neither the Project nor the NPA would result in impacts due to the conversion of forest land to non-forest uses, and the level of impact would be the same.

C. Air Quality

Based on the level of intensity allowed by the adopted SP 239, implementation of the NPA is expected to result in emissions that would exceed the SCAQMD Regional Thresholds for criteria pollutants. Although the NPA is consistent with the growth forecasts assumed by the 2016 SCAQMD AQMP, because the NPA would exceed the SCAQMD Regional Thresholds the NPA would conflict with the implementation of the air quality reductions called for by the SCAQMD AQMP. Thus, as with the Project, impacts due to a conflict with the SCAQMD 2016 AQMP would be significant and unavoidable, and the level of impact would be similar. As the level of intensity for development on site would be similar under the NPA and proposed Project, it is expected that construction-related emissions under both the NPA and the proposed Project would be less than significant with mitigation. For long-term operational conditions, the NPA is projected to result in between 30,111 and 47,888 Average Daily Trips (ADT), whereas the Project is projected to generate between 23,624 and 23,894 ADT. As such, while both the Project and NPA would result in long-term operational emissions that would exceed the SCAQMD Regional Thresholds for criteria pollutants, which could contribute to the SoCAB’s non-attainment status for ozone precursors and particulate matter, vehicular-related air quality emissions under the NPA would be increased as compared to the proposed Project. Impacts would be significant and unavoidable under both the Project and NPA, with impacts being greater under the NPA as compared to the Project. With respect to localized emissions, the NPA would result in the generation of substantially fewer diesel truck trips as compared to the Project; thus, cancer risks and non-cancer health



hazards would be reduced under the NPA as compared to the Project, although impacts would be below the thresholds of significance under both the Project and NPA. Neither the Project nor the NPA would result in or contribute to CO “hot spots,” and impacts would be less than significant with the level of impact being similar. Both the Project and the NPA are anticipated to result in less-than-significant impacts due to odors, although odors would be slightly reduced under the NPA due to the substantial reduction in diesel truck trips.

D. Biological Resources

Under the NPA, a total of 20.8 acres of the Project site would be preserved as natural open space, primarily within the southwest portion of the Project site (generally corresponding to Planning Area 9 of proposed SP 239A1), along with 8.6 acres of recreational open space within the southeast corner of the site. By comparison, under the proposed Project a total of 99.7 acres of the Project site would be preserved as natural open space. Thus, impacts to biological resources under the NPA would be increased as compared to the proposed Project, although as with the Project all impacts would be mitigated to less-than-significant levels. Specifically, the NPA would allow for development within the San Jacinto River floodplain in the eastern portion of the site (i.e., within Planning Area 10 of proposed SP 239A1), which is proposed for long-term conservation natural open space as part of the Project. Additionally, under the NPA areas proposed for recreational open space in the southeast corner of the site would be smaller than the natural open space area proposed as part of Planning Area 11 of proposed SP 239A1. Thus, under the NPA impacts to sensitive vegetation communities would be increased, as would impacts to sensitive plant and animal species. Implementation of the NPA also would result in a substantial increase in impacts to jurisdictional waters and wetlands, the majority of which occur in areas along the San Jacinto River that would be avoided by the Project but that would be subject to development and long-term disturbance under the NPA. The Project and NPA would result in less-than-significant impacts to wildlife movement corridors, although impacts would be increased under the NPA due to the planned development along the San Jacinto River, which is a regional wildlife movement corridor. The NPA would have a greater potential to result in conflicts with the MSHCP due to the increase in areas proposed for development as compared to the proposed Project. Neither the Project nor the NPA would result in a conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and the level of impact would be similar.

E. Cultural Resources

Areas proposed for physical impact under the NPA would be similar to the proposed Project, except that under the Project the open space planned for proposed Planning Area 9 would be reduced in size from 20.8 acres under the NPA to 18.1 acres under the proposed Project, while open space within proposed Planning Area 10 under the proposed Project would be developed with residential uses under the NPA. Both the Project and the NPA would result in less-than-significant impacts to previously undiscovered subsurface historical resources with the implementation of mitigation measures, although the potential impact to previously-undiscovered historical resources would be slightly increased under the NPA due to the increase in areas that would be subject to ground disturbance as compared to the Project. Similarly, both the Project and NPA would result in less-than-significant impacts to previously-undiscovered archaeological resources and human remains with the implementation of mitigation measures, although the level of impact would be slightly increased under the NPA due to the increase in areas subject to ground disturbance under the NPA as compared to the Project.



F. Energy

Based on the rates utilized in Riverside County EIR No. 521, which was prepared to evaluate the County's 2015 General Plan Update, the NPA is projected to result in a demand for between 17.1 and 25.1 million kilowatt hours per year of electricity and between 186.6 and 197.7 million cubic feet per year of natural gas. (Riverside County, 2015, Tables 5.5-O and 5.5-P) With respect to transportation-related energy consumption, the NPA is projected to result in between 30,111 and 47,888 Average Daily Trips (ADT), whereas the Project is projected to generate between 23,624 and 23,894 ADT; thus, the NPA would result in an increase in demand for transportation-related energy sources as compared to the proposed Project. However, it is estimated that Project operational-related non-vehicular energy consumption would be approximately half of what would occur under the proposed Project. Neither the Project nor the NPA would result in the inefficient, wasteful, or unnecessary consumption of energy and impacts would be less than significant. Additionally, both the Project and NPA would be required to comply with adopted State and local plans related to energy conservation; thus, impacts would be less than significant and the level of impact would be similar.

G. Geology and Soils

There are no known faults on or trending towards the Project site; thus, impacts associated with rupture of a known fault would be less than significant and similar under the proposed Project and the NPA. However, the NPA is projected to result in a future residential population of between 6,484 and 6,977 and between approximately 735 and 2,077 employees, whereas the Project is anticipated to generate between 10,044 and 10,256 employees; thus, because the NPA would result in fewer people on site as compared to the Project, the Project's less-than-significant impacts due to strong seismic ground shaking would be reduced under the NPA (Riverside County, 2019a, Appendix E-1, Table E-5). Because development would occur over approximately the same area under the NPA and proposed Project, impacts due to unstable geologic units or soils that are unstable and that potentially could result in on- or off-site landslide, lateral spreading, collapse, or rockfall hazard would be similar and would be less than significant. Impacts associated with ground subsidence also would be similar under the Project and NPA. Neither the Project nor the NPA would be subject to geologic hazards, such as seiches, mudflow, or volcanic hazards; impacts would be less than significant and the level of impact would be similar. Grading activities would be similar under the Project and NPA; thus, impacts due to cut or fill slopes greater than 2:1 or higher than 10 feet would be similar and would be less than significant. Neither the Project nor the NPA would result in grading that affects or negates subsurface sewage disposal systems, and neither the Project nor the NPA would require septic tanks or alternative waste water disposal systems on unsuitable soils; thus, impacts would be less than significant and similar under the NPA and proposed Project. Similarly, impacts due to erosion hazards during construction and long-term operation would be similar under the NPA and proposed Project and impacts would be less than significant. Both the Project and NPA would require remediation of expansive soils on site; thus, impacts associated with expansive soils would be similar and would be less than significant.

H. Greenhouse Gas Emissions

Both the Project and NPA would be required through mitigation measures to achieve a minimum of 100 points per the Riverside County Climate Action Plan (CAP) Update Screening Tables (CAP Update Appendix D),



which would reduce impacts due to GHG emissions to below a level of significance. The level of significance due to GHG emissions would be similar. Neither the Project nor the NPA would conflict with applicable plans, policies, or regulations related to GHGs; thus, impacts would be less than significant and the level of impact would be similar.

I. Hazards and Hazardous Materials

Soil remediation to address existing soil contamination due to pesticides would be required under both the Project and NPA; thus, impacts due to existing site hazards would be less than significant with mitigation under both the Project and NPA, and the level of impact would be similar. The potential for hazardous materials under construction activities would be similar under the Project and NPA, and impacts would be less than significant. However, under long-term operational conditions, the Project has the potential to include businesses that handle hazardous materials whereas the NPA would consist primarily of a residential community. Thus, although long-term operational impacts due to hazards and hazardous materials would be less than significant under both the Project and NPA, the level of impact would be decreased under the NPA. Neither the Project nor the NPA would impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan; thus, impacts under the NPA and proposed Project would be less than significant and the level of impact would be similar. Although neither the Project nor the NPA would emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school, because the Project would involve businesses that have the potential for storage of hazardous materials impacts to nearby schools would be reduced in comparison to the Project's less-than-significant impacts. The Project site is not identified on any lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5; thus, no impact would occur under the Project or NPA, and the level of impact would be similar. Both the Project and NPA would involve land uses that would be consistent with the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan (ALUCP); thus, impacts due to airport-related hazards would be less than significant under both the Project and NPA, and the level of impact would be similar. The Project site is not located in the Airport Influence Area (AIA) of any private airports; thus, there would be no impacts due to private airport-related hazards and the level of impact would be the same.

J. Hydrology and Water Quality

Both the Project and the NPA would be subject to compliance with the Santa Ana Region Basin Plan, and would be required to comply with the requirements of the Santa Ana RWQCB and the County of Riverside. This includes the requirement to obtain a NPDES Municipal Stormwater Permit for construction activities, which requires the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) that would include measures to address water pollution, including sedimentation. Additionally, both the Project and NPA would be subject to NPDES requirements for long-term operations, which would reduce potential water quality impacts (including sediments) from construction to less-than-significant levels. Due to the relatively flat nature of the portions of the Project site proposed for development, it is not expected that the Project or NPA would result in substantial changes to the existing drainage system of the Project site and area; thus, impacts would be less than significant and the level of impact would be similar. Both the Project and NPA would be subject to future implementing hydrology studies as part of future implementing development



(e.g., tentative tract maps, plot plans, etc.), which would be required to demonstrate adequate capacity to handle runoff from the Project site; thus, impacts related to exceeding the capacity of existing or planned stormwater drainage facilities would be less than significant and the level of impact would be similar. The Project site is not subject to flood hazards, tsunamis, or seiche zones, and would have no impact on existing flood plains; thus, impacts due to pollution from inundation from flooding, tsunamis, and seiches would be less than significant, and the level of impact would be similar.

K. Land Use and Planning

Assuming approval of the Project’s proposed General Plan Amendment, both the Project and the NPA would be fully consistent with the Riverside County General Plan and Lakeview/Nuevo Area Plan (LNAP). Thus, impacts would be less than significant under both the Project and the NPA, and the level of impact would be similar. Both the Project and NPA also would be consistent with SCAG’s 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and as such impacts due to a conflict would be similar and less than significant. However, the NPA would be more compatible with existing and planned land uses in the surrounding area; thus, although the Project and NPA would have less-than-significant impacts due to land use compatibility, impacts would be reduced under the NPA as compared to the proposed Project. Additionally, neither the Project nor the NPA would disrupt or divide the physical arrangement of an established community; thus, impacts would be less than significant and the level of impact would be similar.

L. Mineral Resources

The Project site does not contain any known mineral resources that would be of value to the region or the residents of the State. Accordingly, no impacts to mineral resources would occur under the Project or the NPA, and the level of impact would be similar. Additionally, neither the Project nor the NPA would represent an incompatible land use located adjacent to a State classified or designated area or existing surface mine, and the NPA and Project would not expose people or property to hazards from proposed, existing, or abandoned quarries or mines. No impacts would occur, and the level of impact would be similar.

M. Noise

The Project site is located outside of areas subject to public and private airport-related noise levels exceeding 55 dBA CNEL; thus, impacts due to airport-related noise would be less than significant under both the Project and the NPA. Construction-related noise under the Project and NPA would be similar, and impacts due to construction noise would be reduced to below a level of significance under both the Project and NPA with the implementation of mitigation. Because the NPA would involve primarily residential development, noise impacts associated with long-term operations would be reduced under the NPA as compared to the Project, although Project operational impacts would be less than significant with the implementation of mitigation measures. With respect to transportation-related noise, although the NPA would generate more ADT than the proposed Project, the NPA would involve less heavy truck traffic. Thus, transportation-related noise would be similar to the proposed Project, and as such this alternative would reduce but would not avoid the Project’s significant and unavoidable impact due to traffic noise along the segment of Nuevo Road between the Project entrance and Dunlap Drive under EAP (2030) conditions. Construction-related vibration impacts would be similar under the Project and NPA, and impacts would be reduced to less-than-significant levels with



the implementation of mitigation measures. Under long-term operations, because the NPA would involve fewer heavy trucks, operational vibration impacts would be reduced under the NPA in comparison to the Project, although impacts would be less than significant under both the Project and NPA.

N. Paleontological Resources

Riverside County General Plan Figure OS-8 indicates that a majority of the Project site has a “High B” potential for containing paleontological resources. Under the NPA, grading activities would occur in the northeastern portions of the Project site that are planned for open space under the proposed Project. Thus, impacts to subsurface paleontological resources would be increased under the NPA, although impacts would be less than significant under both the Project and NPA with the implementation of mitigation measures.

O. Population and Housing

Neither the Project nor the NPA would result in the displacement of substantial numbers of existing people or housing, necessitating the construction of housing elsewhere; thus, no impact would occur under either the Project or NPA. Although the Project is not anticipated to result in an increased demand for affordable housing, impacts under the NPA would be reduced in comparison to the Project because the NPA would accommodate approximately 446 very high density (affordable) residential units. Although the type of development on site would vary between the Project and the NPA, neither the NPA nor the Project would represent substantial unplanned population growth as the Project site is currently planned for urban land uses by the County’s General Plan. Additionally, neither the Project nor the NPA would indirectly induce growth, as infrastructure improvements would be sized to accommodate only future development on site. Impacts to population and housing would be less than significant under both the Project and NPA, and the level of impact would be similar.

P. Public Services

The NPA would result in a similar level of development intensity on site as the proposed Project. As such, impacts to fire services, sheriff services, and health services would be similar and less than significant with payment of mandatory Development Impact Fees (DIF) in accordance with Riverside County Ordinance No. 659. The Project would not involve any residential development and is not anticipated to increase the County’s residential population, whereas the NPA would involve the construction of up to 2,173 dwelling units; thus, impacts to recreational and library facilities would be increased under the NPA as compared to the Project, although impacts would be less than significant with payment of DIF fees and the development of up to 33.7 acres of parks under the NPA. Additionally, the NPA would result in up to 2,173 residential dwelling units while the Project does not involve any residential uses; thus, impacts to school services would be increased under the NPA as compared to the Project, although impacts would be reduced to less-than-significant levels under the NPA with mandatory payment of school impact fees pursuant to Senate Bill 50 (SB 50).

Q. Recreation

The Project does not entail any residential uses while the NPA would involve up to 2,173 dwelling units and would generate approximately 6,977 future residents. Thus, while the Project would not result in an increase



in demand for recreational resources, the NPA would generate a demand for approximately 34.9 acres of parkland, based on the County's standard of 5.0 acres per 1,000 persons. The NPA only would accommodate 33.7 acres of parks on site. Thus, impacts to recreation would be increased under the NPA in comparison to the proposed Project, although impacts would be reduced to less-than-significant levels with payment of in-lieu park fees. Both the Project and NPA would involve the construction of recreational facilities on site, although such impacts would be inherent to the construction phase and the level of impact would be similar.

R. Transportation

The NPA is projected to result in between 30,111 and 47,888 Average Daily Trips (ADT), whereas the Project is projected to generate between 23,624 and 23,894 ADT; thus, the NPA would have a greater effect on projected Level of Service (LOS) as compared to the Project, although improvements and fair-share contributions would be required under both the Project and NPA to ensure that study area facilities achieve LOS D or better. The level of impact associated with off-site traffic improvements and potential conflicts with the County General Plan's LOS standards would be increased in comparison to the Project. Impacts due to hazardous geometric design features and incompatible uses would be less than significant under both the Project and the NPA, and the level of impact would be similar. Both the Project and the NPA would result in less-than-significant impacts due to the need for new or altered maintenance of roads. Both the Project and the NPA would have the potential to result in impacts to circulation during construction, including emergency access routes, although impacts would be reduced to less-than-significant levels with mitigation, and the level of impact after mitigation would be similar under the Project and NPA. Both the Project and NPA would be required to accommodate facilities for bicycles, although impacts associated with the construction of such trails have been evaluated herein, and both the Project and NPA would result in similar less-than-significant impacts due to bicycle facilities. With respect to VMT, the NPA would involve primarily the development of residential uses in a portion of the County that lacks employment opportunities. As such, it is anticipated that the NPA would result in increased VMT as compared to the proposed Project, although both the Project and NPA would result in significant and unavoidable impacts due to VMT.

S. Tribal Cultural Resources

Grading activities under the Project and NPA would be similar, although areas subject to grading would be slightly increased in comparison to the Project as areas in the northeast portion of the Project site that would be preserved as open space under the Project would instead be subject to development under the NPA. As such, potential impacts to tribal cultural resources would increase under the NPA as compared to the Project, although impacts would be less than significant with implementation of mitigation measures.

T. Utilities and Service Systems

The level of development intensity on site would be similar under both the Project and NPA. Both the Project and NPA would require the construction of water, wastewater, storm water drainage, electric power, natural gas, and telecommunication facilities. Impacts associated with the provision of such facilities would be similar and would be mitigated to less-than-significant levels with implementation of mitigation measures. The EMWD determined that it has sufficient water resources to accommodate development proposed as part of the Project, while the NPA is fully consistent with the growth assumptions used by EMWD for long-term planning



efforts. Thus, because EMWD would be able to provide potable water to both the Project and the NPA, impacts to water supply would be less than significant and the level of impact would be similar. Similarly, EMWD would have adequate capacity to treat wastewater generated by either the Project or the NPA; thus, impacts due to wastewater would be less than significant under both the Project and NPA, and the level of impact would be similar. Both the Project and NPA would be subject to the County's solid waste regulations, and neither the Project nor the NPA would result in the generation of solid waste that could adversely affect landfill capacity. Impacts associated with solid waste would be less than significant, and the level of impact would be similar under both the Project and NPA.

U. Wildfire

Both the Project and NPA would involve development of urban uses in adjacent to lands that are identified as having a high risk for wildfire hazards. Both the Project and NPA would be required to implement a Fire Protection Plan (FPP) to ensure that adequate provisions are accommodated, such as fuel management zones, to reduce the risk of wildfires. With implementation of mitigation and a FPP, impacts due to wildfires would be reduced to less-than-significant levels and the level of impact would be similar.

V. Conclusion

As compared to the proposed Project, the NPA would have increased impacts under the issue areas of air quality (regional operational emissions), biological resources, cultural resources, paleontological resources, public services (schools and parks), recreation, transportation, and tribal cultural resources. The NPA would result in the same or similar impacts under the issue areas of air quality (construction-related emissions and AQMP consistency), agriculture/forest resources, geology/soils, greenhouse gas emissions, hydrology/water quality, mineral resources, noise (construction and traffic-related noise), population/housing, public services (fire, police, and health care), utilities/service systems, and wildfire. The NPA would result in reduced impacts as compared to the Project under the issue areas of aesthetics, air quality (localized operational emissions), energy, hazards/hazardous materials, land use/planning, and noise (operational noise).

The NPA generally would not meet the Project's objectives. Although the NPA would accommodate up to 68.1 acres of commercial retail land uses, it would not result in the establishment of a complementary mix of employment-generating land uses, including light industrial and business park land uses. The NPA would introduce primarily residential uses in an area that has a high proportion of residents to the number of available jobs; thus, the NPA would not assist the SCAG region in attempting to achieve jobs/housing balance region-wide and the local area by providing additional job opportunities in a housing rich area of the Inland Empire. Although the NPA would accommodate 68.1 acres of employment-generating uses (i.e., commercial retail), the NPA would be less effective than the proposed Project in achieving the objective to attract new businesses to Riverside County and thereby provide a more equal jobs-housing balance in the Inland Empire region that will reduce the need for members of the local workforce to commute outside the area for employment. The NPA would be subject to the design guidelines and development standards of the adopted SP 239; thus, the NPA would meet the Project's objective to establish development standards and design guidelines to ensure future development on site complements other existing and planned uses in the immediate vicinity and minimizes conflicts with other nearby land uses. Similarly, the NPA would meet the Project's objective to



establish a unified thematic concept for future development through design elements such as architecture, monumentation, theme walls, and landscaping using a long-range comprehensive planning approach that cannot be accomplished on a parcel-by-parcel basis, as the development concept is established by the adopted SP 239. The NPA would not meet the Project's objective to anticipate market demand by providing a mixture of light industrial, business park, and commercial retail land uses in a master-planned commerce center that would be marketable within the evolving economic profile of western Riverside County. The NPA similarly would not meet the Project's objective to develop a mix of light industrial, business park, and commercial retail uses in unincorporated Riverside County that are designed to meet contemporary industry standards, can accommodate a wide variety of users, and are economically competitive with similar uses in the local area and region. The NPA would, however, meet the Project's objective to develop a property that has access to available infrastructure, including roads and utilities.

6.3.3 REDUCED PROJECT ALTERNATIVE

The RPA considers development of the Project site with similar uses as the proposed Project, but at a much lower intensity. Specifically, under the proposed Project, Light Industrial and Business Park land uses may be developed at a Floor Area Ratio (FAR) up to 0.50, while Commercial Retail land uses can be developed at a FAR up to 0.35. Under the RPA, development of Light Industrial and Business Park land uses would be restricted to a maximum FAR of 0.35, while development in the Commercial Retail portions of the site would be limited to a maximum FAR of 0.25. For purposes of evaluation of the RPA, it is assumed that the MCP would not be in place under long-term conditions, thereby allowing for more development on site than would occur if the MCP were to be implemented through the northern portions of the Project site. As previously summarized in Table 6-1, the RPA would allow for a maximum of 5,923,071 s.f. of light industrial building area, 748,579 s.f. of business park building area, and 87,120 s.f. of commercial retail building area. Thus, implementation of the RPA would result in a reduction of building area allowed on site by approximately 30% as compared to the proposed Project. Under the RPA, it is assumed that all areas proposed for grading and development both on and off site would be the same as for the proposed Project. This alternative was selected by the Lead Agency in order to evaluate an alternative that would reduce the Project's significant and unavoidable impacts to aesthetics, air quality, noise, and transportation.

A. Aesthetics

Under the RPA, the Project site would be developed in a manner similar to that of the proposed Project, although the amount of building area would be reduced by approximately 30% as compared to the proposed Project. As with the proposed Project, development on site would be required to comply with the development standards and design guidelines of proposed SP 239A1, in addition to all other applicable requirements of the County's Municipal Code. Similar to the proposed Project, development under the RPA would not be visible from any State-Designated or State-Eligible scenic highways, although development under both the Project and RPA would be visible from nearby segments of Ramona Expressway, which is identified as a County-Eligible scenic highway. Although both the Project and RPA would be required to comply with the development standards of proposed SP 239A1, visual quality impacts to the Ramona Expressway would be reduced under the RPA due to the reduction in intensity of development on site impacts under the RPA. Areas planned for disturbance and development under the RPA would be similar to the proposed Project. However,



because the RPA would be developed at a reduced intensity, implementation of the RPA would reduce the Project's significant and unavoidable impacts to the existing visual character and quality of public views of the site and its surroundings, although such impacts still would be significant and unavoidable under the RPA. Both the Project and the RPA would be subject to compliance with Riverside County Ordinance No. 655; however, because the RPA would involve less building area, potential impacts to the Mount Palomar Observatory associated with the RPA would be reduced in comparison to the Project. Similarly, although the Project and RPA would be subject to compliance with Riverside County Ordinance Nos. 655 and 915, which would ensure light and glare impacts would be less than significant, due to the reduction in building area under the RPA the RPA would result in reduced light and glare impacts as compared to the Project.

B. Agriculture and Forestry Resources

Areas proposed for physical impact and development under the RPA would be identical to the proposed Project. Thus, the RPA would not avoid the Project's significant and unavoidable impacts due to the conversion of approximately 297.8 acres of "Prime Farmland," approximately 24.6 acres of "Farmland of Statewide Importance," approximately 4.0 acres of "Unique Farmland," and approximately 180.3 acres of "Farmland of Local Importance" to non-agricultural use, and the level of impact would be the same. Neither the Project nor the RPA would result in a conflict with existing agricultural zoning or land subject to a Williamson Act or Riverside County Agricultural Preserve, and impacts would be less than significant and similar. Both the Project and the RPA would result in less-than-significant impacts due to a conflict with existing agricultural uses. Both the Project and the RPA would be subject to Riverside County Ordinance No. 625; thus, no conflicts with existing agricultural land uses would occur under the Project or the RPA, and impacts would be similar and less than significant. There are no other components of the Project or RPA that could result in the conversion of Farmland to non-agricultural use; thus, impacts would be less than significant and the level of impact would be similar. Neither the Project nor the RPA would result in impacts due to the conversion of forest land to non-forest uses, and the level of impact would be the same.

C. Air Quality

The RPA would require a reduction in building area by approximately 30% as compared to the proposed Project. Thus, construction activities associated with the RPA would result in fewer emissions of criterial pollutants as compared to the Project, although neither the Project nor the RPA would exceed the SCAQMD Regional Thresholds during the construction phase and construction-relate impacts would be less than significant. Under long-term operations, both the Project and the RPA would exceed the SCAQMD Regional Thresholds for ROG_s, NO_x, and CO, resulting in significant and unavoidable regional air quality impacts; however, because the total amount of building area would be reduced by 30% under the RPA as compared to the Project, the level of impacts would be substantially reduced under the RPA. With respect to the SCAQMD's localized thresholds of significance (LSTs), neither the Project nor the RPA would exceed the SCAQMD LSTs during construction, although impacts under the RPA would be reduced as compared to the Project due to the reduction in building area. Neither the Project nor the RPA would expose nearby sensitive receptors to cancer or non-cancer risks exceeding the SCAQMD thresholds of significance, although the level of impact would be reduced under the RPA due to the substantial reduction in building area and attendant reduction in the amount of truck traffic generated by the site. Neither the Project nor the RPA would result in



CO “hot spots,” although the amount of localized CO emission under the RPA would be reduced in comparison to the proposed Project. Although impacts due to odors would be less than significant under both the RPA and proposed Project, the level of impact would be slightly reduced under the RPA due to the reduction in proposed building area. Both the Project and the RPA would result in a significant and unavoidable impact due to a conflict with the SCAQMD AQMP, although impacts under the RPA would be reduced in comparison to the Project due to the substantial reduction in building area and associated air quality emissions.

D. Biological Resources

Areas planned for development and disturbance under the RPA would be identical to the proposed Project, although future on-site operations would be less intense than the Project due to the reduction in allowed building area. With mitigation, both the RPA and the proposed Project would be fully consistent with the MSHCP with the implementation of mitigation, although indirect impacts to the MSHCP Conservation Area (e.g., noise) would be reduced in comparison to the Project due to the reduction in building area. Impacts to special status plant species would be identical under the RPA and proposed Project, and impacts would be less than significant due to the preservation of sensitive habitats on site as natural open space. Both the Project and the RPA would have the significant but mitigatable construction-related impacts to nesting birds during the breeding season, although the level of impact would be reduced under the RPA because construction activities under the RPA would be less intense than for the proposed Project. With implementation and coverage of the Project under the MSHCP conservation goals, the Project and RPA would have a less-than-significant impact on special-status small mammal species, and the level of impact would be similar. Additionally, impacts to approximately 500 acres of foraging habitat for the golden eagle, tricolor blackbird, pocketed free-tailed bat, and western mastiff bat under both the RPA and proposed Project would be less than significant with mandatory compliance with the MSHCP, and the level of impact would be similar. Likewise, impacts to 10.37 acres of Riversidean sage scrub, which would potentially support live-in habitat for the coastal California gnatcatcher, as well as impacts to special status reptiles (California glossy snake, coast horned lizard, costal whiptail, and red-diamond rattlesnake) would be mitigated to below a level of significance through compliance with the MSHCP, and the level of impact would be similar under both the RPA and Project. Neither the Project nor the RPA would result in impacts to wildlife movement corridors, and the level of impact would be the same. Both the Project and RPA would result in similar impacts to 0.29 acre of Southern Riparian Scrub, a sensitive vegetation community, which would be reduced to less-than-significant levels with the implementation of compensatory mitigation. The Project and RPA would result in similar significant but mitigable impacts to 0.16 acre of wetlands within the San Jacinto River and associated floodplain, 0.97 acres of Corps jurisdiction, up to 0.981 acre of State waters under RWQCB jurisdiction (0.991 acre if the Southern Truck Route is implemented), up to 1.691 acres of CDFW jurisdiction (1.701 acres if the Southern Truck Route is implemented), and up to 1.691 acres of MSHCP Riparian/Riverine areas (1.701 acres if the Southern Truck Route is implemented), and the level of impact would be the same. Neither the Project nor the RPA would result in significant impacts due to a conflict with local policies or ordinances protecting biological resources, and the level of impact would be the same.



E. Cultural Resources

Areas planned for development and disturbance under the RPA would be identical to the proposed Project. As with the Project, the RPA would not result in any impacts to previously-identified historical resources. However, and similar to the proposed Project, potential impacts to previously-undiscovered historical resources on site or within the off-site improvement areas would be significant but would be mitigated to below a level of significance with implementation of the required mitigation. Both the Project and RPA would provide for the long-term preservation of all but one of the previously-identified archaeological sites located within the Project site. Although both the Project and RPA would result in impacts to Site SR-001, Site SR-001 was determined to not comprise a significant archaeological resource based on the criteria listed in Section 15064.5 of the State CEQA Guidelines. However, both the Project and the RPA require mitigation to reduce to less-than-significant levels potential impacts to previously-undiscovered archaeological resources that may be uncovered during construction. Additionally, both the Project and RPA have the potential to result in similar impacts to buried human remains during construction, although impacts to human remains would be mitigated to below a level of significance through mandatory compliance with California Health and Safety Code § 7050.5 and California Public Resources Code § 5097 et. seq.

F. Energy

Construction and operational characteristics associated with the RPA would be similar to the proposed Project, except that the total amount of building area would be reduced by approximately 30% as compared to the proposed Project. Although both the Project and RPA would be subject to compliance with all applicable energy conservation requirements, such as the California Green Building Standards Code, and would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during construction or long-term operation, due to the reduction in building area under the RPA as compared to the proposed Project the RPA would result in a reduction of the Project's less-than-significant impacts due to energy consumption. The Project and the RPA would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency; thus, no impact would occur and the level of impact would be similar.

G. Geology and Soils

Construction and development characteristics associated with the RPA are very similar to the proposed Project, except that there would be less building area under the RPA as compared to the Project. Both the Project and the RPA would require mitigation to reduce impacts due to strong seismic ground shaking to below a level of significance; however, the RPA would expose fewer people to strong seismic shaking due to the reduction in building area and associated reduction in the number of employees on site. Both the Project and RPA would require mitigation to reduce impacts associated with liquefaction to less-than-significant levels, and the level of impact would be similar. Similarly, both the Project and RPA would require mitigation to reduce to less-than-significant levels impacts associated with landslide hazards, lateral spreading, collapse hazards, rockfall hazards, and subsidence, and the level of impact would be similar. Neither the Project nor the RPA would result in impacts associated with volcanos, seiches, or mudflow hazards, and the level of impact would be similar. Both the Project and the RPA would require mitigation to reduce to less-than-significant levels potential impacts due to proposed slopes greater than 2:1 or higher than 10 feet, although the level of impact



would be reduced under the RPA as there likely would be fewer manufactured slopes required due to the reduction of building intensity on site. Neither the Project nor the RPA would result in significant impacts to subsurface sewage disposal systems, and the level of impact would be the same. With mandatory compliance with a SWPPP and WQMP to address construction and long-term operations, erosion impacts would be less than significant under the Project and RPA and the level of impact would be similar. Both the Project and RPA would require mitigation to reduce potential impacts associated with expansive soils to less-than-significant levels, and the level of impact would be similar.

H. Greenhouse Gas Emissions

Under the RPA, there would be a reduction in building area on site by approximately 30% as compared to the proposed Project. As such, there would be an approximate 30% reduction in the amount of GHGs produced on site during both construction and long-term operations. While both the Project and the RPA would require mitigation to ensure compliance with the Riverside County CAP, which would reduce GHG-related impacts to less-than-significant levels, impacts would be substantially reduced under the RPA as compared to the proposed Project. Both the Project and the RPA would be consistent with the CARB 2008 Scoping Plan and the CARB 2017 Scoping Plan, and both the Project and RPA would require mitigation to ensure compliance with the Riverside County CAP; thus, potential impacts due to a conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases would be reduced to less-than-significant levels under both the Project and RPA, and the level of impact would be similar.

I. Hazards and Hazardous Materials

Both the Project and the RPA would require mitigation to reduce to less-than-significant levels impacts associated with existing site contamination due to the past use of the site for agricultural production, and the level of impact would be similar. Neither the Project nor the RPA would impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan; thus, no impact would occur under the RPA or the proposed Project and the level of impact would be the same. Compliance with applicable federal, State, and local regulations would ensure that neither the Project nor the RPA would result in hazardous emissions or hazardous materials impacts affecting schools; thus, impacts would be less than significant, although the level of impact would be slightly reduced under the RPA due to the less intensive operations on site. The Project site is not located on any list of hazardous materials sites compiled pursuant to Government Code Section 65962.5; thus, no impact would occur under the RPA or the proposed Project, and the level of impact would be the same. With standard conditions of approval requiring compliance with the conditions of approval issued by the ALUC, both the proposed Project and RPA would be fully consistent with the March ARB ALUCP; thus, impacts would be less than significant under both the Project and RPA, although the level of impact under the RPA would be slightly reduced due to the reduction in on-site employment as compared to the Project. There are no private airstrips or heliports within two miles of the Project site; thus, no impact from private airstrips or heliports would occur with implementation of the Project or RPA, and the level of impact would be similar.



J. Hydrology and Water Quality

Neither the Project nor the RPA would involve groundwater production, and thus would have no direct impacts on groundwater supplies. However, both the Project and RPA would require mitigation to ensure runoff from the site does not impair surface or groundwater quality, although the level of impact would be reduced under the RPA due to the reduced development intensity on site as compared to the Project. Both the Project and RPA would require mitigation measures to reduce to less-than-significant levels potential erosion and flood hazards downstream, although the level of impact under the RPA would be reduced due to the reduction in impervious surfaces as compared to the Project. The Project and RPA would result in less-than-significant impacts due to the release of pollutants caused by flood hazards, tsunamis, and seiches, and the level of impact would be similar.

K. Land Use and Planning

Assuming approval of a General Plan Amendment, both the Project and RPA would be fully consistent with the Riverside County General Plan and LNAP, and the SCAG 2020-2045 RTP/SCS; thus, impacts would be less than significant and the level of impact would be similar. With mandatory compliance with the County's Good Neighbor Guidelines, in addition to implementation of measures to address other environmental issues (e.g., air quality, etc.), potential impacts due to land use compatibility under both the Project and RPA would remain less than significant, and the level of impact would be similar. Neither the Project nor the RPA would physically disrupt or divide the arrangement of an established community; thus, impacts would be less than significant and the level of impact would be similar.

L. Mineral Resources

The Project site does not contain any known mineral resources that would be of value to the region or the residents of the State. Accordingly, no impacts to mineral resources would occur under the Project or the RPA, and the level of impact would be similar. Additionally, neither the Project nor the RPA would represent an incompatible land use located adjacent to a State classified or designated area or existing surface mine, and the RPA and Project would not expose people or property to hazards from proposed, existing, or abandoned quarries or mines. No impacts would occur, and the level of impact would be similar.

M. Noise

The Project site also occurs outside of the 55 dBA CNEL contours for both the MARB Airport and Perris Valley Airport; thus, impacts due to aircraft noise would be less than significant under the Project and RPA, and the level of impact would be similar. Both the Project and the RPA would require construction of the proposed off-site water lines, and would require mitigation to reduce construction-related noise to below a level of significance. Impacts would be similar. Both the Project and the RPA would require mitigation measures to ensure long-term operational noise does not expose nearby sensitive receptors to nighttime noise levels exceeding the County's standard of 45 dBA; however, due to the less intense development on site under the RPA, impacts would be reduced under the RPA as compared to the Project. Both the Project and RPA would result in a significant direct impact due to traffic-related noise increases along the segment of Nuevo Road between the Project site entrance and Dunlap Road under EAP (2030) conditions; however, because the



RPA would produce approximately 30% less traffic than the proposed Project, the RPA would result in reduced traffic-related noise impacts as compared to the proposed Project. Both the Project and the RPA would require mitigation to reduce to less-than-significant levels vibration impacts associated with the off-site water line construction and due to blasting activities at the water tank site, and the level of impact would be similar.

N. Paleontological Resources

Although the Project site does not contain any known paleontological resources or geological features, the Project site is underlain by soils and geologic units with a “High B” potential for containing unique paleontological resources. Thus, both the Project and RPA would require mitigation, in the form of a Paleontological Resource Impact Mitigation Program (PRIMP) to reduce impacts to below a level of significance. Because areas proposed for grading and disturbance would be the same under the RPA and proposed Project, potential impacts to paleontological resources would be the same.

O. Population and Housing

Neither the Project nor the RPA would result in the displacement of substantial numbers of existing people or housing, necessitating the construction of housing elsewhere; thus, no impact would occur under either the Project or RPA. The RPA would result in the generation of approximately 7,183 new recurring jobs within the County, while the Project would result in between 10,256 and 10,044 jobs. Thus, as compared to the Project, the RPA would result in a reduced demand for housing. However, it is anticipated that future employees under the RPA or proposed Project would be accommodated by existing residential communities and/or by future residential uses to be constructed in accordance with the General Plan Land Use Plan, and that no additional housing, including housing affordable to households earning 80% or less of the County’s median income, would be required to accommodate Project-related employees. As such, impacts to housing would be less than significant under both the Project and RPA, although impacts would be slightly reduced under the RPA due to the reduction in employees. With respect to unplanned population growth, because the Project site is designated for development with urban uses by the General Plan, LNAP, and SP 239, and because both the Project and RPA would accommodate employment opportunities in a portion of Riverside County that has a relatively low ratio of jobs to housing, the Project would not directly induce substantial unplanned population growth in the area, impacts would be less than significant, and the level of impact would be similar. Similarly, because all infrastructure improvements under the RPA and proposed Project would be sized to accommodate only development on site, both the Project nor the RPA would result in less-than-significant indirect impacts due to unplanned population growth.

P. Public Services

Both the Project and the RPA would be subject to payment of DIF fees, which would reduce to less-than-significant levels potential impacts to fire protection and sheriff facilities. However, due to the decrease in development intensity under the RPA, impacts to fire protection and sheriff facilities would be reduced under the RPA as compared to the Project. Neither the Project nor the RPA would result in direct impacts to school or library facilities, although both the Project and the RPA have the potential to indirectly contribute to the need for new or expanded schools and/or library facilities in the area. However, there are no plans available for any new or expanded school or library facilities; thus, any analysis of potential impacts due to new or



expanded school or library facilities would be speculative. Because the RPA would result in fewer employees on site as compared to the Project, the RPA would result in reduced impacts to schools and libraries, although impacts would be less than significant under both the Project and RPA. Although payment of DIF fees would reduce potential impacts to health service facilities to below a level of significance under both the Project and the RPA, because the RPA would generate fewer employees, the RPA would result in reduced impacts to health service facilities as compared to the Project.

Q. Recreation

Neither the Project nor the RPA would result in a direct demand for recreational resources, as no new residents would be generated; thus, neither the Project nor the RPA would result in the increased use of existing recreational facilities such that substantial physical deterioration of these facilities would occur or be accelerated. Thus, impacts to existing recreational facilities would be less than significant under the Project and RPA, although impacts under the RPA would be slightly reduced due to the reduction in on-site employment. Proposed on-site recreational resources, including the proposed community trail along Antelope Road, would be the same under both the Project and RPA. Impacts due to on-site recreational facility construction have been evaluated throughout this EIR, and there would be no impacts to the environment specifically related to the construction of proposed trails and pedestrian facilities that have not already been addressed throughout this EIR (i.e., for impacts to biological or cultural resources). Impacts due to the construction of on-site recreational facilities would be the same under the Project and RPA and would be less than significant. Neither the Project nor the RPA are located within any CSAs established for recreational resources, and the light industrial, business park, and commercial retail uses under both the Project and the RPA do not require the payment of Quimby fees pursuant to Section 10.35 of Riverside County Ordinance No. 460; thus, impacts under both the Project and RPA would be less than significant, and the level of impact would be similar.

R. Transportation

Both the Project and the RPA would be conditioned to require construction of improvements, payment of DIF and TUMF fees, and payment of fair-share contributions towards improvements not included in any existing fee programs, which would ensure consistency with the General Plan policies related to Level of Service (LOS); thus, impacts would be less than significant under the RPA and proposed Project, although environmental effects under the RPA would be reduced due to the substantial reduction in traffic as compared to the Project. Impacts due to hazardous geometric design features and incompatible uses would be less than significant under both the Project and the RPA, and the level of impact would be similar. Both the Project and the RPA would result in less-than-significant impacts due to the need for new or altered maintenance of roads. Both the Project and the RPA would have the potential to result in impacts to circulation during construction, including emergency access routes, although impacts would be reduced to less-than-significant levels with mitigation, and the level of impact after mitigation would be similar under the Project and RPA. Both the Project and RPA would be required to accommodate facilities for bicycles, although impacts associated with the construction of such trails have been evaluated herein, and both the Project and RPA would result in similar less-than-significant impacts due to bicycle facilities. Because the Project and RPA would involve similar land uses, it is expected that both the Project and the RPA would result in significant and unavoidable impacts



due to VMT. However, due to the reduced development intensity on site, the RPA would generate fewer overall VMT as compared to the Project; thus, impacts due to VMT would be reduced under the RPA.

S. Tribal Cultural Resources

Grading activities under the Project and RPA would be the same. As such, potential impacts to tribal cultural resources would be the same under the RPA and proposed Project, and impacts would be less than significant with implementation of mitigation measures.

T. Utilities and Service Systems

Both the Project and RPA would require the construction of water, wastewater, storm water drainage, electric power, natural gas, and telecommunication facilities. Impacts associated with the provision of such facilities would be similar and would be mitigated to less-than-significant levels with implementation of mitigation measures. The EMWD determined that it has sufficient water resources to accommodate development proposed as part of the Project, and therefore also would have sufficient water resources to serve the RPA. However, due to the reduction in development intensity on site, the RPA would result in a substantial reduction in demand for water resources, thereby reducing the Project's less-than-significant impacts to water supply. Similarly, EMWD would have adequate capacity to treat wastewater generated by either the Project or the RPA; thus, impacts due to wastewater would be less than significant under both the Project and RPA, although the level of impact would be reduced under the RPA as the RPA would generate less wastewater requiring treatment. Both the Project and RPA would be subject to the County's solid waste regulations, and neither the Project nor the RPA would result in the generation of solid waste that could adversely affect landfill capacity. Impacts associated with solid waste would be less than significant, although the level of impact would be reduced under the RPA as compared to the Project because the RPA would generate less solid waste requiring disposal at regional landfills.

U. Wildfire

Both the Project and RPA would involve development of urban uses in adjacent to lands that are identified as having a high risk for wildfire hazards. Both the Project and RPA would be required to implement a Fire Protection Plan (FPP) to ensure that adequate provisions are accommodated, such as fuel management zones, to reduce the risk of wildfires. With implementation of mitigation and a FPP, impacts due to wildfires would be reduced to less-than-significant levels and the level of impact would be similar.

V. Conclusion

As compared to the proposed Project, the RPA would result in reduced impacts under the issues of aesthetics, air quality, energy, geology/soils, GHG emissions, hazards/hazardous materials, hydrology/water quality, noise, population/housing, public services, recreation, transportation, and utilities/service systems. Implementation of the RPA would result in similar impacts to the proposed Project under the issue areas of agriculture/forestry resources, biological resources, cultural resources, land use/planning, mineral resources, paleontological resources, tribal cultural resources, and wildfire. The RPA would not result in any increased



impacts to the environment in comparison to the proposed Project. In accordance with State CEQA Guidelines § 15126.6(e)(2), the RPA is identified as the environmentally superior alternative.

The RPA would meet the Project's objectives, but generally to a lesser extent. Specifically, the RPA would result in the development of an underutilized property with a complementary mix of employment-generating land uses, including light industrial, business park, and commercial retail land uses, although due to the reduction in building intensity on site as compared to the Project the RPA would result in a less efficient development of the property. The RPA would assist the SCAG region in attempting to achieve jobs/housing balance region-wide and the local area by providing additional job opportunities in a housing rich area of the Inland Empire; however, because the RPA would generate fewer jobs, the RPA would be less effective than the proposed Project in meeting this objective. Similarly, the RPA would attract new businesses to Riverside County and thereby provide a more equal jobs-housing balance in the Inland Empire region that will reduce the need for members of the local workforce to commute outside the area for employment; however, because the RPA would involve fewer jobs, the RPA would be less effective than the proposed Project in providing for a more equal jobs-housing balance in the local area. The RPA would meet the Project's objective to establish development standards and design guidelines to ensure future development on site complements other existing and planned uses in the immediate vicinity and minimizes conflicts with other nearby land uses. Additionally, the RPA would meet the Project's objective to establish a unified thematic concept for future development through design elements such as architecture, monumentation, theme walls, and landscaping using a long-range comprehensive planning approach that cannot be accomplished on a parcel-by-parcel basis. The RPA would accommodate market demand by providing a mixture of light industrial, business park, and commercial retail land uses in a master-planned commerce center that would be marketable within the evolving economic profile of western Riverside County; however, due to the reduction in building intensity on site, the RPA would be less effective at meeting this objective. The RPA would meet the Project's objectives to develop a mix of light industrial, business park, and commercial retail uses in unincorporated Riverside County that are designed to meet contemporary industry standards, can accommodate a wide variety of users, and are economically competitive with similar uses in the local area and region, and to develop a property that has access to available infrastructure, including roads and utilities.



Table 6-2 Alternatives to the Proposed Project – Comparison of Environmental Impacts

Environmental Topic	Proposed Project Significance of Impacts After Mitigation	Level of Impact Compared to the Proposed Project/Compliance with Project Objectives		
		No Project/No Development Alternative (NDA)	No Project Alternative (Existing General Plan) (NPA)	Reduced Project Alternative (RPA)
Aesthetics	Significant and Unavoidable Direct and Cumulatively-Considerable Impact	Reduced to Less-than-Significant Levels	Reduced	Reduced
Agriculture and Forestry Resources	Significant and Unavoidable Direct and Cumulatively-Considerable Impact	Reduced to Less-than-Significant Levels	Similar	Similar
Air Quality	Significant and Unavoidable Direct and Cumulatively-Considerable Impacts	Reduced to Less-than-Significant Levels	Increased	Reduced
Biological Resources	Less than Significant	Reduced	Increased	Similar
Cultural Resources	Less than Significant	Reduced	Increased	Similar
Energy	Less than Significant	Reduced	Construction: Similar Vehicular Operational Energy: Increased Facility Operational Energy: Reduced	Reduced
Geology and Soils	Less than Significant	Reduced	Similar	Reduced
Greenhouse Gas Emissions	Less than Significant	Reduced	Similar	Reduced
Hazards and Hazardous Materials	Less than Significant	Most Issues: Reduced Contaminated Soils: Increased	Reduced	Reduced
Hydrology and Water Quality	Less than Significant	Most Issues: Reduced Erosion/Siltation: Increased	Similar	Reduced
Land Use and Planning	Less than Significant	Similar	Reduced	Similar
Mineral Resources	Less than Significant	Similar	Similar	Similar
Noise	Significant and Unavoidable Cumulatively-Considerable Impact (Primary Land Use Plan only)	Reduced to Less-than-Significant Levels (Primary Land Use Plan only)	Construction: Similar Long-Term Operations: Reduced Vehicular-Related Noise: Similar	Reduced
Paleontological Resources	Less than Significant	Reduced	Increased	Similar
Population and Housing	Less than Significant	Reduced	Similar	Reduced
Public Services	Less than Significant	Reduced	Police/Fire/Health: Similar Schools/Libraries: Increased	Reduced
Recreation	Less than Significant	Similar	Increased	Reduced
Transportation	Significant and Unavoidable Direct and Cumulatively-Considerable Impacts	Reduced to Less-than-Significant Levels	Increased	Reduced
Tribal Cultural Resources	Less than Significant	Reduced	Increased	Similar
Utilities and Service Systems	Less than Significant	Reduced	Similar	Reduced
Wildfire	Less-than-Significant	Reduced	Similar	Similar
Objective A: To efficiently develop an underutilized property with a complementary mix of employment-generating land uses, including light industrial, business park, and commercial retail land uses.		No	No	Yes, but less effectively



Environmental Topic	Proposed Project Significance of Impacts After Mitigation	Level of Impact Compared to the Proposed Project/Compliance with Project Objectives		
		No Project/No Development Alternative (NDA)	No Project Alternative (Existing General Plan) (NPA)	Reduced Project Alternative (RPA)
Objective B: To assist the SCAG region in attempting to achieve jobs/housing balance region-wide and the local area by providing additional job opportunities in a housing rich area of the Inland Empire.		No	No	Yes, but less effectively
Objective C: To attract new businesses to Riverside County and thereby provide a more equal jobs-housing balance in the Inland Empire region that will reduce the need for members of the local workforce to commute outside the area for employment.		No	No	Yes, but less effectively
Objective D: To establish development standards and design guidelines to ensure future development on site complements other existing and planned uses in the immediate vicinity and minimizes conflicts with other nearby land uses.		No	Yes	Yes
Objective E: To establish a unified thematic concept for future development through design elements such as architecture, monumentation, theme walls, and landscaping using a long-range comprehensive planning approach that cannot be accomplished on a parcel-by-parcel basis.		No	Yes	Yes
Objective F: To anticipate market demand by providing a mixture of light industrial, business park, and commercial retail land uses in a master-planned commerce center that would be marketable within the evolving economic profile of western Riverside County.		No	No	Yes, but less effectively
Objective G: To develop a mix of light industrial, business park, and commercial retail uses in unincorporated Riverside County that are designed to meet contemporary industry standards, can accommodate a wide variety of users, and are economically competitive with similar uses in the local area and region.		No	No	Yes
Objective H: To develop a property that has access to available infrastructure, including roads and utilities		No	Yes	Yes



7.0 REFERENCES

7.1 PERSONS INVOLVED IN THE PREPARATION OF THIS EIR

7.1.1 COUNTY OF RIVERSIDE PLANNING DIVISION

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7.2 DOCUMENTS APPENDED TO THIS EIR

The following reports, studies, and supporting documentation were used in preparing the Stoneridge Commerce Center SPA 1 EIR and are bound separately as Technical Appendices. A copy of the Technical Appendices is available for review at the Riverside County Planning Department, 4080 Lemon Street, 12th Floor, Riverside, CA 92502.

Appendix A: Initial Study for Stoneridge Commerce Center SPA 1, Notice of Preparation, and Written Comments

Appendix B1: ECORP Consulting, Inc. (ECORP), 2020b. *Air Quality & Greenhouse Gas Assessment, Stoneridge Commerce Center Specific Plan*. December 2020.

Appendix B2: ECORP Consulting, Inc. (ECORP), 2021a. *Stoneridge Commerce Center Alternative Truck Route*. April 21, 2021.

Appendix C1: Glenn Lukos Associates, Inc. (GLA), 2022a. *Biological Technical Report for Stoneridge Commerce Center*. February 24, 2022.

Appendix C2: Glenn Lukos Associates, Inc. (GLA), 2022b. *Jurisdictional Delineation of the Stoneridge Commerce Center and the Northerly and Southerly Offsite Truck Route Road Improvements and Use Project [SP00239A01]*. February 4, 2022.

Appendix D1: ECORP Consulting, Inc. (ECORP), 2019. *Phase I Cultural Resources Assessment for the Stoneridge Project, Riverside County, California*. July 2019.



- Appendix D2: ECORP Consulting, Inc. (ECORP), 2020a. *Addendum Phase I Cultural Resources Assessment for the Stoneridge Project, Offsite Limits of Disturbance, Riverside County, California*. February 2020.
- Appendix D3: Brian F. Smith and Associates, Inc. (BFSA), 2020. *A Phase II Cultural Resources Significance Evaluation Program for the Stoneridge Commerce Center Project*. August 6, 2020.
- Appendix D4: Brian F. Smith and Associates, Inc. (BFSA), 2021. *Archaeological Site Inventory of Planning Area 9 of the Stoneridge Commerce Center Project (GPA190008; CZ1900024; SP239A1), County of Riverside, California*. June 14, 2021.
- Appendix D5: ECORP Consulting, Inc. (ECORP), 2021b. *Addendum Phase I Cultural Resources Assessment for the Stoneridge Project, Offsite Intersection Improvement Areas, Riverside County, California*. May 2021.
- Appendix E: Urban Crossroads, Inc., 2020a. *Stoneridge Commerce Center Specific Plan (SP No. 239, A1) Energy Analysis*. December 28, 2020.
- Appendix F: LGC Geotechnical, Inc. (LGC), 2021. *Updated Geotechnical Evaluation, Proposed “Stoneridge” Industrial and Mixed-Use Development, Tentative Tract Map No. 32372, Unincorporated Area of Riverside County, California*. August 18, 2021.
- Appendix G: Hillmann Consulting, 2019. *Phase I Environmental Site Assessment*. April 10, 2019.
- Appendix H1: Hunsaker & Associates (Hunsaker), 2021a. *Preliminary Hydrology Analysis TTM 32372 – ‘Stoneridge Industrial*. August 2021.
- Appendix H2: Hunsaker & Associates (Hunsaker), 2021b. *Project Specific Water Quality Management Plan Stoneridge Industrial*. August 12, 2021.
- Appendix I: T&B Planning, Inc., 2022. *General Plan Consistency Analysis for Amendment No. 1 to the Stoneridge Commerce Center Specific Plan No. 239*. March 9, 2022.
- Appendix J1: ECORP Consulting, Inc. (ECORP), 2020c. *Noise Impact Assessment Stoneridge Commerce Center Specific Plan*. August 2020.
- Appendix J2: ECORP Consulting, Inc. (ECORP), 2021d. *Stoneridge Commerce Center Specific Plan Alternative Truck Route– Noise Technical Memorandum*. April 2021.
- Appendix J3: Urban Crossroads, Inc. (Urban Crossroads), 2022a. *Stoneridge Commerce Center Specific Plan Supplemental Noise Assessment*. March 9, 2022.



- Appendix J4: Urban Crossroads, Inc. (Urban Crossroads), 2022b. *Stoneridge Commerce Center Specific Plan (SP No. 239, A1) Alternative Truck Access Route Noise Assessment (Southern Truck Route)*. March 7, 2022.
- Appendix K: ECORP Consulting, Inc. (ECORP), 2019b. *Paleontological Resources Assessment Stoneridge Project*. July 31, 2019.
- Appendix L1: Urban Crossroads, Inc. (Urban Crossroads), 2022c. *Stoneridge Commerce Center Specific Plan (SP No. 239 A1) Traffic Impact Analysis*. March 8, 2022.
- Appendix L2: Urban Crossroads, Inc. (Urban Crossroads), 2020b. *Stoneridge Commerce Center Specific Plan (SP No. 239, A1) Vehicle Miles Travelled (VMT) Analysis*. December 23, 2020.
- Appendix L3: Urban Crossroads, Inc. (Urban Crossroads), 2022d. *Stoneridge Commerce Center Specific Plan (SP No. 239A1) Alternative Truck Access Route Assessment (Southern Truck Route)*. March 8, 2022.
- Appendix M: Eastern Municipal Water District (EMWD), 2020a. *Water Supply Assessment Report Stoneridge Commerce Center SP 239, Amendment #1*. June 11, 2020.
- Appendix N: Dudek, 2019. *Fire Protection Plan Stoneridge Commerce Center County of Riverside*. November 2019.
- Appendix O: Project Application Materials
- Appendix P: Draft Specific Plan No. 239, Amendment No. 1

7.3 DOCUMENTS INCORPORATED BY REFERENCE IN THIS EIR

The following reports, studies, and supporting documentation were used in the preparation of this EIR and are incorporated by reference within this EIR. A copy of the following reports, studies, and supporting documentation is a matter of public record and is generally available to the public at the location listed

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