



SYCAMORE HILLS DISTRIBUTION CENTER

Draft Environmental Impact Report

SCH#2020079023

prepared for
City of Riverside
Community Economic Development Department, Planning Division
3900 Main Street, 3rd Floor
Riverside, California 92522
Contact: Veronica Hernandez, Senior Planner

prepared by
Ruth Villalobos & Associates, Inc.
3602 Inland Empire Blvd., Suite C310
Ontario, CA 91764

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RVA

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Acronyms, Units of Measurement, Chemical Symbols

Acronyms, units of measurement and chemical symbols used throughout the Draft EIR are identified in this section.

Acronyms

AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
A.D.	Anno Domini
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
AFB	Sycamore Canyon-March Air Force Base
AGL	Above Ground Level
AGR	Agricultural Supply
ALUC	Riverside County Airport Land Use Commission
AMSL	Above Mean Sea Level
APE	Area of Potential Effects
AQMP	Air Quality Management Plan
ASTM	American Society for Testing and Materials

Acronyms

BDCP	Bay Delta Conservation Plan
BCC	United States Fish and Wildlife Service Birds of Conservation Concern
BDCP	Bay Delta Conservation Plan
BMPs	Best Management Practices
BMP-SP	Business and Manufacturing Park and Specific Plan
B/OP	Business Office Park
B.P.	Before Present
BSA	Biological Study Area
BTU	British Thermal Units
BUOW	Burrowing Owl
C	Commercial
CAA	Clean Air Act
CA FID UST	Facility Inventory Database
CA MUTCD	Caltrans California Manual on Uniform Traffic Control Devices
Cal/ARP	California Emergency Management Agency's Accidental Release Prevention
CAL/EPA	California Environmental Protection Agency
Cal OES	Governor's Office of Emergency Service
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CASSA	Criteria Area Species Survey Area
CBC	California Building Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDC	Center for Disease Control and Prevention
CDFW	California Department of Fish and Wildlife
CDSG	Citywide Design Guidelines and Sign Guidelines
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCIS	Compensation and Liability Information System
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFC	California Fire Code
CFR	Code of Federal Regulations
CGS	California Geological Survey
CHMIRS	California Hazardous Material Incident Report System
CHRIS	California Historical Resources Information System
CHSC	California Heath and Safety Code
CHWMP	County Hazardous Waste Management Plan

Acronyms

CLUP	Comprehensive Land Use Plans
CMA	Congestion Management Agency
CMP	Congestion Management Plan
CNDDB	California Native Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
COG	Council of Governments
CPF	Cancer Potency Factor
CPUC	California Public Utilities Commission
CR	Commercial Retail Zone
CRA	Colorado River
CRHR	California Register of Historic Resources
CRPR	California Rare Plant Rank
CSS	Cross-Street Stop
CTC	County Transportation Commissions
CWA	Clean Water Act
DAMP	Riverside County Drainage Area Management Plan
DAP	Drought Allocation Plan
DBESP	Determination of Biologically Equivalent or Superior Preservation
DCV	Design Capture Volume
DEIR	Draft Environmental Impact Report
DIF	Development Impact Fee
DMA	Drainage Management Area
DMV	Department of Motor Vehicles
DNL	Day-Night Level
DOD	Department of Defense Sites
DPM	Diesel Particulate Matter
DTSC	Department of Toxic Substance Control
DWR	Department of Water Resources
EDR	Environmental Data Resources, Inc.
EHS	Extremely Hazardous Substance
EIA	Energy Information Administration
EIC	Eastern Information Center
EIR	Environmental Impact Report
EMI	Emissions Inventory Data
EMFAC	Emission Factor
EMO	Emergency Management Office
EMS	Emergency Medical Services
EO	Executive Order
EOC	Emergency Operations Center
EPA	Environmental Protection Agency

Acronyms

EMR	Electromagnetic Radiation
EMS	Emergency Medical Services
ESA	Endangered Species Act
ESRP	Eastside Reservoir Project
EV	Electric vehicle
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FE	Federally Endangered
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FPEIR	Final Program Environmental Impact Report
FTA	Federal Transit Administration
GAP	Green Accountability Performance
GHG	Greenhouse Gas
GP 2025	City of Riverside General Plan 2025
GP 2025 FPEIR	City of Riverside General Plan 2025 Final Program Environmental Impact Report
GWMP	Groundwater Management Plan
GWP	Global Warming Potential
GWR	Groundwater Recharge
HBW	Home-Based Work
HCOC	Hydrologic Conditions of Concern
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HERO	Home Energy Renovation Opportunity
HHDT	Heavy-Heavy-Duty Trucks
HIST UST	Hazardous Substance Storage Container Database
HMBP	Hazardous Materials Business Plan
HMMA	California Hazardous Material Management Act
HMTA	Hazardous Materials Transportation Act
HPS	High Pressure Sodium
HRA	Health Risk Assessment
HSC	Public Health and Safety Code
HVAC	Heating, ventilating, and air-conditioning
HWCL	California Hazardous Waste Control Law
IEPC	International Electric Propulsion Conference
IEPR	Integrated Energy Policy Report
IPA	Inland Port Airport
IPM	Integrated Pest Management

Acronyms

IS/NOP	Initial Study/Notice of Preparation
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ITE	Institute of Transportation Engineers
LBVI	Least Bell's Vireo
LDA	Light Duty Autos
LDMF	Local Development Mitigation Fee
LED	Light-Emitting Diode
LHDT	Light-Heavy-Duty-Trucks
LHMP	Local Hazard Mitigation Plan
LID	Low-Impact Development
LOS	Level of Service
LPS	Low Pressure Sodium
LQG	Large Quantity Generators
LST	Localized Significance Thresholds
LUCP	Land Use Compatibility Plan
LUST	Leaking Underground Storage Tank
MARB	March Air Reserve Base
MATES	Multiple Air Toxics Exposure Study
MAWA	Maximum Applied Water Allowance
MBTA	Migratory Bird Treaty Act
MDR	Medium Density Residential
MEIR	Maximally Exposed Individual Receptor
MEISC	Maximum Exposed Individual School Child
MEIW	Maximally Exposed Individual Worker
MGD	Maximum Extend Practicable
MHDTs	Medium-Heavy-Duty-Trucks
MJPA	March Joint Powers Authority
MLD	Most Likely Descendant(s)
MMT CO_2E	Million metric tons of carbon dioxide equivalent
MOE	Measures of Effectiveness
MOU	Memorandum of Understanding
mph	Miles per hour
MPO	Metropolitan Planning Organization
MS4	Municipal Separate Storm Sewer System
MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan
MUN	Municipal and Domestic Supply
MWD	Metropolitan Water District
MWP	Medieval Warm Period
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NAHC	Native American Heritage Commission

Acronyms

NCCP	Natural Communities Conservation Plan
NHMLAC	National History Museum of Los Angeles County
NIMS	National Incident Management System
NOP	Notice of Preparation
NPL	National Priority List
NRC	Nuclear Regulatory Commission
NRCS	Natural Resources Conservation Service
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OEHHA	Office of Environmental Health Hazard Assessment
OEM	Office of Emergency Management
OHP	Office of Historic Preservation
OHWM	Ordinary high water mark
OPR	Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration
P	Public Park
PCBs	Polychlorinated Biphenyls
PCE	Passenger Car Equivalents
PCL	Power Content Label
PF	Public Facilities
PF-SP	Public Facilities and Specific Plant
PG&E	Pacific Gas and Electric
PHF	Peak Hour Factor
POD	Point of discharge
PPV	Peak Particle Velocity
PQP	Public Quasi Public
PRC	Public Resources Code
PRP	Potentially Responsible Parties
PV	Photovoltaic systems
PVC	Polyvinyl chloride
PWQMP	Preliminary Water Quality Management Plan
R4SBW	Riverine, Intermittent, Streambed, Intermittently Flooded/Temporary
RARE	Threatened or Endangered Species
RCA	Western Riverside County Regional Conservation Authority
RCFCWCD	Riverside County Flood Control and Water Conservation District
RCHCA	Riverside County Habitat Conservation Agency
RCIP	Riverside County Integrated Plan
RCTC	Riverside County Transportation Commission
RCRA LQG	Resource Conservation and Recovery Act – Large Quantity Generators
RCWRD	Riverside County Waste Resources Department
RDEIR/SDEIS	Recirculated Draft Environmental Impact Report/Supplemental Draft

Acronyms

	Environmental Impact Statement
REC	Recognized Environmental Conditions
REC1	Water Contact Recreation
REC2	Non-Contact Recreation
REL	Reference Exposure Level
REMAP	Riverside Extended Mountain Area Plan
RFD	Riverside Fire Department
RGNG	City of Riverside Good Neighbor Guidelines for Siting New and/or Modified Warehouse Distribution Facilities
RIVTAM	Riverside Transportation Analysis Model
RLC	Rivers and Lands Conservancy
RMC	Riverside Municipal Code
ROD	Records of Decisions
ROW	Right-of-way or rights-of-way
RP	Restricted Property
RPS	Renewable Portfolio Standard
RPU	Riverside Public Utilities
RRG-CAP	Restorative Growthprint Climate Action Plan
RRWQMP	Riverside Regional Water Quality Control Plant
RSHA	Regional System of Highways and Arterials
RTA	Riverside Transit Authority
RTPA	Regional Transportation Plan Agency
RUWMP	Metropolitan Urban Water Management Plan
RWQCB	Regional Water Quality Control Board
RWQCP	Regional Water Quality Control Plant
S	United States Fish and Wildlife Service Sensitive
SAF	State Alternative Fuels Plan
SAR-DAMP	Santa Ana Regional Drainage Area Management Plan
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCBPSP	Sycamore Canyon Business Park Specific Plan
SCH	State Clearinghouse
SCS	Sustainable Communities Strategy
SCWP SKRMP	Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan
SDG&E	San Diego Gas & Electric
SE	Site Elevation
SE	California State Endangered
SED	Socio-Economic Data

Acronyms

SEMS	Standardized Emergency Management System
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SKR	Stephen's kangaroo rat
SKRHCP	Stephen's Kangaroo Rat Habitat Conservation Plan
SOON	Surplus Off-Road Opt-in for NO_x
SPS	Sustainability Policy Statement
SPWN	Spawning Reproduction and Development
SRR	Semi Rural Residential
SSC	CDFW Species of Special Concern
ST	California State Threatened
SVP	Society of Vertebrate Paleontology
SWANCC	Solid Waste Agency of Northern Cook County
SWEEPS UST	Statewide Environmental Evaluation and Planning System
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TAZ	Traffic Analysis Zones
T-BACT	Best Available Control Technology for Toxics
TCR/TCP	Tribal Cultural Resource/Traditional Cultural Property
TDM	Transportation Demand Management
TEA-21	Transportation Equity Act of the 21st Century
TMDL	Total Maximum Daily Load
TOD	Transit-Oriented Development
TPA	Transit Priority Area
TPQ	Threshold Planning Quantity
TRI	Toxics Release Inventory
TRUs	Transport Refrigeration Units
TS	Traffic Signal
TUMF	Transportation Uniform Mitigation Fee
UBC	Uniform Building Code
URBEMIS	Urban Emissions Model
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDA	U.S. Department of Agriculture
USDOT	United States Department of Transportation
US ENG	Engineering Controls Sites List
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

Acronyms

UST	Underground Storage Tank
UWMP	Urban Water Management Plant
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	Vehicle Miles Traveled
WARM	Warm Freshwater Habitat
WCSSP	Water Conservation and Supply Shortage Program
WILD	Wildlife Habitat
WoS	Waters of the State
WoUS	Waters of the U.S.
WMWD	Western Municipal Water District
WQMP	Water Quality Management Plan
WRCOG	Western Riverside Council of Governments
WRP	Waste Recycling Plan
WSA	Water Supply Assessment
WSAP	Water Supply Allocation Plan
WSC	Waters of the State
WSDM	Water Surplus and Demand Management Plan
WUEMP	Water Use Efficiency Master Plan
WUS	Waters of the United States
WWRF	Western Water Recycling Facility

Units of Measurement and Chemical Symbols

AFY	Acre-feet per year
AnC	Arlington fine sandy loam (soil)
dB(a) L_{eq}	Decibels equivalent continuous sound level
CH_4	Methane
ChF2	Cieneba sandy loam, eroded (soil)
CkF2	Cieneba rocky sandy loam, eroded (soil)
CO	Carbon monoxide
CO_2	Carbon dioxide
CY	Cubic yards
dB	Decibels
ETo	Reference evapotranspiration
°F	Degrees in Fahrenheit
FaD2	Fallbrook sandy loam, eroded (soil)
FbC2	Fallbrook sandy loam, shallow, eroded (soil)
FkD2	Fallbrook fine sandy loam, shallow, eroded (soil)
GPM	Gallons per minute
GWh	Gigawatt hours

Units of Measurement and Chemical Symbols

HC	Hydrocarbons
HFC	Hydroflourocarbons
MGD	Million gallons per day
mpg	Miles per gallon
Mt	Metric ton
MUs	Management Units
N_2O	Nitrous oxide
NH_4N0_3	Ammonium nitrate
NO	Nitric oxide
NO_2	Nitrogen dioxide
NO_X	Oxides of nitrogen
O_3	Ozone
Pb	Lead
PCF	Pounds per cubic foot
pCi/L	Picocuries per liter
pH	Potential of hydrogen
PM	Atmospheric Particulate Matter
PM_{10}	Particulate matter 2.5 to 10 microns in diameter
$PM_{2.5}$	Particulate matter 2.5 microns or less in diameter
Ppm	Parts per million
RMS	Root Mean Square
ROG	Reactive organic gases
SF_6	Sulfur hexaflouride
SO_2	Sulfur dioxide
SO_X	Oxides of sulfur
VdB	Decibel Notation
VOC	Volatile organic compounds
VsD2	Vista coarse sandy loam, eroded (soil)
$\mu g/m^3$	Micrograms per cubic meter

1.0 Executive Summary

The purpose of this Environmental Impact Report (EIR) is to evaluate and disclose potential environmental impacts resulting from the implementation of Sycamore Hills Distribution Center Project (Project). This section summarizes the characteristics of the Project, alternatives to the proposed Project, and the environmental impacts and mitigation measures associated with the proposed Project.

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1.3 Project Description

Project Location

This EIR has been prepared to examine the potential environmental effects of the Sycamore Hills Distribution Center Project. The following is a summary of the full Project description provided in Section 3.0, Project Description. The approximately 48.64 gross acre Project site is located in the eastern portion of the City of Riverside, east of Barton Street, west of Sycamore Canyon Boulevard, and north of Alessandro Boulevard, within the Sycamore Canyon Business Park Specific Plan. The Project site is within the southwestern quarter of Section 9, Township 3 South, Range 4 West, as shown on the Riverside East, California, United States Geological Survey (USGS) 7.5-minute quadrangle. The Project site includes the following Assessor's Parcel Numbers (APNs):

- APN: 263-060-022
- APN: 263-060-024
- APN: 263-060-026

The Project site is bordered on the north by the Sycamore Canyon Wilderness Park, vacant property to the east, Barton Street and a wastewater treatment plant to the west, and the Citywide Self Storage facility and Alessandro Boulevard to the south. Commercial and residential uses are

located further south (across Alessandro Boulevard), within the City and County of Riverside jurisdiction.

Existing Site Conditions

The City of Riverside General Plan 2025 (GP 2025) land use designation for the Project site is Business/Office Park (B/OP). The Project site is zoned BMP-SP – Business and Manufacturing Park and Specific Plan (Sycamore Canyon Business Park) Overlay Zones. The Project site is within the Sycamore Canyon Business Park Specific Plan (SCBPSP), which is considered a "Major Business Park" as shown on Figure LU-4 of the GP 2025. The SCBPSP designation for the Project site is Industrial.

The Project site is currently undeveloped and vacant. The topography consists of natural rolling terrain descending gradually from a west to east direction. The Project site contains two drainages, that cross the site from the southwest and south to the north. The Project site contains low to moderate vegetation primarily consisting of non-native grasslands and patches of sparse Riversidean sage scrub in the upland areas, with some riparian woodland associated with the drainages. The Project site contains an existing area of approximately 11.6 acres legally designated as "Restricted Property" (see Figure 3.0-3). The Restricted Property area supports a jurisdictional drainage and associated riparian habitat and was required as a condition of the Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers for construction of the Grove Community Church at an off-site location, approximately one mile southwest. The Restricted Property is intended for preservation in a natural condition.

Discretionary Actions and Other Agency Approvals

The proposed Project would include site grading, construction, and operation of two warehouse buildings and associated improvements including parking, fire lanes, fencing and walls (including retaining walls), landscaping, and water quality treatment areas. The proposed Project will include the following actions and approvals by the City of Riverside and other agencies[1]:

- Tentative Parcel Map No. 36734 (P20-0025) – A Tentative Parcel Map is required to subdivide the Project site into two parcels (Parcels 1 and 2) and three lettered parcels (Parcels A, B, and C).
- Design Review (P19-0627) – Implementation of the proposed Project consists of the grading, construction, and operation of two warehouse buildings and associated improvements including parking, fire lanes, fencing and walls (including retaining walls), landscaping, and water quality treatment areas as shown on Figure 3.0-9 – Site Plan.

[1] The City of Riverside actions/approvals are based on the requirements of the Riverside Municipal Code (RMC) at the time the Project was deemed substantially complete (November 2020).

Tables 3.0-2 and 3.0-3 provide a summary of the proposed Project and consistency with the City's Site Development Standards.

- Minor Conditional Use Permit (MCUP) – A MCUP is required to allow for warehouses greater than 400,000 square feet pursuant to City of Riverside Municipal Code (RMC), Title 19 – Zoning Code, Chapter 19.150 – Base Zones Permitted Land Uses. This requirement is intended to ensure land use compatibility in terms of traffic characteristics, noise, circulation, operation, building design, and site design.
- Wall Variance for Parcel 1 – A Variance is requested for Parcel 1 to allow the installation of two combination retaining/ freestanding walls to the side of the property wherein the retaining portion exceeds the maximum allowable height of 4 feet and to allow combination retaining/ freestanding walls wherein the overall height exceeds the maximum allowable height of 10 feet, in accordance with Chapter 19.550 of Title 19 – Zoning Code.
- Parking Variance for Building A - A Variance is requested for Building A to allow 388 parking spaces, where 430 parking spaces are required by the City's Municipal Code.
- Grading Exception for Building B - A Grading Exception is needed for Building B on Parcel 2 to allow installation of three retaining walls to exceed 6 feet in vertical height, in accordance with Chapter 17.28 of Title 17 - Grading.
- Environmental Impact Report (P20-0024) for the preparation of an Environmental Impact Report for the proposed Project.
- Lake or Streambed Alteration Agreement from California Department of Fish and Wildlife per Section 1602 of the Fish and Game Code.
- National Pollutant Discharge Elimination System's California General Permit for Stormwater Discharges Associated with Construction Activity from the State Water Resources Control Board.
- Water Quality Certification from the Santa Ana Regional Water Quality Control Board per Clean Water Act Section 401.
- Section 404 Permit from the US Army Corps of Engineers, Los Angeles District for Disposal of Dredge or Fill Material per the Clean Water Act.

Construction and Grading

Construction will occur in accordance with both the City's Noise Ordinance and County's Noise Ordinance, during the hours of 7 am to 6 pm Monday through Friday, 8 am to 5 pm on Saturdays, and not on Sundays or federal holidays. Overall construction is anticipated to last approximately 15 months. Grading and preliminary road construction is the first phase and is expected to last approximately 3 months. After grading, building construction will last approximately 12 months and includes slab and wall framing, concrete pouring, roof installation building interiors,

architectural coatings, parking lots, roadway improvements, landscaping, storm drains and water quality basins, etc.

The Project will involve grading and earthwork within the site in order to accommodate the proposed structures, associated parking lots, drive lanes, water quality basins and landscaped areas. It is anticipated that excavation of decomposed granite may be performed utilizing conventional earthmoving equipment. Blasting will not be required and is not proposed as part of the Project site preparation activities. During the grading phase, soil quantities within the overall site will balance and no export or import of fill from the site will be needed.

Operations and Employment

The Project is a speculative development, and the tenants are unknown at this time, so the number of employees, shifts, days and hours of operation are not known at this time. However, for the purposes of the analysis in the Environmental Impact Report (EIR), the estimated number of employees, using the County of Riverside General Plan Appendix E-2: Socioeconomic Build-Out Assumptions and Methodology[2], which uses a factor of 1,030 SF per employee, would be 388.3 employees for Building A and 197.2 employees for Building B, for a total of 586 (rounded to the nearest whole number) for both buildings.

Project Objectives

The proposed Project intends to achieve the following objectives:

- Develop the site with two warehouse buildings with a total of 603,100 square feet of building space, a conservation easement, and trailhead improvements.
- Modify the Restrictive Covenant (RC) to allow access to Parcel 1, which is currently landlocked by the RC.
- Provide trailhead improvements consistent with the *Sycamore Canyon Wilderness Park Stephen's Kangaroo Rat Management Plan and Updated Conceptual Development Plan* including:
    - a parking lot,
    - sidewalk,
    - shade structure with benches,
    - bike rack,
    - drinking fountains,
    - fencing, gates, signage, and a fire department access gate.

[2] County of Riverside General Plan Square Feet/Employee Factor of 1,030 SF per employee for Light Industrial land use, Appendix E-2: Socioeconomic Build-Out Assumptions and Methodology, April 11, 2017, https://planning.rctlma.org/General-Plan-Zoning/General-Plan

- Develop and operate warehouse buildings that:
    - Take advantage of existing City infrastructure.
    - Are adjacent to similar industrial logistics and distribution centers.
    - Are in close proximity to March Inland Port, State Route 60/Interstate 215, and Interstate 10 to support the distribution of goods throughout the region, while limiting traffic truck disruption to residential areas within the City and neighboring jurisdictions.
    - Will attract quality tenants and will be competitive with other similar facilities in the region.
    - Meet industry standards for operational design criteria.
- Implement the *Sycamore Canyon Business Park Specific Plan* through development of a land use allowed by the industrial land use designation and consistent with the development standards and criteria relevant to the site and proposed use.
- Facilitate the development of underutilized land currently planned for industrial uses that maximizes the use of the site and responds to market demand within the *Sycamore Canyon Business Park Specific Plan* area for warehouse buildings.
- Provide and expand on-site conservation to mitigate for the loss of riparian/riverine resources.
- Positively contribute to the economy of the City through new capital investment, creation of new employment opportunities, including opportunities for highly trained workers, and expansion of the tax base.

1.4 Alternatives

As required by the California Environmental Quality Act (CEQA), this DEIR examines alternatives to the proposed Project. Studied alternatives include the following three alternatives. Based on the alternatives analyses, Alternative 1 was determined to be the environmentally superior alternative.

- Alternative 1: No Project/No Development Alternative
- Alternative 2: Other Permitted Use/ Manufacturing
- Alternative 3: Reduced Development Alternative

Alternative 1 (No Project/ No Development):

As the Project is consistent with designated land use and zoning and the Sycamore Canyon Business Park Specific Plan, the “no project” alternative is no project development or no change from the existing use (vacant land). This alternative was selected based on CEQA requirements (Section 15126.6(e)).

Alternative 2 (Other Permitted Use/ Manufacturing):

Manufacturing is also a permitted use within the BMP-SP – Business Manufacturing Park and Specific Plan (Sycamore Canyon Business Park) Overlay Zone. Alternative 2 consists of the same Project design, with manufacturing instead of warehousing as the use for the site. This alternative was selected as it is an allowable use under the existing land use, zoning, specific plan, and was anticipated to reduce potential impacts associated with trucks, including trip generation and VMT, and also associated air quality and greenhouse gas emissions. Other types of uses such as institutional (educational or religious), retail/commercial, or residential would not meet the density/intensity standards of the compatibility Zone C1 of the MARB/IPA LUCP, resulting in an increase in potential impacts related to hazards, safety, and land use compatibility, as compared to the proposed Project.

Alternative 3 (Reduced Development Alternative):

The third alternative is a reduced development consisting only of the development of Parcel 1/Building A. Alternative 3 was identified and evaluated based on its the potential to reduce or avoid significant impacts related to VMT. In addition, as there are fewer physical cultural resources/tribal cultural resources in the eastern portion of the Project site, Alternative 3 would also reduce impacts to these individual resources as well as the larger TCL and TCP/TCR.

Refer to Section 8.0, Alternatives, for the complete alternatives analyses.

1.5 Areas of Known Controversy

The City of Riverside circulated an Initial Study and a Notice of Preparation (NOP) of the EIR for a 30-day agency and public review period starting on July 28, 2020 and ending on August 27, 2020 at 5:00 p.m. The City distributed the NOP to the State Clearinghouse, responsible agencies, and other interested parties. Due to COVID-19 restrictions, the City held a virtual EIR Public Scoping Meeting on August 12, 2020, aimed at providing information about the proposed Project and the CEQA process to members of public agencies, interested stakeholders, and residents/community members.

In addition to verbal comments from members of the public during the virtual Public Scoping Meeting, the City received letters from public agencies, and emails/letters from members of the public. Appendix A of this EIR contains the Initial Study, the NOP, and all comments received during the 30-day review period. Responses to the Notice of a Preparation of a Draft EIR and input received during the virtual EIR scoping meeting held by the City are summarized in Section 2.0, Introduction.

Primary areas of concern include the following:

- Air pollution health impacts to the community
- Potential need for applicable regulatory permits from resource agencies
- Potential impacts to drainage patterns, water quality, water supply

- Assessment of biological resources including direct, indirect and cumulative impacts, and consistency with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)
- Analysis of potential air quality impacts incorporating recommended South Coast Air Quality Management District (SCAQMD) methodology
- Potential impacts to Metropolitan properties and operations nearby
- Recommendation for City to require local hires and paying prevailing wages and exceed the current California Green Building code and 2020 County of Los Angeles Green Building Standards
- Potential substantial effects on human beings due to the COVID-19 crisis
- Justification in the traffic reports/documents for elimination of the existing traffic signal (at the intersection of private driveway south of project & Alessandro Boulevard) and proposed additional traffic signal (at the intersection of Vista Grande Drive & Alessandro Boulevard)
- Project's proximity to the nearby Sycamore Canyon Wilderness Park and its role in recreation, and preservation of the endangered Stephens' kangaroo rat
- Urban/ Wildlands interface impacts including light and noise impacts to the park
- Potential impacts to other undeveloped properties
- Analysis of all potential project impacts
- Increased traffic congestion and changes to circulation patterns, especially with truck routes
- Potential impacts to wildlife, habitat, natural drainages, and existing views
- Project in the context of other development in the area (cumulative development impacts)
- Air quality and greenhouse gas emissions impacts

Written and verbal comments from agencies and interested parties in response to the NOP are summarized in Table 2.0-1 Summary of Written Comments Received in Response to the Notice of Preparation, which also details where each is addressed in the EIR. Comments received at the scoping meeting are summarized in Table 2.0-2 Summary of Comments Received at the August 12, 2020, Virtual Scoping Meeting.

1.6 Issues Not Studied in Detail in the DEIR

The Initial Study (Appendix A) determined no substantial evidence exists that significant impacts would occur with one or more of the thresholds contained in the environmental checklist/ Initial Study for the following issue areas: Agriculture and Forestry Resources, Hazards and Hazardous

Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population/Housing, Public Services, Recreation, and Transportation. Section 7.0 Environmental Effects Found not to be Significant, summarizes the issues determined to have no impact and issues from the environmental checklist determined to be less than significant.

1.7 Summary of Impacts and Mitigation Measures

Table ES-1 summarizes the environmental impacts of the proposed Project, proposed mitigation measures, and residual impacts (the impact after application of mitigation, if required). Impacts are categorized as follows:

- **Significant and Unavoidable:** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the CEQA Guidelines.
- **Less than Significant with Mitigation Incorporated:** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures.
- **Less than Significant:** An impact that may be adverse but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact:** The proposed Project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Table 1.0-1 – Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
Aesthetics			
Threshold A: Would the Project have a substantial adverse effect on a scenic vista?	Less than significant	None required	Less than significant
Threshold B: Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	Significant without mitigation	**MM BIO-6:** Prior to issuance of occupancy permit, in order to reduce impacts to on-site Riparian/Riverine areas and suitable habitat for least Bell's vireo (an endangered bird), on-site mitigation shall include: 1. Enhancement of a total of 1.58 acres of riparian habitat: 0.01 acres in Drainage A, 1.34 acres in Drainage B, and 0.23 acre in Area C. 2. Create (establish) 0.61 acre of in-kind riparian woodland in Area C. 3. Restoration of 0.02 acre of riparian habitat in Drainage B. 4. The non-jurisdictional, non-riparian/riverine upland areas of slopes associated with the access road will be restored/replanted with native seed mix. 5. The roadway/access to Parcel1/Building A shall include culverts to provide a hydrological connection to the riparian habitat on the east side of the roadway and a corridor for small wildlife species.	Less than significant

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		6. Revise the existing Restricted Property to include Parcel A (7.19 acres) and Parcel B (5.04 acres), with a combined total area of 12.23 acres. The revised 12.23 Restricted Property shall be managed in perpetuity by a CDFW approved 3rd party (such as Rivers and Lands Conservancy "RLC").	
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 a 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?	Less than significant	None required	Less than significant
Threshold D: Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Significant without mitigation	**MM AES-1:** To further reduce impacts related to light pollution, the Project's night lighting shall be directed away from natural open space areas within and adjacent to the Project site and directed downward and towards the center of the development. Energy efficient Low Pressure Sodium (LPS) or High Pressure Sodium (HPS) lamps shall be used exclusively to dampen glare. **MM AES-2:** Prior to the issuance of building permits, the applicant shall submit a photometric (lighting) plan for approval by the Community & Economic Development Department, Planning Division. The approved light design	Less than significant

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		requirements shall be included on the final building plan sheets. The lighting plan shall incorporate the following requirements and shall show that there is no light spillage into the Sycamore Canyon Wilderness Park: • The project shall be designed in such a manner as to prevent light spillage from the project to the adjacent and nearby open space areas • Project lighting shall not exceed an intensity of one foot-candle • Shielding shall be employed, where feasible • Any night lighting shall be directed away from natural open space areas and directed downward and towards the center of the development • No project lights shall blink, flash, oscillate, or be of unusually high intensity or brightness • Energy-efficient LPS or HPS lamps shall be used exclusively throughout the project site to dampen glare	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		• Exterior lights shall be only "warm" LED lights (<3000K color temperature)	
Air Quality			
Threshold A: Would the Project conflict with or obstruct implementation of the applicable air quality plan?	Significant without Mitigation	**MM AIR-1:** The project applicant is required to record a covenant on the property (Parcels 1 and 2) that prohibit manufacturing use. Proof of the record of covenant shall be submitted to the City of Riverside Planning Division prior to issuance of Building Permits.	Less than significant
Threshold B: Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?	Significant without Mitigation	**MM AIR-1** (above)	Less than significant
Threshold C: Would the Project expose sensitive receptors to substantial pollutant concentrations?	Significant without Mitigation	**MM AIR-1** (above)	Less than significant
Threshold D: Would the Project result in emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less than significant	None required	Less than significant
Biological Resources			
Threshold A: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U. S. Wildlife Service?	Significant without mitigation	**MM BIO-1:** Prior to issuance of a grading permit, a qualified biologist shall collect seed for paniculate tarplant and Robinson's pepper-grass throughout the proposed development footprint of the project. The seeds shall be stored in accordance with the biologist's recommendations until restoration efforts are commenced within the existing and additional Restricted Property/ conservation area. If seed is not collected prior to grading permit issuance then	Less than significant

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		topsoil, where identified by the qualified biologist, shall be salvaged and temporarily stored in accordance with the qualified biologists' recommendations until restoration efforts are commenced. On site restoration efforts shall incorporate the collected seed or salvaged topsoil. **MM NOI-1:** Prior to issuance of grading and construction activities, should least Bell's vireo be present in the Sycamore Canyon Wilderness Park within 300 feet of the Project site, in Parcel A on-site conservation area, or within Parcel B on-site conservation area within 100 feet of the development footprint, construction noise impacts shall be minimized through implementation of the following measure: • A 12-foot high temporary noise barrier shall be installed at the perimeter of the limits of disturbance between the construction activities and the adjacent Sycamore Canyon Wilderness Park to the north and east, and the on-site conservation areas as shown in Figure 5.11-5 – Construction Barrier. The barrier shall be continuous without openings, holes, or cracks, and shall reach the ground. The barrier may be constructed with 1-inch plywood and provide a	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		reduction of at least 10 dB(A) to ensure noise levels do not exceed 65 dB(A) L_{eq} at the Sycamore Canyon Wilderness Park and on-site conservation areas. Other barrier materials providing the same reduction shall also be permitted. • Heavy grade rubber mats/pads shall be used within the bed of the trucks. These mats will help attenuate initial impact noise generated when an excavator drops rock and debris into the bed of the truck. These mats must be maintained and/or replaced as necessary. • During all Project site excavation and grading on-site, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturer standards. • The contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the Project site. • Equipment shall be shut off and not left to idle when not in use.	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		• The contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise/vibration sources and sensitive receptors nearest the Project site during all Project construction. • The Project proponent shall mandate that the construction contractor prohibit the use of music or sound amplification on the Project site during construction. • The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment (7:00 a.m. to 6:00 p.m. on weekdays, and 8:00 a.m. to 5:00 p.m. on Saturdays). • The use of heavy equipment or vibratory rollers and soil compressors shall be limited along the Project boundaries to the greatest degree possible. It is acknowledged that some soil compression may be necessary along the Project boundaries. • Any jackhammers, pneumatic equipment and all other portable stationary noise sources shall be	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		shielded, and noise shall be directed away from sensitive receptors. • For the duration of construction activities, the construction manager shall serve as the contact person should noise levels become disruptive to local residents. A sign should be posted at the Project site with the contact phone number. This sign shall be posted at the Alessandro Boulevard frontage as well as the Barton Street frontage. **MM BIO-2:** The Project has been designed to avoid direct construction impacts to riparian plant communities to the greatest extent feasible. Avoidance and minimization measures shall be included in the Project specifications for implementation during construction to further reduce the potential for any temporary, indirect impacts to occur to these areas during construction activities, including the following: • Trash and other debris shall be properly disposed of and not left on-site in areas where it could fall into protected habitat. • Project boundaries shall be clearly marked with fencing, or other suitable type of marking material as directed by a qualified biologist. Vehicles and other	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		Project construction personnel shall stay within these delineated Project boundaries. • Sensitive areas (i.e., jurisdictional drainage features, riparian habitats, and MSHCP Conservation Areas) in proximity to the construction footprint shall be clearly marked, with fencing or other suitable type of marking material as directed by a qualified biologist, for awareness and avoidance. • Refueling, washing, or other vehicular maintenance activities shall occur a minimum of 100 feet away from riparian areas, including the conserved riparian habitat. • Equipment would be maintained and checked at least on a daily basis for leaks. • All vehicle leaks or other hazardous material leaks shall be contained and cleaned up immediately. All contaminated soil shall be removed from the site and disposed of properly. **MM BIO-3:** During soil excavation, grading, or other subsurface disturbances, the construction contractor shall supervise provision and maintenance of all standard dust control BMPs to reduce fugitive dust	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		emissions, including but not limited to the following actions: • Water any exposed soil areas a minimum of twice per day, or as allowed under any imposed drought restrictions. On windy days or when fugitive dust can be observed leaving the construction site, additional water shall be applied at a frequency to be determined by the on-site construction superintendent. • Pave, periodically water, or apply chemical stabilizer to construction access/egress points. • Minimize the amount of area disturbed by clearing, grading, earthmoving, or excavation operations at all times. • Operate all vehicles on graded areas at speeds less than 15 miles per hour. • Cover all stockpiles that would not be utilized within three days with plastic or equivalent material, to be determined by the on-site construction superintendent, or spray them with a non-toxic chemical stabilizer. **MM BIO-4:** During construction, to address potential short-term impacts to	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		water quality within the on-site drainages from construction runoff that may carry storm water pollutants, a SWPPP shall be implemented by the construction contractor as required by the California General Construction Storm Water Permit pursuant the Regional Board regulations. The SWPPP shall identify BMPs related to the control of toxic substances, including construction fuels, oils, and other liquids. These BMPs would be implemented by the construction contractor prior to the start of any ground clearing activity, shall be subject to periodic inspections by the City and the Project's hydrological consultant, shall be maintained throughout the construction period and remain in place until all landscape and permanent BMPs are in place. BMPs shall be monitored and repaired if necessary, to ensure maximum erosion, sediment, and pollution control. • The use of erosion control materials potentially harmful to fish and wildlife species, such as mono-filament netting (erosion control matting) or similar material, within and adjacent to conserved riparian habitat shall be prohibited. • All fiber roles, straw waddles, and/or hay bales utilized	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		within and adjacent to the Project site shall be free of non-native plant materials. • Construction contractor shall comply with all litter and pollution laws. All contractors, subcontractors, and employees shall also obey these laws. • Water containing mud, silt, or other pollutants from grading, aggregate washing, or other activities shall not be allowed to enter the conserved riparian habitat or be placed in locations that may be subjected to high storm flows. • Spoil sites shall not be located within jurisdictional areas and MSHCP Conservation Areas or locations that may be subjected to high storm flows, where spoil shall be washed back into the conserved riparian habitat where it would impact streambed habitat and aquatic or riparian vegetation. • Raw cement/concrete or washings thereof, asphalt, paint, or other coating material, oil or other petroleum products, or any other substances which could be hazardous to fish and	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		wildlife resources resulting from Project related activities shall be prevented from contaminating the soil and/or entering the conserved riparian habitat. These materials, placed within or where they may enter the conserved riparian habitat or any party working under contract to the construction contractor, shall be removed immediately. • No equipment maintenance shall be done within or near the conserved riparian habitat where petroleum products or other pollutants from the equipment may enter these areas under any flow. • No broken concrete, cement, debris, soil, silt, sand, bark, slash, sawdust, rubbish, or washings thereof, oil or petroleum products, or other organic or earthen material from any construction or associated activity of whatever nature shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into the conserved riparian habitat. When operations are	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the conserved riparian habitat. **MM BIO-5:** Prior to issuance of grading permit, the following measures shall be incorporated into the construction documents and specifications, and implemented by the contractor, to avoid potential construction-related impacts to the conserved riparian habitat outside of the approved disturbance limits: • Construction worker training shall be provided by a qualified biologist at the first on-site construction meeting; • Project boundaries shall be clearly marked and or signs shall be erected near the top of slope adjacent to the conserved riparian habitat to prevent accidental/unauthorized intrusions during construction; and • Staging areas for storage of materials and heavy equipment, and for fueling, cleaning, or maintenance of construction vehicles or equipment, shall be prohibited within 20 feet from	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		the top of slope adjacent to the conserved riparian habitat. **MM BIO-6:** (above) **MM BIO-7:** In order to reduce potential impacts to MSHCP covered species, payment of the MSHCP mitigation fee shall be provided to the City of Riverside prior to issuance of a grading permit for the project. **MM BIO-8:** Payment of the SKRHCP fee shall be provided to the City of Riverside prior to issuance of a grading permit for the Project. **MM BIO-9:** If construction activity is conducted between September 1st and January 31st, then this mitigation measure is required prior to issuance of a grading permit. Federal Migratory Bird Treaty Act (MBTA) and/or state code protect all native bird species - both common and special status. In most scenarios, MSHCP coverage does not override the nesting bird protections provided by these. Impacts to nesting birds, both direct and indirect, can be minimized or eliminated by conducting work activities outside of the local breeding season. Although nesting can occur in any month in southern California for some species, breeding in the study area, given the	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		habitat, would primarily be expected from about 1 February through 31 August. Work from about 1 September through 31 January would avoid most negative affects to birds and nesting activity. If work must be done during the breeding season, surveys for nesting birds should occur no more than three (3) days prior to all vegetation clearing and ground disturbance. If active nests are found, they should be avoided until young have fledged. While there is no established protocol for nest avoidance, when consulted the CDFW generally recommends avoidance buffers of about 500 feet for raptors and threatened/endangered species and 100 – 300 feet for non-raptors. Adherence to these nesting bird recommendations will also avoid and/or mitigate impacts to special status bird species known from the project site which are not covered by the MSHCP. **MM BIO-10:** A focused BUOW survey must be conducted during the breeding season (four visits between 1 March - 31 August). Regardless of the result of those surveys, because of the presence of suitable habitat that could be occupied at any time, a one-day preconstruction survey must also be conducted 30 days or less before groundbreaking.	
Threshold B: Would the Project have a substantial adverse effect on any riparian habitat	Significant without mitigation	**MM BIO-2** through **MM BIO-7** (above)	Less than significant

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			
Threshold C: Would the Project have a substantial adverse effect on Federally-protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Significant without mitigation	**MM BIO-2** through **MM BIO-7** (above)	Less than significant
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?	Less than significant	None required	Less than significant
Threshold E: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Less than significant	None required	Less than significant
Threshold F: 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?	Significant without mitigation	**MM BIO-6**, **MM AES-1**, **MM AES-2**, **MM NOI-1, MM BIO-10** (all listed above) and **MM BIO-11**. **MM BIO-11:** During construction standard BMPs from Volume I, Appendix C of the MSHCP shall be implemented to avoid impacts to biological resources of the MSHCP. The following standard BMPs shall be included as Environmental Requirement Notes on the final grading plans to be reviewed and approved by	Less than significant

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		City Staff prior to issuance of a grading permit. The measures are as follows: • A condition shall be placed on grading permits requiring a qualified biologist to conduct a training session for project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act (Act) and the MSHCP, the need to adhere to the provisions of the Act and the MSHCP, the penalties associated with violating the provisions of the Act, the general measures that are being implemented to conserve the species of concern as they relate to the project, and the access routes to and project site boundaries within which the project activities must be accomplished. • Water pollution and erosion control plans shall be developed and implemented	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		in accordance with RWQCB requirements. • The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible. • The upstream and downstream limits of projects disturbance plus lateral limits of disturbance on either side of the stream shall be clearly defined and marked in the field and reviewed by the biologist prior to initiation of work. • Projects should be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern. • Projects that cannot be conducted without placing equipment or personnel in	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		sensitive habitats should be timed to avoid the breeding season of riparian species identified in MSHCP Global Species Objective No. 7. • When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing or other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream. • Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, USFWS, and CDFW, RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas. • Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		• The qualified project biologist shall monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint. • The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species. • Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible. • To avoid attracting predators of the species of concern, the project site shall be kept as clean of debris as possible. All food related trash items	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		shall be enclosed in sealed containers and regularly removed from the site(s). • Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.	
Cultural Resources			
Threshold A: Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5 of the CEQA Guidelines?	Less than Significant	None required	Less than significant

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
Threshold B: Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5 of the CEQA Guidelines?	Less than Significant	**MM CUL-1**: Prior to grading permit issuance, if there are any changes to Project site design and/or proposed grades, the Applicant and the City shall contact consulting tribes to provide an electronic copy of the revised plans for review. Additional consultation shall occur between the City, developer/applicant, and consulting tribes to discuss any proposed changes and review any new impacts and/or potential avoidance/preservation of the cultural resources on the Project site. The City and the developer/applicant shall make all attempts to avoid and/or preserve in place as many cultural and paleontological resources as possible that are located on the project site if the site design and/or proposed grades should be revised. In the event of inadvertent discoveries of archaeological resources, work shall temporarily halt until agreements are executed with consulting tribe, to provide tribal monitoring for ground disturbing activities. **MM CUL-2: Archaeological Monitoring**: At least 30 days prior to application for a grading permit and before any grading, excavation and/or ground disturbing activities take place, the developer/applicant shall retain a Secretary of Interior Standards qualified archaeological monitor to monitor all ground-disturbing activities in an effort to	Less than significant.

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		identify any unknown archaeological resources. 1. The Project Archaeologist, in consultation with consulting tribes, the Developer, and the City, shall develop an Archaeological Monitoring Plan to address the details, timing, and responsibility of all archaeological and cultural activities that will occur on the project site. Details in the plan shall include: a) Project grading and development scheduling; b) The development of a schedule in coordination with the developer/applicant, the project archaeologist, and for designated Native American Tribal Monitors from the consulting tribes for grading, excavation, and ground-disturbing activities on the site, including the scheduling, safety requirements, duties, scope of work, and Project Archeologist and Native American Tribal Monitors' authority to stop and redirect grading activities; c) The protocols and stipulations that the Applicant, tribes, and Project Archaeologist/Paleontologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits, or nonrenewable paleontological	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		resources that shall be subject to a cultural resources evaluation; d) In conjunction with the Archeological Monitor(s), the Native American Monitor(s) shall have the authority to temporarily divert, redirect or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources. e) Treatment and final disposition of any cultural and paleontological resources, sacred sites, and human remains if discovered on the project site; and f) The scheduling and timing of the Cultural Sensitivity Training noted in mitigation measure MM-CUL-5. **MM CUL-3:** Native American Monitor: Prior to issuance of grading permit, the developer/permit applicant shall engage each of the consulting tribe(s) regarding Native American Monitoring. The developer/permit applicant shall provide evidence to the City that they have reached an agreement with each of the consulting tribe(s) regarding the following: a) The treatment of known cultural resources; b) The treatment and final disposition of any tribal cultural resources, sacred sites, human remains or archaeological and cultural	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		resources inadvertently discovered on the Project site; c) Project grading, ground disturbance (including but not limited to excavation, trenching, cleaning, grubbing, tree removals, grading and trenching) and development scheduling; and d) The designation, responsibilities, and participation of professional Tribal Monitor(s) during grading, excavation and ground disturbing activities. If the developer/permit applicant and the consulting tribe(s) are unable to reach an agreement, the mitigation measure shall be considered satisfied if the developer/permit applicant provides sufficient documented evidence that they have made a reasonable good faith effort, as determined by the City to reach an agreement with the consulting tribes with regards to items a-d, as listed above). **MM CUL-4**: **Treatment and Disposition of Cultural Resources:** In the event Native American cultural resources are inadvertently discovered during the course of grading for this Project, the following procedures will be carried out for treatment and disposition of the discoveries: 1. **Consulting Tribes Notified:** within 24 hours of discovery, the consulting	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		tribe(s) shall be notified via email and phone. The developer shall provide the City evidence of notification to consulting tribes. Consulting tribe(s) will be allowed access to the discovery, in order to assist with the significance evaluation. 2. **Temporary Curation and Storage:** During the course of construction, all discovered resources shall be temporarily curated in a secure location on site. The removal of any artifacts from the Project site shall require the approval of the Consulting Tribes and all resources subject to such removal must be thoroughly inventoried with a tribal monitor from each consulting tribe to oversee of the process; and 3. **Treatment and Final Disposition:** The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The Applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Riverside Community and Economic Development Department with evidence of same: a) Preservation-In-Place of the cultural resources, if feasible as determined through coordination between the	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		project archeologist, developer/ applicant, and consulting tribal monitor(s). Preservation in place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resources in perpetuity; b) Accommodate the process for on-site reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed, with an exception that sacred items, burial goods and Native American human remains are excluded. No cataloguing, analysis, or other studies may occur on sacred items, human remains, and grave goods. Any reburial process shall be culturally appropriate. List of contents and location of the reburial shall be included in the confidential Phase IV Report. The Phase IV report shall be prepared by the project archeologist and shall be filed with the City under a confidential cover and not subject to a Public Records Request. The Tribe(s) should be able to access these areas	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		in the future through enforceable agreement; c) If reburial is not feasible, a curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79 and therefore will be professionally curated and made available to other archaeologists/ researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation; d) At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting; and,	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City of Riverside, Eastern Information Center, and consulting tribes. **MM CUL-5: Cultural Sensitivity Training:** The Secretary of Interior Standards County certified archaeologist and Native American monitors shall attend the pre-grading meeting with the developer/permit holder's contractors to provide Cultural Sensitivity Training for all construction personnel. This shall include the procedures to be followed during ground disturbance in sensitive areas and protocols that apply in the event that unanticipated resources are discovered. Only construction personnel who have received this training can conduct construction and disturbance activities in sensitive areas. A sign-in sheet for attendees of this training shall be included in the Phase IV Monitoring Report. **MM CUL-6 Fencing of the Avoided Sites:** Prior to any earthmoving activities, the current boundaries of the avoided sites (CA-RIV-11770, CA-RIV-11772, CA-RIV-2486, two milling slicks within CA-RIV-2488, and CA-RIV-2489) will be fenced and identified as an Environmental Sensitive Area (ESA). The project	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		applicant will ensure that appropriate temporary fencing is installed i.e., orange fabric/barrier fencing) to prevent any unintentional disturbances to CA-RIV-11770, CA-RIV-11772, CA-RIV-2486, two milling slicks within CA-RIV-2488, and CA-RIV-2489 during any earthmoving activities on the project site. The fencing will be installed before clearing and grubbing and will not be removed until all earthmoving activities have been completed and the wall in Parcel 4 has been constructed. The project archaeologist and Tribal Monitor(s) will be on site to monitor the fence installation and removal and will conduct daily inspections of the fencing to make sure that it is intact and has not been breached. If the project archaeologist and/or Tribal Monitor(s) identify a breach of the fence, i.e., removal, cut, depressed, driven over or intentionally breached in any way, all work within a 25-foot buffer shall cease and the Project Applicant, City, project archaeologist and the Monitoring Tribe(s) shall meet and confer as to the best method to repair the fencing. The person(s) responsible for the breach and the Construction Supervisor (or appropriate supervisory personnel) shall be required to retake the sensitivity training provided at the beginning of construction, in addition to any other remedies considered appropriate.	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		MM CUL-7 Relocation of Impacted Sites: Prior to any grading in the associated areas, the Project Applicant shall meet with the Project Archaeologist and the Consulting Tribe(s) in order to assess CA-RIV-11769, CA-RIV-2487, and two milling slicks within CA-RIV-2488 to determine the suitability for relocation to a permanent open space area. The Consulting Tribe(s) shall work with the Project Archaeologist, Project Applicant, and the grading contractor or appropriate personnel to ensure that every effort is made to relocate the Features safely and to discuss the most appropriate methods for relocation. Using professional archaeological methods, the milling slicks associated with Sites CA-RIV-11769, CA-RIV-2487, and CA-RIV-2488 shall be relocated to the planned open space area in the northern portion of the Project site. The Tribe(s) should be able to access these areas in the future through enforceable agreement. Before construction activities may resume in the affected area, any visible artifacts shall be recovered and recorded, and the features recorded using professional archaeological methods. The current Department of Parks and Recreation forms for the sites shall be updated, detailing which features were relocated, the process taken, and updated maps using sub meter GIS technology to	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		document the new location of each feature. The relocation information shall be included in a Phase IV Monitoring Report. The site record should clearly indicate that the Features are not in their original location and why they were relocated. **MM CUL-8 Long-Term Preservation Plan:** Prior to occupancy, a Long-Term Preservation Plan (LTPP) shall be prepared among the City, Land Owner, and Consulting Tribe(s). The LTPP should include the following: a) Description of archaeological resources b) Documentation of resources of concern, such as high-resolution photographs or similar c) Listing of Preservation Actions to Date d) The determination of responsibility for care, maintenance, and guidance in the event preserved resources [CA-RIV-11770, CA-RIV-11772, CA-RIV-2486, two milling slicks within CA-RIV-2488, and CA-RIV-2489] should be vandalized or damaged. This section should also address responsibility for regular site condition assessments to determine if resources are being affected by project construction and later operations.	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		MM CUL-9 Controlled Grade: Sites CA-RIV-11769, CA-RIV-11770, CA-RIV-11772, CA-RIV-2486, CA-RIV-2487, CA-RIV-2488, and CA-RIV-2489 will be impacted during grading and construction activities and the soils surrounding them will be disturbed. Prior to any grading in the associated areas, the Project Applicant, the Consulting Tribes, and the City will formalize a written agreement to identify the area that will be subject to "Controlled Grading" during construction of the Project. The Pechanga Tribe, the Project Applicant, and the City will develop an exhibit that outlines the area subject to controlled grading, and that area will be highlighted on the rough grading plans, precise grading plans or other off-site improvement plans that may impact this site. "Controlled Grading" shall include, without limitation, the slow and deliberate excavation and removal of soils employing the smallest reasonable cuts in certain areas using light scrapers (for example Caterpillar 623 or 627), dozers (for example D6- D8), front end loaders, excavators, skip loaders, dump trucks, and motor graders. A controlled grading plan will be monitored by the Project Archeologist and Tribal Monitor(s) to ensure the systematic removal of the ground surface surrounding these features are monitored to allow for the identification of resources. Results of all	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		controlled grading activities shall be included in the Phase IV monitoring report. **Consistent with State Law the Project will be required to comply with the following standard condition of approval:** **Discovery of Human Remains:** In the event that human remains (or remains that may be human) are discovered at the Project site during grading or earthmoving, the construction contractors, Project Archaeologist, and/or designated Native American Monitor shall immediately stop all activities within 100 feet of the find. The Project proponent shall then inform the Riverside County Coroner and the City of Riverside Community & Economic Development Department immediately, and the coroner shall be permitted to examine the remains as required by California Health and Safety Code Section 7050.5(b) unless more current State law requirements are in effect at the time of the discovery. Section 7050.5 requires that excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If human remains are determined as those of Native American origin, the Applicant shall comply with the state relating to the	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		disposition of Native American burials that fall within the jurisdiction of the NAHC (PRC Section 5097). The coroner shall contact the NAHC to determine the most likely descendant(s). The MLD shall complete his or her inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The Disposition of the remains shall be overseen by the most likely descendant(s) to determine the most appropriate means of treating the human remains and any associated grave artifacts. The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. The County Coroner will notify the Native American Heritage Commission in accordance with California Public Resources Code 5097.98. According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). The disposition of the remains shall be determined in consultation between the Project proponent and the MLD. In the event that the Project proponent and the MLD are in disagreement regarding the disposition of	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		the remains, State law will apply and the median and decision process will occur with the NAHC (see Public Resources Code Section 5097.98(e) and 5097.94(k)).	
Threshold C: Would the Project disturb any human remains, including those interred outside of formal cemeteries?	Less than significant	None required	Less than significant
Energy			
Threshold A: Would the Project result in potentially significant environmental impact due to wasteful, inefficient, unnecessary consumption of energy resources, during project construction or operation?	Less than significant	None required	Less than significant
Threshold B: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Less than significant	None required	Less than significant
Threshold C: Would the Project achieve the goal of energy conservation by the following? ▪ Decreasing overall per capita energy consumption; ▪ Decreasing reliance on fossil fuels such as coal, natural gas and oil; and ▪ Increasing reliance on renewable energy sources.	Less than significant	None required	Less than significant
Geology and Soils			
Threshold A: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to	Less than significant	None required	Less than significant

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
Division of Mines and Geology Special Publication 42; ii) strong seismic ground shaking; iii) seismic-related ground failure, including liquefaction; and/or iv) landslides?			
Threshold B: Would the Project result in substantial soil erosion or the loss of topsoil?	Less than significant	None required	Less than significant
Threshold C: Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	Less than significant	None required	Less than significant
Threshold D: Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Less than significant	None required	Less than significant
Threshold E: Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	Less than significant	None required	Less than significant
Threshold F: Will the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Significant without mitigation	**MM GEO-1:** If one or more fossils are discovered during construction, all ground disturbing activities within 50 feet of the area of the find shall be ceased and the applicant shall retain a paleontologist who meets the Society of Vertebrate Paleontology (SVP) qualifications standards for Project Paleontologist to oversee the documentation of the extent and potential significance of the finds as well as recovery efforts. Ground-disturbing activities may resume in the area of the finds at the discretion of the	Less than significant

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		Project Paleontologist. If the fossils are significant per the SVP's 2010 criteria, then paleontological monitoring shall be conducted on an as-needed basis for further ground-disturbing activities in the Project Area.	
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?	Significant without mitigation	**MM AIR-1** (previously described above) is required to ensure that the actual use of the site is consistent with the use described in the Project Description and analyzed in the Project-specific greenhouse gas analysis. **MM BIO-6** (previously described above) would also reduce the Project's overall GHG impacts.	Less than significant
Threshold B: Would the Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Significant without mitigation	**MM AIR-1** (previously described above) is required to ensure that the actual use of the site is consistent with the use described in the Project Description and analyzed in the Project-specific greenhouse gas analysis.	Less than significant
Hazards & Hazardous Materials			
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?	Significant without mitigation	**MM AIR-1** (previously described above).	Less than significant
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?	Less than significant	None required	Less than significant
Threshold C: Would the Project emit hazardous emissions or handle hazardous or acutely	Less than significant	None required	Less than significant

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			
Threshold D: Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?	Less than significant	None required	Less than significant
Threshold E: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	Less than significant	None required	Less than significant
Threshold F: Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Less than significant	None required	Less than significant
Hydrology and Water Quality			
Threshold A: Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Less than significant	None required	Less than significant
Threshold B: Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Less than significant	None required	Less than significant
Threshold C: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: i)	Less than significant	None required	Less than significant

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
result in substantial erosion or siltation on-or off-site; ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off site; iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or; iv) impede or redirect flood flows?			
Threshold D: Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less than significant	None required	Less than significant
Land Use and Planning			
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?	Less than significant	None required	Less than significant
Noise			
Threshold A: 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?	Significant without mitigation	**MM NOI-1** (above)	Less than significant
Threshold B: Would the Project result in the generation of excessive groundborne vibration or groundborne noise levels?	None required	None required	Less than significant
Transportation			
Threshold A: Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	Less than significant	None required	Less than significant

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
Threshold B: Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	Significant and unavoidable	No feasible mitigation available. Even with implementation of feasible TDM measures, Project VMT cannot be reduced to less than significant levels and thus, the Project's VMT would still contribute to cumulative impacts and are considered significant and unavoidable.	Significant and unavoidable
Threshold C: Would the Project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	Less than significant	None required	Less than significant
Threshold D: 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)?	Less than significant	None required	Less than significant
Tribal Cultural Resources			
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 that is: • (Threshold A) 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)? • (Threshold B) a resource determined by the lead agency, in its discretion and supported	Less than significant	**MM CUL-1 through MM CUL-9** as previously discussed above in Cultural Resources.	Less than significant

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
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, would the lead agency consider the significance of the resource to a California Native American tribe?			
Utilities			
Threshold A: Would the Project 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?	Less than significant	None required	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?	Less than significant	None required	Less than significant
Threshold C: Would the Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less than significant	None required	Less than significant
Threshold D: 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?	Less than significant	None required	Less than significant
Threshold E: Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Less than significant	None required	Less than significant

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
Wildfire			
Threshold A: Would the Project Substantially impair an adopted emergency response plan or emergency evacuation plan?	Less than significant	None required	Less than significant
Threshold B: 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 governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for Fire Protection Public Services?	Less than significant	None required	Less than Significant
Threshold C: Due to slope, prevailing winds, and other factors, would the Project exacerbate wildfire risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	Less than Significant	None required	Less than Significant
Threshold D: 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?	Less than significant	None required	Less than Significant
Threshold E: 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?	Less than significant	None required	Less than Significant
Threshold F: Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Less than significant	None required	Less than Significant

2.0 Introduction

2.1 Purpose and Scope

The purpose of this Environmental Impact Report (EIR) is to evaluate and disclose potential environmental impacts resulting from the implementation of the Sycamore Hills Distribution Center Project located north of Alessandro Boulevard directly east of Barton Street and west of San Gorgonio Drive. The EIR will also evaluate potential environmental impacts along associated streets and utility improvements (hereinafter referred to as the Project), as further described in Section 3.0 – Project Description of this DEIR.

This EIR is to serve as an informational document for the public and City of Riverside (City) decision makers. The process to finalize the EIR includes public hearings before the Planning Commission and City Council to consider certification of a Final EIR and approval of the Project.

2.2 Authorization

The EIR has been prepared by the City as the "Lead Agency" in accordance with the Guidelines for the Implementation of the California Environmental Quality Act (State *CEQA Guidelines*), (Sections 15000-15387 of the California Code of Regulations), and the City's *CEQA Guidelines.* The Project considered in this DEIR is a "project," as defined by Section 15378 of the State *CEQA Guidelines*, which states that an EIR must be prepared for any project that may have a significant impact on the environment. The City, as Lead Agency, has determined that the Project may have a significant adverse impact on the environment; therefore, preparation of an EIR was required.

2.3 Lead and Responsible Agencies

CEQA defines a "Lead Agency" as the public agency that has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment. Other agencies, e.g., Western Municipal Water District, California Department of Fish and Wildlife (CDFW), the Santa Ana Regional Water Quality Control Board (RWQCB), the U.S. Army Corps of Engineers (USACE) and the South Coast Air Quality Management District (SCAQMD) which also have some authority or responsibility to issue permits for project implementation, are designated as "responsible agencies." Both the Lead Agency and responsible agencies must consider the information contained in the EIR prior to acting upon or approving a project. The City, as the Lead Agency, has determined the Project may have a significant adverse impact on the environment, and, therefore, preparation of an EIR is required. The City's address is:

City of Riverside
Community & Economic Development Department
Planning Division
3900 Main Street, 3rd Floor
Riverside, CA 92522
Contact: Veronica Hernandez, Senior Planner

Responsible agencies for the Project include:

- **Santa Ana Regional Water Quality Control Board:** Issuance of a Notice of Intent prior to construction operations related to National Pollutant Discharge Elimination System (NPDES) Construction Permits, issuance of a water quality certification pursuant to Section 401 of the Clean Water Act in connection with issuance of a Section 404 Clean Water Act permit.
- **California Department of Fish and Wildlife:** Issuance of agreements under Section 1601-1602 of the Fish and Game Code related to streambed alterations and review of the Determination of Biologically Equivalent or Superior Preservation (DBESP) for impacts to riparian/riverine resources protected under the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP).
- **US Army Corps of Engineers:** Issuance of a Section 404 permit under the Clean Water Act.
- **US Fish and Wildlife Service:** Review of the Determination of Biologically Equivalent or Superior Preservation (DBESP) for impacts to riparian/riverine resources protected under the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) and Endangered Species Act Section 7 Consultation with US Army Corps of Engineers.
- **Western Municipal Water District:** Approval and construction of water improvements.
- **South Coast Air Quality Management District:** Review air quality modeling used to support the EIR analysis and findings.

2.4 Project Applicant

The Project Applicant is:

Darrell A. Butler and Khosro Khaloghli
3241 Alta Laguna Boulevard
Laguna Beach, CA 92651
Contact: Darrell A. Butler

2.5 Compliance with CEQA

The basic purposes of CEQA are to:

1. Inform governmental decision makers and the public about the potential significant environmental effects of proposed activities;
2. Identify the ways that environmental damage can be avoided or significantly reduced;
3. 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
4. Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved. (State CEQA Guidelines, Section 15002).

The EIR process typically consists of three (3) parts—the Notice of Preparation (NOP), DEIR, and Final EIR. Pursuant to Section 15082 of the State CEQA Guidelines, the City initiated the environmental process with a NOP. The NOP was distributed to the State Clearinghouse, responsible agencies, and other interested parties, on July 28, 2020. Pursuant to Section 15082 of the Sate *CEQA Guidelines,* recipients of the NOP were requested to provide responses within 30 days after their receipt of the NOP. A scoping meeting was held on August 12, 2020; the scoping meeting was held virtually due to the Covid-19 pandemic.

Agencies and interested parties that submitted written comments in response to the NOP are identified in Table 2.0-1 – Summary of Written Comments Received in Response to the Notice of Preparation and copies of the letters received are included in Appendix A of this DEIR.

Table 2.0-1 – Summary of Written Comments Received in Response to the Notice of Preparation

Commenting Party (Date of Letter/email)	Summary of Comment	Addressed in Section(s) of the DEIR
Diane Dosserich – Metropolitan Water District of Southern California (Metropolitan) (August 17, 2020)	1. Metropolitan indicates it owns property and owns and operates facilities adjacent to the Project site (Box Springs Feeder and Mill's Treatment Plant located north and west of the Project, respectively; and Perris Valley Pipeline along the boundary of the south side of the Project beneath Alessandro Boulevard). Metropolitan expresses its concern of potential impacts to its properties, the pipeline, and associated facilities resulting from construction of the Project, and states Metropolitan must be allowed to maintain its rights-of-way and unobstructed access to its facilities. 2. Metropolitan also states it will not allow any structures within its Property or easements. Development associated with the proposed Project must not restrict any of Metropolitan's day-to-day operations and/or access to its facilities. Metropolitan will not permit activities that could subject the pipeline to excessive vehicle, impact, or vibratory loads. Structures within its properties or easement will also not be allowed. 3. Metropolitan requires detailed design plans for any activities within the vicinity of its facilities, properties, or rights-of way be	Comments have been noted and are addressed in Section 5.14 – Utilities. Vibration impacts from construction activities are discussed in Section 5.11 – Noise.

Commenting Party (Date of Letter/email)	Summary of Comment	Addressed in Section(s) of the DEIR
	submitted prior to construction for review and approval.	
Jeffrey Smith – March JPA (August 20, 2020)	This comment letter notes that while the Project is not adjacent to the March JPA jurisdictional boundary, the traffic analysis and Draft EIR should consider: 1. City/County designated truck routes on Alessandro Boulevard between State Route 91 and Interstate 215; 2. Intersections at Alessandro Boulevard/Meridian Parkway; Meridian Parkway/Cactus Avenue; Meridian Parkway/Van Buren Boulevard; and 3. Interstate 215 On/Off Ramps at Van Buren Boulevard, Cactus Avenue, Alessandro Boulevard, and Eastridge Avenue.	Section 5.12 – Transportation
Deborah De Chambeau – Riverside County Flood Control District (District) (August 20, 2020)	1. The District's letter indicates that the Project would not be impacted by District Master Drainage Plan facilities, nor are any facilities of regional interest proposed. 2. The Project may require a National Pollutant Discharge Elimination System (NPDES) permit from the State Water Resources Control Board 3. If the Project involves a Federal Emergency Management Agency (FEMA) mapped floodplain, the City should require the Applicant to provide all information required to meet FEMA requirements and that the Applicant should obtain a Conditional Letter of Map Revision (CLOMR) and Letter of Map Revision (LOMR) 4. The Project may require the Applicant to obtain a Section 1602 Agreement, a Clean Water Act Section 404 Permit, and a Clean Water Act Section 401 Water Quality Certification	Comments have been noted and are addressed in Section 5.9 – Hydrology and Water Quality
Mauricio Alvarez – Riverside Transit Authority (RTA) (August 21, 2020)	RTA comments they are requesting a sidewalk on Alessandro Blvd that is Americans with Disabilities Act (ADA) compliant with capacity to install a bus sign pole and bench in the future. RTA will install these improvements when appropriate.	Section 5.12 – Transportation

Commenting Party (Date of Letter/email)	Summary of Comment	Addressed in Section(s) of the DEIR
Lijin Sun – South Coast Air Quality Management District (SCAQMD) (August 25, 2020)	1. SCAQMD recommends that the SCAQMD's CEQA Air Quality Handbook and website be used as guidance in preparing the air quality and greenhouse gas analyses. SCAQMD additionally recommends the CalEEMod land use emissions software be used as well, and further notes the California Air Resource Board's (CARB) *Air Quality and Land Use Handbook: A Community Health Perspective* as a general reference guide for evaluating and reducing air pollution impacts. 2. SCAQMD recommends the Project's air quality impacts be determined by comparing Project criteria pollutant emissions to SCAQMD's CEQA regional pollutant emissions significance thresholds and localized significance thresholds. It is also noted that potential adverse air quality impacts from all phases of the Project should be identified, and that air quality impacts from construction and operation should be calculated. It is additionally recommended that a mobile source health risk assessment be performed if the Project generates diesel emissions. 3. The comment letter indicates that SCAQMD should be identified as a Responsible Agency should the Project require a permit from SCAQMD. 4. SCAQMD expresses its staff's concerns about potential public health impacts of siting warehouses within close proximity of sensitive land uses and cites its Multiple Air Toxics Exposure Study (MATES IV, May 2015). 5. SCAQMD provides a number of mitigation measures it recommends the City consider in the event the Project results in significant adverse air quality impacts, including measures for operational air quality impacts from mobile sources and other area sources.	Section 5.2 – Air Quality Section 5.7 – Greenhouse Gases The Air Quality Impact Analysis and Health Risk Assessment are contained in Appendix C.

Commenting Party (Date of Letter/email)	Summary of Comment	Addressed in Section(s) of the DEIR
	6. SCAQMD additionally recommends design considerations to further reduce potential air quality and health risk impacts.	
Scott Wilson-CDFW (August 25, 2020)	**Assessment of Biological Resources** 1. An assessment of various habitat types and a map that identifies the location of each habitat. 2. A biological inventory of species present or have the potential to be present. 3. A complete recent inventory of rare, threatened, endangered, and other sensitive species located within the Project footprint. 4. A thorough, recent, floristic-based assessment of special status plants and natural communities. 5. Information on the regional setting that is critical to an assessment of environmental impacts. 6. A full accounting of all mitigation/conversation lands within and adjacent to the Project. Include impacts to the existing restricted covenant. **Analysis of Direct, indirect, and cumulative impacts to Biological resources** 1. A discussion of potential impacts from lighting, noise, human activity, defensible space, and wildlife-human interaction etc. Changes to drainage patterns should also be discussed (water quality, volume, velocity, etc.). a. DEIR should fully describe and identify the location, acreage, and composition of defensible space. b. Defensible space should be provided and accounted for within proposed development area and not transferred to adjacent open space 2. A discussion on potential indirect Project impacts on biological resources, including areas adjacent. 3. An evaluation of impacts to adjacent and onsite open space/conserved lands from both the Project and long-term operational/maintenance needs.	Section 5.3 – Biological Resources, Section 5.9 – Hydrology and Water Quality, and Section 5.15 – Wildfire. The Biological Resources Report and MSHCP Consistency Report is contained in Appendix D.

Commenting Party (Date of Letter/email)	Summary of Comment	Addressed in Section(s) of the DEIR
	a. DEIR should include an evaluation of all potential Project-related impacts to the restricted covenant and the Wilderness Park. 4. Cumulative effects analysis which includes potential direct and indirect impacts to riparian areas, wetlands, vernal pools, wildlife corridors or wildlife movement areas, aquatic habitats, sensitive species and other sensitive habitats, open lands etc. **Alternatives Analysis** CDFW recommends the DEIR describes and analyzes a range of alternatives for the Project **Mitigation Measures for Project Impacts to Biological Resources** CDFW recommends the DEIR identify mitigation measures for the following topics; 1. Fully Protected Species: may not be taken or possessed at any time. CDFW recommends that the DEIR analyzes potential adverse impacts to fully protected species and that the City include in the analysis how appropriate avoidance, minimization, and mitigation measures will reduce indirect impacts to fully protected species. 2. Sensitive Plant Communities: the DEIR should include measures to fully avoid and otherwise protect sensitive plant communities from Project-related direct and indirect impacts. 3. California Species of Special Concern (CSSC): CSSCs should be considered during the environmental review process. 4. Mitigation: the DEIR should include mitigation measures for adverse Project-related impacts to sensitive species and habitats. Mitigation measures should emphasize avoidance and reduction of Project impacts. For unavoidable impacts, habitat restoration and/or enhancement, and preservation should be evaluated and discussed in detail.	

Commenting Party (Date of Letter/email)	Summary of Comment	Addressed in Section(s) of the DEIR
	a. The DEIR should include measures to perpetually protect the targeted habitat values within mitigation area from direct and indirect adverse impacts. Specific issues are restrictions on access, proposed land dedications, long-term monitoring and management programs, control of illegal dumping, water pollution, increased human intrusion, etc. b. If sensitive species and/or their habitat may be impacted from the Project, CDFW recommends the inclusion of specific mitigation in the DEIR. c. CDFW recommends that the DEIR specify mitigation that is roughly proportional to the level of impacts, in accordance with the provisions of CEQA. d. CDFW is concerned of the construction of an access road over approximately 0.67 acres of lands conserved under a restricted covenant. CDFW recommends that the City conduct a thorough analysis of this proposal and include in the DEIR an in-depth discussion demonstrating that this proposal represents an appropriate and defensible mitigation strategy. CDFW recommends that the City include in the DEIR a discussion of onsite habitat values and habitat management activities conducted pursuant to the Restoration Plan. The DEIR should specifically address how the mitigation proposal will provide superior conservation values. Copies of the Restoration Plan and associated annual reports should be included as an appendix. 5. Habitat Revegetation/Restoration Plans: Plans should be prepared by persons with	

Commenting Party (Date of Letter/email)	Summary of Comment	Addressed in Section(s) of the DEIR
	expertise in southern California ecosystems. Each plan should include the following; a. The location of restoration sites and assessment of appropriate reference sites; b. The plant species to be used, sources of local propagules, container sizes, and seeding rates; c. A schematic depicting the mitigation area; d. A local seed and cuttings and planting schedule; e. A description of the irrigation methodology; f. Measures to control exotic vegetation on site; g. Specific success criteria; h. A detailed monitoring program; i. Contingency measures should the success criteria not be met; and j. Identification of the party responsible for meeting the success criteria and providing for conservation of the party responsible for meeting the success criteria and providing for conservation of the mitigation site. CDFW recommends that local onsite propagules from the Project area and nearby vicinity be collected and used for restoration purposed. Onsite seed collection should be initiated. Restoration objectives should include protecting special habitat elements or recreating them. 6. Nesting Birds and Migratory Bird Treaty Act: CDFW recommends that the DEIR include specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur and measures should a nest be location. If pre-construction surveys are proposed, CDFW recommends no more than three (3) days prior to vegetation clearing or ground disturbance activities.	

Commenting Party (Date of Letter/email)	Summary of Comment	Addressed in Section(s) of the DEIR
	California Endangered Species Act CDFW recommends early consultation and recommends the DEIR addresses all Project impacts to listed species and specifies a mitigation monitoring and reporting program. **Western Riverside County Multiple Species Habitat Conservation Plan** 1. An assessment of the impacts to the MSHCP as a result to this Project is necessary to address CEQA requirements. 2. The permittees need to demonstrate that proposed actions are consistent with the MSHCP. The DEIR needs to address how the proposed Project will affect the policies and procedures of the MSHCP. All surveys and results shall be included in the DEIR.	
Mitchell M. Tsai – Attorneys for Southwest Regional Council of Carpenters (SWRCC) (August 26, 2020)	The commenter states the following: 1. The commenter provided comments that are more administrative, not related to the EIR or project, and these comments are noted. 2. The City should require the Applicant to provide additional community benefits such as requiring local hires and paying prevailing wages to benefit the City – comment noted. 3. It would be beneficial for the City to require the Applicant to hire workers who a. have graduated from a Joint Labor Management apprenticeship training program approved by the State, or b. have as many hours of on-the-job experience as would be required to graduate from such a program; c. are registered apprentices in an apprenticeship training program approved by the State 4. The City should require the Project to be built to standards exceeding the current 2019 California Green Building code and 2020 County of Los Angeles Green Building Standards Code to both mitigate environmental impacts and advance progress toward the State's environmental goals	Items #1-5 do not relate to the content or analysis contained in the DEIR. The Project's compliance with the California Building Code is addressed in Sections 5.2 – Air Quality, 5.5 – Energy, 5.7 – Greenhouse Gases, and 5.10 Land Use. The Air Quality Impact Analysis and Health Risk Assessment are contained in Appendix C.

Commenting Party (Date of Letter/email)	Summary of Comment	Addressed in Section(s) of the DEIR
	The commenter additionally provides the following regarding COVID-19: 5. Due to the COVID-19 Crisis, the City must adopt a mandatory finding of significance that the Project may cause a substantial adverse effect on human beings a. The commenter recommends the Lead Agency adopt additional CEQA mitigation measures to mitigate public health risks from Project construction activities b. The commenter recommends several work practices regarding construction site design, testing procedures, and planning as it relates to disease preparedness and response	
Nick Tavaglione – NL Tavaglione Consulting (NLTC) (August 26, 2020)	The commenter indicates NLTC's services have been retained by a party whose property may be impacted by the Project with regards to ingress and egress, existing traffic signal(s) elimination, and additional traffic signal(s) and requests traffic reports/documents that justify the changes mentioned.	Section 5.12 – Transportation and the Traffic Operations Analysis is included as Appendix L
Len Nunney - Friends of Riverside's Hills (August 27, 2020)	The Friends of Riverside's Hills comments that the following should be addressed in the DEIR: 1. All phases of development as well as developments in the area 2. Construction traffic impacts 3. Biological resource impacts, including the Project's proximity to the nearby Sycamore Canyon Wilderness Park (Park) and the role of the Park in the preservation of the endangered Stephens' kangaroo rat and as a core area in the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) 4. Urban/wildlands interface impacts, including issues outlined in the MSHCP 5. Aesthetic and view impacts, including the Project's proximity to the Park 6. Cultural Resource impacts 7. Energy impacts, including mitigation options such as solar panel generation	Section 3 – Project Description Section 4 – Environmental Setting Section 5.1 – Aesthetics Section 5.2 – Air Quality Section 5.3 – Biological Resources Section 5.4 – Cultural Resources Section 5.5 – Energy Section 5.6 – Geology and Soils

Commenting Party (Date of Letter/email)	Summary of Comment	Addressed in Section(s) of the DEIR
	8. Geology and soils impacts, including the amount of grading involved in the Project 9. Land use and planning impacts 10. Recreation impacts, including the Project's proximity to the Park and the need to maintain access to the Park 11. Traffic impacts, including nearby streets and intersection impacts 12. Noise impacts, including impacts to the Park 13. Light impacts, including impacts to the Park 14. Water quality impacts, including impacts to on-site riparian areas and plans for their future management 15. Air quality impacts 16. Water supply impacts	Section 5.9 – Hydrology and Water Quality Section 5.10 – Land Use and Planning Section 5.11 – Noise Section 5.12 – Transportation/Traffic Section 5.14 – Wildfire Section 7 – Environmental Effects Found not to be Significant

Comments received at the scoping meeting are summarized in Table 2.0-2-Summary of Comments Received at the August 12, 2020, Virtual Scoping Meeting.

Table 2.0-2 – Summary of Comments Received At the August 12, 2020, Virtual Scoping Meeting

Commenting Party	Summary of Comments	Location in DEIR in which Comment is Addressed
Bill Quisenberry – Labor Relations Representative, Laborers' International Union of North America (LiUNA!)	Commenter expressed interest in possible contracting with the Project applicant and requested contact information.	Section 2 – Introduction provides Project Applicant information; comment was also noted and addressed by the City.

Copies of the NOP, Initial Study, and copies of written comments received by the City in response to the NOP are included in Appendix A.

An EIR is an informational document intended to inform decisions makers and the general public of potentially significant environmental impacts of a project. An EIR also identifies possible ways to minimize these potentially significant impacts (referred to as a mitigation) and describes alternatives to a project that may also reduce its significant impacts. Having the authority to take action on the proposed Project, the City Planning Commission and the City Council will consider the information in this EIR in their evaluations of the Project. The findings and conclusions presented in the EIR regarding environmental impacts do not control the City's discretion to approve, deny, or modify the Project, but instead are presented as information to aid the decision-making process.

As set forth in Section 15021 of the State *CEQA Guidelines*, as Lead Agency, the City has the duty to avoid or minimize environmental damage where feasible. Furthermore, Section 15021(d) of the State *CEQA Guidelines* states that, "CEQA recognizes that in determining whether and how a project should be approved, a public agency has an obligation to balance a variety of public objectives, including economic, environmental, and social factors, and in particular the goal of providing a decent home and satisfying living environment for every Californian." Other public agencies (i.e., Responsible and Trustee Agencies) that may use this EIR in their decision-making or permit processes will consider the information in this EIR along with other information that may be presented during the CEQA process. In accordance with CEQA, the public agencies will be required to make findings for each environmental impact of the Project that cannot be mitigated to below a level of significance. If the Lead Agency determines that the benefits of the proposed Project outweigh significant environmental effects, the Lead Agency will be required to adopt a Statement of Overriding Considerations stating the reasons supporting its action notwithstanding the Project's significant environmental effects.

Potentially Significant Environmental Effects

CEQA requires consideration and discussion of significant environmental effects. Section 15126 of the State *CEQA Guidelines* state that, "All phases of a project must be considered when evaluating its impact on the environment: planning, acquisition, development, and operation." Section 5 of this DEIR will address each environmental effect that was determined to be potentially significant in the NOP (Appendix A). Each effect is organized into an issue area; those that will be analyzed (and the section of the DEIR in which the analysis is contained) are listed below:

- Aesthetics (Section 5.1)
- Air Quality (Section 5.2)
- Biological Resources (Section 5.3)
- Cultural Resources (Section 5.4)
- Energy (Section 5.5)
- Geology and Soils (Section 5.6)
- Greenhouse Gas Emissions (Section 5.7)
- Hazards and Hazardous Materials (Section 5.8)
- Hydrology and Water Quality (Section 5.9)
- Land Use and Planning (Section 5.10)
- Noise (Section 5.11)
- Transportation (Section 5.12)
- Tribal Cultural Resources (Section 5.13)
- Utilities (Section 5.14)
- Wildfire (Section 5.15)

Format

This DEIR has been organized in sections as follows:

Table of Contents to assist readers in locating the analysis of different subjects and issues as required by Section 15122 of the State *CEQA Guidelines*. A list of acronyms used in the EIR is included in the table of contents.

Section 1 – Executive Summary covers the summary requirements of CEQA as required by Section 15123 of the State *CEQA Guidelines* and includes: the Project location, a brief description of the Project, a matrix containing a summary of environmental impacts and mitigation measures, Project objectives, approvals related to the Project, areas of controversy, and a brief description of the Project alternatives.

Section 2 – Introduction describes the scope and purpose of the DEIR, identifies the Project Applicant and Lead Agency, provides a brief summary of the CEQA process to date, summarizes and identifies the documents incorporated by reference in the DEIR.

Section 3 – Project Description contains the information required by Section 15124 of the State *CEQA Guidelines* including: a detailed description of the Project, the Project objectives, a general description of the Project's environmental setting, the approvals needed to implement the Project, and a list of agencies expected to use the DEIR.

Section 4 – Environmental Setting provides a general overview of the environmental setting for the proposed Project and the developments considered in the cumulative impact analysis in Section 5.

Section 5 – Environmental Impact Analysis satisfies the requirements of Sections 15125, 15126, 15126.2, and 15126.4 of the State *CEQA Guidelines* by including an analysis of each environmental issue area determined to have potentially significant impacts in the NOP or as a result of comments received in response to the NOP. For each issue area analyzed, this section includes a discussion of the setting to which each issue area is analyzed against, defines the related regulations affecting the proposed Project, identifies the thresholds used to determine significance, describes any Project design features that would reduce impacts, analyzes the Project's impacts, provides a description of the mitigation measures used to reduce or lessen potential impacts, discusses the Project's impacts, if mitigation is required, and analyzes the Project's potential cumulative impacts.

Section 6 – Other CEQA Topics includes the Project's consistency with regional plans, significant irreversible impacts, and growth inducing impact discussion.

Section 7 – Environmental Effects Found Not Significant includes the topics and thresholds in which the Project would not have significant impacts.

Section 8 – Alternatives satisfies the requirements of Section 15126.6 of the State *CEQA Guidelines* by identifying and discussing the no Project alternative in addition to alternatives to the Project that lessen the severity of significant impacts and identifying the environmentally superior alternative.

Section 9 – References includes a listing of all reference materials, the organizations and persons contacted in preparing the EIR, and a list of preparers as required by Section 15129 of the State *CEQA Guidelines.*

2.6 Documents Incorporated by Reference

Section 15150 of the State CEQA Guidelines permits and encourages an environmental document to incorporate, by reference, other documents that provide relevant data. The documents summarized below are incorporated by reference, and the pertinent material is summarized throughout this EIR, where that information is relevant to the analysis of potential impacts of the Project. All documents incorporated by reference are available for review at, or can be obtained through, the City of Riverside, Community & Economic Development Department, Planning Division. Technical studies cited below were specifically developed in connection with the Project. Where noted as appendices, the reports are included in their entirety.

City of Riverside General Plan 2025 Final Program Environmental Impact Report

The *City of Riverside General Plan 2025 Final Program Environmental Impact Report* (GP 2025 FPEIR) was certified in 2007. The GP 2025 FPEIR provided a first tier analysis of the potential environmental effects of the adoption and implementation of the proposed General Plan, adoption and implementation of the comprehensive update of the Zoning Code and Subdivision Code, an amendment to the Noise Code, and adoption and implementation of the Magnolia Avenue Specific Plan as well as the adoption and implementation of the Citywide Design and Sign Guidelines. The GP 2025 FPEIR contains information regarding the environmental setting within the City and is available online at http://www.riversideca.gov/planning/gp2025program.

City of Riverside General Plan 2025

The *City of Riverside General Plan 2025* (GP 2025) was adopted in 2007. The GP 2025 is a long-range plan designed to control and regulate the growth in the City and to maintain the quality of the human and natural environment. The GP 2025 is the City's planning "constitution," or a blueprint for development, and is the single-most important policy document in guiding land use and development decisions within the City (GP 2025 FPEIR, p. 2-5). To that end, the GP2025 contains goals and policies that serve as the planning framework for the City in addition to providing direction for City operations and programs and serves as a guide to public and private decision making. The GP 2025 includes the following elements: Land Use and Urban Design, Circulation and Community Mobility, Housing, Arts and Culture, Education, Public Safety, Noise, Open Space and Conservation, Air Quality, Public Facilities, and Park and Recreation Elements. The GP 2025 is available online at http://www.riversideca.gov/planning/gp2025program.

City of Riverside Municipal Code

The City's Municipal Code complements the GP 2025. The Municipal Code, which contains among other ordinances, the City's Zoning Code, is a mechanism to implement and enforce the goals, objectives, policies and programs articulated in the GP 2025. Many of the potential environmental concerns considered in this DEIR are adequately addressed through application

of regulations contained in the Municipal Code. The Municipal Code is available online at http://www.riversideca.gov/municode.

Sycamore Canyon Business Park Specific Plan and EIR

Originally known as the Box Springs Industrial Park Specific Plan, the *Sycamore Canyon Business Park Specific Plan* (SCBPSP) was originally adopted April 10, 1984 and has been amended 14 times. The SCBPSP describes a planned industrial park consisting of approximately 920 acres of industrial and commercial uses and a 480-acre wilderness park (Sycamore Canyon Wilderness Park) within an approximately 1,500-acre area. The purpose of the SCBPSP is to assure efficient, orderly, and attractive development. To provide for orderly development, the SCBPSP was coordinated with the Sycamore Canyon Specific Plan and the General Development Plan for the Sycamore Canyon Park. The SCBPSP is available online at https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/spec-plans/syc-bus-park/plan_doc.pdf.

The SCBPSP was the result of a complex series of circumstances. As the only large, undeveloped area of land not previously subject to detailed planning analysis, the site had been identified as a potential significant opportunity in economic revitalization studies conducted in 1978. A number of studies covering the area occurred between when the Specific Plan was adopted. Important factors in these studies were preserving the land now known as Sycamore Canyon Wilderness Park and establishing land uses that would be compatible with what is now known as the March Air Reserve Base Airport Compatibility Plan available at http://www.rcaluc.org/Portals/13/17%20-%20Vol.%201%20March%20Air%20Reserve%20Base%20Final.pdf?ver=2016-08-15-145812-700. A good portion of the property within the SCBPSP is impacted by the C1 – Primary Approach/Departure Zone and D – Flight Corridor Buffer Compatibly Criteria that limits other uses, such as residential uses, in this area.

Sycamore Canyon Wilderness Park Stephen's Kangaroo Rat Management Plan and Updated Conceptual Development Plan.

The *Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan* was prepared with two purposes: update the park's conceptual development plan and provide a coordinated Maintenance/Management Plan for the endangered Stephens' kangaroo rat (SKR). Because the Sycamore Canyon Wilderness Park was designated as a core reserve in the Habitat Conservation Plan (HCP) for the SKR, the City was required to prepare a Maintenance/Management Plan for the core reserve. The plan is available online at the City's website:

https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/spec-plans/SycCynMnmgtPlan_UpdatedConceptualPlan.pdf

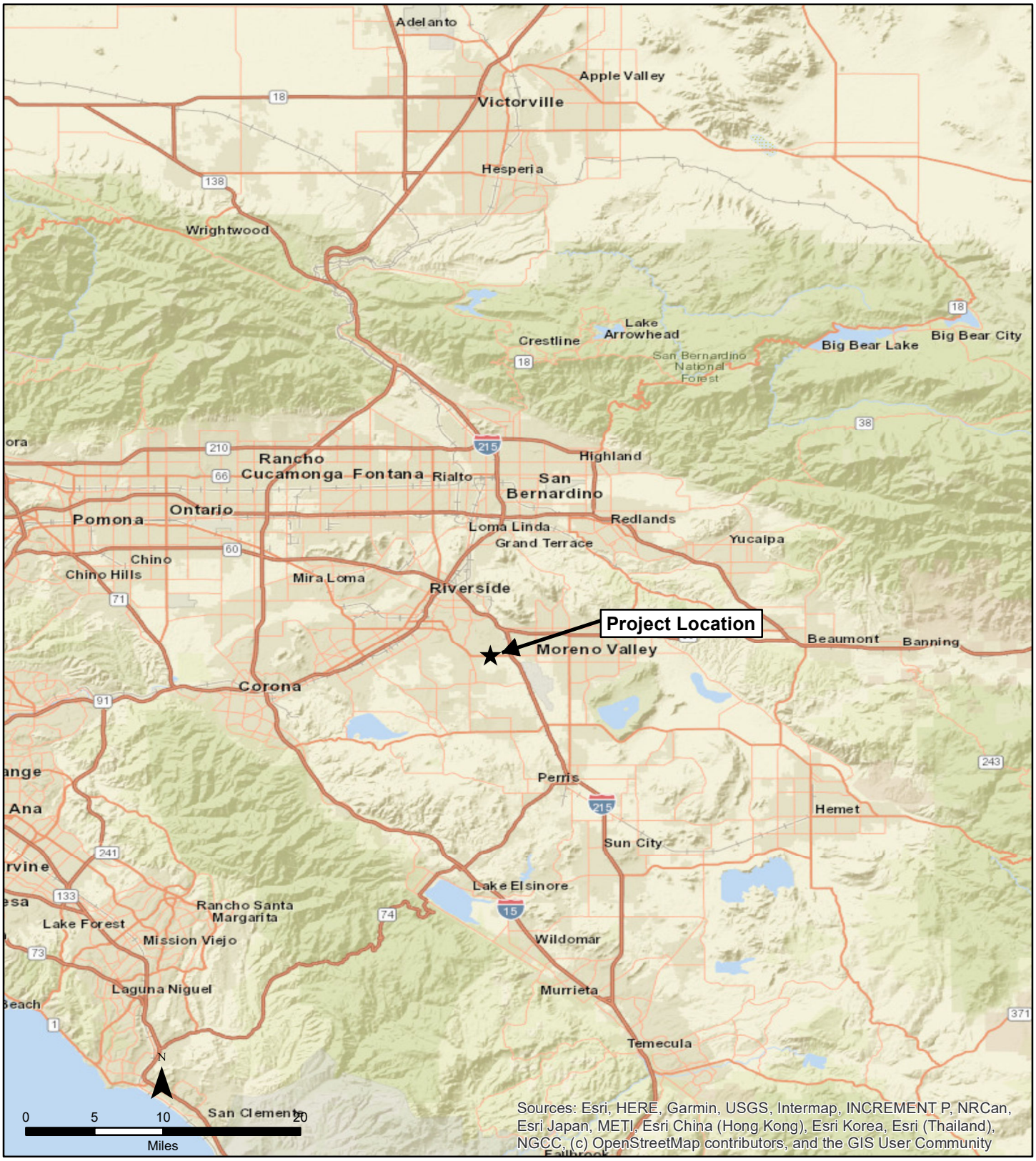
3.0 Project Description

This section describes the Project, identifies the Project location, the Project site and surrounding land uses, project characteristics, objectives, and discretionary actions needed for approval. This DEIR analyzes the potential environmental effects of the construction and operation of the proposed Sycamore Hills Distribution Center Project, and all associated on-and off-site supporting improvements, which herein collectively are referred to as the "Project."

3.1 Project Location

The regional setting of the Project is shown on Figure 3.0-1 – Regional Map. The Project is located approximately 10 miles south of Downtown Riverside. The Project site is within the southwestern quarter of Section 9, Township 3 South, Range 4 West, as shown on the Riverside East, California, United States Geological Survey (USGS) 7.5-minute quadrangle. (Figure 3.0-2 – Vicinity Map). The Project site is located in the eastern portion of the City of Riverside, east of Barton Street, west of Sycamore Canyon Boulevard, and north of Alessandro Boulevard, within the Sycamore Canyon Business Park Specific Plan. (Figure 3.0-3 – Project Location Map). The Project site is approximately 48.64 gross acres and includes the following Assessor's Parcel Numbers (APNs):

- APN: 263-060-022
- APN: 263-060-024
- APN: 263-060-026

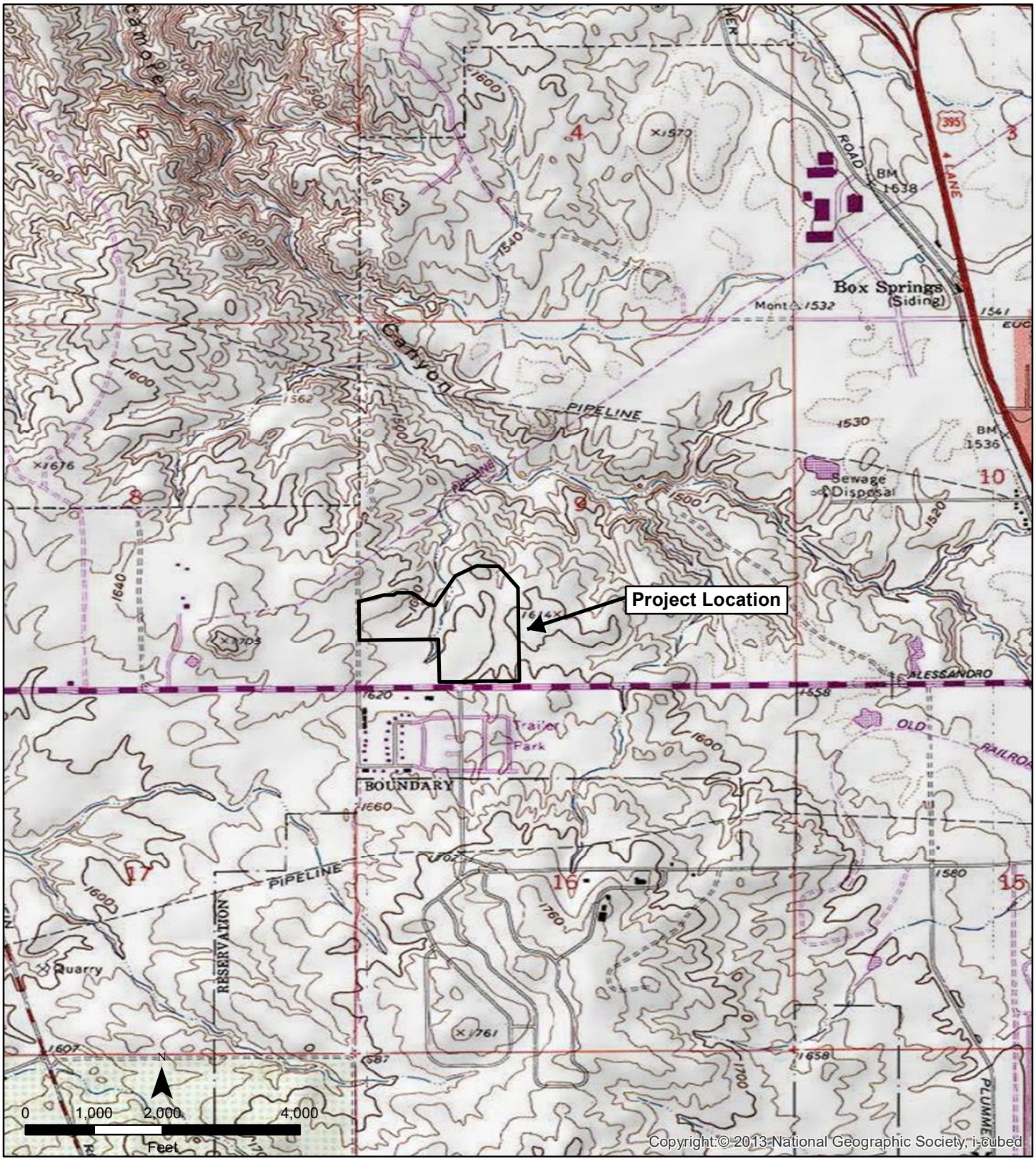


SYCAMORE HILLS DISTRIBUTION CENTER

RVA

Regional Map

Figure 3.0-1



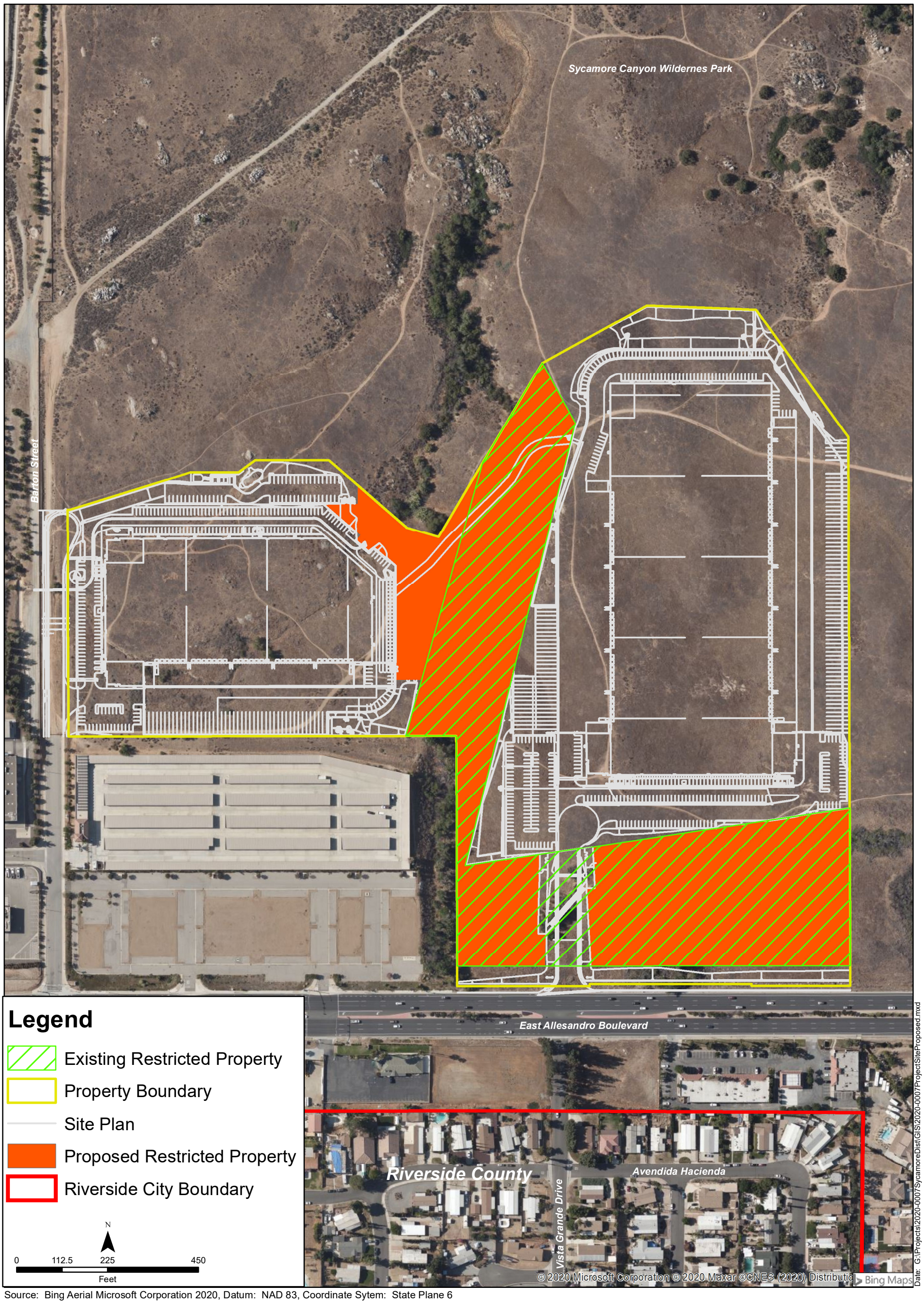
USGS 7.5 minute Quadrangle: Riverside East, Range: 4W, Section: 8, 9, Township: 3S

SYCAMORE HILLS DISTRIBUTION CENTER

RVA

Vicinity Map

Figure 3.0-2



Source: Bing Aerial Microsoft Corporation 2020, Datum: NAD 83, Coordinate Sytem: State Plane 6

SYCAMORE HILLS DISTRIBUTION CENTER

RVA

Project Location Map

Figure 3.0-3

3.1.1 Project Site – Existing Conditions

The Project site is currently undeveloped and vacant but has been used historically as open space. The topography consists of natural rolling terrain descending gradually from a west to east direction. There are granitic rock outcroppings throughout the property (see Figures 3.0-4A-E).

The Project site contains two drainages, Drainage A and Drainage B. Drainage A enters the site near the northern portion of the western boundary and flows for approximately 1,183 feet before exiting the site near the middle of the northern boundary. Drainage B enters the site near the middle of the southern boundary and flows for approximately 981 feet before exiting the site near the middle of the northern boundary.

The Project site contains low to moderate vegetation primarily consisting of non-native grasslands and weeds as well as some riparian woodland. The non-native grasslands and weeds make up approximately 41 acres of the Project site and the riparian woodland makes up approximately 5 acres. Patches of sparse Riversidean sage scrub are present in the upland areas and make up a total of approximately 2 acres. The rest of the Project site is disturbed with no vegetation or exposed rock.

Several unpaved trails cross through the Project site and the drainages. The trails are not vegetated and are used by both people and animals. Several trails lead into the Sycamore Canyon Wilderness Park just north of the Project site and a couple trails lead into the private property to the east. These on-site trails are not identified as designated trails in the Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan.

The Project site contains an existing area of approximately 11.6 acres legally designated as "Restricted Property" (see Figure 3.0-3). The Restricted Property area supports a jurisdictional drainage and associated riparian habitat and was required as a condition of the Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers for construction of the Grove Community Church at an off-site location, approximately one mile southwest. The Restricted Property is intended for preservation in a natural condition.



Source: Bing Aerial Microsoft Corporation 2020, Datum: NAD 83, Coordinate Sytem: State Plane 6

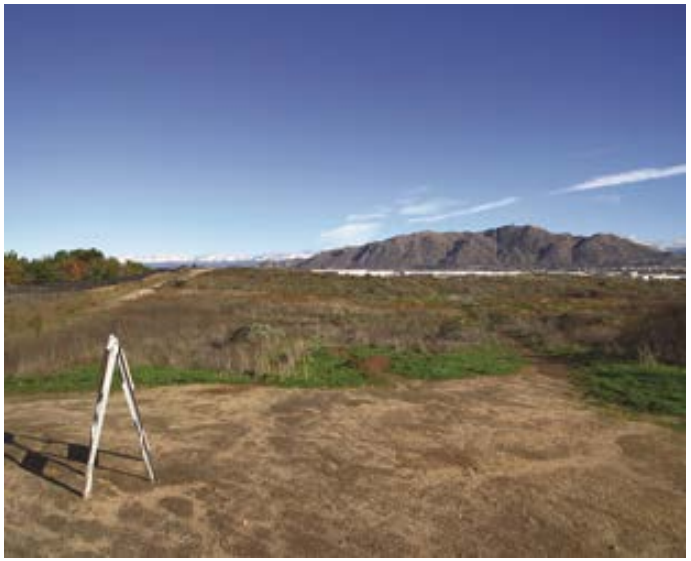
SYCAMORE HILLS DISTRIBUTION CENTER

RVA

Photo Location Map

Figure 3.0-4A

View 1



View 2



View 3



View 4



Sycamore Hills Distribution Center

RVA

Site Photos

Figure 3.0-4B

View 5



View 6



View 7



View 8



Sycamore Hills Distribution Center

RVA

Site Photos

Figure 3.0-4C

View 9



View 10



View 11



View 12



Sycamore Hills Distribution Center

RVA

Site Photos

Figure 3.0-4D

View 13



Sycamore Hills Distribution Center

Site Photos

Figure 3.0-4E

3.1.2 Project Site Background

The Project site was formerly owned by the Grove Community Church where a new church was planned to be constructed in the future. However, as the site is located within the C-1 Primary Approach/Departure Zone of the March Air Reserve Base/ Inland Port Airport Land Use Compatibility Plan, and due to restrictions regarding the height of the building and the maximum number of people allowed to congregate at any time, it was not conducive to the church's plans. March Joint Powers Authority (MJPA) assisted the church in finding a new location for the church, approximately one mile to the southwest at 19900 Grove Community Drive, Riverside.

Construction of the Grove Community Church at the off-site 19900 Grove Community Drive, location had impacts to a jurisdictional drainage and associated riparian habitat at that location. To mitigate for impacts from construction of the church at the off-site location, the U.S. Army Corps of Engineers required that the on-site jurisdictional drainage and riparian habitat along Alessandro Boulevard be set aside and preserved in a legally designated "Restricted Property," as a condition of the Clean Water Act Section 404 permit that was issued for the construction of the church. The "Restricted Property" was recorded in 2009.

MJPA purchased the Project site property from the church with the intent to sell and to convey title of the "Restricted Property" area to the City of Riverside. However, a parcel map was not created, and the title transfer did not take place. MJPA is still the owner of the entire Project site property. The Project applicant intends to purchase the property from MJPA upon project entitlement approvals.

The Project site and surrounding area has been the subject of City planning efforts since the early 1980s. To place the Project site and surrounding land uses into context, these efforts are described below.

Amended 1979 – Air Installation Compatible Use Zones

As amended in October of 1979, the Air Installation Compatible Use Zones (AICUZ) report for March Air Force Base, identifies aircraft noise and accident potential effects of the mission at March AFB. It also recommends land use plans, policies, and ordinances which are intended to ensure compatible relationships in the local environments of the base.

The bulk of property within the Sycamore Canyon Business Park is described as impacted by aircraft noise contours of 80 CNEL or above. In addition, a large area of land along the Atchison, Topeka and Santa Fe Railway (AT&SF) railroad is exposed to accident potential resulting from aircraft operations.

April 1984 – Sycamore Canyon Business Park Specific Plan and EIR

Originally known as the Box Springs Industrial Park Specific Plan, the *Sycamore Canyon Business Park Specific Plan* (SCBPSP) was adopted April 10, 1984 and has been amended several times since its adoption. The SCBPSP encompasses approximately 1,500 acres, consisting of a 920-acre planned industrial park with industrial and commercial uses, and a 480-acre wilderness park (Sycamore Canyon Wilderness Park). The purpose of the SCBPSP is to

assure efficient, orderly, and attractive development. To provide for orderly development, the SCBPSP was coordinated with the Sycamore Canyon Specific Plan and the General Development Plan for the Sycamore Canyon Park.

The SCBPSP was the result of a complex series of circumstances including: (i) the SCBPSP was the only large, undeveloped area of land not previously subject to detailed planning analysis; (ii) the SCBPSP area had been identified as a potentially significant development opportunity for economic revitalization; (iii) the adoption of the Arlington Heights Plan in 1979; (iv) the Southeast Study Area report adopted in 1980; and (v) the Air Installation Compatible Use Zones (AICUZ) (amended in 1979) for March Air Force Base. Important factors in these studies included preservation of the land now known as Sycamore Canyon Wilderness Park and establishment of land uses that would be compatible with what is now known as the March Air Reserve Base (MARB) Airport Compatibility Plan. Under the MARB Compatibility Plan, a good portion of the property within the SCBPSP is impacted by the C1 – Primary Approach/Departure Zone and D – Flight Corridor Buffer Compatibly Criteria that limits other uses, such as residential uses, in this area.

April 1984 – Sycamore Canyon Specific Plan (SCSP) and EIR

The *Sycamore Canyon Specific Plan* (SCSP) was adopted on April 10, 1984, to further the voter's intent shown by the passage of Proposition R with regard to protecting natural hillside and arroyo areas. Overall development levels established by Proposition R are the basis of the SCSP; however, the location and density of development was shifted within the SCSP area. This shift was made in order to protect Sycamore Canyon as a complete ecosystem, to the extent possible, within the limitations of the SCSP area and adjacent lands. The major thrust of the SCSP was to identify the area most appropriately preserved as open space in order to protect the various natural resources in and around Sycamore Canyon. The SCSP called for preservation of over 920 acres of land, of which about 450 acres are involved in the main canyon or its tributaries and the steep surrounding slopes. The remaining 470 acres to be preserved includes sensitive wildlife areas, archaeological areas, and linking areas, many of which have other special features such as rock outcroppings.

The SCSP provides for the development of perimeter portions of the site with residential and some commercial uses while protecting areas in and around Sycamore Canyon for open space. The proposed residential uses allowed under the SCSP were broken out of the SCSP and were instead covered by the Lusk Highlander Specific Plan (now known as the Sycamore Highlands Specific Plan).

April 1984 – Air Installation Compatible Use Zones

An updated *Air Installation Compatible Use Zones* (AICUZ) report for the *March ARB March Air Force Base Riverside County Comprehensive Land Use Plan* (CLUP) was adopted on April 26, 1984. The CLUP placed the newly created SCBPSP into Area II. Area II was defined to be those areas of significant safety concerns due to aircraft maneuvering, ascending, descending, turning, and changing power settings when landing or taking off from the airport. Due to safety concerns, the City chose industrial use for Area II because it would potentially expose fewer people.

The AICUZ study has been updated a number of times since its 1984 adoption, with an updated study released in 2005 and the most recent released in 2018. The March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan (discussed further below) is primarily based on the 2005 AICUZ study.

March 1999 – Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan

The *Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan* was prepared with two purposes: update the Sycamore Canyon Wilderness Park's (Park) conceptual development plan and provide a coordinated Maintenance/Management Plan for the endangered Stephens' kangaroo rat (SKR). The City was required to prepare a Maintenance/Management Plan because the Park was designated as a core reserve in the Habitat Conservation Plan for the Stephen's Kangaroo Rat (SKR HCP) in Western Riverside County.

Adopted November 2014 – March Air Reserve Base /Inland Port Airport Land Use Compatibility Plan

The *March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan* (March ARB/IPA ALUCP) was prepared for and adopted by the Riverside County Airport Land Use Commission (RCALUC). In accordance with provisions of the California State Aeronautics Act (Public Utilities Code Section 21670 et seq.), the RCALUC has been assigned the lead responsibility for airport land use compatibility planning around each of the public-use and military airports in Riverside County, including the preparation of an ALUCP for each airport. With regard to military airports, Public Utilities Code Section 21675(b) states that Airport Land Use Commissions (ALUCs) must prepare a compatibility plan and that such plans "shall be consistent with the safety and noise standards in the Air Installations Compatible Use Zones plan prepared for that military airport" (RCALUC 2014). Accordingly, as previously mentioned, the 2014 ALUCP is based primarily on the 2005 AICUZ study.

As noted on Map MA-1 of the March ARB/IPA ALUCP, the Project site is located in Compatibility Zone C1. Per Table MA-2 – Basic Compatibility, Zone C1, the Primary Approach/Departure Zone, permits most uses, including industrial but limits the density/intensity of industrial uses and includes development conditions, such as discouraging aboveground bulk storage of hazardous materials and requiring airspace review for objects greater than 70 feet tall (MARB/IPA ALUCP, Table MA-2).

3.1.3 Land Use and Zoning

The City of Riverside General Plan 2025 (GP 2025) land use designation for the Project site is Business/Office Park (B/OP), Figure 3.0-5 Land Use Designation Map. The Project site is zoned BMP-SP – Business and Manufacturing Park and Specific Plan (Sycamore Canyon Business Park) Overlay Zones, Figure 3.0-6 – Zoning Map. The Project site is within the Sycamore Canyon Business Park Specific Plan (SCBPSP), which is considered a "Major Business Park" as shown

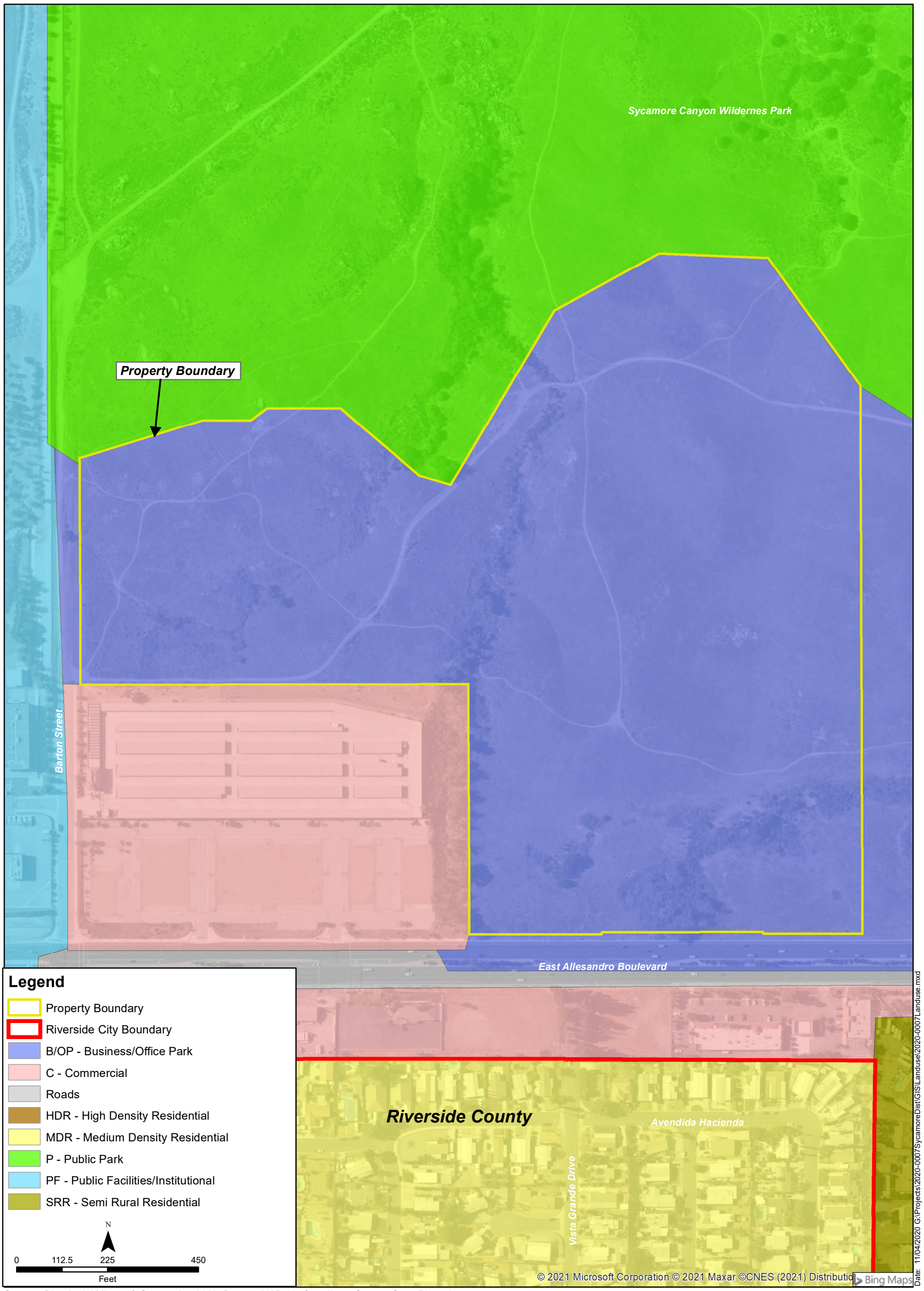
on Figure LU-4 of the GP 2025. The SCBPSP designation for the Project site is Industrial, Figure 3.0-7.

3.1.4 Surrounding Land Use and Zoning

The Project site is bordered on the north by the Sycamore Canyon Wilderness Park, vacant property to the east, Barton Street and a wastewater treatment plant to the west, and the Citywide Self Storage facility and Alessandro Boulevard to the south. Commercial and residential uses are located further south (across Alessandro Boulevard), within the City and County of Riverside jurisdictions. Table 3.0-1 details the land use and zoning of the Project site and surrounding areas.

Table 3.0-1 – Site and Surrounding Land Use/Zoning Designations

	Existing Land Use	General Plan Designation	Zoning Designation
Project Site	Vacant	B/OP – Business/Office Park	BPM-SP – Business and Manufacturing Park and Specific Plan (Sycamore Canyon Business Park) Overlay Zones
North	Sycamore Canyon Wilderness Park	P – Public Park	PF-SP – Public Facilities and Specific Plan (Sycamore Canyon Business Park) Overlay Zones
East	Vacant and Citywide Self-Storage	B/OP – Business/Office Park, and P – Public Park	BPM-SP – Business and Manufacturing Park and Specific Plan (Sycamore Canyon Business Park) Overlay Zones, and PF-SP – Public Facilities and Specific Plan (Sycamore Canyon Business Park) Overlay Zones
South	Citywide Self-Storage Across Alessandro Blvd. commercial and residential (in County of Riverside)	C – Commercial	CG-X-20 – Commercial General, Building Setback (20 feet from Barton Street) Overlay Zones, and CR – Commercial Retail Zone
West	Wastewater Treatment Plant	PF – Public Facilities/Institutions and C – Commercial	PF – Public Facilities Zone, CG-X-20 – Commercial General, Building Setback (20 feet from Barton Street) Overlay Zones, and CR-X-50/20 – Commercial Retail and Building Setback (50 feet from Alessandro Blvd. and 20 feet from other streets) Overlay Zones



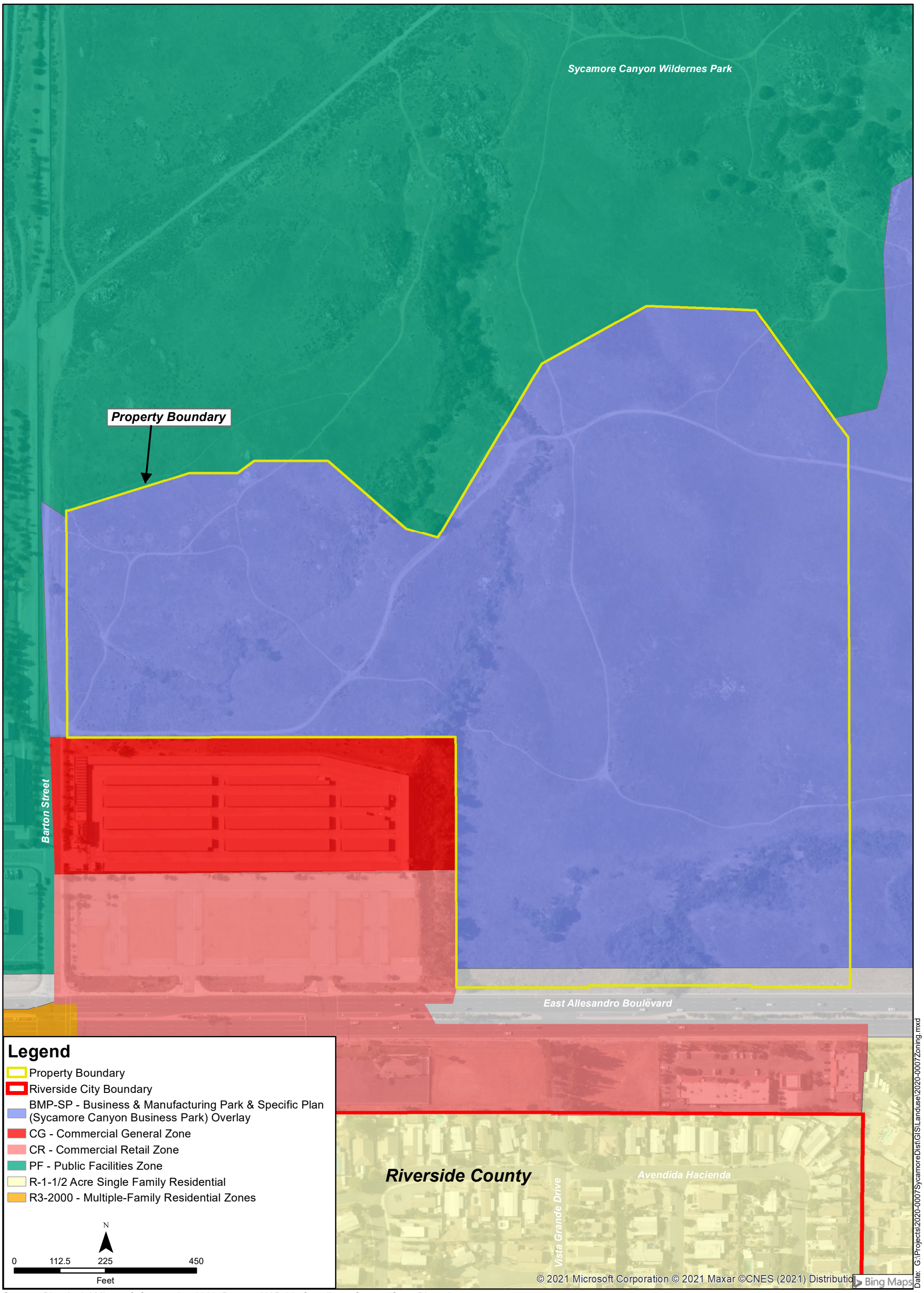
Source: Bing Aerial Microsoft Corporation 2020, Datum: NAD 83, Coordinate Sytem: State Plane 6

SYCAMORE HILLS DISTRIBUTION CENTER

RVA

Land Use Designation Map

Figure 3.0-5



Source: Bing Aerial Microsoft Corporation 2020, Datum: NAD 83, Coordinate Sytem: State Plane 6

SYCAMORE HILLS DISTRIBUTION CENTER

RVA

Zoning Map

Figure 3.0-6

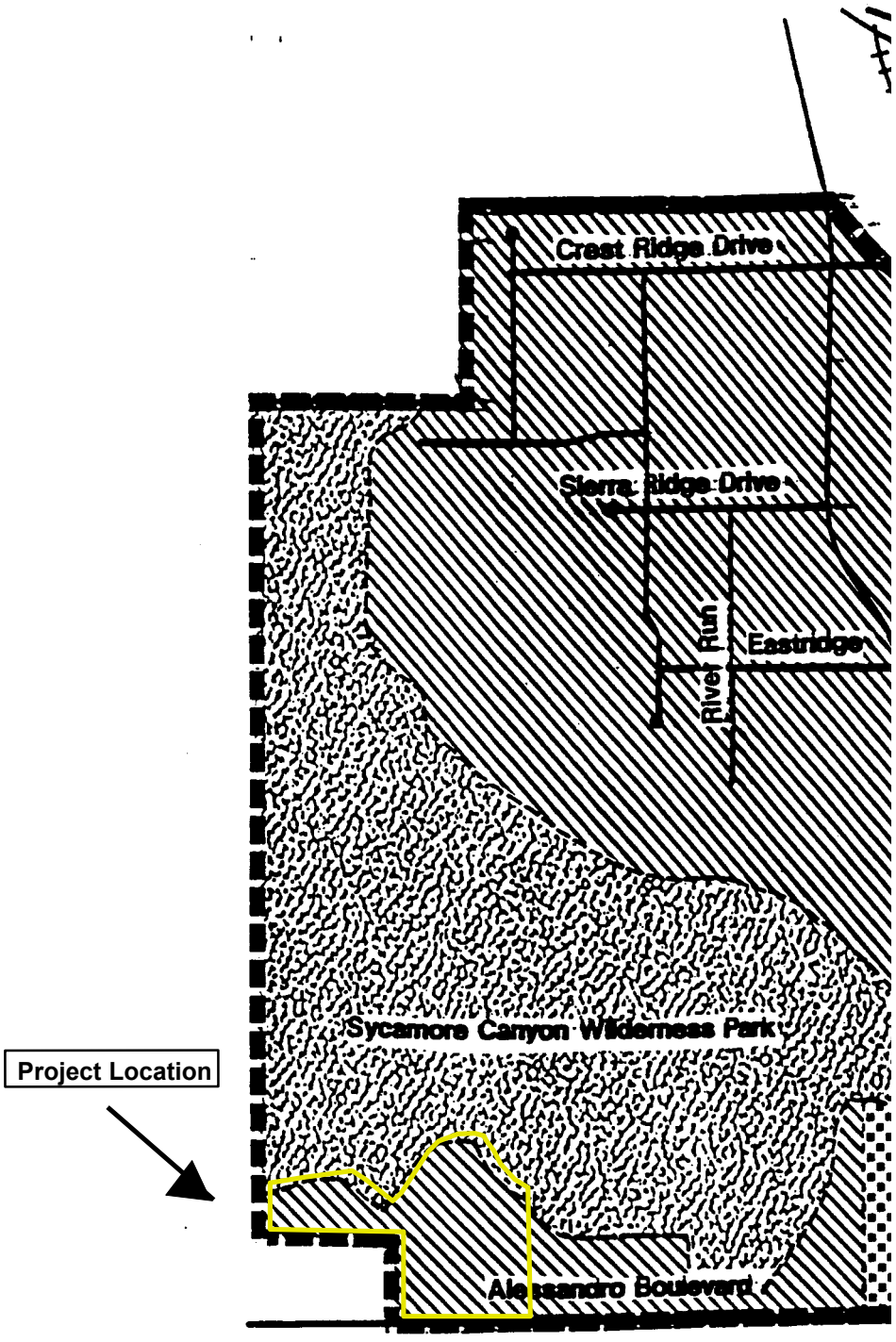


Figure Not to Scale

Source: Sycamore Canyon Business Park Specific Plan Exhibit 5

LAND USE MAP

- Regional Park
- Retail Business Office
- Industrial Support
- Industrial

SYCAMORE HILLS DISTRIBUTION CENTER

Sycamore Canyon Business Park Specific Plan
Land Use Map
Figure 3.0-7

3.2 Project Characteristics

3.2.1 Project Entitlements

Implementation of the Project will require the approval of the following development entitlements[1]:

Tentative Parcel Map No. 36734 (P20-0025)

A Tentative Parcel Map is required to subdivide the Project site into two parcels (Parcels 1 and 2) and three lettered parcels (Parcels A, B, and C) (Figure 3.0-8 – Tentative Parcel Map).

Table 3.0-2 – Parcel Lot Characteristics

	Parcel 1	Parcel 2	Parcel A	Parcel B	Parcel C
Lot Area	1,052,986 SF (24.31 acres)	449,643 SF (10.32 acres)	313,197 SF (7.19 acres)	219,543 SF (5.04 acres)	51,284 SF (1.18 acres)
Lot Width*	649-972 feet	421-575 feet	20-574 feet	641-656 feet	253-714 feet
Lot Depth*	917-1,679 feet	451-871 feet	496-1,493 feet	294-390 feet	40-106 feet
*All parcels are irregularly shaped, distances vary within range provided.					

Parcels A, B, and C

Parcels A and B contain the existing 11.6-acre Restricted Property that landlocks Parcel 1. Parcel C will be designated for a trailhead parking lot. Parcel A, B, and C are described in more detail below:

- Parcels A and B are designated as a Conservation Area and will be part of the Restricted Property on the west and east sides, respectively, of the proposed access road along Alessandro Boulevard. The proposed Project includes removing 0.81 acres of the Restricted Property to create a driveway connecting Parcel 1/Building A to Alessandro Boulevard. As part of mitigation for the Project, 1.44 acres will be incorporated into Parcel A, for a net gain of 0.63 acre of new Restricted Property. Thus, Parcel A and B will have a total of 12.23 acres of Restricted Property as part of the Project.

  The access road would include two elliptical shaped corrugated metal pipes measuring 38 inches high and 57 inches wide to allow drainage and wildlife connectivity between Parcel

[1] The City of Riverside actions/approvals are based on the requirements of the Riverside Municipal Code (RMC) at the time the Project was deemed substantially complete (November 2020).

A and Parcel B. Parcels A and B will be managed in perpetuity by a professional conservation organization funded by the applicant as part of mitigation for the Project.

- Parcel C is proposed to be developed with a trailhead parking lot for the Sycamore Canyon Wilderness Park. The northerly terminus of Barton Street is identified as "a minor trailhead" in the *Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan*. The proposed trailhead parking lot will include an improved decomposed granite parking lot, landscaping, a shade structure with benches, a bike rack, a drinking fountain (including for pets), and ADA (Americans with Disabilities Act) compliant parking spaces and sidewalk. Trail fencing, gates, and signage will also be installed to direct access, circulation and trail connection to existing trails as well as the master planned multipurpose trail on the west side of Barton Street. The proposed trailhead parking lot is not required but is being provided by the applicant as an amenity to the City's Sycamore Canyon Wilderness Park, though it should be noted that Parcel C will not be formally incorporated into the Park. The 1.18-acre parking lot and trailhead in Parcel C would be dedicated to the City and operated and managed by the City's Parks, Recreation, & Community Services Department.

Minor Conditional Use Permit – (P19-0626)

A Minor Conditional Use Permit (chapter 19.550) is required to allow for warehouses greater than 400,000 square feet pursuant to City of Riverside Municipal Code (RMC), Title 19 – Zoning Code, Chapter 19.150 – Base Zones Permitted Land Uses. This requirement is intended to ensure land use compatibility in terms of traffic characteristics, noise, circulation, operation, building design, and site design.

The proposed warehouse buildings are proposed for high cube transload short-term use, primarily for the short-term storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials), usually on pallet loads or larger handling products prior to their distribution to retail locations or other warehouses. A typical high cube warehouse has a high level of on-site automation and logistics management. No refrigeration use is proposed in the warehouses (cold storage) or with the trucks (transport refrigeration units "TRUs").

Variances (P20-0258) and Grading Exception (P20-0282)

Variances

Walls

A Variance is requested for Parcel 1 to allow the installation of two combination retaining/ freestanding walls to the side of the property wherein the retaining portion exceeds the RMC's maximum allowable height of 4 feet and to allow combination retaining/ freestanding walls wherein the overall height exceeds the maximum allowable height of 10 feet, in accordance with Chapter 19.550 – of Title 19 – Zoning Code. These walls are located along the eastern property line of Parcel 1, as shown on Figure 3.0-10 – Grading Exception-Wall Variance Exhibit. Following is a summary of the requested Variances:

- To allow 132 linear feet of combination retaining/ freestanding wall with the retaining portion height up to 6.4 feet and combined height of up to 14.4 feet.
- To allow 205 linear feet of combination retaining/ freestanding wall with the retaining portion height up to 7.6 feet.

Parking

A Variance is requested for Building A to allow 388 parking spaces, where 430 parking spaces are required by the City's Municipal Code. All parking will be provided on site.

Grading Exception

Retaining Wall Height

A Grading Exception is needed for Building B on Parcel 2 to allow installation of three retaining walls to exceed 6 feet in vertical height, in accordance with Chapter 17.28 of Title 17 - Grading. The three retaining walls, ranging in height from 4.7 feet to 11.5 feet, are required at the northeast and southeast corners of Parcel 2 due to existing topography relief and to avoid sensitive resources as shown on Figure 3.0-10 – Grading Exception & Wall Variance Exhibit. Following is a summary of the requested Grading Exceptions:

- To allow a 6.5 to 11.5-foot retaining wall in the northeast corner on Parcel 2 (Area 1);
- To allow a 4.7 to 8.2-foot high retaining wall and a 6 to 10-foot high retaining wall in the southeast corner of Parcel 2 (Area 2).

Design Review – (P19-0627)

Implementation of the proposed Project consists of the grading, construction, and operation of two warehouse buildings and associated improvements including parking, fire lanes, fencing and walls (including retaining walls), landscaping, and water quality treatment areas as shown on Figure 3.0-9 – Site Plan. Tables 3.0-2 and 3.0-3 provide a summary of the proposed development.

Building A will be sited on Parcel 1 and will be 400,000 square feet in size. It includes 10,000 square feet of office area, 390,000 square feet of warehouse area, 39 dock doors facing west, and 49 dock doors facing east. Access to Building A will be provided via a driveway that crosses the existing Restricted Property in a north-south direction connecting to Alessandro Boulevard. Installation of improvements to Alessandro Boulevard along the Project's frontage will also be completed, including curb and gutter, curb adjacent sidewalk, street widening, turn lane pockets, and the installation of a traffic signal. The new traffic signal is proposed at Vista Grande Drive and Alessandro Boulevard to facilitate access to Building A.

Perimeter fences and walls proposed on Parcel 1 include: 1) 42-inch high cable rail theme fence along the northerly, westerly, and southerly property lines; 2) 8-foot high concrete walls along most of the easterly property line; and 3) 6-8-foot high metal fence and 42-inch cable rail theme

fence between Parcel 1 and Parcels A and B. The access road to from Alessandro Boulevard to Building A would also include 42-inch high cable rail theme fence on each side of the road. It should be noted the concrete walls along the easterly property line measure 8 feet high from inside the property line and will range from 8 feet to 14.4 feet in height as measured from outside the property line, due to grade differences.

Table 3.0-3 – Building A

City's Site Development Standard				Proposed
Max Floor Area Ratio	1.50			0.38
Building Height	45 feet			42-45 feet
Building Minimum Setbacks	Front Yard (South Fronting Alessandro Boulevard)		50 feet	520 feet
	Side Yard (East & West)		20 feet	80-240 feet
	Rear Yard (North Adjacent to the Park)		20 feet	120-140 feet
Minimum Parking	Office: 1 space/250 sq. ft. (10,000 sq. ft.)	40 spaces	430 spaces	388 spaces 110 trailer stalls
	Warehouse: 1 space/1,000 sq. ft. (390,000 sq. ft.)	390 spaces		
Minimum Landscape Setbacks	Front (Adjacent to Alessandro Blvd)		50 feet	520 feet
	Side (Interior):		0, or 40 feet where adjacent to Park	40 feet where adjacent to Park
	Rear (Adjacent to the Park)		40 feet	40 feet

Building B will be sited on Parcel 2 and will be 203,100 square feet in size. It includes 10,000 square feet of office area, 193,100 square feet of warehouse area, and 34 dock doors facing south. Access to Building B will be provided from Barton Street. No access from Alessandro Boulevard will be provided.

Perimeter fences and walls proposed on Parcel 2 include: 1) 6-to-8-foot high metal fence along the westerly and southerly property lines; 2) 8-foot high combination screening fence/wall, consisting of 4-foot high tubular steel metal fence on top of 4-foot high screen wall, along the northerly property line; 3) 8-foot high concrete wall along a portion of the northeasterly property line; 4) 42-inch high cable rail theme fence along a portion of the southeasterly property line between the water quality basin and the conservation area; and 5) 8-foot high combination screen wall/ retaining wall along the easterly and northeasterly boundary of the parcel.

Table 3.0-4 – Building B

City's Site Development Standard			Proposed
Max Floor Area Ratio	1.50		0.45
Building Height	45 feet		42-45 feet
Building Minimum Setbacks	Front Yard (West)	50 feet	90 feet
	Side Yard (North & South)	0 feet	20-182 feet
	Rear Yard (East)	0 feet	57 feet
Minimum Parking	Office: 1 space/250 sq. ft. (10,000 sq. ft.)	40 spaces	235 spaces 45 trailer stalls
	Warehouse: 1 space/1,000 sq. ft. (193,100 sq. ft.)	194 spaces	
	Total:	234 spaces	
Minimum Landscape Setbacks	Front: (West)	20 feet	20 feet
	Side:	0 feet	0 feet
	Rear:	0 feet	0 feet

OWNER/ APPLICANT

DARRELL BUTLER
3241 ALTA LAGUNA BLVD.
LAGUNA BEACH, CA 92651
VOICE: (949) 632-9892

ENGINEER

SDH & ASSOCIATES, INC.
14060 MERIDIAN PARKWAY 102
RIVERSIDE, CALIFORNIA 92518
TEL (951) 683-3691
FAX (951) 788-2314

ASSESSORS PARCEL NO.

263-060-022-7
263-060-024-9
263-060-026-1

PROJECT INFO

AREA OF SITE = 2,092,809 S.F. (48.04 AC)

SURROUNDING ZONING

NORTH..... OS
EAST..... BMP
SOUTH..... COUNTY OF RIVERSIDE/ CR
WEST..... PUBLIC FACILITY (BMP)

ZONING AND LAND USE

EXISTING ZONING – BMP-SP
PROPOSED ZONING – BMP-SP
EXISTING LAND USE – VACANT

SURROUNDING LAND USE

NORTH..... SYCAMORE CANYON PARK
EAST..... VACANT
SOUTH..... RESIDENTIAL/ COMMERCIAL
WEST..... MUNICIPAL

SCHOOL DISTRICT

RIVERSIDE UNIFIED
SCHOOL DISTRICT

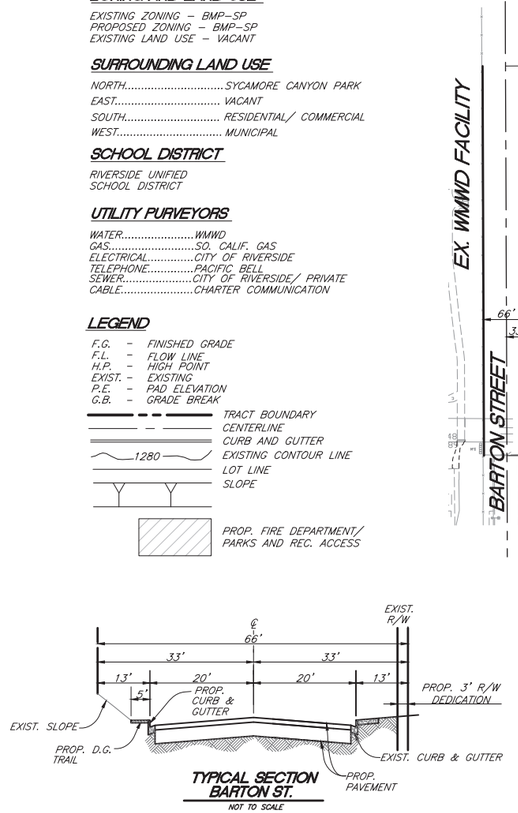
UTILITY PURVEYORS

WATER.....WMWD
GAS.....SO. CALIF. GAS
ELECTRICAL.....CITY OF RIVERSIDE
TELEPHONE.....PACIFIC BELL
SEWER.....CITY OF RIVERSIDE/ PRIVATE
CABLE.....CHARTER COMMUNICATION

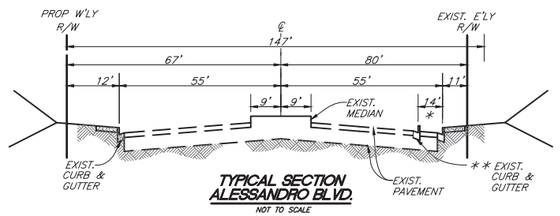
LEGEND

F.G. – FINISHED GRADE
F.L. – FLOW LINE
H.P. – HIGH POINT
EXIST. – EXISTING
P.E. – PAD ELEVATION
G.B. – GRADE BREAK

TRACT BOUNDARY
CENTERLINE
CURB AND GUTTER
1280 EXISTING CONTOUR LINE
LOT LINE
SLOPE
PROP. FIRE DEPARTMENT/ PARKS AND REC. ACCESS



TYPICAL SECTION
BARTON ST.
NOT TO SCALE



TYPICAL SECTION
ALESSANDRO BLVD.
NOT TO SCALE

* PROPOSED CURB WIDTH AT DEDICATED RIGHT TURN LANE

** EXISTING CURB WIDTH TO REMAIN BEYOND DEDICATED RIGHT TURN LANE

LEGAL DESCRIPTION

THE LAND REFERRED TO IN THIS COMMITMENT IS SITUATED IN THE CITY OF RIVERSIDE, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:
THE WEST 120.00 ACRES OF THE SOUTHWEST QUARTER OF SECTION 9, TOWNSHIP 3 SOUTH, RANGE 4 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE CITY OF RIVERSIDE, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA;

EXCEPT THAT PORTION DESCRIBED AS FOLLOWS;

BEGINNING AT THE SOUTHWEST QUARTER OF SAID SECTION 9; THENCE NORTH 660.00 FEET ON THE WEST LINE OF SAID SECTION 9; THENCE EAST 990.00 FEET, PARALLEL WITH THE SOUTH LINE OF SAID SECTION 9; THENCE SOUTH 660.00 FEET, PARALLEL WITH THE WEST LINE OF SAID SECTION 9 TO THE SOUTH LINE THEREOF; THENCE WEST 990.00 FEET ON SAID SOUTH LINE TO THE POINT OF BEGINNING;

ALSO EXCEPT THAT PORTION DESCRIBED AS FOLLOWS;

BEGINNING AT THE NORTHWEST CORNER OF SAID SOUTHWEST QUARTER; THENCE EAST 660.00 FEET ON THE NORTH LINE OF SAID SOUTHWEST QUARTER; THENCE SOUTH 660.00 FEET, PARALLEL WITH THE WEST LINE OF SAID SOUTHWEST QUARTER; THENCE WEST 660.00 FEET, PARALLEL WITH THE NORTH LINE OF SAID SOUTHWEST QUARTER TO THE WEST LINE THEREOF; THENCE NORTH 660.00 FEET ON SAID WEST LINE TO THE POINT OF BEGINNING;

ALSO EXCEPT THAT PORTION CONVEYED TO THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA BY DEED RECORDED AUGUST 2, 1974 AS INSTRUMENT NO. 97988 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA;

ALSO EXCEPT THE SOUTH 40.00 FEET CONVEYED TO THE COUNTY OF RIVERSIDE BY DEEDS RECORDED SEPTEMBER 29, 1931 AND APRIL 17, 1956 IN BOOK 45, PAGE(S) 206 AND IN BOOK 1898, PAGE(S) 284, RESPECTIVELY, OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA;

ALSO EXCEPT THE WEST 30.00 FEET IN BARTON STREET;

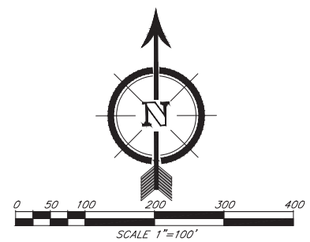
ALSO EXCEPT THAT PORTION CONVEYED TO THE STATE OF CALIFORNIA BY DEED RECORDED SEPTEMBER 8, 1986 AS INSTRUMENT NO. 216794, OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA;

SAID LAND IS INCLUDED WITHIN THE AREA SHOWN ON A MAP FILED IN BOOK 41, PAGE(S) 79 OF RECORD OF SURVEYS, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

APN: 263-060-022-7; 263-060-024-9 AND 263-060-026-1

PROJECT NOTES

1) A BLANKET MAINTENACE EASEMENT IN FAVOR OF THE CITY OF RIVERSIDE AND ITS AGENTS WILL BE GRANTED OVER ANY PRIVATE PROPERTY AREAS THAT ARE REQUIRED TO ACCESS THE PROPOSED MAINTENANCE GATES THAT PROVIDE ACCESS TO THE CONSERVATION EASEMENT AREAS.

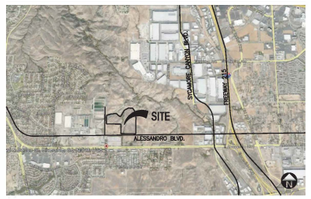


SYCAMORE HILLS DISTRIBUTION CENTER

Tentative Parcel Map

Figure 3.0-8

VICINITY MAP



PROJECT INFORMATION

Owner/Applicant
BUTLER
3176 PULLMAN ST.
COSTA MESA, CA 92626
TEL : (949) 632-9892
CONTACT: DARRELL BUTLER

Project Address
NE CORNER OF ALESSANDRO BLVD & BARTON ST.
CITY OF RIVERSIDE, CA 92570

Code Analysis
2016 CALIFORNIA BUILDING CODE
2016 CALIFORNIA PLUMBING CODE
2016 CALIFORNIA MECHANICAL CODE
2016 CALIFORNIA ELECTRICAL CODE
2015 CALIFORNIA FIRE CODE
2016 CALIFORNIA ENERGY CODE
2016 CALIFORNIA GREEN BUILDING STANDARDS

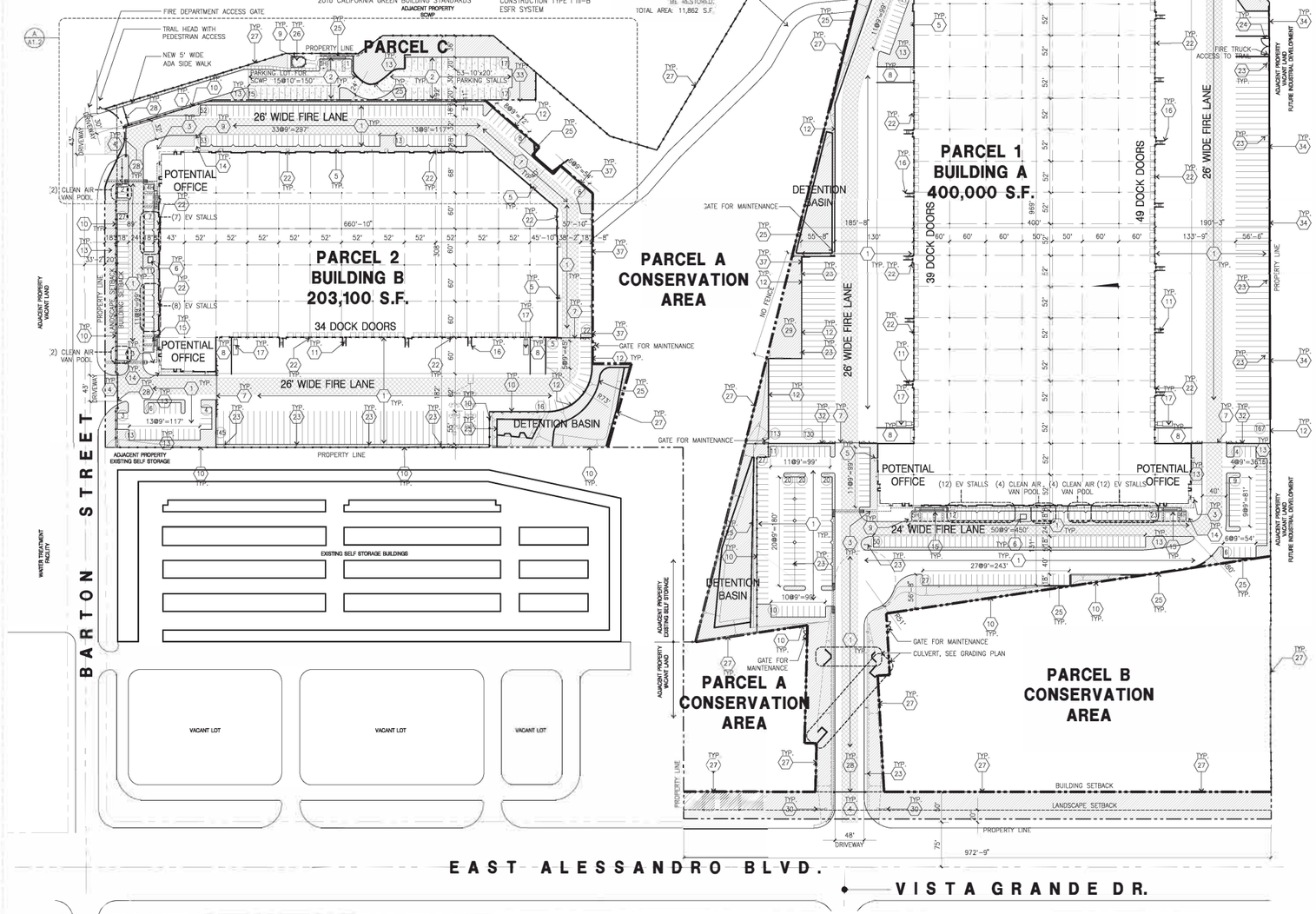
Applicant's Representative
HPA, INC.
18831 BARDEEN AVE. – SUITE 100
IRVINE, CA 92612
PHONE: (949) FAX: (949) 863-0851
CONTACT: MATTHEW LEE

Zoning
BMP-SP – BUSINESS AND MANUFACTURING PARK
SPECIFIC PLAN (SYCAMORE CANYON BUSINESS PARK OVERLAY)

Assessors Parcel Number
0263-060-022-7,
0263-060-024-9,
0263-060-026-1,

Construction Type
CONCRETE TILT-UP BUILDING
BUILDING OCCUPANCY : S-1 / B
CONSTRUCTION TYPE I II-B
ESFR SYSTEM

20' WIDE TEMPORARY CONSTRUCTION CROSSING ON EXISTING DIRT ROAD TO BE RESTORED; TOTAL AREA: 11,862 S.F.



SITE PLAN KEYNOTES

1. HEAVY BROOM FINISH CONCRETE PAVEMENT
2. STABILIZED DECOMPOSED GRANITE PER GRADING PLAN
3. CONCRETE WALKWAY, MEDIUM BROOM FINISH
4. DRIVEWAY APRONS TO BE CONSTRUCTED
5. 5'-6"X5'-6"X4" THICK CONCRETE EXTERIOR LANDING PAD TYP. AT ALL EXTERIOR MAN DOORS TO LANDSCAPED AREAS. FINISH TO BE MEDIUM BROOM FINISH. PROVIDE WALK TO PUBLIC WAY OR DRIVE WAY AS REQ. BY CITY INSPECTOR.
6. APPROXIMATE LOCATION OF TRANSFORMER. CONTRACTOR TO VERIFY WITH S.C.E.
7. PROVIDE 8' HIGH METAL SLIDING GATES W/ KNOX-BOX PER FIRE DEPARTMENT STANDARDS PER DRIVEWAY.
8. CONCRETE RAMP W/ 42" HIGH CONCRETE WALL.
9. EXTERIOR BIKE RACK TYPICAL
10. 6' TO 8' HIGH METAL FENCE. SEE A4.1 FOR DETAILS
11. EXTERIOR CONCRETE STAIR
12. 8' HIGH CONCRETE WALL
13. LANDSCAPE. ALL LANDSCAPE AREAS INDICATED BY SHADING
14. EMPLOYEE BREAK/SMOKING AREA.
15. PRE-CAST CONCRETE WHEEL STOP
16. CONCRETE FILLED GUARD POST "6 DIA. U.N.O. 42" H,
17. TRASH COMPACTOR 30 YARD SELF CONTAINED
18. ACCESSIBLE ENTRY SIGN
19. ACCESSIBLE PARKING STALL SIGN.
20. IRRIGATED DOME.
21. APPROXIMATE LOCATION OF FIRE HYDRANT
22. WALL MOUNTED LIGHTING FIXTURE. LOCATION PER PHOTOMETRIC PLAN
23. SITE LIGHT POLE W/ CONCRETE BASE. LOCATION PER PHOTOMETRIC PLAN
24. 8' HIGH METAL SWING GATE W/ KNOX-BOX PER FIRE DEPARTMENT STANDARDS PER DRIVEWAY.
25. RETAINING WALL PER CIVIL DRAWINGS.
26. SHADE STRUCTURES WITH BENCHES AND DRINKING FOUNTAIN (HUMAN AND PET) AND BIKE RACKS
27. 42" CABLE RAIL THEME FENCE. SEE DETAIL B/A1.1
28. ARM GATE
29. FIRE RESISTANT LANDSCAPING W/ COLUMNAR TREES
30. MONUMENT SIGN
31. PARK ENTRY SIGN
32. 15' H CONCRETE WALL
33. 8' HIGH SCREENING WITH 4" HIGH METAL FENCE ON TOP 4' HIGH SCREEN WALL

SITE PLAN GENERAL NOTES

1. THE SITE PLAN BASED ON THE SOILS REPORT NORCAL ENGINEER 3/29/19 AND 1/3/20
2. IF SOILS ARE EXPANSIVE IN NATURE, USE STEEL REINFORCING FOR ALL SITE CONCRETE
3. ALL DIMENSIONS ARE TO THE FACE OF CONCRETE WALL, FACE OF CONCRETE CURB OR GRID LINE U.N.O
4. SEE "C" PLANS FOR ALL CONCRETE CURBS, GUTTERS AND SWALES.
5. THE ENTIRE PROJECT SHALL BE PERMANENTLY MAINTAINED WITH AN AUTOMATIC IRRIGATION SYSTEM
6. SEE "C" DRAWINGS FOR POINT OF CONNECTIONS TO OFF-SITE UTILITIES. CONTRACTOR SHALL VERIFY ACTUAL UTILITY LOCATIONS
7. PROVIDE POSITIVE DRAINAGE AWAY FROM BLDG. SEE "C" DRAWINGS
8. CONTRACTOR TO REFER TO "C" DRAWINGS FOR ALL HORIZONTAL CONTROL DIMENSIONS. SITE PLANS ARE FOR GUIDANCE AND STARTING LAYOUT POINTS
9. SEE "C" DRAWINGS FOR FINISH GRADE ELEVATIONS.
10. CONCRETE SIDEWALKS TO BE A MINIMUM OF 4" THICK W/ TOOLED JOINTS AT 6' O.C. EXPANSION/CONSTRUCTION JOINTS SHALL BE A MAXIMUM 12' EA. WAY. EXPANSION JOINTS TO HAVE COMPRESSIVE EXPANSION FILLER MATERIAL OF 1/4". FINISH TO BE A MEDIUM BROOM FINISH U.N.O.
11. PAINT CURBS AND PROVIDE SIGNS TO INFORM OF FIRE LANES AS REQUIRED BY FIRE DEPARTMENT
12. CONSTRUCTION DOCUMENTS PERTAINING TO THE LANDSCAPE AND IRRIGATION OF THE ENTIRE PROJECT SITE SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT AND APPROVED BY PUBLIC FACILITIES DEVELOPMENT PRIOR TO ISSUANCE OF BUILDING PERMITS.
13. PRIOR TO FINAL CITY INSPECTION, THE LANDSCAPE ARCHITECT SHALL SUBMIT A CERTIFICATE OF COMPLETION TO PUBLIC FACILITIES DEVELOPMENT
14. ALL LANDSCAPE AND IRRIGATION DESIGNS SHALL MEET CURRENT CITY STANDARDS AS LISTED IN GUIDELINES OR AS OBTAINED FROM PUBLIC FACILITIES DEVELOPMENT.
15. LANDSCAPED AREAS SHALL BE DELINEATED WITH A MINIMUM SIX INCHES (6") HIGH CURB
16. ROCK OUTCROPPINGS TO BE PRESERVED WILL HAVE A 3' LANDSCAPE BUFFER FROM ANY PAVED AREA

ADJACENT PROPERTY VACANT LAND

OVERALL SITE PLAN (A)
scale: 1" = 80'-0"

SITE PLAN GENERAL NOTES

CONCRETE PAVING. SEE "C" DRWGS. F THICKNESS

STANDARD PARKING (9' X 18')

LANDSCAPED AREA

26' WIDE FIRELANE

HANDICAP PARKING STALL (9' X 18') W/ 5' ACCESSIBLE AISLE

HANDICAP PARKING STALL (VAN) (12' X 18') W/ 5' ACCESSIBLE AISLE

PATH OF TRAVEL

SYCAMORE HILLS DISTRIBUTION CENTER

RVA

HPA architecture

Site Plan

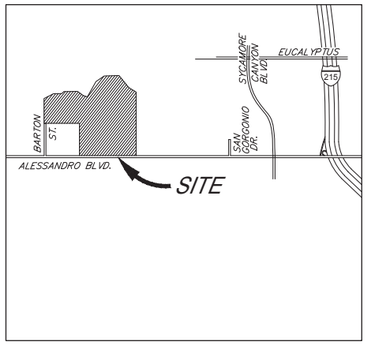
Figure 3.0-9

IN THE CITY RIVERSIDE, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA.

GRADING EXCEPTION & WALL VARIANCE EXHIBIT
SYCAMORE HILLS DISTRIBUTION CENTER

NOVEMBER 2020

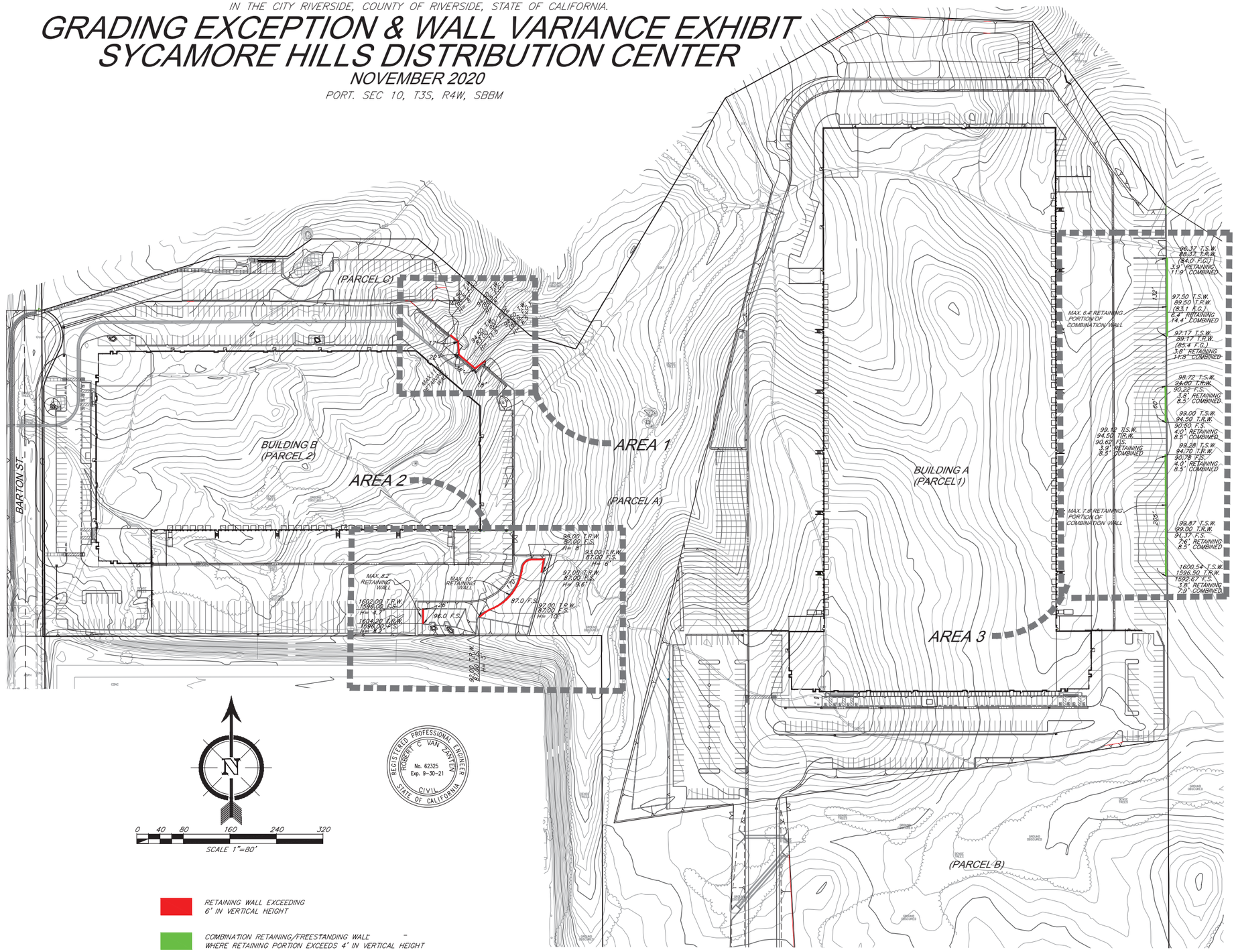
PORT. SEC 10, T3S, R4W, SBBM



VICINITY MAP

NOT TO SCALE

THOMAS GUIDE PG. 716, PORT. GRID H-5 & H-6



REGISTERED PROFESSIONAL ENGINEER
ROBERT C. VAN ANTEN
No. 62325
Exp. 9-30-21
CIVIL
STATE OF CALIFORNIA

3.2.2 Design and Appearance

Landscaping and On-Site Preservation

On-site landscaping is proposed generally along the perimeters of Buildings A and B and along the proposed access road/driveway from Alessandro Boulevard to Building A as shown in Figure 3.0-12A and 3.0-12B – Landscape Design. The Project site will be landscaped with fire-resistant landscape, drought-tolerant and climate appropriate trees, shrubs, and ground cover that will meet or exceed the City's requirements. The landscape plan is designed to provide visual appeal and screen the views of Buildings A and B from the adjacent residential areas and the Sycamore Canyon Wilderness Park. The proposed on-site landscaping does not include any plant species listed as invasive by the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP).

The required landscaping for Parcel 1 is 23,014 square feet. Parcel 1 will include 138,659 square feet of landscaping, for a site coverage of 30.12 percent, located inside the northern, western, and southern boundaries. The required landscaping for Parcel 2 is 9,542 square feet. Parcel 2 will include 37,993 square feet of landscaping, for site a coverage of 19.91 percent, located inside the northern, eastern, western, and southern boundaries. Landscaping will include fire resistant groundcover, shrubs and columnar trees. As outlined above in Section 3.1.2 Project Site Background, the Project site contains an existing Restricted Property area of 11.6 acres, as shown in Figure 3.0-3 – Project Site Map, intended for preservation in a natural condition. This area contains an existing natural drainage course and associated riparian woodland vegetation. The Restricted Property will be largely preserved with a minor reduction to allow for the new driveway/access road to Parcel 1/ Building A and an addition to the conservation area, between Parcels 1 and 2, that will result in a net increase in the Restricted Property by 0.63 acre. The Project will largely retain and increase the preserved natural drainage course and vegetation.

Architecture

The design of the Project's proposed structures is consistent with the *SCBPSP* and with Citywide Design and Sign Guidelines. The proposed structures are also architecturally consistent with other warehouses within the City. Figures 3.0-13 – Materials Board and 3.0-14 A and 3.0-14B - Building Elevations shows the paint color palette of the proposed structures' exterior for Building A, which is also representative of Building B. The proposed buildings will consist of concrete tilt-up paneling with a color palette largely consisting of tans as well as accented use of black and blue with reflective glazing. Both proposed buildings will include a color palette that is largely beige (Maison Blanche, Fresco Cream, Mexican Sand, and Oak Creek). Windows will consist of glazing blue reflective windows, with a mullion black for frames. The colors are similar to existing ground and sky colors in the Project area and would complement the aesthetics of the Sycamore Canyon Wilderness Park. The building and screen wall elevations include articulation and design that is intended to decrease the feeling and appearance of massing and bulkiness. All roof-mounted equipment is screened from view as required by Riverside Municipal Code Section 19.555. Both Buildings A and B are proposed to be approximately 42 feet in height from the

proposed finish floor to the proposed future roof top; both structures are designed for high-pile storage.

Lighting

Project lighting will include security lights on buildings, parking lot areas, and the trailhead for security. Exterior lights will be shielded downwards and set to motion detectors and will only turn on if employees are present at either of the buildings when it is dark. Interior lights will be on motion detectors as well. All building and parking lot lighting will conform to the Sycamore Canyon Business Park Specific Plan guidelines, the City Municipal Code, the standards and specifications of the City's Park, Recreation, and Community Services Department, and the Sycamore Canyon Wilderness Park Stephen's Kangaroo Rat Management Plan. Due to the proximity to the Sycamore Canyon Wilderness Park to the north of the Project site, the Project's proposed lighting will also be required to adhere to Section 6.1.4 of the MSHCP, which addresses potential impacts at the urban/wildlands interface. MSHCP Section 6.1.4 requires that night lighting be directed away from natural open space and incorporates shielding so as not to increase ambient lighting in wildland areas.

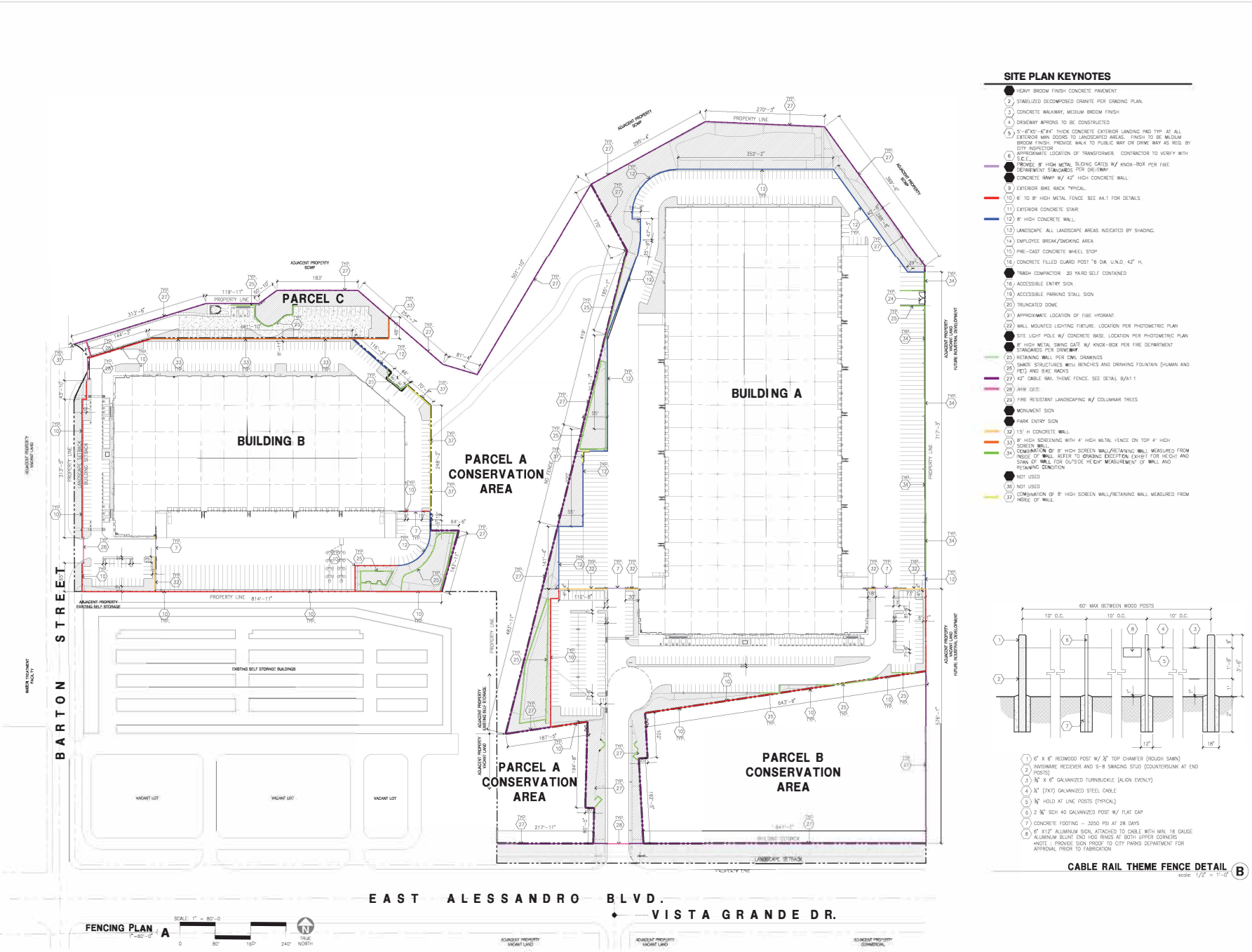
Fencing

The Project includes perimeter fencing around the Project site, the parking lot for the trail, and the Restricted Property to minimize unauthorized public access, domestic animal predation, and dumping. As mentioned above in Section 3.2, the Project will require a wall height variance and grading exception for compliance with the RMC. All other fencing shall be required to conform to the standards of the City's Parks, Recreation and Community Services Department, the SCBPSP, and the *Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan*.

As shown on Figure 3.0-11 – Fencing Plan, several different fences and walls will be installed with the most northern being a 42-inch cable rail theme fence along the northern property line, adjacent to the Sycamore Canyon Wilderness Park. The 42-inch cable rail theme fence will also extend along the western side of Parcel 1 and the boundary of Parcel A, the Restricted Property/Conservation Area. The 42-inch cable rail theme fence will also run along Parcels A and B Conservation Areas southern boundary and frontage along Alessandro Boulevard and on both sides of the Parcel 1/ Building A driveway on Alessandro Boulevard. An 8-foot-high concrete screen wall will be constructed around the east, north and west sides of Building A at the outer edge of the drive aisles and parking area. A 6-foot to 8-foot-high metal fence will be placed along the outer edge of the drive aisles and parking area on the south side of Building A. An 8-foot-high metal sliding gate and 15-feet high concrete screening walls will be located on both sides of the southern end of Building A that faces Alessandro Boulevard to screen views of the dock doors and loading areas from Alessandro Boulevard.

This 8-foot-high concrete screen wall will be installed around the northeast, east, and southeast sides of Building B, at the outer edge of the drive aisles and parking areas, adjacent to the Parcel A Conservation Area. A 6-foot to 8-foot-high metal fence will be placed along the northwestern,

western, and southern sides of Building B at the outer edge of the drive aisles and parking areas. To separate the Building B northern parking lot/property line and the trail head parking lot an 8-foot-high combination screening fence/wall, consisting of a 4-foot high tubular steel metal fence on top of a 4-foot high screen wall, will be installed. An 8-foot-high metal sliding gate and 15-feet high concrete screening walls will be located on the south side of Building B facing west to Barton Street to screen views of the dock doors and loading area from Barton Street.



SITE PLAN KEYNOTES

1. HEAVY BROOM FINISH CONCRETE PAVEMENT
2. STABILIZED DECOMPOSED GRANITE PER GRADING PLAN.
3. CONCRETE WALKWAY, MEDIUM BROOM FINISH
4. DRIVEWAY APRONS TO BE CONSTRUCTED
5. 5'-6"X5'-6"X4" THICK CONCRETE EXTERIOR LANDING PAD TYP. AT ALL EXTERIOR MAN DOORS TO LANDSCAPED AREAS. FINISH TO BE MEDIUM BROOM FINISH. PROVIDE WALK TO PUBLIC WAY OR DRIVE WAY AS REQ. BY CITY INSPECTOR
6. APPROXIMATE LOCATION OF TRANSFORMER. CONTRACTOR TO VERIFY WITH S.C.E.
7. PROVIDE 8' HIGH METAL SLIDING GATES W/ KNOX-BOX PER FIRE DEPARTMENT STANDARDS PER DRIVEWAY
8. CONCRETE RAMP W/ 42" HIGH CONCRETE WALL
9. EXTERIOR BIKE RACK TYPICAL.
10. 6' TO 8' HIGH METAL FENCE. SEE A4.1 FOR DETAILS
11. EXTERIOR CONCRETE STAIR
12. 8' HIGH CONCRETE WALL.
13. LANDSCAPE. ALL LANDSCAPE AREAS INDICATED BY SHADING.
14. EMPLOYEE BREAK/SMOKING AREA
15. PRE-CAST CONCRETE WHEEL STOP
16. CONCRETE FILLED GUARD POST @ 6 DIA. U.N.O. 42" H.
17. TRASH COMPACTOR - 30 YARD SELF CONTAINED
18. ACCESSIBLE ENTRY SIGN
19. ACCESSIBLE PARKING STALL SIGN
20. TRUNCATED DOME
21. APPROXIMATE LOCATION OF FIRE HYDRANT.
22. WALL MOUNTED LIGHTING FIXTURE. LOCATION PER PHOTOMETRIC PLAN
23. SITE LIGHT POLE W/ CONCRETE BASE. LOCATION PER PHOTOMETRIC PLAN
24. 8' HIGH METAL SWING GATE W/ KNOX-BOX PER FIRE DEPARTMENT STANDARDS PER DRIVEWAY
25. RETAINING WALL PER CIVIL DRAWINGS
26. SHADE STRUCTURES WITH BENCHES AND DRINKING FOUNTAIN (HUMAN AND PET) AND BIKE RACKS
27. 42" CABLE RAIL THEME FENCE. SEE DETAIL B/A1.1
28. ANIMAL GATE
29. FIRE RESISTANT LANDSCAPING W/ COLUMNAR TREES
30. MONUMENT SIGN
31. PARK ENTRY SIGN
32. 15' H CONCRETE WALL
33. 8' HIGH SCREENING WITH 4' HIGH METAL FENCE ON TOP 4' HIGH SCREEN WALL
34. COMBINATION OF 8' HIGH SCREEN WALL/RETAINING WALL MEASURED FROM INSIDE OF WALL. REFER TO GRADING EXCEPTION EXHIBIT FOR HEIGHT AND SPAN OF WALL FOR OUTSIDE HEIGHT MEASUREMENT OF WALL AND RETAINING CONDITION
35. NOT USED
36. NOT USED
37. COMBINATION OF 8' HIGH SCREEN WALL/RETAINING WALL MEASURED FROM INSIDE OF WALL.

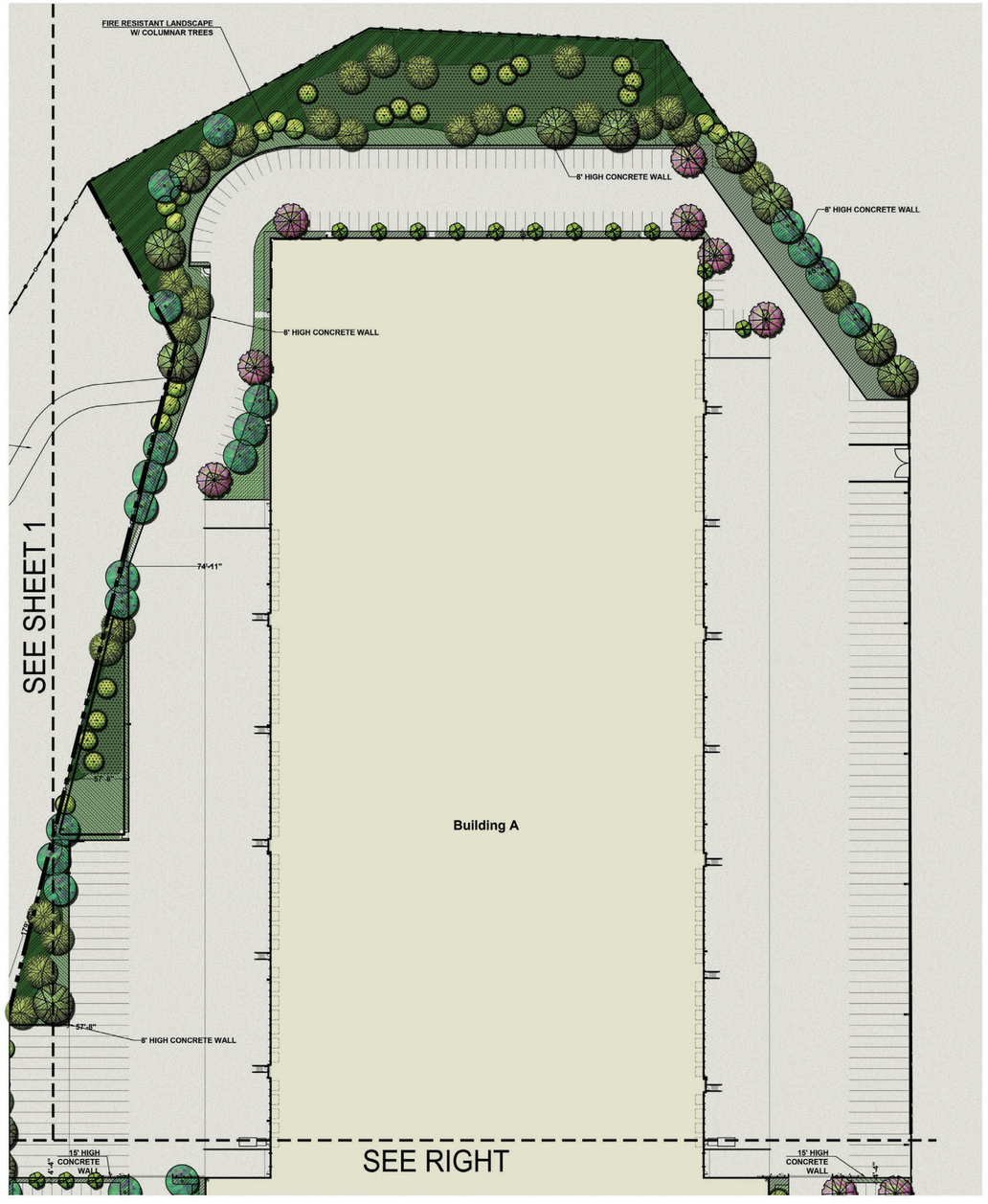
1. 6" X 6" REDWOOD POST W/ ½" TOP CHAMFER (ROUGH SAWN)
2. INVISIWARE RECIEVER AND S-8 SWAGING STUD (COUNTERSUNK AT END POSTS)
3. ¾" X 6" GALVANIZED TURNBUCKLE (ALIGN EVENLY)
4. ¼" (7X7) GALVANIZED STEEL CABLE
5. ⅜" HOLD AT LINE POSTS (TYPICAL)
6. 2 ⅜" SCH 40 GALVANIZED POST W/ FLAT CAP
7. CONCRETE FOOTING - 3250 PSI AT 28 DAYS
8. 6" X12" ALUMINUM SIGN, ATTACHED TO CABLE WITH MIN. 16 GAUGE ALUMINUM BLUNT END HOG RINGS AT BOTH UPPER CORNERS
   *NOTE : PROVIDE SIGN PROOF TO CITY PARKS DEPARTMENT FOR APPROVAL PRIOR TO FABRICATION

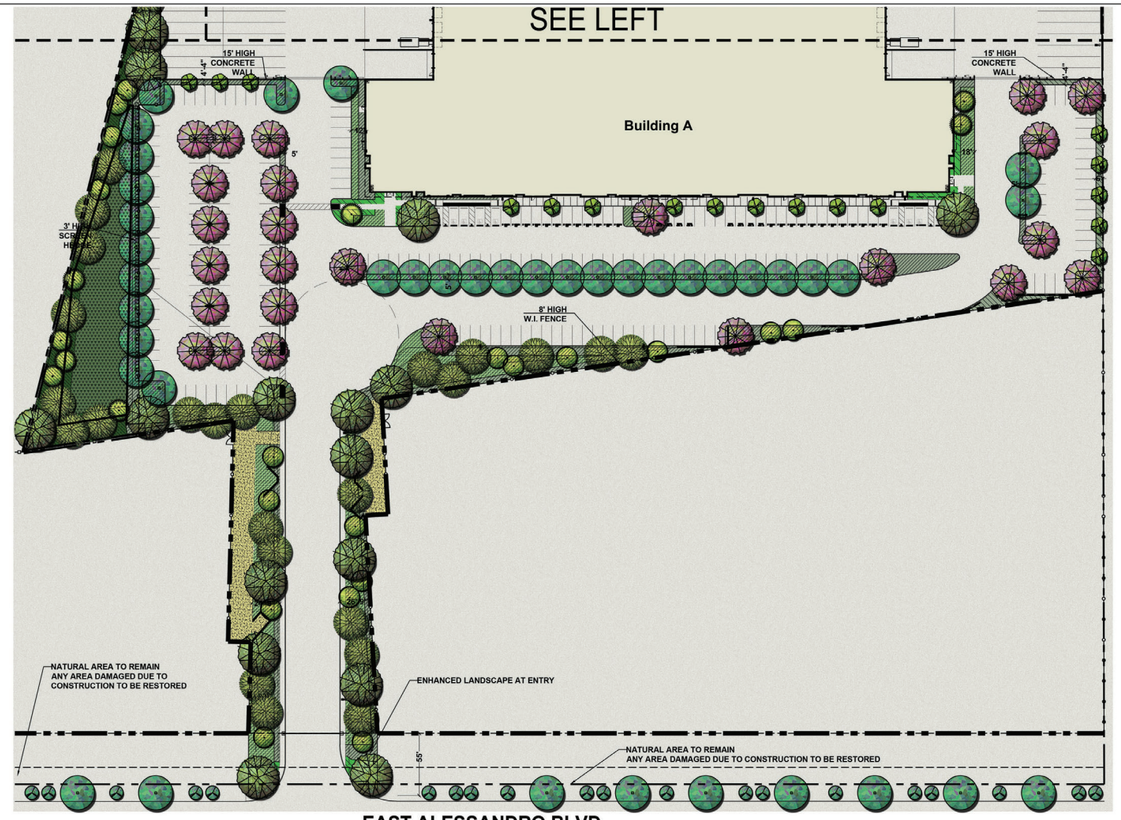
CABLE RAIL THEME FENCE DETAIL (B)
scale: 1/2" = 1'-0"

SYCAMORE HILLS DISTRIBUTION CENTER

RVA HPA architecture

Fencing Plan
Figure 3.0-11





PLANTING LEGEND

TREES

SYMBOL	BOTANICAL/COMMON NAME	SIZE	QTY	WUCOLS	REMARKS
	Chilopsis linearis Desert Willow	24" Box	35	L	Multi
	Chitalpa tashkentensis Chitalpa	24" Box	50	L	Standard
	Cercis occidentalis Western Redbud	24" Box	20	M	Multi
	Heteromeles arbutifolia Toyon	15 Gal	40	L	Multi
	Platanus racemosa California Sycamore	24" Box	64	M	Multi
	Quercus agrifolia Coast Live Oak	24" Box	33	M	Multi
	Rhus lancea African Sumac	24" Box	76	L	Standard
	Tristania conferta Brisbane Box	15 Gal	66	M	Standard

SHRUBS

SYMBOL	BOTANICAL/COMMON NAME	SIZE	WUCOLS
	Acca sellowiana Pineapple Guava	5 Gal 36" O.C.	M
	Artemisia 'Powis Castle' Artemisia	5 Gal 48" O.C.	L
	Baccharis p. 'Centennial' Coyote Bush	5 Gal 6' O.C.	L
	Callistemon 'Little John' Dwarf Bottle Brush	5 Gal 48" O.C.	M
	Cassia phyllodenia Silverleaf Cassia	5 Gal 48" O.C.	L
	Dietes bicolor Fortnight Lily	5 Gal 36" O.C.	M
	Elaeagnus pungens Silverberry	5 Gal 48" O.C.	L
	Ligustrum j. Texanum Texas Privet	5 Gal 48" O.C.	M
	Muhlenbergia capillaris Pink Muhly	5 Gal 36" O.C.	M
	Muhlenbergia rigens Deer Grass	5 Gal 36" O.C.	M
	Rhamnus californica Coffeeberry	5 Gal 36" O.C.	L
	Rosmarinus o. 'Tuscan Blue' Rosemary	5 Gal 48" O.C.	L
	Salvia c. 'Allen Chickering' Allen Chickering Sage	5 Gal 48" O.C.	L
	Salvia greggii Autumn Sage	5 Gal 36" O.C.	L
	Salvia leucantha Mexican Sage	5 Gal 48" O.C.	L
	Westringia fruticosa Coast Rosemary	5 Gal 48" O.C.	L
	Westringia f. 'Grey Box Dwarf Coast Rosemary	5 Gal 48" O.C.	L

GROUNDCOVER

SYMBOL	BOTANICAL/COMMON NAME	SIZE	SPACING	WUCOLS	REMARKS
	Baccharis p. 'Pigeon Point' Dwarf Coyote Bush	1 Gal	6' O.C.	L	
	Carex penja California Meadow Sedge	4" Pots	12" O.C.	M	
	Carissa m. 'Green Carpet' Prostrate Natal Plum	1 Gal	36" O.C.	M	
	Festuca mairei Atlas Fescue	1 Gal	24" O.C.	M	
	Hemerocallis hybridus-Yellow Yellow Day Lily	1 Gal	24" O.C.	M	
	Rosa 'Flower Carpet' -Red Red Flower Carpet Rose	1 Gal	30" O.C.	L	
	Rosmarinus o. 'Huntington Carpet' Prostrate Rosemary	1 Gal	48" O.C.	L	
	Sesleria autumnalis Moor Grass	1 Gal	18" O.C.	M	Grass
	Trachelospermum jasminiodes Star Jasmine	1 Gal	24" O.C.	M	
	Tulbaghia violacea Society Garlic	1 Gal	24" O.C.	M	

ACCENTS

SYMBOL	BOTANICAL/COMMON NAME	SIZE	WUCOLS
	Agave americana Century Plant	5 Gal 6' O.C.	L
	Agave 'Blue Flame' Blue Flame Agave	5 Gal 48" O.C.	L
	Agave 'Blue Glow' Blue Glow Agave	5 Gal 36" O.C.	L
	Agave desmeniana Smooth Agave	5 Gal 48" O.C.	L
	Aloe maculata Soap Aloe	5 Gal 24" O.C.	L
	Aloe virlata Coral Aloe	1 Gal 24" O.C.	L
	Dasylirion wheeleri Desert Spoon	5 Gal 48" O.C.	L
	Echeveria 'Afterglow' Afterglow Echeveria	5 Gal 24" O.C.	L
	Hesperaloe parviflora Red Yucca	5 Gal 48" O.C.	L
	Lantana 'Gold Mound' Yellow Lantana	5 Gal 48" O.C.	L

FUEL MODIFICATION AREA

SYMBOL	BOTANICAL/COMMON NAME	SIZE	WUCOLS
	Artemisia californica Mugwort	1 Gal 48" O.C.	VL
	Cercocarpus betuloides Mountain Mahogany	1 Gal 36" O.C.	VL
	Heteromeles arbutifolia Toyon	5 Gal 6' O.C.	VL
	Rhamnus crocea Redberry	1 Gal 48" O.C.	VL

BIO-RETENTION AREA

SYMBOL	BOTANICAL/COMMON NAME	SIZE	WUCOLS
	Rosa californica California Wild Rose	1 Gal 6' O.C.	VL
	Baccharis pilularis Coyote Bush	1 Gal 8' O.C.	VL
	Sambucus mexicana Mexican Elderberry	1 Gal 48" O.C.	VL
	Mimulus cardinalis Scarlet Monkey Flower	1 Gal 36" O.C.	VL
	Aristida purpurea Purple Tree-Awn	Seed	VL
	Deschampsia caespitosa Tufted Hairgrass	Seed	VL
	Distichlis spicata Salt Grass	Seed	VL
	Juncus patens California Gray Rush	Seed	VL
	Muhlenbergia rigens Deergrass	Seed	VL

PARK LANDSCAPE - planted in decomposed granite

SYMBOL	BOTANICAL/COMMON NAME	SIZE	WUCOLS
	Sphaeralcea ambigua Desert Mallow	1 Gal 36" O.C.	L
	Baccharis pilularis 'Pigeon Point' Dwarf Coyote Brush	1 Gal 6' O.C.	L
	Encelia farinosa Brittle Bush	1 Gal 36" O.C.	VL
	Keckiella cordifolia Heart-leaved Penstemon	1 Gal 36" O.C.	VL

2000 lbs/ac Wood cellulose fiber
500 lbs/ac 7-3-1 Blend organic fertilizer
190 lbs/ac Stabilizing binder
20 lbs/ac Endo net mycorrhizal inoculum
3 lbs/ac Aristata purpurea
3 lbs/ac Artemisia californica
12 lbs/ac Eriogonum fasciculatum
3 lbs/ac Mimulus aurantiacus
5 lbs/ac Encelia farinosa
2 lbs/ac Salvia alpinia
2 lbs/ac Salvia mellifera
5 lbs/ac Acmispon glaber (Lotus scoparius)
3 lbs/ac Eschscholzia californica
3 lbs/ac Lupinus truncatus
1 lbs/ac Salvia columbariae
4 lbs/ac Plantago erecta
3 lbs/ac Festuca microstachus (Vulpia Micro)

CALCULATIONS	BUILDING A	BUILDING B
TOTAL PAVED AREA	460,289 SF	190,931 SF
5% Landscape Required	23,014 SF	9,542 SF
Landscape Provided	138,659 SF	37,993 SF
% of Landscape	30.12%	19.91%

3/4" crushed rock decorative rock -Desert Gold. 3" layer over filter fabric.

SHEET 2 OF 3

N

0 20 40 80

SYCAMORE HILLS DISTRIBUTION CENTER

RVA *Hunter Landscape*

Landscape Design - Building A

Figure 3.0-12A



PLANTING LEGEND

TREES

SYMBOL	BOTANICAL/COMMON NAME	SIZE	QTY	W/COOLS	REMARKS
	Chilopsis linearis Desert Willow	24" Box	35	L	Multi
	Chitalpa tashkentensis Chitalpa	24" Box	50	L	Standard
	Cercis occidentalis Western Redbud	24" Box	30	M	Multi
	Heteromeles arbutifolia Toyon	15 Gal	40	L	Multi
	Platanus racemosa California Sycamore	24" Box	64	M	Multi
	Quercus agrifolia Coast Live Oak	24" Box	33	M	Multi
	Rhus lancea African Sumac	24" Box	76	L	Standard Certify male only
	Trissaenia conferta Brisbane Box	15 Gal	66	M	Standard

SHRUBS

SYMBOL	BOTANICAL/COMMON NAME	SIZE	W/COOLS
	Agave vilmoriana Pineapple Gauze	5 Gal 36" O.C.	M
	Arbutus unedo Strawberry Tree	5 Gal 48" O.C.	M
	Callistemon 'Little John' Dwarf Bottle Brush	5 Gal 48" O.C.	M
	Dietes bicolor Fortnight Lily	5 Gal 36" O.C.	M
	Leucophyllum frutiscens Texas Ranger	5 Gal 60" O.C.	L
	Muhlenbergia capillaris Pink Muhly	5 Gal 36" O.C.	M
	Muhlenbergia rigens Deer Grass	5 Gal 36" O.C.	M
	Rhamnus californica Coffeeberry	5 Gal 36" O.C.	L
	Rosmarinus o. 'Tuscan Blue' Rosemary	5 Gal 48" O.C.	L
	Salvia o. 'Allen Chickering' Allen Chickering Sage	5 Gal 48" O.C.	L
	Salvia greggii Autumn Sage	5 Gal 36" O.C.	L
	Salvia leucantha Mexican Sage	5 Gal 48" O.C.	L
	Westringia fruticosa Coast Rosemary	5 Gal 48" O.C.	L
	Westringia f. 'Grey Box Dwarf Coast Rosemary	5 Gal 48" O.C.	L

GROUNDCOVER

SYMBOL	BOTANICAL/COMMON NAME	SIZE	SPACING	W/COOLS	REMARKS
	Baccharis p. 'Pigeon Point' Dwarf Coyote Bush	1 Gal	8' O.C.	L	
	Carex zonata California Meadow Sedge	4" Pots	12" O.C.	M	
	Ceanothus 'Green Carpet' Prostrate Natal Plum	1 Gal	36" O.C.	M	
	Festuca mairei Atlas Fescue	1 Gal	24" O.C.	M	
	Hemerocallis hybridus-Yellow Yellow Day Lily	1 Gal	24" O.C.	M	
	Rosa 'Flower Carpet'-Red Red Flower Carpet Rose	1 Gal	36" O.C.	L	
	Rosmarinus o. 'Huntington Carpet' Prostrate Rosemary	1 Gal	48" O.C.	L	
	Sesleria autumnalis Moor Grass	1 Gal	18" O.C.	M	Grass
	Trachelospermum jasminoides Star Jasmine	1 Gal	24" O.C.	M	
	Tulbaghia violacea Society Garlic	1 Gal	24" O.C.	M	

ACCENTS

SYMBOL	BOTANICAL/COMMON NAME	SIZE	W/COOLS
	Agave americana Century Plant	5 Gal 6' O.C.	L
	Agave 'Blue Flame' Blue Flame Agave	5 Gal 48" O.C.	L
	Agave 'Blue Glow' Blue Glow Agave	5 Gal 36" O.C.	L
	Agave desmetiana Smooth Agave	5 Gal 48" O.C.	L
	Aloe maculata Soap Aloe	5 Gal 36" O.C.	L
	Aloe striata Coral Aloe	1 Gal 24" O.C.	L
	Dasylirion wheeleri Desert Spoon	5 Gal 48" O.C.	L
	Echeveria 'Afterglow' Afterglow Echeveria	5 Gal 24" O.C.	L
	Hesperaloe parviflora Red Yucca	5 Gal 48" O.C.	L
	Lantana 'Gold Mound' Yellow Lantana	5 Gal 48" O.C.	L

FUEL MODIFICATION AREA

SYMBOL	BOTANICAL/COMMON NAME	SIZE	W/COOLS
	Prunus ilicifolia ssp. Holyleaf Cherry	1 Gal 36" O.C.	VL
	Rhamnus californica Coffee Berry	6' O.C.	VL
	Rhamnus ovata Sugarbush	1 Gal 48" O.C.	VL

BIO-RETENTION AREA

SYMBOL	BOTANICAL/COMMON NAME	SIZE	W/COOLS
	Rosa californica California Wild Rose	1 Gal 6' O.C.	VL
	Baccharis pilularis Coyote Bush	1 Gal 8' O.C.	VL
	Sambucus texensis Mexican Elderberry	1 Gal 48" O.C.	VL
	Mimulus cardinalis Scarlet Monkey Flower	1 Gal 36" O.C.	VL
	Aristida purpurea Purple Three-Awn	Seed	VL
	Deschampsia caespitosa Tufted Hairgrass	Seed	VL
	Distichlis spicata Salt Grass	Seed	VL
	Juncus patens California Gray Rush	Seed	VL
	Muhlenbergia rigens Deergrass	Seed	VL

RAIN GARDEN - planted in decomposed granite

SYMBOL	BOTANICAL/COMMON NAME	SIZE	W/COOLS
	Sphaeralcea ambigua Desert Mallow	1 Gal 36" O.C.	L
	Baccharis pilularis 'Pigeon Point' Dwarf Coyote Brush	1 Gal 6' O.C.	L
	Encelia farinosa Brittle Bush	1 Gal 36" O.C.	VL
	Keckiella cordifolia Heart-leaved Penstemon	1 Gal 36" O.C.	VL

2000 lbs/ac Wood cellulose fiber
600 lbs/ac 7-2-1 Blend organic fertilizer
100 lbs/ac Stabilizing binder
20 lbs/ac Endo-exo mycorrhizal innoculant
3 lbs/ac Aristida purpurea
3 lbs/ac Artemisia californica
1.2 lbs/ac Eriogonum fasciculatum

5 lbs/ac Encelia farinosa
2 lbs/yd Salvia alpinia
2 lbs/yd Salvia merrifera
5 lbs/ac Acmispon glaber (Lotus scoparius)
3 lbs/ac Eschscholzia californica
3 lbs/ac Lupinus truncatus
1 lbs/ac Salvia columbariae
4 lbs/ac Plantago erecta
3 lbs/ac Festuca microstachus (Vulpia Micro)

CALCULATIONS	BUILDING A	BUILDING B
TOTAL PAVED AREA	488,289 SF	180,031 SF
6% Landscape Reduired	33,014 SF	9,942 SF
Landscape Provided	130,659 SF	37,993 SF
% of Landscape	30.12%	19.91%

3/4" crushed rock decorative rock -Desert Gold, 5" layer over filter fabric.

VINES

SHEET 1 OF 3

N

0 20' 40' 80'

SYCAMORE HILLS DISTRIBUTION CENTER

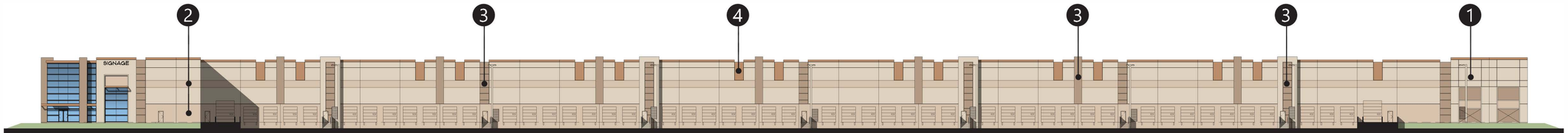
RVA *Hunter Landscape*

Landscape Design - Building B

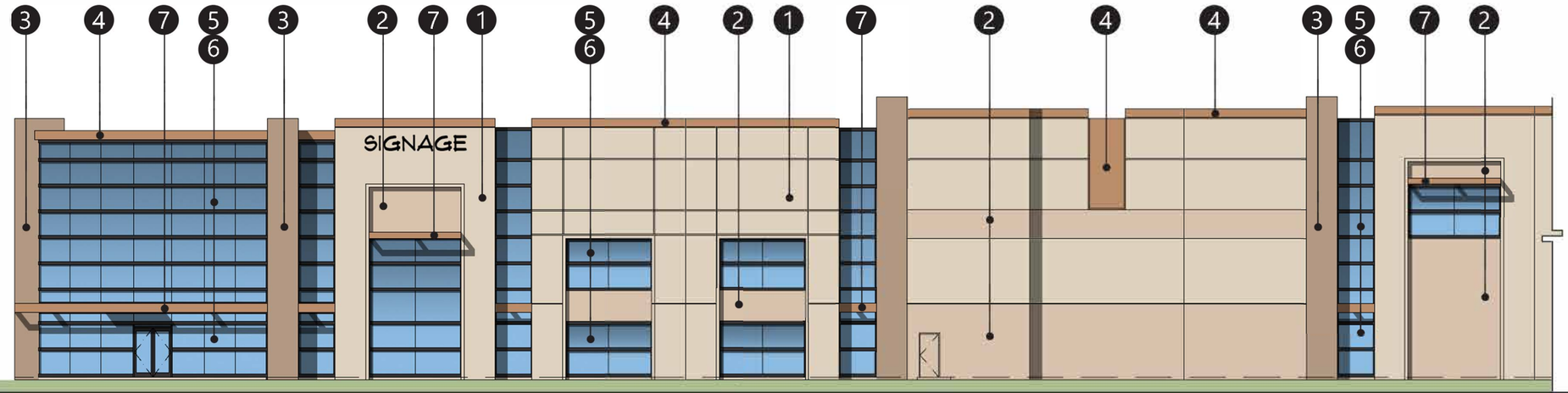
Figure 3.0-12B



SOUTH ELEVATION



EAST ELEVATION



ENLARGED SOUTH ELEVATION

1 Sherwin Williams SW 7526 Maison Blanche

2 Sherwin Williams SW 7719 Fresco Cream

3 Sherwin Williams SW 7519 Mexican Sand

4 Sherwin Williams SW 7718 Oak Creek

5 Black MULLIONS

6 Blue Reflective GLAZING

7 Sherwin Williams Acrylic Latex Systems High Gloss/High performance in color: SW 7718 Oak Creek @ Metal Canopy

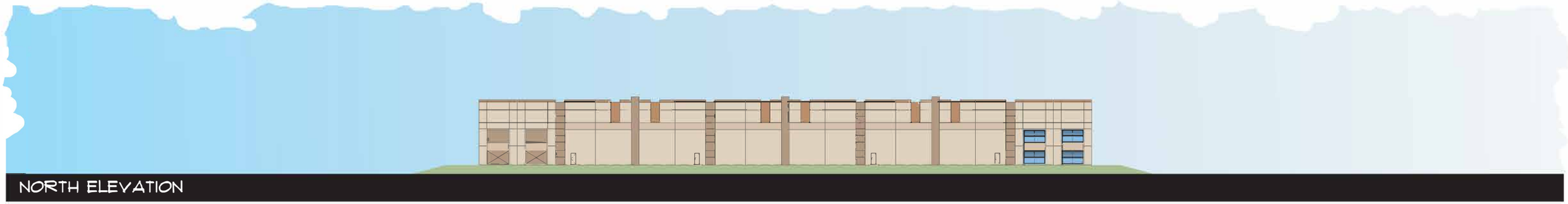
SYCAMORE HILLS DISTRIBUTION CENTER

RVA

HPA architecture

Building Elevations & Materials Board - Building 1

Figure 3.0-13



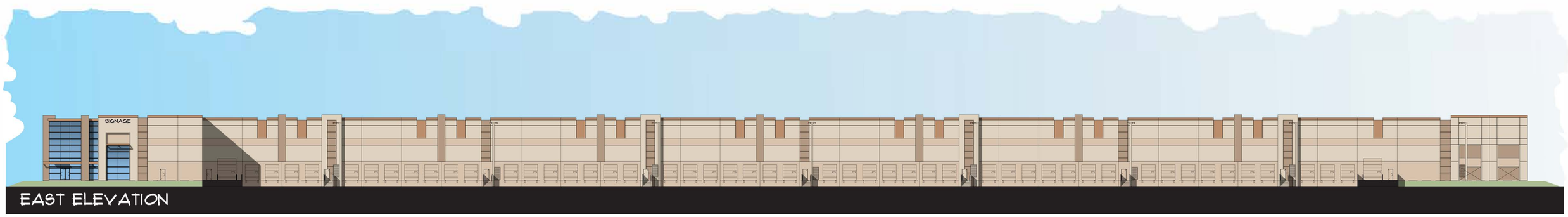
NORTH ELEVATION



WEST ELEVATION



SOUTH ELEVATION

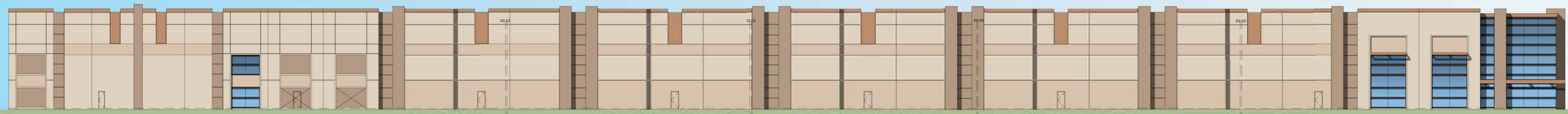


EAST ELEVATION

SYCAMORE HILLS DISTRIBUTION CENTER

Conceptual Elevations - Building A

Figure 3.0-14A



NORTH ELEVATION



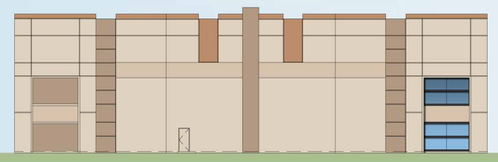
WEST ELEVATION



SOUTH ELEVATION



EAST ELEVATION



NORTHEAST ELEVATION

SYCAMORE HILLS DISTRIBUTION CENTER

Conceptual Elevations - Building B

Figure 3.0-14B

Site Preparation and Grading

The Project will involve grading and earthwork within the site in order to accommodate the proposed structures, associated parking lots, drive lanes, water quality basins and landscaped areas. Prior to grading operations, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared in accordance with requirements of the statewide general National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for stormwater discharges from construction sites. The SWPPP will include Project-specific best management practices (BMPs) to reduce erosion and sedimentation and is subject to review and comment by the City Public Works Department and approval by the Santa Ana Regional Water Quality Control Board. BMPs may include, but not be limited to, soil stabilization controls, perimeter silt fences, placement of hay bales, and use of sediment basins. All erosion and sediment controls will be in accordance with the currently adopted state general permit. The developer and construction contractor will be responsible for implementing the BMPs in accordance with the SWPPP.

It is anticipated that excavation of decomposed granite may be performed utilizing conventional earthmoving equipment. Blasting will not be required and is not proposed as part of the Project site preparation activities. Grading for Parcel 1/Building A, Parcel C, and Parcel 2/Building B is described below:

- Parcel 1 and Parcel C will be graded within the same grading construction activities for the Project. Parcels 1 and C total approximately 25.49 acres with undulating topography with elevations varying from approximately 1,570 to 1,615 feet above mean sea level (AMSL). Grading will result in cut areas up to 15 feet and fill areas as much as 12 feet. Over-excavation may be required to provide necessary structural support but is not expected to exceed 3 feet in depth. Total earthwork volumes, exclusive of any over-excavation are approximately 145,000 cubic yards of cut and 105,000 cubic yards of fill. The estimated 40,000 cubic yards of excess material will be moved from Parcel 1 to Parcel 2. This excess material will be transported via the existing dirt road between the parcels (crossing through Parcel A), which will be utilized temporarily during construction and restored post-construction.
- Parcel 2 is approximately 10.32 acres with undulating topography with elevations varying from approximately 1,580 to 1,618 feet AMSL. Grading will result in cut areas up to 16 feet and fill areas up to 8 feet. Over-excavation may be required but is not expected to exceed 3 feet in depth. Total earthwork volumes, exclusive of any over-excavation, are approximately 25,000 cubic yards of cut and 65,000 cubic yards of fill (with 40,000 cubic yards from Parcel 1 to balance). During the grading phase, soil quantities within the overall site will balance and no export or import of fill from the site will be needed.

3.2.3 Infrastructure and Utilities

Site and Park Access

As previously discussed, access to Building A would be provided via a driveway that crosses the existing Restricted Property in a north-south direction connecting to Alessandro Boulevard.

Improvements to Alessandro Boulevard along the Project's frontage would also be completed, including curb and gutter, curb adjacent sideway, street widening, turn lane pockets, and the installation of a traffic signal. The traffic signal is proposed at Vista Grande Drive and Alessandro Boulevard to facilitate access to Building A.

Access to Building B would be provided from Barton Street. No access to Building B from Alessandro Boulevard would be provided, or between Building A and Building B.

Additionally, as previously discussed, Parcel C is proposed to be developed with a trailhead parking lot for the Sycamore Canyon Wilderness Park. The northerly terminus of Barton Street is identified as a "minor trailhead" in the *Sycamore Canyon Wilderness Park Stephen's Kangaroo Rat Management Plan and Updated Conceptual Development Plan*. Trail fencing, gates, and signage will also be installed to direct access, circulation and trail connection to existing trails as well as the master planned multipurpose trail on the west side of Barton Street. The proposed trailhead parking lot is not required but is being provided by the applicant as an amenity to the City's Sycamore Canyon Wilderness Park, though it should be noted that Parcel C will not be formally incorporated into the Park.

Buildings A and B will both provide fire access and fire access lanes. Building A fire access will be on the southside of the Project site located on Driveway 2/Vista Grande Drive and Alessandro Boulevard, and Building B fire access will be on the west side of the Project site located on Driveway 1 and Barton Street.

Drainage

As earlier described, two drainages enter the Project site. Drainage A enters the site near the northern portion of the western boundary of Parcel 2 and flows for approximately 1,183 feet before exiting the site near the middle of the northern boundary of Parcel 1. Drainage B enters the site near the middle of the southern boundary on Parcel A and flows for approximately 981 feet before exiting the site near the middle of the northern boundary of Parcel A.

The Project site is not located within an existing Riverside County Flood Control and Water Conservation District (RCFCWCD) Master Drainage Plan. (GP 2025 FPEIR, Figure 5.16-1) The Project's onsite storm drain infrastructure includes underground storm drain pipes, Filterras engineered biofiltration systems for water quality treatment prior to discharging to underground detention system, multiple bioretention basins, and outflow pipes with rip-rap to dissipate flows. The access road will include two elliptical shaped corrugated metal pipes measuring 38 inches high and 57 inches wide to allow drainage underneath. Storm water runoff from the site will be conveyed through the site within underground storm drain pipes, underground detention system to the bioretention basins prior to being discharged via outflow pipes to the existing natural drainages on site. The existing off site storm water runoff that enters the western boundary of the site along the Barton Street alignment will be conveyed in an underground storm drain pipe, separately from the site's storm water runoff, and be discharged at the same location as the existing Drainage A exits the site into the Sycamore Canyon Wilderness Park.

Utilities

Wet and dry utility extensions will be constructed underground to serve the Project and will connect to existing utility lines in Alessandro Boulevard for Building A and Barton Street for Building B, respectively. Electricity and sewer service will be provided by Riverside Public Utilities and water by the Western Municipal Water District (Western). It is not feasible for Building B to connect to the City's sewer/wastewater system. The elevation of Barton Street drops from Alessandro Boulevard going north to the Project site; as such, there is no existing gravity wastewater/ sewer pipeline in Barton Street or the option to construct one (the flows would be going away from Alessandro Boulevard, not towards it). Therefore, Building B on Parcel 2 will have a septic system and leach lines. Natural gas would be provided by Southern California Gas Company via extensions from an existing pipeline in Alessandro Boulevard.

3.2.4 Sustainability Features

The Project would meet or exceed all applicable standards under California's Green Building Code Title 24 standards. This will be accomplished by incorporating, at minimum, the following sustainability features or other features that are equally efficient:

Energy Efficiency

- Design building shells and components, such as electrical systems, windows, and roof systems to comply with the provisions of the Title 24 standards for nonresidential buildings. The Project would be constructed in accordance with energy efficiency standards effective at the time building permits are issued. The effective date of the 2019 Building Energy Efficiency Standards was January 1, 2020, and it is anticipated that nonresidential buildings will use approximately 30 percent less energy due to lighting upgrades under the revised standards.
- Use of Energy Star products such as appliances, building products, heating and cooling equipment, and other energy-efficient equipment will be utilized.
- Install efficient lighting and lighting control systems. Light-emitting diodes (LEDs) will be installed for outdoor lighting, which will incorporate motion sensors that turn lighting off when not in use.
- Install skylights on the rooftops of both buildings and incorporate the use of natural lighting when possible.
- Achieve construction energy efficiencies and energy conservation through bulk purchase, transport, and use of construction materials. Use of materials in bulk reduces energy demands associated with preparation and transport of construction materials as well as transport and disposal of construction waste.
- The Project proposes conventional industrial uses that are not inherently energy intensive and reflect contemporary energy efficient/energy conserving designs and operational programs.

Renewable Energy

- Design buildings to have "solar ready" roofs that will structurally accommodate later installation of rooftop solar panels. Building operators providing rooftop solar panels will submit plans for solar panels prior to occupancy.

Water Conservation and Efficiency

- Create water-efficient landscapes in compliance with the City's Water Efficient Landscape and Irrigation Ordinance in 19.570.
- Install water-efficient irrigation systems and devices according to the City's Water Efficient Landscape and Irrigation Ordinance 19.570, which complies with the California Department of Water Resources Model Efficient Landscape Ordinance.
- Design buildings to be water-efficient; install water-efficient fixtures and appliances.
- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff.
- Provide education about water conservation and available programs and incentives to the building operators to distribute to employees.

Solid Waste Measures

- Sort, recycle, and divert from landfills Project-related construction and demolition waste in accordance with mandatory regulatory requirements.
- Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas.
- The property operator will provide readily available information provided by the City for employee education about reducing waste and available recycling services.

Transportation and Motor Vehicles

- Limit idling times of construction vehicles to no more than 5 minutes in accordance with CCR, Title 13, Motor Vehicles, section 2449(d)(3) Idling.
- Implement sidewalks to facilitate and encourage pedestrian access, which would reduce vehicle miles traveled (VMT) and associated energy consumption.
- Provide a total of 39 electric vehicle (EV) parking stalls (24 within Parcel 1 for Building A and 15 within Parcel 2 for Building B) to encourage the use of low or zero-emission vehicles.
- Provide a total of 13 clean air/van pool parking stalls (8 within Parcel 1 for Building A and 5 within Parcel 2 for Building B) to support and encourage ridesharing.

- Promote the use of bicycles as an alternative means of transportation by providing short-term and/or long-term bicycle parking accommodations in accordance with the California Green Buildings Standards Code Sections 5.710.6.2.1 and 5.710.6.2.2.
- The building operator will support and encourage ridesharing and transit for the construction crew.

On-Site Equipment and Loading Docks

- The Project will require building operators (by contract specifications) to turn off equipment, including heavy-duty equipment, motor vehicles, and portable equipment when not in use for more than 5 minutes. Truck idling shall not exceed 5 minutes in duration. All facilities will post signs requiring that trucks shall not be left idling for more than 5 minutes pursuant to Title 13 of the California Code of Regulations, Section 2485., which limits idle times to not more than 5 minutes.

Construction

- Require construction equipment to turn off when not in use.
- Use "green" building materials where feasible, such as those materials that are resource-efficient and recycled and manufactured in an environmentally conscious way.
- During grading, heavy-duty construction equipment (i.e., excavators, graders, scrapers, dozers, tractor/loader/backhoes, etc.) shall be CARB/U.S. Environmental Protection Agency Tier 3 certified. All construction equipment is subject to the CARB In-Use Off-Road Diesel-Fueled Fleets Regulation. This regulation, which applies to all off-road diesel vehicles 25 horsepower or greater, limits unnecessary idling to 5 minutes, requires all construction fleets to be labeled and reported to CARB, bans Tier 0 equipment and phases out Tier 1 and 2 equipment (thereby replacing fleets with cleaner equipment), and requires that fleets comply with Best Available Control Technology requirements.[2]

3.2.5 Operations and Employment

The Project is a speculative development and the tenants are unknown at this time, so the number of employees, shifts, days and hours of operation are not known at this time. However, for the purposes of the analysis in the Environmental Impact Report (EIR), the estimated number of employees, using the County of Riverside General Plan Appendix E-2: Socioeconomic Build-Out Assumptions and Methodology[3], which uses a factor of 1,030 SF per employee, would be 388.3

[2] Air Quality Analysis for the Sycamore Hills Distribution Project, page 34, contained in Appendix B of this EIR.

[3] County of Riverside General Plan Square Feet/Employee Factor of 1,030 SF per employee for Light Industrial land use, Appendix E-2: Socioeconomic Build-Out Assumptions and Methodology, April 11, 2017, https://planning.rctlma.org/General-Plan-Zoning/General-Plan

employees for Building A and 197.2 employees for Building B, for a total of 586 (rounded to the nearest whole number) for both buildings.

3.2.6 Construction and Operation

Construction will occur in accordance with both the City's Noise Ordinance and County's Noise Ordinance, during the hours of 7 am to 6 pm Monday through Friday, 8 am to 5 pm on Saturdays, and not on Sundays or federal holidays. Overall construction is anticipated to last approximately 15 months. Grading and preliminary road construction is the first phase and is expected to last approximately 3 months. After grading, building construction will last approximately 12 months and includes slab and wall framing, concrete pouring, roof installation building interiors, architectural coatings, parking lots, roadway improvements, landscaping, storm drains and water quality basins, etc.

3.3 Project Objectives

The objectives of the Project are:

- Develop the site with two warehouse buildings with a total of 603,100 square feet of building space, a conservation easement, and trailhead improvements.
- Modify the Restrictive Covenant (RC) to allow access to Parcel 1, which is currently landlocked by the RC.
- Provide trailhead improvements consistent with the *Sycamore Canyon Wilderness Park Stephen's Kangaroo Rat Management Plan and Updated Conceptual Development Plan* including:
    - a parking lot,
    - sidewalk,
    - shade structure with benches,
    - bike rack,
    - drinking fountains,
    - fencing, gates, signage, and a fire department access gate.
- Develop and operate warehouse buildings that:
    - Takes advantage of existing City infrastructure
    - Are adjacent to similar industrial logistics and distribution centers.
    - Are in close proximity to March Inland Port, State Route 60/Interstate 215, and Interstate 10 to support the distribution of goods throughout the region, while limiting traffic truck disruption to residential areas within the City and neighboring jurisdictions.

  - Will attract quality tenants and will be competitive with other similar facilities in the region.
  - Meet industry standards for operational design criteria.
- Implement the *Sycamore Canyon Business Park Specific Plan* through development of a land use allowed by the industrial land use designation and consistent with the development standards and criteria relevant to the site and proposed use.
- Facilitate the development of underutilized land currently planned for industrial uses that maximizes the use of the site and responds to market demand within the *Sycamore Canyon Business Park Specific Plan* area for warehouse buildings.
- Provide and expand on-site conservation to mitigate for the loss of riparian/riverine resources.
- Positively contribute to the economy of the City through new capital investment, creation of new employment opportunities, including opportunities for highly trained workers, and expansion of the tax base.

3.4 Discretionary Actions and Other Agency Approvals

In conformance with State CEQA *Guidelines* Sections 15050 and 15367, the City is the "Lead Agency," defined as the "public agency which has the principal responsibility for carrying out or approving a project," for the Project's environmental analysis. This DEIR serves as an information document for use by public agencies, the general public, and other decision makers. This DEIR discusses the impacts of development pursuant to the Project and related components and analyzes Project alternatives. This DEIR will be used by the City in assessing impacts of the Project.

The following public agencies will use this DEIR when considering the following actions, as well as any other discretionary actions necessary or desirable to implement the Project identified through consultation with the appropriate public agencies:

City of Riverside

- Tentative Parcel Map 37789 (P20-0025)
- Design Review (P19-0627)
- Minor Conditional Use Permit (P19-0626)
- Variance (P20-0258)
- Grading Exception (P20-0282)
- Environmental Impact Report (P20-0024)

California Department of Fish and Wildlife

- Lake or Streambed Alteration Agreement per Section 1602 of the Fish and Game Code

State Water Resources Control Board, Santa Ana Regional Water Quality Control Board

- National Pollutant Discharge Elimination System's California General Permit for Stormwater Discharges Associated with Construction Activity
- Water Quality Certification per Clean Water Act Section 401

U.S. Army Corps of Engineers

- Section 404 Permit for Disposal of Dredge or Fill Material per the Clean Water Act

4.0 Environmental Setting

This section provides a general overview of the environmental setting for the proposed Project. Detailed descriptions of the environmental setting, which generally captures the baseline conditions, for each environmental issue area can be found in Section 5.0, Environmental Impact Analysis.

4.1 Regional Setting

The approximately 48.64 gross-acre Project site is located in Riverside County, in the City of Riverside California. The site is located in the eastern portion of the City, east of Barton Street, west of Sycamore Canyon Boulevard, and north of Alessandro Boulevard, within the Sycamore Canyon Business Park Specific Plan. The Project site is within the southwestern corner of Section 9, Township 3 South, Range 4 West as shown on the Riverside East, California, United States Geological Survey (USGS) 7.5-minute quadrangle (Figure 3.0-2 – Vicinity Map). The City of Riverside encompasses approximately 81 square miles and is located approximately 50 miles east of downtown Los Angeles, and 9 miles south of San Bernardino. Currently the City is the 12th most populous city in California and has the largest employment base in the Inland Empire region. A grid system of east-west and north-south roadways, including arterials, collectors, and local streets provide circulation throughout the City. The region is characterized by a semi-arid climate with hot and dry summers and relatively mild, wet winters.

4.2 Project Site Setting

The approximately 48.64-acre Project site is located on the north side of Alessandro Boulevard, directly east of Barton Street, and west of Sycamore Canyon Boulevard. The Project site includes Assessor Parcel Numbers (APNs) 263-060-022, 263-060-024, and 263-060-026.

The Project site is undeveloped and vacant. The topography consists of natural rolling terrain descending gradually from a west to east direction. The Project site contains some granitic rock outcrops throughout the property.

The Project site contains low to moderate vegetation primarily consisting of non-native grasslands crossed by several drainages, some of which contain riparian woodland vegetation. Several unpaved trails cross the upland and drainages. Non-native grasslands and weeds make up approximately 41 acres of the Project site and the riparian woodland makes up approximately 5 acres. Patches of sparse Riversidean sage scrub are present in the upland areas and make up a total of approximately 2 acres. The rest of the Project site is disturbed with no vegetation or exposed rock.

The two primary drainages that cross the Project site (referred to as Drainage A and Drainage B) and the riparian area (Area C) are shown in Figure 5.3-5 – Drainages Map. Drainage A contains sparsely vegetated sections and areas of dense riparian vegetation. Drainage A enters the site near the northern portion of the western boundary and flows for approximately 1,183 feet before exiting the site near the middle of the northern boundary. Drainage B enters the site near the

middle of the southern boundary and flows for approximately 981 feet before exiting the site near the middle of the northern boundary.

The Project site contains an existing Restricted Property area of 11.6 acres, as shown in Figure 3.0-3 – Project Location Map, intended for preservation in a natural condition.

As shown in Figure 3.0.5 – Land Use Designation, the Project site is bordered on the north by the Sycamore Canyon Wilderness Park, vacant property to the east, a wastewater treatment plant to the west across Barton Street, and the Citywide Self Storage facility to the south. Commercial and residential uses located south (across Alessandro Boulevard) are within the City and County of Riverside. The northerly terminus of Barton Street is identified as "a minor trailhead" in the *Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan* The proposed trailhead parking lot, at the northern end of the Project site will include an improved decomposed granite parking lot, landscaping, a shade structure with benches, a bike rack, a drinking fountain (including for pets), and ADA (Americans with Disabilities Act) compliant parking spaces and sidewalk. Trail fencing, gates, and signage will also be installed to direct access, circulation and trail connection to existing trails as well as the master planned multipurpose trail on the west side of Barton Street.

The Project site has a General Plan land use designation of Business/Office Park (B/OP), as shown in Section 3, Figure 3.0-5 – Land Use Designation Map. The Project site is zoned BMP-SP - Business and Manufacturing Park and Specific Plan (Sycamore Canyon Business Park) Overlay Zones, Figure 3.0-7 – Zoning Map. The Sycamore Canyon Business Park Specific Plan (SCBPSP), which is considered a "Major Business Park" as shown on Figure LU-4 of the GP 2025, designation for the Project site is Industrial, as shown in Section 3, Figure 3.0-6 – Sycamore Canyon Business Park Specific Plan Land Use Map.

4.3 Developments Considered in Cumulative Impact Analysis

In addition to the specific impacts of individual projects, CEQA requires EIRs to consider potential cumulative impacts of the proposed project. CEQA defines "cumulative impacts" as two or more individual impacts that are substantial or will compound other environmental impacts, when considered together. Cumulative impacts are the combined changes in the environment that result from the incremental impact of development of the proposed Project and other nearby projects. For example, transportation impacts of two nearby projects may be less than significant when analyzed separately, but could have a significant impact when analyzed together. Cumulative impact analysis allows the EIR to provide a reasonable forecast of future environmental conditions and gauge the effects of a series of projects more accurately.

As outlined in the CEQA Guidelines Section 15130, the cumulative impact analysis in an EIR should consider either a list of planned and pending projects that may contribute to cumulative effects or a forecast of future development potential. The cumulative impact analysis utilized in this EIR considers a list of planned and pending projects. Currently planned and pending projects in Riverside and surrounding areas, including in the City of Moreno Valley and County of

Riverside, are included in Table 4.0-1 and shown on Figure 4.0-1. The cumulative project list was developed largely from the Traffic Operations Analysis which was created in consultation with the City of Riverside Planning and Public Works staff, as well as the County of Riverside, March Joint Powers Authority (JPA), and the City of Moreno Valley. The Traffic Operations Analysis, included in Appendix K, followed the City of Riverside's Traffic Impact Analysis Preparation Guide. The cumulative list included projects anticipated to contribute measurable traffic impacts to the study area, and to other impacts linked to the amount of traffic generated by a project, such as air quality, greenhouse gases, and noise. Although the Crestview Apartments project does not contribute measurable traffic impacts to the traffic study area of the Sycamore Hills Distribution Center Project, it is a development project currently being considered by the City and may contribute to other non-traffic related cumulative impacts (aesthetics, biological resources, etc.) and thus is included in the cumulative project list. The cumulative project list below includes the cumulative project list for the Focused Traffic Analysis with the addition of the Crestview Apartments project.

A total of 27 planned or pending projects were identified as having the potential to contribute to cumulative effects, including:

- Three residential developments with a combined total of 287 residential dwelling units;
- One hotel development with a total of 110 rooms;
- One apartment development with a total of 237 dwelling units;
- Sixteen warehouse developments totaling 6,434,728 square feet of development.
- Various retail, industrial, office, and commercial developments with an approximate combined footprint of 9,374,297 square feet.

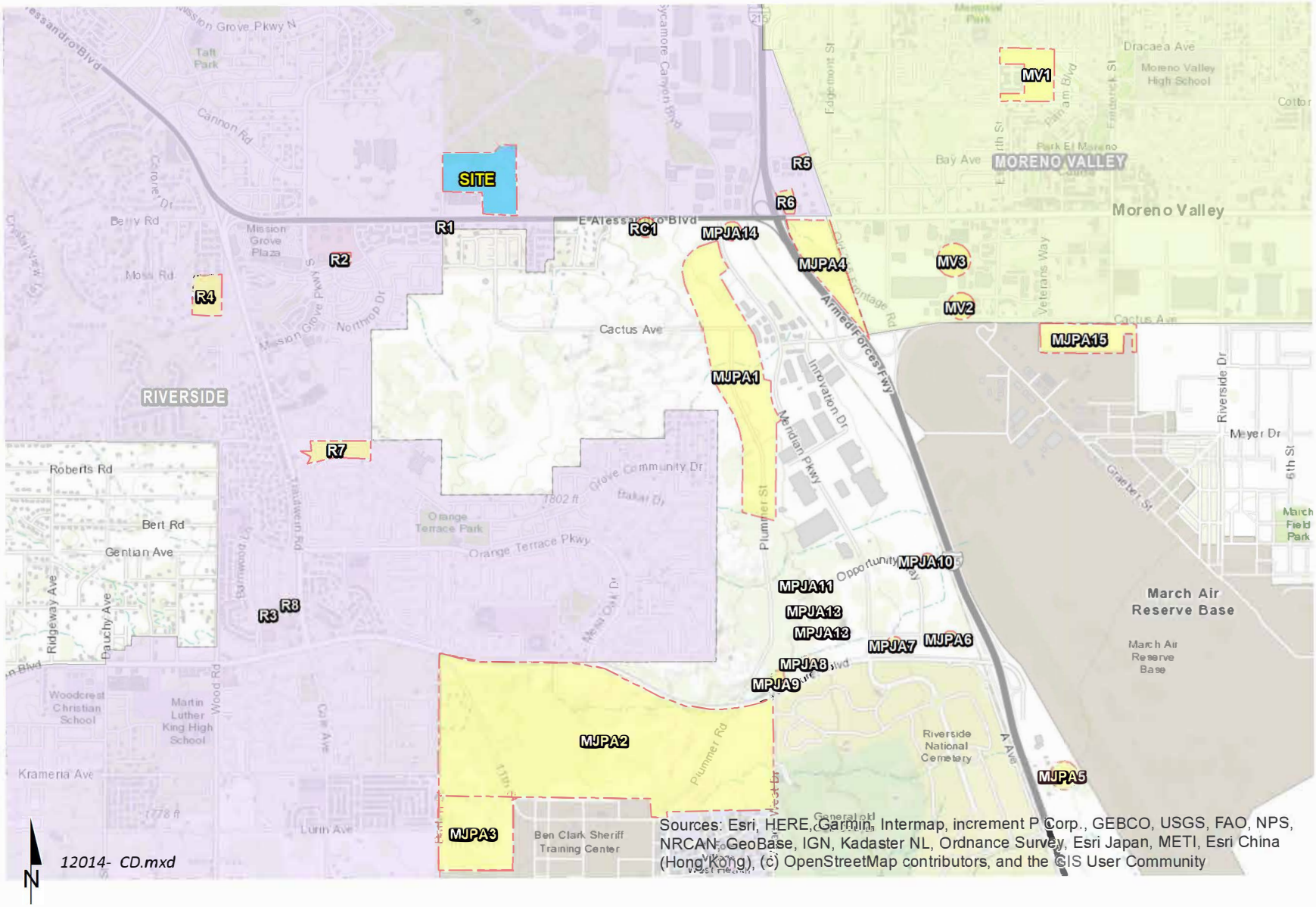
The full list of cumulative development projects is included in Table 4.0-1.

Table 4.0-1: Summary of Cumulative Development Projects

Map ID	Project Name	Land Use[1]	Quantity	Units[2]
City of Riverside				
R1	P17-0419/20/21	Fast Food w/ Drive Thru	1.857	TSF
R2	P16-0578	Warehouse	82.200	TSF
R3	P19-0151/P19-0152/P19-0153	Health and Fitness Club	21.706	TSF
R4	P13-0665	SFDR	8	DU
R5	P15-1035/P16-0556/P16-0567	Warehouse	176.149	TSF
R6	P14-0841 to P14-0848/P16-0472/P16-0474	Warehouse	73.200	TSF
		Commercial Retail	15.000	TSF
R7	P14-0472/P14-0473-P15-0321/P15-0322	SFDR	85	DU
R8	P19-022/P19-0024/P19-0026/P19-0027/P19-0028	Fast Food w/ Drive Thru	4.319	TSF
R9[3]	P19-0775/P19-0776/P19-0777/P19-0905/P20-0307/P20-0308/P20-0309/P20-0310	Multifamily	237	DU
County of Riverside				
RC1	PP 25422	Warehouse	814.000	TSF
March Joint Powers Authority				
MJPA1	Meridian Business Park (West Campus)	Industrial Park	2,278.852	TSF
MJPA2	Meridian South Campus	Warehouse	500.000	TSF
		General Office	338.800	TSF
		Commercial Retail	7.905	TSF
		Fast Food w/ Drive Thru	3.300	TSF
		Gas Station w/ Conv. Market	12	VFP
MJPA3	Meridian South Parcel Delivery	Warehouse	1,699	Employees
MJPA4	Freeway Business Center	Warehouse	709	TSF
MJPA5	Veteran's Industrial Plaza/VIP 215	Warehouse	2,000.000	TSF
MJPA6	Veteran's Plaza	Commercial Retail	198.000	TSF
MJPA7	MS Van Buren I	Warehouse	176.396	TSF
MJPA8	MS Van Buren II	Warehouse	162.041	TSF
MJPA9	MS Prime Six	General Office	74.922	TSF
MJPA10	Meridian Distribution Center II	Warehouse	510.000	TSF
MJPA11	Meridian Distribution Center III	Warehouse	262.269	TSF
MJPA12	Meridian Distribution Center IV	Warehouse	90.000	TSF
MJPA13	Economic Business Center	Warehouse	124.523	TSF
MJPA14	MS Alessandro	Industrial Park	157.513	TSF
MJPA15	K4 Parcel	Warehouse	718.000	TSF
City of Moreno Valley				
MV1	Scottish Village	Multifamily	194	DU
MV2	Moreno Valley Cactus Center (PEN16-0131)	Warehouse	36.950	TSF
		Fast Food w/ Drive Thru	7.900	TSF
		Gas Station w/ Car Wash	28	VFP
MV3	PA 08-0047-0052 (Komar Cactus Plaza)	Hotel	110	Rooms
		Fast Food w/ Drive Thru	8.000	TSF
		Commercial	42.400	TSF

[1] SFDR = Single Family Detached Residential
[2] = Dwelling Units; TSF – Thousand Square Feet; SP – Spaces; VFP – Vehicle Fueling Positions

[3] R9 is not shown on figure 4.0-1, as it is outside of the map area, northwest of the Central Avenue and Sycamore Canyon Boulevard intersection



SYCAMORE HILLS DISTRIBUTION CENTER

RVA URBAN CROSSROADS

Cumulative Development Location Map

Figure 4.0-1

5.0 Potentially Significant Environmental Effects

This section discusses the possible environmental effects of the Project on the specific issue areas identified as having the potential for significant effects. As defined in the *CEQA Guidelines* (Section 15382) a "significant effect on the environment means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.

Sections 5.1 through 5.15 of the DEIR examine the potential environmental impacts associated with implementation of the Project and focus on the following issues:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards & Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Transportation
- Tribal Cultural Resources
- Utilities
- Wildfire

5.0.1 Technical Studies

Technical and supporting studies were prepared in order to provide detailed analysis for the Project and this DEIR. The following studies are identified in the discussion for the individual environmental issues and included as technical appendices of the DEIR:

- Initial Study, Notice of Preparation (NOP), and NOP Comment Letters (Appendix A)
- Project Compliance With Applicable GP & SP Policies (Appendix B)
- Air Quality Analysis (Appendix C)
- Mobile Source Health Risk Assessment (Appendix C)
- Construction Health Risk Assessment Memorandum (Appendix C)
- Determination of Biologically Equivalent or Superior Preservation (DBESP) Report for Impacts to Riparian/Riverine Resources (Appendix D)

- Biological Resources and Western Riverside County Multiple Species Habitat Conservation Plan Consistency Report (Appendix D)
- Jurisdictional Delineation Report (Appendix D)
- Least Bell's Vireo, Southwestern Willow Flycatcher & Yellow-Billed Cuckoo Survey Results Report (Appendix D)
- Burrowing Owl Focused Survey Report (Appendix D)
- Phase I and Phase II Cultural Resource Investigations (Appendix E)
- Energy Analysis (Appendix F)
- Geotechnical Engineering Investigation (Appendix G)
- Deep Percolation Testing (Appendix G)
- Paleontological Resource Assessment (Appendix G)
- Greenhouse Gas Analysis (Appendix H)
- Phase I Environmental Site Assessment (Appendix I)
- Hydrology Memo (Appendix J)
- Water Quality Management Plan (Appendix J)
- Noise Analysis (Appendix K)
- Traffic Operations Analysis (Appendix L)
- Vehicle Miles Traveled Analysis (Appendix L)

5.0.2 Analysis Format

The DEIR assesses how the Project would impact the issue areas identified above. Each environmental issue addressed in this DEIR is presented in terms of the following subsections:

- **Setting:** Provides information describing the existing setting on or surrounding the Project site which may be subject to change and affected as a result of the implementation of the Project and provides a description of the "baseline" conditions from which potential impacts are assessed. This setting describes the physical conditions that existed when the IS/NOP was published and sent to responsible agencies and the State Clearinghouse.
- **Related Regulations:** Provides a discussion of the applicable regulations with respect to each environmental issue.
- **Project Design Considerations:** Provides a discussion of the Project design features as it relates to each environmental issue. Project design features are those features or elements of the Project that serve to avoid or minimize potential environmental impacts.
- **Thresholds of Significance:** Provides criteria for determining the significance of Project impacts for each environmental issue.

- **Environmental Impacts:** Provides a discussion of the characteristics of the Project that may have an effect on the environment; analyzes the nature and extent to which the Project is expected to change the existing environment, and whether or not the Project impacts are less than or exceed the levels of significance thresholds, with or without mitigation.
- **Proposed Mitigation Measures:** Identifies mitigation measures to reduce significant adverse impacts to the extent feasible.
- **Cumulative Environmental Effects:** Describes potential environmental changes to the existing physical conditions that may occur with the Project together with all other reasonably foreseeable, planned, and approved future projects.

5.1 Aesthetics

Based on Appendix G of the *State CEQA Guidelines*, the analysis in the Initial Study (IS/NOP) prepared for this Project (Appendix A), and comments received during the NOP public review period (Appendix A), this section evaluates the Project's impacts to the scenic vistas, scenic resources, visual character or quality, and light and glare.

Aesthetics refers to what is perceived as being visually pleasing or beautiful. Because "beauty is in the eye of the beholder," this aspect of environmental impact analysis is an inherently subjective issue. It is not the purpose of this section of the DEIR to try to determine if the existing vacant site is more aesthetically pleasing than the Project. Rather, this analysis will address definable thresholds of significance related to City policy, designated scenic resources, and known landmarks, to determine if the Project will cause significant negative aesthetic effects.

Pursuant to the *State CEQA Guidelines*, aesthetic effects relate to obstruction of scenic vistas or views, creation of a negative aesthetic effect, and creation of light or glare. Important criterion for visual impacts is visual consistency. Project design should be consistent with natural surroundings and adjacent land uses. Additionally, it is more practical and effective to prevent offensive visual contrasts through a combination of building siting, setbacks, height restrictions, and landscaping. This evaluation measures the existing visual resources in the Project area against the Project, analyzing the nature of the anticipated change considering that the Project site is currently undeveloped.

5.1.1 Setting

Regional Visual Setting

Although the majority of the City is urbanized, the hills and ridgelines that surround the City provide scenic vistas to residents where they can experience long distance views of natural terrain. Vista points can be found throughout the City, both as viewed from urban areas toward the hills and from wilderness areas toward the City. The most notable scenic vistas in the City include the La Sierra/Norco Hills, Sycamore Canyon Wilderness Park, and Box Springs Mountain Regional Park. The peaks of the Box Springs Mountain, as well as Mount Rubidoux, Arlington Mountain, Alessandro Heights and the La Sierra/Norco Hills provide scenic views of the City and the region. Per the Riverside General Plan 2025 EIR (GP 2025 FPEIR) the higher elevation hills shape the visual outline of the City, and drainage areas of the City provide a visual backdrop as viewed from streets, buildings, and open spaces. (GP 2025 FPEIR, p. 5.1-2)

There are several Scenic and Special Boulevards and Parkways within the City as identified in the City's 2025 General Plan Master Plan of Roadways. Scenic Boulevards require special landscaping and additional right-of-way may be required. Special Boulevards may require a two-lane divided roadway or variable geometric design or of variable width and design. Alessandro Boulevard, south of the Project site, is designated a Scenic Boulevard. The nearest designated Special and Scenic Boulevard to the Project site is Mission Grove Parkway, located approximately 0.75 mile to the northwest. The nearest designated Parkway, Canyon Crest Drive (also a designated Scenic Boulevard), is located approximately 1.5 miles to the west. (GP 2025, Figure

CCM-4) No officially designated State scenic highways or eligible State scenic highways traverse the City (GP 2025 FPEIR, p. 5.1-4).

Visual Character of the Project Site

Photographs of the Project site are shown in Figure 3.0-4 of the Section 3.0 Project Description. Figure 3.0-4A shows where within the Project site the photographs were taken and in what direction. Figures 3.0-4B through 3.0-4D show photographs 1-12 of the Project site and surrounding areas. The Project site is currently undeveloped and vacant. The topography consists of natural rolling terrain descending gradually from a west to east direction. There are granitic rock outcroppings throughout the property. The Project site contains low to moderate vegetation primarily consisting of non-native grasslands crossed by several drainages, some of which contain riparian woodland. Patches of sparse Riversidean Sage Scrub are present in the upland areas. Several unpaved trails also cross the site. Two drainages enter the Project site. Drainage A enters the site near the northern portion of the western boundary and flows for approximately 1,183 feet before exiting the site near the middle of the northern boundary. Drainage B enters the site near the middle of the southern boundary and flows for approximately 981 feet before exiting the site near the middle of the northern boundary. Drainage B is identified as a “blueline stream” in the USGS 7.5 Minute Quadrangle topographic map shown in Figure 3.0-2 Vicinity Map. (Refer to Figure 5.3-5 for Drainages A & B, Area C)

Visual Character of the Surrounding Area

The area surrounding the Project site is typified by varied topography intermixed with graded and developed land. The Sycamore Canyon Wilderness Park is north of the Project site and seen in the photographs View 1, 2, 5, and 7 (Figure 3.0-4B and 3.0-4C). This natural open space park is characterized by rugged terrain, with granitic outcroppings, streambeds, and steep drainages. Box Springs Mountain is located northeast of the Project site and is visible from the Project area, as seen in the photographs View 1, 2, 5, and 7 (Figure 3.0-4B and 3.0-4C). The Sycamore Canyon Wilderness Park and the peaks of Box Springs Mountain are considered notable scenic vistas for the City (GP 2025 FPEIR, 5.1-2). The Sycamore Canyon Business Park, where the Project site is located, is primarily characterized by large-scale light industrial uses, which includes warehouses and distribution centers. Industrial buildings located on the north side of the Sycamore Canyon Wilderness Park and within the Sycamore Canyon Business Park can be seen in the distance in the photographs View 1, 2, 3, 4, 5, and 7 (Figure 3.0-4B and 3.0-4C). Existing commercial and single-family and multi-family residential uses are located south and southwest of the Project site, across Alessandro Boulevard, and can be seen in the distance in the photographs View 8, 9, and 12 (Figure 3.0-4C and 3.0-4D). Also, to the south of the Project site is Citywide Self Storage, shown in photographs View 3, 6, and 8 (Figure 3.0-4B and 3.0-4C). To the west of the Project site is a Metropolitan Water District Facility which includes a water treatment plant, water storage and other water-based facilities. In a regional context, the Project site is in a generally urbanized area comprised by commercial, industrial and residential developments, with the exception of the Sycamore Canyon Wilderness Park open space to the north.

Nighttime Light Characteristics of the Project Site and Surrounding Area

The City is primarily urbanized, with significant existing sources of light and glare, such as streetlights along roadways, parking lots and walkways, and light emitted from residential and non-residential buildings (GP 2025 FPEIR, p. 5.1-4). The Project site is currently unlit at night; however, security and operational lighting associated with the existing commercial and industrial uses within Sycamore Canyon Business Park to the east and north of the site are present. Additionally, there is streetlighting along the roadway on Barton Street which borders the west side of the Project. South of the Project site, there is street lighting along Alessandro Boulevard and on the roadways in the residential subdivisions south of Alessandro Boulevard. An additional existing source of light and glare along these roadways is created by passing vehicles through nighttime use of headlights and taillights.

5.1.2 Related Regulations

5.1.2.1 Federal Regulations

No Federal regulations are applicable to the Project with respect to aesthetics.

5.1.2.2 State Regulations

California Scenic Highway Program

The California Scenic Highways Program was established in 1963 to "preserve and protect scenic highway corridors from change which would diminish any aesthetic value of lands adjacent to highways." The State laws governing the scenic highway program are found in the California Streets and Highways Code Section 260 et seq. No State-designated or eligible scenic highways exist within or near the Project site, and therefore, no State regulations are applicable to this Project.

5.1.2.3 Regional Regulations

Mount Palomar Lighting Policy Area

The Palomar Observatory is located on Palomar Mountain in north San Diego County. The continued urbanization of the areas surrounding this observatory, including southwestern Riverside County, contributes to reducing the nighttime usefulness of this facility due to lighting from streetlights, automobiles, residences, and businesses. In order for the night sky to be viewed clearly for astronomical research purposes from this observatory, unique nighttime lighting standards are required for development within the Mount Palomar Lighting Policy Area. The Mount Palomar Lighting Policy Area consists of two zones; Zone A, which includes property within a 15-mile radius of the observatory, and Zone B, which includes property within a 45-mile radius of the observatory. Because the Project site is more the 45 miles north of the observatory it is not within the Mount Palomar Lighting Policy Area.

5.1.2.4 Local Regulations

Riverside General Plan 2025

The GP 2025 defines the community vision and establishes a fundamental framework to guide decision-making about development, land use, resource management, public safety, public services, and general community well-being. The GP 2025 also sets forth policies and goals to not only preserve but improve existing visual resources within the City and its Sphere of Influence. The City has a long-standing history, which is reflected in its historic buildings, parkways, and local landmarks. Objectives and policies from the General Plan applicable to scenic resources and aesthetics relative to development in the City are:

Objective LU-7: Preserve and protect significant areas of native wildlife and plant habitat, including endangered species

> **Policy LU-7.1:** Continue to maintain Sycamore Canyon Wilderness Park as primarily a function of wildlife habitat.
>
> **Policy LU-7.2:** Design new development adjacent and in close proximity to native wildlife in a manner which protects and preserves habitat.
>
> **Policy LU-7.3:** Continue to require natural open space easements in conjunction with new development in hillside and arroyo areas over non-graded areas of the development.
>
> **Policy LU-7.4:** Continue to participate in the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP).

Objective LU-27: Enhance, maintain, and grow Riverside's inventory of street trees.

> **Policy LU-27.1:** Require appropriately sized landscaped parkways in all new development. Parkway areas shall be of sufficient width to allow planting of trees that will become large canopy trees.
>
> **Policy LU-27.4:** Encourage trees on private property to add to the City's urban forest.

Objective LU-30: Establish Riverside's neighborhoods as the fundamental building blocks of the overall community, utilizing Neighborhood and Specific Plans to provide a more detailed design and policy direction for development projects located in particular neighborhoods.

> **Policy LU-30.2:** Ensure that every neighborhood has a unique community image that is incorporated and reflected in all public facilities, streetscapes, signage and entryways proposed for each neighborhood.
>
> **Policy LU-30.3:** Ensure that the distinct character of each of Riverside's neighborhoods is respected and reflected in all new development, especially infill development.

Objective LU-79: Preserve and enhance the natural character and qualities of Sycamore Canyon Wilderness Park.

> **Policy LU-79.2:** Ensure that the development on the periphery of the park is minimally disruptive and maximally screened from the Park.

Policy LU-79.5: Enhance access points and encourage recreational use in accordance with the adopted Sycamore Canyon Wilderness Park – Stephen's Kangaroo Rat Management Plan and Updated Conceptual Development Plan.

Open Space and Conservation Element

The Open Space and Conservation Element of the General Plan addresses the use and preservation of the open space areas throughout the City, including natural and human-made features. It guides the preservation of scenic resources and vista points in Riverside, including hillsides and other topographic features. Objectives and policies related to scenic resources and aesthetics in the Element are:

Objective OS-1: Preserve and expand open space areas and linkages throughout the City and sphere of influence to protect the natural and visual character of the community and to provide for appropriate active and passive recreational uses.

Policy OS-1.6: Ensure that any new development that does occur is effectively integrated through convenient street and/or pedestrian connections, as well as through visual connections.

Sycamore Canyon Business Park Specific Plan

The Sycamore Canyon Business Park Specific Plan (SCBPSP) addresses detailed design, land use, service, and community character issues as well as establishes standards and guidelines for development within the SCBPSP area, which includes the Project site. It is a planning document intended to provide a comprehensive plan and policies to encourage and facilitate high quality development. The basic objective of the SCBPSP in regard to landscaping and design is to create a strong unified landscape character in the Plan area by implementing the standard City landscaping requirements for industrial and commercial developments (SCBPSP, p. 14). Additionally, the SCBPSP contains development standards and criteria for the Plan area. Accordingly, these standards and criteria are also applicable to the Project.

Riverside Municipal Code

Title 17 – Grading Code

The Grading Code, which is contained within Title 17 of the Riverside Municipal Code, sets forth rules and regulations placed on grading to control erosion, grading, and earthwork construction, including fills and embankments. The basic aim of the Grading Code, as it relates to aesthetics, includes ensuring that significant natural characteristics such as land form, vegetation, wildlife communities, scenic qualities, and open space can substantially be maintained; maintaining the identity, image, and environmental quality of the City and achieving land use densities that are in keeping with the GP 2025; minimizing the visual impact of grading; minimizing grading which relates to the natural contour of the land, and which will round off, in a natural manner, sharp angles at the top and ends of cut and fill slopes, and which does not result in a staircase or padding affect; preserving prominent landforms within the community, including, but not limited to ridgelines, knolls, valleys, creeks, rock outcroppings or other unique topographic features or viewscapes; and preserving major hillsides viewscapes visible from points within the City so that

they are not detrimentally altered by the intrusion of highly visible cut and/or fill slopes, building lines and/or road surfaces (RMC, Section 17.04.010).

Title 19 – Zoning Code

The Zoning Code, which is contained within Title 19 of the Riverside Municipal Code (RMC), regulates all land uses in the City and includes design standards such as building height and size, setbacks, lighting, parking design and quotas, landscaping, and density at the individual parcel level, as well as standards and permitted uses for signs. In the City, there are four zones for industrial uses. Per the City's Zoning Map, the existing zoning of the Project site is BMP-SP – Business and Manufacturing Park and Specific Plan (Sycamore Canyon Business Park) Overlay Zones, which is intended to provide a district for low-intensity and low-impact industrial, office, and related uses (RMC, Section 19.130.010(A)). Zoning Code Chapter 19.130 contains the development standards specific to the City's industrial zones. Through the City's Design Review process, the architectural design of the Project has been evaluated to ensure consistency with the provisions of Title 19 and other applicable sections of the Riverside Municipal Code and the SCBPSP, as well as to ensure a design consistent with surrounding land uses.

Citywide Design Review Guidelines and Sign Guidelines

As the Project proposes new structures within an industrial zone, the Project is required to comply with the Citywide Design Guidelines and Sign Guidelines (CDSG). The CDSG are part of a structure of policy documents that guide development in the City. The CDSG is an implementing tool of the GP 2025 and applies to all properties in the City. The CDSG are intended to improve overall urban design. (CDG, p. I-4). These guidelines work to reinforce the physical image of the City and are intended to promote quality, well-designed development throughout the City that enhances existing neighborhoods, creates identity, and improves the overall quality of life. Moreover, these guidelines supplement the contents of the City's Zoning Code on matters of design and aesthetics (CDG, p. I-1).

The CDSG contain guidelines applicable to development of industrial land uses including light industrial structures, business parks, and heavy manufacturing and industrial structures. They address site design, parking and loading, architecture, landscaping, walls and fences, screening, lighting, and signs (CDG, p. V-1) and are applicable to the Project.

Design Review Process Chapter 19.710

The Design Review Process (Chapter 19.710) is used to preserve and promote the health, safety and general welfare of the community by achieving the following:

A. Protecting and preserving the value of properties and encouraging high quality development in areas where adverse effects will result from excessive uniformity, dissimilarity, poor exterior quality and appearance of buildings and structures, and from inadequate and poorly planned landscaping, and from failure to preserve where feasible natural landscape features, open spaces and the like, and will result in the impairment of the benefits of occupancy and use of existing properties in such areas;

B. Recognizing the interdependence of land values and aesthetics and providing a method to implement this interdependence in order to maintain the values of surrounding properties and improvements, and to encourage excellence of development of property, compatible with the general plan for, and character of, the City, with due regard to the public and private interests involved;

C. Ensuring that the public benefits derived from expenditures of public funds for improvement and beautification of streets and public facilities shall be protected by the exercise of reasonable controls over the character and design of private buildings, structures and open spaces;

D. Ensuring the maintenance of high design standards in the vicinity of public buildings and grounds for the preservation of the architecture and general appearance in the areas of the City containing the buildings and grounds and to preserve the property values in the areas;

E. Promoting the maintenance of high design standards adjoining thoroughfares of Citywide importance to ensure that the community benefits from the natural growth and vegetation as much as possible, and from the natural terrain, and preserving and stabilizing the architecture and general appearance of buildings and grounds adjoining the thoroughfares; and preserving and protecting the property values in the areas; and

F. Ensuring the design of landscaping and irrigation that shades paved areas, buffers or screens undesirable views, compliments building architecture and that implements the purposes of Chapter 19.570 (Water Efficient Landscaping and Irrigation).

5.1.3 Project Design Considerations

Site and Building Components

The existing restricted property will largely be retained. It includes a natural drainage course and associated riparian woodland vegetation that will serve as a buffer between Building A and Alessandro Boulevard as well as in between Buildings A and B.

Building A will be set back from Alessandro Boulevard by approximately 520 feet with the restricted property/ conservation area and natural terrain and vegetation within that setback. No dock doors of Building A face south towards Alessandro Boulevard or north towards Sycamore Canyon Wilderness Park. (Figure 3.0-8 – Site Plan) Dock doors are located on the west side (39 dock doors) and east side (49 dock doors) of the building. The dock doors will be screened from the public view from the east and west sides of Building A by 8-foot high walls and from the south by 15-foot high walls on both sides of the southern end of Building A that faces Alessandro Boulevard. The 15-foot high walls will screen views of the dock doors and loading areas from Alessandro Boulevard.

Building B will have a total of 34 dock doors facing south, adjacent to and facing the back wall of Citywide Self Storage. The front of Building B faces Barton Street to the west. Building B will be set back 90 feet from Barton Street. A 6-foot high metal fence will be located along the westerly

property line, with an 8-foot high metal fence along the southerly property line. An 8-foot high combination screening fence/wall, consisting of a 4-foot high tubular steel metal fence on top of a 4-foot high screen wall, will be located along the northerly property line adjacent to the trailhead parking lot.

Parcel C is 1.18 acre and is proposed as a new trailhead parking lot for the Sycamore Canyon Wilderness Park. The northerly terminus of Barton Street is currently identified as "a minor trailhead" in the *Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan*. Parcel C would be dedicated to the City and operated and managed by the City's Parks, Recreation & Community Services Department. The Project will not impede or adversely affect continued access to the park. Rather, it is enhancing access to the park by developing a trailhead shade structure and additional parking and dedicating this area to the City. Refer to Figure 3.0-9 for the site plan. The proposed trailhead parking lot improvements include the following:

- Decomposed granite parking lot consisting of 53 parking spaces (10 x 20-foot);
- 3 ADA parking spaces and a 5-foot wide sidewalk connecting to Barton Street and trail;
- Trail fencing, gates and signage;
- Shade structure with benches;
- Bike rack;
- Drinking fountain (including for pets); and
- Fire department access gate at the northern terminus of Barton Street.

Building Elevations and Color Palette

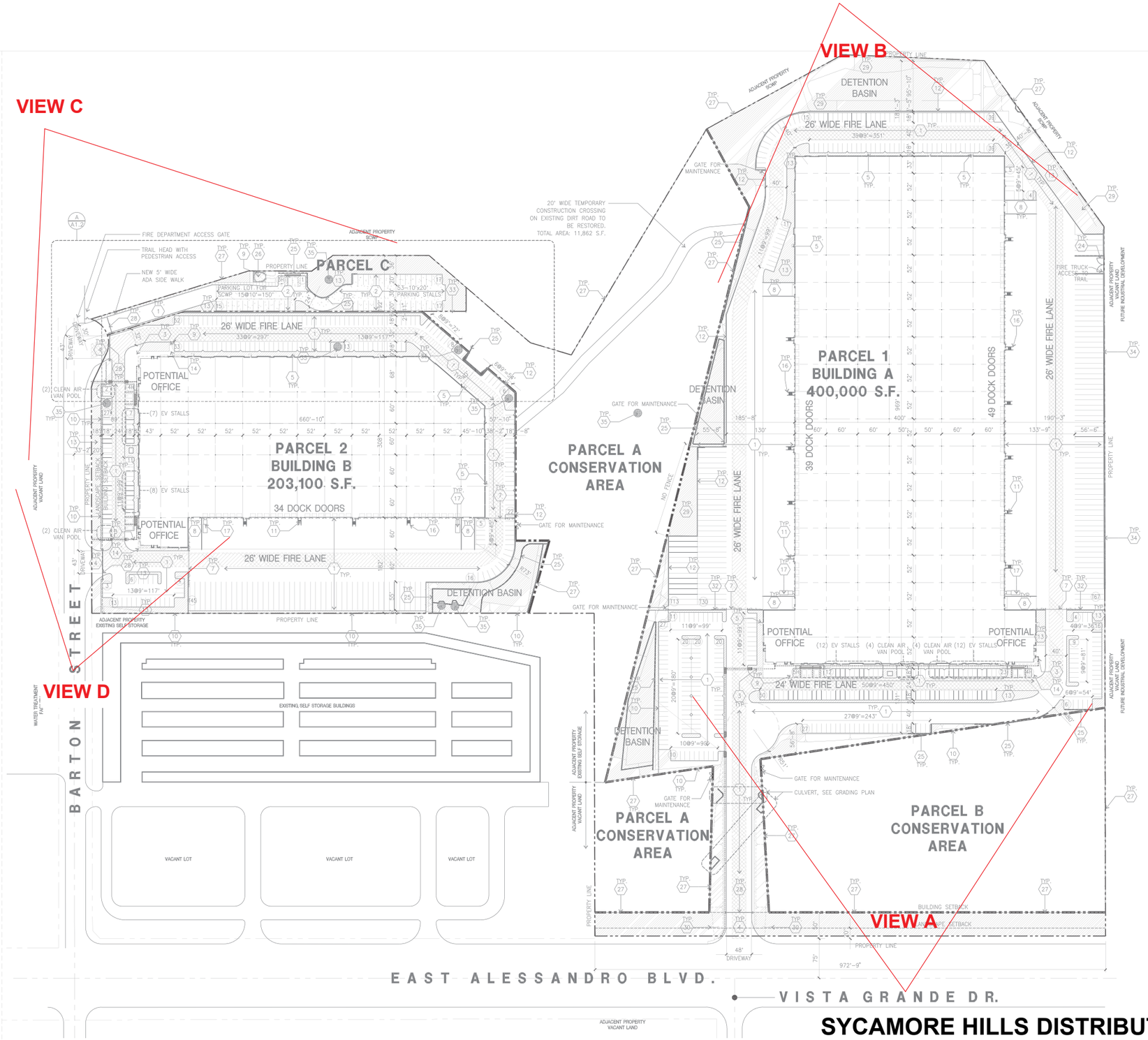
Buildings A and B will be 45 feet in height, with parapet walls ranging from 2 to 5-feet. HVAC systems will be located on the roofs but will be shielded from view. The south elevation of Building A is 510 feet long, while the north elevation is 400 feet long. The east and west elevations of Building A are 969 feet long. The west elevation of Building B is 365 feet, the north and south elevation is 660 feet 10 inches, and the east elevation is 308 feet. Both building's design have been articulated to create pockets of light and shadow to break up the long expanse of wall surface. Refer to Figures 3.0-13A and 3.0-13B for Conceptual Elevations of Buildings A and B.

Both proposed buildings will include a color palette largely consisting of beiges (Maison Blanche, Fresco Cream, Mexican Sand, and Oak Creek). Windows will have blue reflective glazing, with black mullions (refer to Figure 3.0-11 Materials Board). Photographs of the site and surrounding areas were used to develop a color palette that is consistent with and complements the surrounding area, including Sycamore Canyon Wilderness Park. Window treatments at the corner office spaces will include the use of insulated vision glass, spandrel glass, and spandrel glass with concrete behind. Elevation renderings are included in Figure 5.1-2, Figure 5.1-3, Figure 5.1-4, and Figure 5.1-5, with a Key Map in Figure 5.1-1.

Landscaping

On-site landscaping is proposed generally along the perimeters of Parcels 1 and 2, around Buildings A and B, throughout the parking lot, and along the proposed access road/driveway from Alessandro Boulevard to Building A, as shown in Figure 3.0-10A and 3.0-10B – Landscape Design. The Project site will be landscaped with fire-resistant landscape, drought-tolerant and climate appropriate trees, shrubs, and ground cover that will meet or exceed the City's requirements. The landscape plan is designed to provide visual appeal and screen the views of Buildings A and B from the adjacent residential areas and the Sycamore Canyon Wilderness Park. The proposed on-site landscaping does not include any plant species listed as invasive by the *Western Riverside County Multiple Species Habitat Conservation Plan* (MSHCP).

The required landscaping for Parcels 1 and 2 is five percent (23,014 square feet and 9,542 square feet, respectively). Parcel 1 will include 132,699 square feet of landscaping, for a site coverage of 28.83 percent, located inside the northern, western, and southern boundaries. Parcel 2 will include 37,993 square feet of landscaping, for site a coverage of 19.91 percent, located inside the northern, eastern, western, and southern boundaries. Landscaping will include fire resistant groundcover, shrubs and columnar trees.



SYCAMORE HILLS DISTRIBUTION CENTER

Elevation Renderings Key Map

Figure 5.1-1



SYCAMORE HILLS DISTRIBUTION CENTER

Elevation Rendering View A

Figure 5.1-2



SYCAMORE HILLS DISTRIBUTION CENTER

Elevation Rendering View B

Figure 5.1-3



SYCAMORE HILLS DISTRIBUTION CENTER

Elevation Rendering View C

Figure 5.1-4



SYCAMORE HILLS DISTRIBUTION CENTER

Elevation Rendering View D

Figure 5.1-5

5.1.4 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the *State CEQA Guidelines*. Therefore, significance thresholds in Appendix G ("Environmental Checklist") of the *State CEQA Guidelines* are utilized. The Environmental Checklist prepared by the City for the Project (see Appendix A of this document) indicates that impacts related to the Sycamore Hills Distribution Center Project may be considered potentially significant if the proposed Project would:

- (Threshold A) have a substantial adverse effect on a scenic vista;
- (Threshold B) substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway;
- (Threshold C) in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are experienced from publicly accessible vantage point). If the Project is in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality; or
- (Threshold D) create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

5.1.5 Environmental Impacts

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

Scenic vistas are defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public, which can be impacted by development in two ways. First, a structure may be constructed that blocks the view of a vista. Second, the vista itself may be altered (i.e., development on a scenic hillside). The Project site is currently vacant and warehousing and light industrial uses are located east along Alessandro Boulevard and northeast, along Sycamore Canyon Boulevard. The Sycamore Canyon Wilderness Park is located directly north, and commercial and residential uses are located to the south, across Alessandro Boulevard. A Metropolitan Water District (MWD) wastewater treatment plant is west of the Project site, across Barton Street.

The Project site itself does not constitute a scenic vista. The Project site is not a part of the Sycamore Canyon Wilderness Park. Views of Sycamore Canyon Wilderness Park from Alessandro Boulevard are currently blocked by the existing Citywide Self-Storage development. Further, the Project site does not constitute a scenic vista because it is largely surrounded by development, including the wastewater treatment plant to the west, the self-storage facility and Alessandro Boulevard to the south, and commercial and residential uses south of Alessandro Boulevard. The property directly east of the Project site is vacant but is also within the Sycamore Canyon Business Park Specific Plan (SCBPSP), with land use designation for Industrial and zoned BMP-SP (Business and Manufacturing Park and Sycamore Canyon Specific Plan). Existing warehousing and light industrial uses within the SCBPSP located east and northeast also are

directly adjacent to the Sycamore Canyon Wilderness Park. Views of the Project site are generally obstructed by surrounding development, with the exception of views from the south and southeast from Alessandro Boulevard. Although the Project site is visible from Alessandro Boulevard and to the residences located on the south side of Alessandro Boulevard, the Project site itself does not provide expansive views of a highly valued landscape to the general public.

Industrial buildings located on the north side of the Sycamore Canyon Wilderness Park and within the Sycamore Canyon Business Park can be seen in the distance in the photographs View 1, 2, 3, 4, 5, and 7 (Figure 3.0-4B and 3.0-4C). Buildings A and B will be 45 feet high, with a parapet wall ranging in height between 2 and 5 feet, which is consistent with the SCBPSP standards. The proposed structures are compliant with the maximum building height allowed by the zone. Due to the Project's distance from the Box Springs Mountains as well as the elevations of these mountains, it will not block views of these mountains from Alessandro Boulevard or the existing uses (commercial and residential) south of Alessandro Boulevard. The Project will not result in a substantial adverse effect on views of these mountains within the area.

Therefore, as the Project's proposed structures will not substantially impact the scenic vistas of the Sycamore Canyon Wilderness Park or Box Springs Mountains and as the proposed Project does not represent a significant change in the viewshed from what currently exists in the area, **impacts will be less than significant.**

Threshold B: *Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

The Project site is not located adjacent to a scenic highway as there are no designated or eligible State scenic highways in the City; thus, no impacts will occur in this regard.

Alessandro Boulevard, south of the Project site, is designated a Scenic Boulevard. The Project site is visible from Alessandro Boulevard from the south and southeast. The view of the Project site from Alessandro Boulevard is partially blocked by the existing Citywide Self-Storage development. Mission Grove Parkway, another designated Special Boulevard near the Project site, is located approximately 0.75 mile to the northwest. The nearest designated Parkway is Canyon Crest Drive, also a designated Scenic Boulevard, located approximately 1.5 miles to the west. (GP 2025, Figure CCM-4) The Project site is not readily visible from Mission Grove Parkway or Canyon Crest Drive due to the distance of these roadways from the Project site, the topography of the area, and existing development along these roadways.

The Project site is vacant and does not have any historic buildings or historic resources; therefore, it would not result in impacts to these resources. The topography consists of natural rolling terrain descending gradually from a west to east direction. There are granitic rock outcroppings throughout the property. The existing rock outcroppings at the site are relatively low to the ground and are generally blocked from view from Alessandro Boulevard with existing onsite vegetation. Therefore, the onsite rock outcroppings are not considered a scenic resource and damage to these rock outcroppings during construction would not be considered a significant aesthetics impact.

The Project site contains low to moderate vegetation primarily consisting of non-native grasslands crossed by several drainages, some of which contain riparian woodland. The existing riparian woodland vegetation, approximately 5.16 acres in total, is considered a scenic resource.

Driveway construction to provide access to Building A from Alessandro Boulevard will result in 0.57 acres of permanent impacts of the existing riparian vegetation in Area C. Area C has more sparse riparian vegetation, with less trees than Drainage B, and Area C is at a lower elevation than Alessandro Boulevard. Construction of Building B will result in permanent impacts to 0.35 acres of existing riparian vegetation in Drainage A. The riparian vegetation associated with Drainage A is also sparse and is generally blocked from view from Alessandro Boulevard by the more prominent Drainage B riparian vegetation and the Citywide Self-Storage facility. The 1.36 acres of riparian vegetation associated with Drainage B has more mature trees and taller trees than Drainage A and Area C and will not be permanently impacted but preserved in place. Although the project will result in permanent impacts to 0.57 acres of Area C and 0.35 acres of Drainage A riparian vegetation, this is not considered a significant impact because: 1) the views of these areas from Alessandro Boulevard are partially or completely blocked by topography relief, Drainage B vegetation, and the Citywide Self-Storage facility; 2) the most prominent riparian vegetation associated with Drainage B, that is visible from Alessandro Boulevard and has the most number of and the tallest trees, will be preserved; 3) a total of 4.24 acres of existing riparian vegetation will be preserved; 4) **Mitigation Measure MM BIO-6** includes enhancement of a total of 1.58 acres of riparian habitat and creation (establishment) of 0.61 acre of in-kind riparian woodland in Area C and restoration of 0.02 acre of riparian habitat in Drainage B, all within the Restricted Property/Conservation Area that will be managed in perpetuity.

MM BIO-6 states that prior to issuance of occupancy permit, in order to reduce impacts to on-site Riparian/Riverine areas and suitable habitat for least Bell's vireo (an endangered bird), on-site mitigation shall include:

1. Enhancement of a total of 1.58 acres of riparian habitat: 0.01 acres in Drainage A, 1.34 acres in Drainage B, and 0.23 acre in Area C.
2. Create (establish) 0.61 acre of in-kind riparian woodland in Area C.
3. Restoration of 0.02 acre of riparian habitat in Drainage B.
4. The non-jurisdictional, non-riparian/riverine upland areas of slopes associated with the access road will be restored/replanted with native seed mix.
5. The roadway/access to Parcel1/Building A shall include culverts to provide a hydrological connection to the riparian habitat on the east side of the roadway and a corridor for small wildlife species.
6. Record lettered parcels A and B for portions of the site that will not be developed but includes the revised restricted property and is designed as conservation area. Parcel A 7.19 acres and Parcel B 5.04 acres, with a combined total of 12.23 acres, shall be managed in perpetuity by a 3rd party, anticipated to be the Rivers and Lands Conservancy (RLC) or other CDFW approved entity, with an endowment funded by the developer.

Therefore, with the Project's avoidance and preservation of the most prominent and mature existing riparian woodland vegetation associated with Drainage B and implementation of MM BIO-6, **impacts will be less than significant with mitigation incorporated.**

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

The proposed Project is located in an urbanized area and it will not conflict with applicable zoning and other scenic quality regulations. The City of Riverside General Plan 2025 (GP 2025) designates the Project site as Business/Office Park (B/OP), and within the Sycamore Canyon Business Park, which is considered a "Major Business Park" as shown on Figure LU-4 of the GP 2025. Additionally, as previously discussed, development of the Project site is guided by the SCBPSP, which was adopted in 1984 by the City in order to encourage and provide incentives for economic development in the 1,400-acre planning area. The SCBPSP designates the Project site land use as 'Industrial.' Further, per the City's Zoning Map, the Project site is within the BMP-SP - Business and Manufacturing Park and Specific Plan (Sycamore Canyon Business Park Specific Plan) Overlay Zones. The BMP zone is one of four industrial zones within the City. The vacant property directly east of the Project Site is also zoned BMP-SP and designated for Industrial use within the SCBPSP. Further east and northeast of the Project site is existing large-scale light industrial uses, consisting of distribution centers and warehousing within the Sycamore Canyon Business Park. Thus, the Project site is designated for business/manufacturing park use and is largely surrounded by development.

The existing restricted property, which includes a natural drainage course and associated riparian woodland vegetation, will largely be preserved and will serve as a buffer between Building A and Alessandro Boulevard, as well as between Buildings A and B.

Building A will be set back from Alessandro Boulevard by approximately 500 feet with the restricted property/ conservation area and natural terrain and vegetation within that setback. No dock doors of Building A face south towards Alessandro Boulevard or north towards Sycamore Canyon Wilderness Park. (Figure 3.0-8 – Site Plan) Dock doors are located on the west side (39 dock doors) and east side (49 dock doors) of the building. The dock doors will be screened from the public view by an 8-foot high wall on the east and west sides of Building A. Another set of 15-foot high walls will be located on the east and west sides of Building A, facing south, creating a right angle with the 8-foot high wall to screen views of the dock door and loading areas from Alessandro Boulevard. The required landscaping for Parcel 1 is five percent (23,014 square feet). Parcel 1 will include 132,699 square feet of landscaping, which greatly exceeds the minimum requirement, for a site coverage of 28.83 percent. Landscaping in Parcel 1 is located inside the western, northern, and southern boundaries. Landscaping will include fire resistant groundcover, shrubs and columnar trees, consistent with the *Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan.* This enhanced landscaping, in the northern and southern portions of the site, provide additional screening of Building A from Alessandro Boulevard and the Sycamore Canyon Wilderness Park, respectively.

Building B will have a total of 34 dock doors facing south, adjacent to and facing the back wall of Citywide Self Storage. The front of Building B faces Barton Street to the west. Building B will be set back 90 feet from Barton Street. An 8-foot high metal fence will be located along the westerly and southernly property line. An 8-foot high combination screening fence/wall, consisting of a 4-foot high tubular metal fence on top of a 4-foot high screen wall, will be located along the northerly property line adjacent to the trailhead parking lot. The required landscaping for Parcel 2 is five percent (9,542 square feet). Parcel 2 will include 37,993 square feet of landscaping, which also greatly exceeds the minimum requirement, for a site coverage of 19.91 percent. The landscaping for Parcel 2 also includes fire resistant groundcover, shrubs and columnar trees, consistent with the *Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan.* This enhanced landscaping in Parcel 2 is located inside the northern, eastern, western, and southern boundaries, providing additional screening of Building B from Barton Street and the Sycamore Canyon Wilderness Park.

Both proposed buildings will include a color palette largely consisting of beiges (Maison Blanche, Fresco Cream, Mexican Sand, and Oak Creek). Windows will have blue reflective glazing with black mullions, refer to Figure 3.0-11 Materials Board. Photographs of the site and surrounding areas were used to develop the color palette that is consistent with and complements the surrounding area, including Sycamore Canyon Wilderness Park.

Buildings A and B will be 45 feet in height, with a parapet wall ranging in height between 2 and 5-feet. HVAC systems will be located on the roofs but will be shielded from view. The south elevation of Building A is 520 feet long, while the north elevation is 400 feet long. The east and west elevations of Building A is 969 feet long. The west elevation of Building B is 365 feet, the north and south elevation is 660 feet 10 inches, and the east elevation is 308 feet. The building design implements articulation to create pockets of light and shadow to break up the long expanse of wall surface. Refer to Figures 3.0-13A and 3.0-13B for Conceptual Elevations of Buildings A and B.

Public views are those that are experienced from publicly accessible vantage point. Public views of Building A on Parcel 1 will be from two publicly accessible vantage points: Alessandro Boulevard to the south and from trails within the Sycamore Canyon Wilderness Park to the north. As shown in Figure 5.1-2 – Elevation Rendering View A, the public view of Building A from Alessandro Boulevard is softened by the 520-foot setback, landscaping, natural vegetation within the restrictive property/conservation area, and the natural and earth-toned color palette. The Project's landscaping will also partially screen the north elevation of Building A. The view from Sycamore Canyon Wilderness Park south towards Building A on Parcel 1 is shown in Figure 5.1-3 – Elevation Rendering View B. Building A will be screened on this side by the Project's landscaping, including the water quality basin, and the view is softened by the 40-foot set-back of the building from the property line.

Public views of Building B on Parcel 2 will be from two publicly accessible vantage points: Barton Street to the west and from trails within the Sycamore Canyon Wilderness Park to the north. As shown in Figure 5.1-4 – Elevation Rendering View C, the trailhead parking lot and amenities serve as an additional setback between the northern property line with the park and Building B. Building

B will be located between 20-182 feet from the northerly property line of Parcel 2, and 90 feet from the northerly property line of the trailhead parking lot. The trailhead parking lot will largely be decomposed granite, with landscaping and amenities that are complementary to the adjacent Wilderness Park. The Project's enhanced landscaping will also partially screen Building B and its parking areas from Barton Street, as shown in Figure 5.1-5 – Elevation Rendering View D.

With the natural and earth-toned color palette, the articulation of the building facades, the screen walls for the loading dock areas, and the enhanced landscaping, the Project will not substantially degrade the existing visual character or quality of public views of the site and its surroundings. The restricted property/conservation area with existing mature vegetation and the required 20-foot landscape setback at the front of Building A will preserve the existing character of the site along the frontage of Building A and between Buildings A and B. A landscaped buffer will be located along the northern side of Building A and an 8-foot high concrete wall along the northern and eastern sides of Building A to screen the building from the Sycamore Canyon Wilderness Park. Building B will have a 20-foot landscape setback on the western side, along Barton Street. There will also be an 8-foot high tubular metal fence and enhanced landscaping along the western side of Building B to screen the building from Barton Street. An 8-foot high combination screening fence/wall, consisting of a 4-foot high tubular metal fence on top of a 4-foot high screen wall and landscaping with shrubs and trees, will be located along the northerly property line adjacent to the trailhead parking lot to screen Building B from the Sycamore Canyon Wilderness Park. The trailhead parking lot will also provide a buffer and setback between Building B and the Sycamore Canyon Wilderness Park.

Grading Exception

Due to the topography of the site, the Project will require a grading exception. While the vast majority of the grading complies with the Code, minor portions of the proposed retaining walls will exceed the allowable 6 feet in height. These areas are illustrated on Figure 3.0-10 - Grading Exception & Wall Variance and identified as Areas 1 & 2. Area 3 consists of a combination freestanding/retaining wall subject to provisions of Title 19.

Area 1

As shown in red on Figure 3.0-10, this area consists of approximately 95 linear feet of retaining wall that varies in height from 6.5-11.5 feet adjacent to Building B. The primary purpose of this wall is to serve as a headwall and wing walls for a 48-inch diameter storm drain outlet that conveys offsite flow from the Metropolitan Water District Mills Filtration Plant, through the subject property and discharges directly into the existing drainage course and proposed additional Restricted Property area to allow for maximum feasible avoidance of the drainage course. Approval of the grading exception to allow retaining walls varying from 6.5-11.5 feet in height in this area would be consistent with the general purpose and intent of Title 17 of the Riverside Municipal Code to minimize the adverse effects of grading on natural landforms, particularly in regard to water runoff. The following is a summary of the requested grading exception:

- To allow a 6.5-11.5-foot retaining wall in the northeast corner of Parcel 2.

This retaining wall is located at a low point in the grading and existing topography of the site associated with Drainage A. It will not generally be visible from the Sycamore Canyon Wilderness Park to the north due to the low elevation and screening by existing vegetation in Drainage A as it extends north out of the property and into the park. This retaining wall will not be visible from views from the southeast, including from Alessandro Boulevard, due to proposed 8-foot high screening wall associated with the eastern side of Parcel 2 as well as the existing City-Wide Storage Facility and mature vegetation in Drainage B (in the central portion of the site).

Area 2

As shown on Figure 3.0-10, this area is located near the southeasterly corner of Building B. The sole purpose of the walls in this area is to accommodate two water quality basins required for new developments per requirement of the Federal Clean Water Act, State Porter-Cologne Water Quality Control Act and the Santa Ana Region National Pollutant Discharge Elimination System (NPDES) Permit. Approval of the grading exception for Area 2 is required to ensure sufficient basin capacity. The following is a summary of the requested grading exception:

- To allow a 4.7 to 8.2-foot-high retaining wall (26 linear feet) in the southeast corner of Parcel 2
- To allow a 6-10-foot-high retaining wall (170 linear feet) in the southeast corner of Parcel 2

These retaining walls will not generally be visible from the Sycamore Canyon Wilderness Park to the north due to the low elevation and screening by existing vegetation in Drainage B. These retaining walls will not be visible from views from the southeast, including from Alessandro Boulevard, due to proposed 8-foot high metal fence and landscaping associated with the southwest corner of Parcel 1, the existing City-Wide Storage Facility, and mature vegetation in Drainage B (in the central portion of the site).

Wall Variance

Area 3

A Variance is requested for Parcel 1 to allow the installation of two combination retaining/ freestanding walls wherein the retaining portion exceeds the RMC's maximum allowable height of 4 feet and to allow combination retaining/ freestanding walls wherein the overall height exceeds the RMC's maximum allowable height of 10 feet (Chapter 19.550 – Fences, Walls and Landscape Materials). These walls are located along the eastern property line of Parcel 1, as shown on Figure 3.0-10 – Grading Exception-Wall Variance Exhibit. The retaining wall is required to avoid drastic grade changes across the site and the freestanding wall is required to screen the dock doors on the east side of Building A from the east and southeast, including views from Alessandro Boulevard. Additionally, reconfiguring the site to reduce the walls to the required 4 feet height would also complicate future development of the private property to the east. The following is a summary of the requested variances:

- To allow 132 linear feet of combination retaining/freestanding wall with the retaining portion height up to 6.4 feet and combined height of up to 14.4 feet.
- To allow 205 linear feet of combination retaining/freestanding wall with the retaining portion height up to 7.6 feet.

Fencing

As shown on Figure 3.0-9 – Site Plan, a 42-inch cable rail fence will be located along the northern boundary of the property adjacent to the Sycamore Canyon Wilderness Park to demark the property line for park users. The cable rail fence will also run along the frontage of Parcel 1 with Alessandro Boulevard and on both sides of the access road to Parcel 1 and around the Restricted Property/Conservation Areas (Parcels A and B) internal to the site to restrict access into these areas. The 42-inch cable rail fence, by design (low height and openings), would not obstruct views or degrade the visual character of the site. In addition, the cable rail fence located along the frontage of Parcel 1 and on both sides of the access road will be at a lower elevation than Alessandro Boulevard and below the line of sight of drivers in vehicles on Alessandro Boulevard.

The south side of Building A and its parking area/drive aisles will have a 8-foot high tubular steel fence; however, there will also be landscaping with shrubs and trees along this fence line and it will be set back from Alessandro Boulevard by approximately 500 feet with the restricted property/ conservation area and natural terrain and vegetation within that setback. Refer to Figure 5.1-2 for the rendering of view from Alessandro Boulevard north to Building A. Building A will also have an 8-foot high tubular steel fence along the frontage of Barton Street. Along this fence line there will be a 20-foot enhanced landscape setback with shrubs and trees. Refer to Figure 5.1-5 for the rendering of view from Barton Street northeast to Building B. These setbacks and enhanced landscaping will soften the fence lines and views of the buildings. Therefore, the Project will not substantially degrade the existing visual character or quality of public views of the site and impacts are **less than significant without mitigation measures.**

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

The potential impact associated with exterior lighting is spill light (also referred to as light trespass). Spill light occurs when lighting fixtures such as streetlights, parking lot lights, landscape lights, or lights on buildings, are not properly aimed or shielded to direct light to the desired location. In these instances, light escapes and partially illuminates a surrounding area. Glare is the result of improperly aimed or blocked lighting sources that are visible against a dark background such as a night sky. Glare is also the result of indirection reflection of a light source (natural or artificial) against a surface. Glare generally does not illuminate off-site locations but may result in a visible source of light viewable from a distance.

The Project will include outside nighttime lighting for security; however, the lights will be shielded downwards and set to motion detectors and will only be turned on if employees are present. Interior lights will also be on motion detectors.

All lighting will comply with the development standards contained in the City's Zoning Code, the Sycamore Canyon Business Park Specific Plan guidelines, the RMC, the standards and specification of the City's Park, Recreation, and Community Service Department, and the *Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan*. Specifically, the RMC requires that on-site lighting be arranged so as to reflect away from the adjoining property or any public streets, and that lighting not be directed skyward or in a manner that interferes with aircraft operation (RMC Chapter 19.590).

The development of the Project will include the installation of exterior building lights and freestanding parking lot lights. Building-mounted lights will consist of approximately 15 high output and supersaver LED cut-off lights with no uptilt located approximately 28 feet above finished floor elevation for Building A. Along the northern and southern building wall a total of approximately 7 SLM-LED-30L-SIL-3-50-70CRI light fixtures will be placed at the same elevation. Approximately 12 high output and supersaver LED cut-off light with no uptilt will be located approximately 28 feet above finished floor elevation for Building B, and along the eastern building wall 3 SLM-LED-30L-SIL-3-50-70CRI light fixtures will be placed at the same elevation.

A photometric study with manufacturer's cut sheets of all exterior lighting on buildings, in landscaped areas, and in parking lots was prepared and submitted to Planning Division staff for review, consistent with City standard lighting conditions. Based on Riverside Municipal Code 19.5556.060, the Project site is located in Lighting Zone 3 which is suitable for medium to high levels of exterior lighting at night. The adjacent Sycamore Canyon Wilderness Park is considered to be in Lighting Zone 0 where it is intended to be preserved in a natural state with little or no exterior light at night. Photometric software was used with the layout of the Project site and the proposed light fixtures. The Photometric Plan shows the Project area with foot candle measurements, which is the most common unit of measure used to measure lighting in businesses and outdoor spaces. For reference 1-foot candle is equal to 1 lumen/square foot (ft^2). All on-site lighting shall provide a minimum intensity of one-foot candle and a maximum of ten-foot candles at ground level through the areas serving the public and used for parking. The standard lighting conditions proposed that light sources shall be shielded to minimize off-site glare, shall not direct light skyward and shall be directed away from adjacent properties and public rights-of-way. If lights are proposed to be mounted on buildings, down-lights shall be utilized. Light poles shall not exceed twenty feet (20) in height, including the height of any concrete or other base material.

Existing streetlights along Alessandro Boulevard, existing commercial and residential uses south of Alessandro Boulevard, and industrial uses east and northeast of the Project site provide night lighting in the area. As a result, lighting from the Project will not result in a substantial source of new light or glare that could adversely affect these existing uses. As discussed in Section 5.3 Biological Resources, the Project must be consistent with Section 6.1.4 – *Guidelines Pertaining to the Urban/ Wildlands Interface*, of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Night light shall be directed downward away from natural open space areas and directed downwards and towards the center of the development. Energy efficient

Low Pressure Sodium (LPS) or High Pressure Sodium (HPS) lamps shall be used exclusively to dampen glare.

Per RMC Chapter 19.556.080, the Project must follow lighting restrictions for the maximum allowable light trespass to properties surrounding the Project which include the Sycamore Canyon Wilderness Park, the vacant property to the east, Barton Road, Alessandro Boulevard, and the property to the south zoned CG – Commercial General. The maximum allowable light trespass to the Sycamore Canyon Wilderness Park is 0 foot candle and all other adjacent properties have a maximum allowable light trespass of 0.5 foot candle. Per the Photometric Plan the light sources from the Project site will be located only on Parcel 1 and Parcel 2. The light spillage from Parcel 1 and Parcel 2 to the other parcels (Parcel A, B, C, respectively) and the properties surrounding the Project site would be 0 foot candle. Thus, Parcel 1 and Parcel 2 would not have light spillage to the other parcels (Parcel A, B, C, respectively) and would not have light spillage to the properties surrounding the Project site.

The photometric plan shows that no light spill from parking lot and building lights will occur outside of the Building pad footprints. Additionally, the photometric plan shows no light spill will occur into the restricted property/conservation areas (Parcels A and B), the trailhead parking lot (Parcel C), or into the Sycamore Canyon Wilderness Park to the north.

Implementation of the Project will add additional traffic to surrounding streets, including Barton Street and Alessandro Boulevard. Vehicle headlights are designed to direct light onto roadways so vehicles may be safely operated in low light conditions. When properly installed and aligned, vehicle lights do not constitute a significant source of spill light or glare. Additionally, the amount of traffic generated by the Project will not result in a significant new or increased source of light or glare as roadways within the Project already experience vehicular traffic and the use of headlights during evening and nighttime hours. Vehicle headlights will be prevented from spilling into the Sycamore Canyon Wilderness Park by an 8-foot high combination screen wall/retaining wall along the easterly side and an 8-foot high concrete screen wall located around the northern and western perimeter of Building A's drive aisles and parking and loading dock areas. Vehicle headlights will be prevented from spilling into the Sycamore Canyon Wilderness Park by an 8-foot high combination screen wall/retaining wall and an 8-foot high concrete screen wall located at the eastern and northeastern perimeter, and a 4-foot high concrete screen wall (with 4-feet metal fence on top) at the northern perimeter, of Building B's drive aisles and parking areas. The trailhead parking lot, which is located along the northern side of Building B, will also serve as a buffer between the warehouse operations and the wilderness park. Consistent with the operational hours of the Sycamore Canyon Wilderness Park, the trailhead parking lot will be open from dusk to dawn and an arm gate at the entrance will be used to restrict access when not open. Therefore, there would not be vehicle headlights at nighttime shining into the park from the trailhead parking lot.

Materials used for construction of the Project will be consistent with the materials and finishes used throughout the Sycamore Canyon Business Park and are subject to review and approval by the City's Planning Division. Because high-glare and reflective materials are not proposed to be

used, Project implementation is not anticipated to create a new source of substantial glare that would adversely affect day or nighttime views in the area.

As outlined above, the Project lighting is required to comply with the City's Zoning Code and standard lighting conditions of approval. With implementation of these requirements and **Mitigation Measure MM AES 1,** which requires the Project's night light to be directed away from open spaces, and **Mitigation Measure MM AES 2,** which requires approval of the site's photometric study, and the proposed concrete screening walls on the northern, northeastern, and eastern perimeters of building drive aisles and parking and docking areas, will ensure that there is no light spillage from the Project into the Sycamore Canyon Wilderness Park, and potential lighting impacts from the Project would **be less than significant with mitigation.**

5.1.6 Proposed Mitigation Measures

MM AES 1: To further reduce impacts related to light pollution, the Project's night lighting shall be directed away from natural open space areas within and adjacent to the Project site and directed downward and towards the center of the development. Energy efficient Low Pressure Sodium (LPS) or High Pressure Sodium (HPS) lamps shall be used exclusively to dampen glare.

MM AES 2: Prior to the issuance of building permits, the applicant shall submit a photometric (lighting) plan for approval by the Community & Economic Development Department, Planning Division. The approved light design requirements shall be included on the final building plan sheets. The lighting plan shall incorporate the following requirements and shall show that there is no light spillage into the Sycamore Canyon Wilderness Park:

- The project shall be designed in such a manner as to prevent light spillage from the project to the adjacent and nearby open space areas
- Project lighting shall not exceed an intensity of one foot-candle
- Shielding shall be employed, where feasible
- Any night lighting shall be directed away from natural open space areas and directed downward and towards the center of the development
- No project lights shall blink, flash, oscillate, or be of unusually high intensity or brightness
- Energy-efficient LPS or HPS lamps shall be used exclusively throughout the project site to dampen glare
- Exterior lights shall be only "warm" LED lights (<3000K color temperature)

5.1.7 Cumulative Environmental Effects

Cumulative development in the City and the surrounding area would modify the visual characteristic of the surrounding area through the development of vacant lots or through redevelopment. The planned and pending projects in the area of the Project, listed in Table 4.0-1 include development projects consisting of residential (approximately 525 single family and multifamily residential dwelling units), hotel (110 rooms), commercial/retail, warehouse, general

office, gas station and convenience market, gas station with carwash and commercial development, fast food drive-thru, and health/fitness club. Those in the immediate vicinity of the Project include warehouses, warehouse and commercial, and an industrial park. Cumulatively the Project does not have a substantial adverse effect on a scenic resource itself in the City or when considered alongside nearby cumulative projects. Similar to the Project, visual quality impacts associated with other cumulative projects would be addressed on a case-by-case basis in order to determine their consistency with applicable plans and policies.

Light and glare impacts shall be mitigated via **Mitigation Measure MM AES-1** which will require all night lighting to be directed away from natural open spaces and directed downwards and within the development parcels. In addition, as referenced in the Photometric Plan, light spillage is not expected to occur into areas of the Sycamore Canyon Wildness Park or into Parcel A, Parcel B, and Parcel C (internal conservation areas). Therefore, the Project would have a **less than significant impact cumulatively with mitigation** as it relates to aesthetics.

5.1.8 References

The following references were used in the preparation of this section of the DEIR:

CDG	City of Riverside, *Riverside Citywide Design Guidelines and Sign Guidelines* adopted November 2007, Resolution No. 21544. (Available at https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/Citywide_Design_and_Sign_Guidelines_web%20version_Amended%2001-15-19_1.pdf, accessed January 2020)
GP 2025	City of Riverside, General Plan 2025, certified November 2007 with subsequent amendments to various elements. (Available at https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/general-plan/04_Land_Use_and_Urban_Design_Element_with%20maps%20COMPLETE%20AUGUST%202019.pdf, accessed January 2020)
GP 2025 FPEIR	City of Riverside, *General Plan 2025 Program Environmental Impact Report* (SCH# 2004021108), certified November 2007. (Available at https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/general-plan/vol2/5-1_Aesthetics.pdf, accessed January 2020
RMC	City of Riverside, *Municipal Code*. (Available at http://www.riversideca.gov/municode/, accessed January 2020)
RMC	City of Riverside, Municipal Code Article VIII Chapter 19.556 Lighting zones. (Available at https://library.municode.com/ca/riverside/codes/code_of_ordinances?nodeId=PTIICOOR_TIT19ZO_ARTVIIISIPLGEDEPR_CH19.556OULI_19.556.060LIZO, accessed February 2021.)

SCBP	City of Riverside, *Sycamore Canyon Business Park Specific Plan*, adopted April 10, 1984, as amended through Amendment No. 14, January 23, 2007. (Available at: https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/spec-plans/syc-bus-park/plan_doc.pdf, accessed January 2020)

5.2 Air Quality

Based upon Appendix G of the *State CEQA Guidelines,* the analysis in the Initial Study (IS/NOP) prepared for this Project (Appendix A), and comments received during the NOP public review period (Appendix A), this section evaluates the Project's impacts on Air Quality.

The analysis in this section is based on the *Air Quality Analysis for the Sycamore Hills Distribution Project* prepared by RECON (Appendix C, September 2020). The *Air Quality Analysis* evaluates whether the expected criteria air pollutant emissions that would be generated as a result of the Project would cause significant impacts to air quality. The analysis of air quality impacts is based on federal and state Ambient Air Quality Standards (AAQS) and is assessed in accordance with guidelines, policies, and standards established by the City of Riverside and the South Coast Air Quality Management District (SCAQMD). The analysis in this section is also based on the *Sycamore Hills Distribution Center Mobile Source Health Risk Assessment (HRA)* prepared by Urban Crossroads (Appendix C, September 2020) and *Construction Health Risk Assessment Memorandum* prepared by Urban Crossroads (Appendix C, September 2020). The HRA includes an analysis of diesel particulate matter (DPM) emissions associated with diesel truck traffic traveling along Alessandro Boulevard, a designated truck route, and three new driveways, proposed to be constructed, one on Alessandro Boulevard and two on Barton Street, in the vicinity of the proposed Project, and potential cancer risks to exiting nearby sensitive receptors, including residents and/or adjacent workers.

5.2.1 Setting

Regional Setting and Climate

The Project site is located approximately 37 miles northeast of the Pacific Ocean in the City in northwestern Riverside County. Air quality in the County is influenced by both topographical and meteorological conditions. The Project site is located between the Santa Ana Mountains and the San Jacinto Mountains.

The Project area, like other inland valley areas in southern California, has a Mediterranean climate characterized by warm, dry summers and mild, wet winters. The March Field climate monitoring station (ID 045326) is approximately 2.5 miles southeast of the Project site and the Riverside Fire Station 3 climate monitoring station (ID 047470) is approximately 5 miles northwest of the Project site. Based on measurements taken at these climate monitoring stations, the average annual precipitation is 8 to 10 inches, falling primarily from November to April (Western Regional Climate Center 2018). Annual temperatures in the Project area average about 64 degrees Fahrenheit (°F), winter low temperatures average about 40°F, and summer high temperatures average about 92°F.

The dominant meteorological feature affecting the region is the Pacific High Pressure Zone, which produces the prevailing westerly to northwesterly winds. These winds tend to blow pollutants away from the coast toward the inland areas. Consequently, air quality near the coast is generally better than that which occurs at the base of the coastal mountain range.

The prevailing westerly wind pattern is sometimes interrupted by regional "Santa Ana" conditions. A Santa Ana wind occurs when a strong high pressure develops over the Nevada–Utah area and overcomes the prevailing westerly coastal winds, sending strong, steady, hot, dry northeasterly winds over the mountains and out to sea.

Physical Setting

The Project is located within the Basin, which is under the jurisdiction of the SCAQMD. The Basin consists of Orange County, coastal and mountain portions of Los Angeles County, as well as Riverside and San Bernardino Counties (SCAQMD 1993, p. 2-1). Regional and local air quality within the Basin is affected by topography, atmospheric inversions, and dominant onshore flows. Topographic features such as the San Gabriel, San Bernardino, and San Jacinto Mountains form natural horizontal barriers to the dispersion of air contaminants. The presence of atmospheric inversions limits the vertical dispersion of air pollutants. With an inversion, the temperature initially follows a normal pattern of decreasing temperature with increasing altitude; however, at some elevations, the trend reverses and temperature begins to increase as altitude increases. This transition to increasing temperature establishes the effective mixing height of the atmosphere and acts as a barrier to vertical dispersion of pollutants (SCAQMD 1993, p. A8-2).

Dominant onshore flow provides the driving mechanism for both air pollution transport and pollutant dispersion. Air pollution generated in coastal areas is transported east to inland receptors by the onshore flow during the daytime until a natural barrier (the mountains) is confronted, limiting the horizontal dispersion of pollutants. The result is a gradual degradation of air quality from coastal areas to inland areas, which is most evident with the photochemical pollutants such as ozone formed under reactions with sunlight (SCAQMD 1993, pp. A8-1–A8-2).

Existing Air Quality

The state of California is divided geographically into 15 air basins for managing the air resources of the state on a regional basis. As discussed, the Project is located in the SCAQMD Basin. The Basin is designated as in attainment or unclassifiable attainment (expected to be meeting the standard despite a lack of monitoring data) for all federal air quality standards except eight-hour ozone and $PM_{2.5}$ standards. The Basin is designated as in nonattainment for state air quality standards for eight-hour ozone and $PM_{2.5}$, and additionally is in nonattainment of state PM_{10} standards.

Air quality is commonly expressed as the number of days in which air pollution levels exceed state standards set by the California Air Resources Board (CARB) or federal standards set by the U.S. EPA. The SCAQMD maintains 41 active air quality monitoring sites located throughout the South Coast Air Basin, including eight active sites in the County. Air pollutant concentrations and meteorological information are continuously recorded at these stations. Measurements are then used by scientists to help forecast daily air pollution levels. Examples of primary pollutants include carbon monoxide (CO), nitrogen dioxide (NO_2) and nitric oxide (NO) (NO2 and NO are collectively known as oxides of nitrogen [NO_x]), sulfur dioxide (SO_2), particulates (PM_{10} and $PM_{2.5}$), and various hydrocarbons (HC) or volatile organic compounds (VOC), which are also referred to as reactive organic gases (ROG).

The Rubidoux-Mission Boulevard monitoring station, located at 5888 Mission Boulevard approximately eight miles northwest of the Project site, is the nearest monitoring station. The Rubidoux-Mission Boulevard monitoring station measures ozone, NO_2, PM_{10}, and $PM_{2.5}$. Table 5.2-1 provides a summary of measurements collected at the monitoring station for the years 2014 through 2018.

Table 5.2-1 – Summary of Air Quality Measurements Recorded at Rubidoux – Mission Boulevard Monitoring Station

Pollutant/Standard	2014	2015	2016	2017	2018
Ozone					
Days State 1-hr. Standard Exceeded (0.09 ppm)	29	31	33	47	22
Days State 8-hr. Standard Exceeded (0.07 ppm)	69	59	71	82	57
Days 2015 Federal 8-hr. Standard Exceeded (0.07 ppm)	66	55	69	81	53
Days 2008 Federal 8-hr. Standard Exceeded (0.075 ppm)	41	39	47	58	34
Max. 1-hr. (ppm)	0.141	0.132	0.142	0.145	0.123
Max. 8-hr. (ppm)	0.104	0.105	0.104	0.118	0.101
NO_2					
Days State 1-hr. Standard Exceeded (0.18 ppm)	0	0	0	0	0
Days Federal 1-hr. Standard Exceeded (0.100 ppm)	0	0	0	0	0
Max 1-hr. (ppm)	0.059	0.057	0.073	0.063	0.554
Annual Average (ppm)	0.015	0.014	0.014	0.014	0.014
CO					
Days State 1-hr. Standard Exceeded (20 ppm)	0	0	0	NA	NA
Days State 8-hr. Standard Exceeded (9.0 ppm)	0	0	0	NA	NA
Days Federal 1-hr. Standard Exceeded (35 ppm)	0	0	0	NA	NA
Days Federal 8-hr. Standard Exceeded (9.0 ppm)	0	0	0	NA	NA
Max. 1-hr. (ppm)	2.0	2.5	1.7	NA	NA
Max. 8-hr. (ppm)	1.9	1.7	1.3	NA	NA
PM_{10}*					
State Max. Daily (µg/m^3)	122.7	107.4	170.5	137.6	126.0
Measured Days State 24-hr. Standard Exceeded (50 µg/m^3)	119	87	60	98	127
Calculated Days State 24-hr. Standard Exceeded (50 µg/m^3)	124.7	92.2	NA	102.5	133.6
State Annual Average (µg/m^3)	44.8	40.0	NA	41.3	43.9
Federal Max. Daily (µg/m^3)	100.0	69.0	84.0	92.0	86.5
Measured Days Federal 24-hr. Standard Exceeded (150 µg/m^3)	0	0	0	0	0
Calculated Days Federal 24-hr. Standard Exceeded (150 µg/m^3)	0.0	0.0	0.0	0.0	0.0
Federal Annual Average (µg/m^3)	36.3	32.2	38.1	39.0	35.4
$PM_{2.5}$*					
State Max. Daily (µg/m^3)	50.6	61.1	60.8	50.3	68.3
State Annual Average (µg/m^3)	16.8	15.3	12.6	14.5	12.6
Federal Max. Daily (µg/m^3)	48.9	54.7	51.5	50.3	66.3
Federal Annual Average (µg/m^3)	NA	11.8	12.5	12.2	12.5
Measured Days Federal 24-hr. Standard Exceeded (35 µg/m^3)	5	9	5	7	3
Calculated Days Federal 24-hr. Standard Exceeded (35 µg/m^3)	NA	10.3	5.1	7.2	3.1

Source: CARB 2020, SCAQMD 2018.
ppm = parts per million; µg/m^3 = micrograms per cubic meter; NA = Not Available.

*Calculated days value. Calculated days are the estimated number of days that a measurement would have been greater than the level of the standard had measurements been collected every day. The number of days above the standard is not necessarily the number of violations of the standard for the year.

Categories of Emission Sources

Air pollutant emissions sources are typically grouped into two categories: stationary and mobile sources. These emission categories are defined and discussed in the following subsections.

Stationary Sources

Stationary sources are divided into two major subcategories: point and area sources. Point sources consist of a single emission source with an identified location at a facility. A single facility could have multiple point sources located on site. Stationary point sources are usually associated with manufacturing and industrial processes. Examples of point sources include boilers or other types of combustion equipment at oil refineries, electric power plants, etc. Area sources are small emission sources that are widely distributed but are cumulatively substantial because there may be a large number of sources. Examples include residential water heaters; painting operations; lawn mowers; agricultural fields; landfills; and consumer products, such as barbecue lighter fluid and hair spray. (SCAQMD 1993, p. 1-1)

Mobile Sources

Mobile sources are motorized vehicles which are classified as either on-road or off-road. On-road mobile sources typically include automobiles and trucks that operate on public roadways. Off-road mobile sources include aircraft, ships, trains, and self-propelled construction equipment that operate off of public roadways. Mobile source emissions are accounted for as both direct source emissions (those directly emitted by the individual source) and indirect source emissions, which are sources that by themselves do not emit air contaminants but indirectly cause the generation of air pollutants by attracting vehicles. Examples of indirect sources include office complexes, commercial and government centers, sports and recreational complexes, and residential developments. (SCAQMD 1993, p. 1-2)

Air Pollution Constituents

Criteria Pollutants

Air pollutants are classified as either primary or secondary, depending on how they are formed. Primary pollutants are generated daily and are emitted directly from a source into the atmosphere. As previously described, examples of primary pollutants include CO, (NO_2) and (NO) (NO_2 and NO are collectively known as oxides of nitrogen [NO_x]), SO_2, PM_{10} and $PM_{2.5}$, and various HCs or VOCs, which are also ROGs. The predominant source of air emissions expected to be generated by the Project is vehicle emissions. Motor vehicles primarily emit CO, NO_x, and VOC/ROG/HC.

Secondary pollutants are created over time and occur within the atmosphere as chemical and photochemical reactions take place. An example of a secondary pollutant is ozone (O_3), which is one of the products formed when NO_x reacts with HC in the presence of sunlight. Other secondary

pollutants include photochemical aerosols. Secondary pollutants such as ozone represent major air quality problems in the Basin.

The federal Clean Air Act (CAA) of 1970 established the National Ambient Air Quality Standards (NAAQS). Six "criteria" air pollutants were identified using specific medical evidence available at that time, and NAAQS were established for those chemicals. The state of California has adopted the same six chemicals as criteria pollutants but has established different allowable levels. The six criteria pollutants are: carbon monoxide, nitrogen dioxide, ozone, lead, particulates less than 10 microns in size, and sulfur dioxide. The following is a further discussion of these criteria pollutants, as well as volatile organic compounds.

- **Carbon Monoxide (CO)** is a colorless, odorless, toxic gas produced by incomplete combustion of carbon-containing substances. Concentrations of CO are generally higher during the winter months when meteorological conditions favor the build-up of primary pollutants (EPA 2016). Automobiles are the major source of CO in the Basin, although various industrial processes also emit CO through incomplete combustion of fuels. In high concentrations, CO can cause serious health problems in humans by limiting the red blood cells' ability to carry oxygen (SCAQMD 1993, p. 3-2).
- **Oxides of Nitrogen (NO_x)** contribute to air pollution include NO and NO_2. NO is a colorless, odorless gas formed by a combination of nitrogen and oxygen when combustion takes place under high temperatures and pressures. NO_2 is a reddish-brown gas formed by the combination of NO with oxygen. Combustion in motor vehicle engines, power plants, refineries, and other industrial operations, as well as ships, railroads, and aircraft, are the primary sources of NO_x. NO_2 at atmospheric concentrations is a potential irritant and can cause coughing in healthy people, can alter respiratory responsiveness and pulmonary functions in people with pre-existing respiratory illness, and potentially lead to increased levels of respiratory illness in children (EPA 2016).
- **Ozone (O_3)** is a colorless toxic gas that irritates the lungs and damages materials and vegetation. During the summer's long daylight hours, plentiful sunshine provides the energy needed to fuel photochemical reactions between NO_2 and VOC, which results in the formation of O_3. Conditions that lead to high levels of O_3 are adequate sunshine, early morning stagnation in source areas, high surface temperatures, strong and low morning inversions, greatly restricted vertical mixing during the day, and daytime subsidence that strengthens the inversion layer (all of which are characteristic of western Riverside County). Ozone represents the worst air pollution-related health threat in the Basin as it affects people with pre-existing respiratory illness as well as reduces lung function in healthy people. Studies have shown that children living within the Basin experience a 10-15 percent reduction in lung function (SCAQMD 1993, p. 3-2).
- **Atmospheric Particulate Matter (PM)** is made up of fine solid and liquid particulates, such as soot, dust, aerosols, fumes, and mists. PM_{10} consists of particulate matter that is 10 microns less in diameter, and $PM_{2.5}$ consists of particulate matter of 2.5 microns or less in size. Both PM_{10} and $PM_{2.5}$ can be inhaled into the deepest part of the lung, contributing

to health effects. The presence of these fine particles by themselves cause lung damage and interfere with the body's ability to clear its respiratory tract. These particles can also act as a carrier of other toxic substances (SCAQMD 1993, p. 3-3).

Sources contributing to particulate matter pollution include road dust, windblown dust, agriculture, construction, fireplaces and wood burning stoves, and vehicle exhaust. Specifically, SCAQMD data indicates the largest component of PM_{10} particles in the area comes from dust (unpaved roads, unpaved yards, agricultural lands, and vacant land that has been disked). $PM_{2.5}$ particles are mostly manmade particles resulting from combustion sources. According to SCAQMD, one component of $PM_{2.5}$ pollution in Riverside comes from ammonium nitrate (NH_4NO_3) particulates. NO_X, emitted throughout the Basin by vehicles, reacts with ammonia produced from livestock and horses to form ammonium nitrate. Organic carbon particles generated from paints, degreasers, and vehicles are another component of $PM_{2.5}$ pollution. The last notable constituent of $PM_{2.5}$ sources is elemental carbon, which is used as a surrogate for diesel particulates.

- **Sulfur dioxide (SO_2)** is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. SO_2 can result in temporary breathing impairment in asthmatic children and adults engaged in active outdoor activities. When combined with PM, SO_2 can cause symptoms such as shortness of breath and wheezing; and, with long-term exposure, lead to the exacerbation of existing cardiovascular disease and respiratory illnesses (EPA 2016). Although SO_2 concentrations have been reduced to levels well below state and federal standards, further reductions in SO_2 emissions are needed because SO_2 is a precursor to sulfate and $PM_{2.5}$.
- **Lead (Pb)** concentrations in the past once exceeded the state and federal air quality standards by a wide margin but have not exceeded state or federal air quality standards at any regular monitoring station since 1982. Health effects associated with lead include neurological impairments, mental retardation, and behavioral disorders. At low levels, lead can damage the nervous systems of fetuses and result in lowered IQ levels in children (EPA 2016). Although special monitoring sites immediately downwind of lead sources recorded very localized violations of the state standard in 1994, no violations have been recorded at these stations since 1996. Unleaded gasoline has greatly contributed to the reduction in lead emissions in the Basin. Since the Project will not involve leaded gasoline, or other sources of lead emissions, this criteria pollutant is not expected to increase with Project implementation.
- **Reactive Organic Gases/Volatile Organic Compounds (ROG/VOC)** are not classified as criteria pollutants and as such do not have any state or federal ambient air quality standards. VOCs are regulated; however, a reduction in VOC emissions reduces certain chemical reactions which contribute to the formation of ozone. VOCs are also transformed into organic aerosols in the atmosphere, contributing to higher PM_{10} and lower visibility levels. Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations of VOCs because of interference

with oxygen uptake. In general, ambient VOC concentrations in the atmosphere, even at low concentrations, are suspected to cause coughing, sneezing, headaches, weakness, laryngitis, and bronchitis. Some hydrocarbon components classified as VOC emissions are thought or known to be hazardous. Benzene, for example, is a hydrocarbon component of VOC emissions that is known to be a human carcinogen. (SCAQMD 2005, p. 1-5)

Toxic Air Contaminants

A toxic air contaminant (TAC) is defined as an air pollutant which may cause or contribute to an increase in mortality or serious illness, or which may pose a hazard to human health. TACs are generally present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at very low concentrations. For those TACs that cause cancer, there is no concentration that does not present some low-level risk. In other words, there is no threshold below which adverse health impacts are not expected to occur. This contrasts with the criteria pollutants for which acceptable levels of exposure can be determined, and for which the state and federal governments have set ambient air quality standards. The majority of the estimated health risk from TACs can be attributed to relatively few compounds, the most important being PM from diesel-fueled engines, known as diesel particulate matter (DPM). In addition to DPM, benzene and 1,3-butadiene are also significant contributors to overall ambient public health risk in California.

TACs are regulated under both federal and state laws. Federally, the 1970 Amendments to the Clean Air Act included a provision to address air toxics. California regulates TACs through its air toxics program, mandated in Chapter 3.5 (Toxic Air Contaminants) of the Health and Safety Code Section 39660, *et seq*., and Part 6 Air Toxics "Hot Spots" Information Assessment (Section 44300, *et seq*.). CARB, working in conjunction with the Office of Environmental Health Hazard Assessment (OEHHA), identifies TACs. Air toxic control measures may then be adopted to reduce ambient concentrations of the identified TAC below a specific threshold based on its effects on health, or to the lowest concentration achievable though use of best available control technology for toxics (T-BACT). The program is administered by the CARB. Air quality control agencies, including the SCAQMD, must incorporate air toxic control measures into their regulatory programs or adopt equally stringent control measures as rules within six months of adoption by CARB.

Both SCAQMD and the CARB have monitoring networks within the Basin that measure ambient concentrations of certain TACs which are associated with important health-related effects and are present in appreciable concentrations in the Basin. The SCAQMD uses this information to determine health risks for a particular area. CARB publishes annual statewide, air basin, and location-specific summaries of the concentration levels of several TACs and their resulting cancer risks. The most recent summary is the CARB Air Quality Almanac for 2013; however, this version did not include a discussion of TACs. The 2009 version of the Almanac is the most recent version which presents the relevant concentration and cancer risk data for the ten TACs that present the most substantial health risk in California based on available data. These TACs are: acetaldehyde, benzene, 1,3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene. DPM is not directly measured but is

indirectly estimated based on fine particulate matter measurements and special studies on the chemical speciation of ambient fine particulate data, along with receptor modeling techniques.

Exhaust emissions from diesel mobile sources dropped by 38 percent from 1990 to 2000 due to more stringent emissions standards and introduction of cleaner burning diesel (CARB 2013). Reductions in cancer risk are expected to continue into the future as new emission controls are implemented to further reduce DPM emissions, which are the major component total airborne cancer risk.

Table 5.2-2 – TAC Concentration Levels and Associated Health Risks provides a summary of TACs and health risk information from the CARB Annual Toxic Summary for the most recent four-year period, 2016-2019 for the Riverside-Rubidoux air monitoring station, which is located approximately 7.5 miles northeast of the Project site. The overall cancer risk attributable to the non-DPM chemicals (i.e., the 10 TACs measured by the CARB described above, excluding para-dichlorobenzene) have also shown significant reductions at the Riverside-Rubidoux location, declining from an estimated cancer risk of 299 in one million in 1996 to 118 in one million in 2014, a reduction of approximately 60 percent (CARB 2016).

Table 5.2-2 – TAC Concentration Levels and Associated Health Risks

TAC		Year			
		2016	2017	2018	2019
Acetaldehyde[4]	Concentration[1]	1.44	1.08	--	--
	Risk[2]	21	16	--	--
Benzene	Concentration	0.33	0.27	0.24	--
	Risk	85	70	62	--
1,3-Butadiene	Concentration	0.05	0.04	0.04	--
	Risk	57	48	46	--
Carbon Tetrachloride	Concentration	0.09	0.09	0.07	--
	Risk	67	69	56	--
Chromium, Hex	Concentration[3]	0.05	0.04	--	--
	Risk	19	16	--	--
Para-Dichlorobenzene[4]	Concentration	--	--	--	--
	Risk	--	--	--	--
Formaldehyde	Concentration	3.64	3.35	--	--
	Risk	76	70	--	--
Methylene chloride	Concentration	48.2	12.3	9.59	--
	Risk	477	122	95	--
Perchloroethylene	Concentration	0.02	0.01	0.01	--
	Risk	2	2	1	--
Diesel PM[4]	Concentration	---	---	--	
	Risk	---	---	--	

Notes: [1]Concentration in parts per billion (ppb), [2]Risk in cancer cases per million, [3]Chromium Hex concentration in ng/m^3, [4]Data insufficient or unavailable to determine the value (most recent year is 2006 for para-Dichlorobenzene at Riverside-Rubidoux station)

In addition to the measurements presented in the CARB 2013 almanac and the Annual Air Toxics Summary, the SCAQMD has conducted a detailed TAC emission inventory, air sampling, and dispersion modeling study called the “Multiple Air Toxics Exposure Study in the South Coast Air

SoCAB" (MATES-II, SCAQMD 2000), MATES-III (SCAQMD 2008a), and MATES-IV (SCAQMD 2014) (collectively, "MATES Studies").

The MATES Studies provided information on the importance of various TACs in terms of their relative health risks, as well as their spatial distribution across the Basin. The MATES-IV information can be used to characterize the "background" health risks from both regional and local TAC emission sources based on the available toxics emission inventory for the year 2012. The MATES-IV program results indicate that the existing cancer risk attributable to TACs in the area where the Project site is located is estimated to be 710.46 in one million, of which DPM contributes approximately 68 percent of the total cancer risk (MATES Appendices, p. VII-1). This cancer risk level is approximately 16 percent lower than the background cancer risks based on the MATES-III study that used the toxics emission inventory for the year 2005, which further illustrates the trend of declining health risk from TACs. The MATES V update is currently being conducted and the final MATES V report is still pending (SCAQMD 2020). Thus, as the final report for the MATES IV study is the most currently available, it is the most appropriate for use in this analysis.

This sharp decline is attributable largely to emission reduction programs implemented by the SCAQMD, CARB, and the U.S. Environmental Protection Agency (EPA), particularly with regard to DPM.

Attainment Status

The EPA has established NAAQS for the six criteria pollutants O_3, CO, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ to protect human health, with an adequate margin of safety. Likewise, the California EPA (Cal EPA) has developed statewide thresholds for each of the criteria pollutants. If the concentration of one or more criteria pollutants within a geographic area is found to exceed the established statewide or NAAQS threshold level for one of the criteria pollutants, the area is considered to be in nonattainment for that pollutant.

The Project site is located within a portion of the Basin that is designated as nonattainment for PM_{10} by the state, as well as nonattainment for ozone, and $PM_{2.5}$ under both the state and federal standards (see Table 5.2-3 – Attainment Status). As a result, SCAQMD is required to develop an Air Quality Management Plan (AQMP) for the Basin to bring the area into attainment for all criteria pollutants.

Table 5.2-3 –Basin Attainment Status

Criteria Air Pollutant	Attainment Designation	
	State	Federal
1-Hour Ozone	Nonattainment	Nonattainment (Extreme)
8-Hour Ozone	Nonattainment	Nonattainment (Extreme)
Carbon monoxide (1-hour and 8-Hour)	Attainment	Attainment (Maintenance)
Nitrogen dioxide	Attainment	Attainment (Maintenance)
Sulfur dioxide	Attainment	Unclassifiable/Attainment
PM_{10}	Nonattainment	Attainment (Maintenance)
$PM_{2.5}$	Nonattainment	Nonattainment (Serious)

Source: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf?sfvrsn=14

Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution, as identified by the SCAQMD, may include children, the elderly, and people with cardiovascular and chronic respiratory diseases. Sensitive receptors may include residences, schools, playgrounds, athletic facilities, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes.

The sensitive receptors nearest to the Project site include single and multi-family residences to the south and southeast of the Project site.

5.2.2 Related Regulations

The federal and state ambient air quality standards (AAQS) establish the context for the local AQMPs and for determination of the significance of a Project's contribution to local or regional pollutant concentrations. The federal and state AAQS are presented in Table 5.2-5. The AAQS represent the level of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other diseases or illness, and persons engaged in strenuous work or exercise, all referred to as “sensitive receptors.” SCAQMD defines a "sensitive receptor" as a land use or facility such as schools, childcare centers, athletic facilities, playgrounds, retirement homes, and convalescent homes. (SCAQMD 1993, p. 1-2)

5.2.2.1 Federal Regulations

U.S. Environmental Protection Agency

The EPA is responsible for enforcing the CAA, the legislation that governs air quality in the United States. EPA is also responsible for establishing the NAAQS. NAAQS are required under the 1977 CAA and subsequent amendments. EPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain types of locomotives. EPA has jurisdiction over emission sources outside state waters (e.g., beyond the outer continental shelf) and establishes emission standards, including those for vehicles sold in states other than California, where automobiles must meet stricter emission standards set by the California Air Resources Board.

Ambient Air Quality Standards

AAQS represent the maximum levels of background pollution considered safe, with an adequate margin of safety, to protect the public health and welfare. The federal CAA was enacted in 1970 and amended in 1977 and 1990 [42 United States Code (USC) 7401] for the purposes of protecting and enhancing the quality of the nation’s air resources to benefit public health, welfare,

and productivity. In 1971, in order to achieve the purposes of Section 109 of the CAA [42 USC 7409], the EPA developed primary and secondary NAAQS.

Six criteria pollutants of primary concern have been designated: ozone, CO, SO_2, NO_2, Pb, and respirable PM_{10} and $PM_{2.5}$. The primary NAAQS ". . . in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health . . ." and the secondary standards ". . . protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air" [42 USC 7409(b)(2)]. The primary NAAQS were established, with a margin of safety, considering long-term exposure for the most sensitive groups in the general population (i.e., children, senior citizens, and people with breathing difficulties). The NAAQS are presented in Table 5.2-4 – Ambient Air Quality Standards (CARB, 2016).

Table 5.2-4 - Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	---	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.07 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM_{10})[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3)		---		
Fine Particulate Matter ($PM_{2.5}$)[9]	24 Hour	No Separate State Standard		35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12 µg/m^3	15 µg/m^3)	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-dispersive Infrared Photometry	35 ppm (40 mg/m^3)	---	Non-dispersive Infrared Photometry
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	---	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		---	Same as Primary Standard	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemi-luminescence	100 ppb (188 µg/m^3)	---	Gas Phase Chemi-luminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Flourescence	75 ppb (196 µg/m^3)	---	Ultraviolet Fluorescence; Spectro-photometry (Pararosaniline Method)
	3 Hour	---		---	0.5 ppm (1,300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	---	

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
	Annual Arithmetic Mean	---		0.030 ppm (for certain areas)[11]	---	
Lead[12,13]	30 Day Average	1.5 µg/m^3	Atomic Absorption	---	---	High Volume Sampler and Atomic Absorption
	Calendar Quarter	---		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	---		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m^3	Ion Chroma-tography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chroma-tography			

ppm = parts per million; ppb = parts per billion; µg/m$_3$ = micrograms per cubic meter; – = not applicable.
[1] California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
[2] National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m$_3$ is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
[3] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
[4] Any equivalent measurement method which can be shown to the satisfaction of the Air Resources Board to give equivalent results at or near the level of the air quality standard may be used.
[5] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
[6] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
[7] Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
[8] On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
[9] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m$_3$ to 12.0 µg/m$_3$. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m$_3$, as was the annual secondary standards of 15 µg/m$_3$. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m$_3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
[10] To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national standards are in units of ppb. California standards are in units of ppm. To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
[11] On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the 1-hour national standard is in units of ppb. California standards are in units of ppm. To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm. [12] The Air Resources Board has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants. [13] The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m_3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved. [14] In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively. Source: CARB 2016						

An air basin is designated as either attainment or nonattainment for a particular pollutant. Once a nonattainment area has achieved the AAQS for a particular pollutant, it is re-designated as an attainment area for that pollutant. To be re-designated, the area must meet air quality standards for three consecutive years. After re-designation to attainment, the area is known as a maintenance area and must develop a 10-year plan for continuing to meet and maintain air quality standards, as well as satisfy other requirements of the federal CAA. The Project area of the Basin is a nonattainment area for the federal ozone and $PM_{2.5}$ standards.

General Conformity Rule

The General Conformity Rule requires that federal agencies demonstrate that actions would conform to the applicable State Implementation Plan (SIP), which is a collection of documents that set forth the state's strategies for achieving the NAAQS. In California, the SIP is a compilation of new and previously submitted plans, programs (such as air quality management plans, monitoring, modeling, permitting, etc.), district rules, state regulations, and federal controls. Per the General Conformity Rule, federal agencies demonstrate actions would conform to the applicable SIP by either determining that the action is exempt from the General Conformity Rule requirements or subject to a formal conformity determination. This requires analysis of the total direct and indirect emissions of criteria pollutants and their precursors for which an area is designated nonattainment or covered by a maintenance plan. The total direct and indirect emissions are the net emission increases in the nonattainment or maintenance area caused by the action. The emissions must be reasonably foreseeable at the time the conformity determination is made. For indirect emissions, the federal agency also must be able to practicably control the emissions based upon the agency's continuing program responsibility. If the emissions resulting from an action would not exceed applicable General Conformity *de minimis* levels, shown in Table 5.2-5 below, then the action would conform to the applicable SIP and no further analysis would be required. If emissions resulting from an action would exceed applicable General Conformity *de minimis* levels, then a formal Air Quality Conformity Analysis would be required.

Table 5.2-5 - General Conformity De Minimis Limits

Pollutant	Designation Category	Emissions (Tons/Year)
Ozone Precursors (VOC or NO_x)	Nonattainment (Extreme)	10
Carbon Monoxide (CO)	Attainment (Maintenance)	100
Particulate Matter (PM_{10})	Attainment (Maintenance)	100
Particulate Matter ($PM_{2.5}$)	Nonattainment (Serious)	70
Sources: 40 CFR 93.53(b)(1) and 40 CFR 93.53(b)(2) VOC = Volatile Organic Compound		

5.2.2.2 State Regulations

California Air Resources Board

In addition to being subject to the requirements of the CAA, air quality in California is also governed by more stringent regulations under the California Clean Air Act (CCAA). The CARB, which became part of the CalEPA in 1991, is responsible for administering the CCAA and establishing the California Ambient Air Quality Standards (CAAQS). The CCAA, as amended in 1992, requires all air districts in the state to achieve and maintain the CAAQS, which are generally more stringent than the federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

CARB has broad authority to regulate mobile air pollution sources, such as motor vehicles. It is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB established passenger vehicle fuel specifications, which became effective in March 1996. CARB oversees the functions of local air pollution control districts and air quality management districts, which, in turn, administer air quality activities at the regional and county levels. The state standards are summarized in Table 5.2-1 (Summary of Air Quality Measurements Recorded at Rubidoux-Mission Boulevard Monitoring Station).

The CCAA requires CARB to designate areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a state standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a state standard and are not used as a basis for designating areas as nonattainment. CAAQS attainment status is shown in Table 5.2-3 Attainment Status.

Criteria Pollutants

The CARB has developed the California Ambient Air Quality Standards (CAAQS) and generally has set more stringent limits on the criteria pollutants than the NAAQS, shown in Table 5.2-4. In addition to the federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride, shown in Table 5.2-4.

Similar to the federal CAA, the state classifies as either "attainment" or "nonattainment" areas for each pollutant based on the comparison of measured data with the CAAQS. The Project area of the South Coast Air Basin is a nonattainment area for the state ozone, PM_{10}, and $PM_{2.5}$ standards.

California Environmental Quality Act

Section 15125(d) of CEQA Guidelines requires discussion of any inconsistencies between the project and applicable general plans and regional plans, including the applicable air quality attainment or maintenance plan (or SIP).

California Green Building Code

Part 11 of the California Building Standards Code in Title 24 of the California Code of Regulations is also known as the CALGreen Code. The development of the CALGreen Code is intended to: (1) cause a reduction in greenhouse gas emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor. The following sections of the CALGreen Code are applicable to this Project:

Section 5.106.4

Bicycle parking. Comply with Sections 5.106.4.1 and 5.106.4.2; or meet local ordinance or the University of California Policy on Sustainable Practices, whichever is stricter.

- 5.106.4.1 Short-term bicycle parking. If the project is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of visitor motorized vehicle parking capacity, with a minimum of one two-bike capacity rack.
- 5.106.4.2 Long-term bicycle parking. For buildings with over 10 tenant-occupants, provide secure bicycle parking for 5 percent of motorized vehicle parking capacity, with a minimum of one space. Acceptable parking facilities shall be convenient from the street and may include: 1. Covered, lockable enclosures with permanently anchored racks for bicycles; 2. Lockable bicycle rooms with permanently anchored racks; and 3. Lockable, permanently anchored bicycle lockers. Note: Additional information on recommended bicycle accommodations may be obtained from Sacramento Area Bicycle Advocates.

Section 5.106.5.2

Designated parking.

- Provide designated parking for any combination of low-emitting, fuel efficient, and carpool/vanpool vehicles as shown in *Table 5.106.5.2* of the CALGreen Code.

5.2.2.3 Regional Regulations

South Coast Air Quality Management District

The SCAQMD is the air pollution control agency in the Basin. The role of the local SCAQMD is to protect the people and the environment of the Basin from the effects of air pollution. SCAQMD shares responsibility with CARB for ensuring that NAAQS and CAAQS are achieved and

maintained within the Basin. As the South Coast Air Basin is designated as a nonattainment area for state air quality standards for 8-hour ozone, PM_{10}, and $PM_{2.5}$, the SCAQMD periodically prepares AQMPs outlining measures to reduce these pollutants. The most recent AQMP is the 2016 Air Quality Management Plan (2016 AQMP).

SCAQMD Amicus Brief

In *Sierra Club v. County of Fresno* (2019) 6 Cal.5th 502 ("Friant Ranch" decision), the California Supreme Court conceded that an explanation of the connection between an individual project's pollutant emissions in excess of thresholds and human health effects may not be possible given the current state of environmental science modeling. However, the California Supreme Court concluded that the Friant Ranch Project EIR itself must explain, in a manner reasonably calculated to inform the public, the scope of what is and is not yet known about the effect of the project's significant and unavoidable air quality impacts on human health. The specific language provided by the Court is provided below:

> "The EIR fails to provide an adequate discussion of health and safety problems that will be caused by the rise in various pollutants resulting from the Project's development. At this point, we cannot know whether the required additional analysis will disclose that the Project's effects on air quality are less than significant or unavoidable, or whether that analysis will require reassessment of proposed mitigation measures. Absent an analysis that reasonably informs the public how anticipated air quality effects will adversely affect human health, an EIR may still be sufficient if it adequately explains why it is not scientifically feasible at the time of drafting to provide such an analysis."

SCAQMD has provided amicus briefs explaining the difficulties in providing correlation between regional pollutant emissions and human health. With regard to the analysis of air quality-related health impacts, the SCAQMD has stated that "EIRs must generally quantify a project's pollutant emissions, but in some cases, it is not feasible to correlate these emissions to specific, quantifiable health impacts (e.g., premature mortality; hospital admissions)." In such cases, a general description of the adverse health impacts resulting from the pollutants at issue may be sufficient.

The SCAQMD has further stated that from a scientific standpoint, it takes a large amount of additional precursor emissions to cause a modeled increase in ambient ozone levels over an entire region. SCAQMD further acknowledges that it may be feasible to analyze air quality related health impacts for projects on a regional scale with very high emissions of oxides of nitrogen (NOx) and volatile organic compounds (VOCs), where impacts are regional. The example SCAQMD provided was for proposed Rule 1315, which authorized various newly permitted sources to use offsets from the SCAQMD's "internal bank" of emission reductions. The CEQA analysis accounted for essentially all of the increases in emissions due to new or modified sources in the District between 2010 and 2030, or approximately 6,620 pounds per day of NOx and 89,947 pounds per day of VOC, to expected health outcomes from ozone and particulate matter (e.g., 20 premature deaths per year and 89,947 school absences in the year 2030 due to ozone).

Multiple Air Toxics Exposure Study

The Multiple Air Toxics Exposure Study (MATES) is a monitoring and evaluation study conducted in the South Coast Air Basin. The MATES V study, which is an update of previous studies, includes a fixed site monitoring program with 10 stations, an updated inventory of TACs, and a modeling effort to characterize risk across the South Coast Air Basin. The purpose of the MATES V fixed site monitoring is to characterize long-term regional air toxics levels in residential and commercial areas (SCAQMD 2017). MATES V is still being conducted; however, MATES IV predicts that the excess cancer risk for the project area is 754.23 in a million (SCAQMD 2015a). The MATES IV study represents the baseline health risk for a cumulative analysis.

5.2.2.4 Local Regulations

Riverside General Plan 2025

The GP 2025 contains objectives and policies to protect air quality within the City in the Air Quality Element. The following objectives and policies are applicable to the Project:

Objective AQ-1: Adopt land use policies that site polluting facilities away from sensitive receptors and vice versa; improve jobs-housing balance; reduce vehicle miles travelled and length of work trips; and improve the flow of traffic.

> **Policy AQ-1.3:** Separate, buffer and protect sensitive receptors from significant sources of pollution to the greatest extent possible.
>
> **Policy AQ-1.8:** Promote "Job/Housing Opportunity Zones" and incentives to support housing in job-rich areas and jobs in housing-rich areas, where the jobs are located at non-polluting or extremely low polluting entities.
>
> **Policy AQ-1.21:** Cooperate and participate in regional air quality management plans, programs, and enforcement measures.

Policy AQ-1.22: Implement the required components of the Congestion Management Plan (CMP) and continue to work with Riverside County Transportation Commission on annual updates to the CMP. **Objective AQ-2:** Reduce air pollution by reducing emissions from mobile sources.

> **Policy AQ-2.8:** Work with Riverside Transit Authority (RTA) to establish mass transit mechanisms for the reduction of work-related and non-work-related vehicle trips.
>
> **Policy AQ-2.11:** Develop ways to incorporate the "Good Neighbor Guidelines for Siting New and/or Modified Warehouse/Distribution Facilities" into the Development Review process and Citywide air quality education programs.

Objective AQ-3: Prevent and reduce pollution from stationary sources, including point sources (such as power plants and refinery boilers) and area sources (including small emission sources such as residential water heaters and architectural coatings).

> **Policy AQ-3.6:** Support "green" building codes that require air conditioning/filtration installation, upgrades or improvements for all buildings, but particularly for those associated with sensitive receptors.

Objective AQ-4: Reduce particulate matter, as defined by the Environmental Protection Agency, as either airborne photochemical precipitates or windborne dust.

Policy AQ-4.4: Support programs that reduce emissions from building materials and methods that generate excessive pollutants through incentives and/or regulations.

Policy AQ-4.5: Require the suspension of all grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour.

Policy AQ-5.1: Utilize source reduction, recycling and other appropriate measures to reduce the amount of solid waste disposed of in landfills.

Riverside Good Neighbor Guidelines

The City adopted Good Neighbor Guidelines for Siting New and/or Modified Warehouse/Distribution Facilities (GNG) in October 2008 to focus on the relationship between land use, permitting, and air quality. They also highlight strategies that can help minimize the impacts of diesel emissions associated with warehouse/distribution centers. Specifically, the Guidelines help to minimize the impacts of diesel particulate matter from on-road trucks associated with warehouses and distribution centers on existing communities and sensitive receptors.

The Good Neighbor Guidelines goals and strategies, adopted by the City in 2008, applicable to the Project include:

Goal 1: Minimize exposure to diesel emissions to neighbors that are situated in close proximity to the warehouse/distribution center.

Strategy 1a: Design facilities to allow for the queuing of the trucks on-site and away from sensitive receptors. Conversely, prevent the queuing of the trucks on streets or elsewhere outside of the facility in compliance with Title 10-Vehicles and Traffic-Chapter 10.44-Stopping, Standing and Parking.

Strategy 1b: To the extent possible, locate driveways, loading docks, and internal circulation routes away from residential uses or any other sensitive receptors.

Strategy 1c: In compliance with CEQA, conduct SCAQMD URBEMIS and EMFAC computer models, as appropriate, to initially evaluate warehouse and distribution projects on a case by case basis to determine the significance of air quality impacts and whether air quality thresholds would be exceeded as a result of the project. Where thresholds are exceeded, a more detailed air quality analysis/health risk assessment prepared by an air quality specialist is required to be prepared and submitted by the project applicant. As a general rule, the following guidelines can be used to determine whether a proposed project will be required to prepare additional technical analyses:

i. An air quality study for an industrial project is required when the proposed project has the potential to exceed established thresholds as noted by URBEMIS and EMFAC computer models provided by SCAQMD. If these models indicate the project will exceed thresholds due to existing or proposed site conditions, intensity

of development, location of nearest sensitive receptor, or any other exceptional circumstance warranting the need for additional review the preparation of an air quality study will be required.

ii. A health risk assessment is required when the truck traffic areas of an industrial project are located within 1,000 feet of sensitive receptors, in accordance with SCAQMD guidelines and/or practices.

Goal 4: Reduce and/or eliminate diesel idling within the warehouse/distribution center.

On November 10, 2020, the Riverside City Council adopted updates to the GNG, in addition to associated amendments to Title 19 – Zoning Code of the Riverside Municipal Code (RMC), the Hunter Business Park Specific Plan, and the Sycamore Canyon Business Park Specific Plan related to siting industrial uses in the City when located adjacent to sensitive receptors, including residential neighborhoods, schools, parks, playgrounds, day care centers, nursing homes, hospitals, and other public spaces. City Council action also allowed any project achieving substantial completion within 90 days of the effective date of the implementing ordinance to continue to be subject to the 2008 GNG. As this Project was deemed complete prior to adoption of the updated GNG (discussed further in Section 5.2.5), it does not need to comply with the updated GNG.

Diesel Regulations

In 1990, the state of California listed diesel exhaust as a known carcinogen under its Safe Drinking Water and Toxic Enforcement Act (Proposition 65). In 1998, CARB listed diesel particulate as a TAC.

CARB took the lead on addressing diesel emissions in the state of California. The first step to significantly reduce diesel emissions occurred in September 2000 when CARB approved the "Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles" or Diesel Risk Reduction Plan. The two main goals of the Diesel Risk Reduction Plan are: 1) to get new diesel fueled engines to use state-of-the-art emission controls as well as low-sulfur diesel fuel and, 2) for existing diesel engines to be retrofitted with emission control features. Effects of meeting these goals set by the CARB reduce the health effects experienced by Californians from diesel exhaust.

CARB Diesel Risk Reduction Program

Under CARB's Diesel Risk Reduction Program, mobile diesel emissions have their own set of reduction programs, as opposed to stationary diesel sources (generators) which are addressed separately under the Reduction Plan. One of the incentive programs for mobile diesel sources is the Carl Moyer Program which is a clean engine incentive program. This program provides money in the form of grants to cover the incremental portion of the cost to purchase cleaner burning engines or retrofitting existing ones.

Other programs include a program designed to develop and implement strategies to reduce emissions from new on-road heavy-duty diesel engines. The primary method of implementing this program will be through the development of emission control regulations and test procedures for

those new engines. The California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles were amended in 2007 and will reduce emissions from new on-road heavy-duty diesel engines.

Strategies for reducing diesel emissions from existing on-road heavy duty engines are mainly implemented through three sections of this program: retrofit assessment, heavy-duty testing and field support and retrofit implementation. CARB staff has developed a regulation to reduce diesel particulate matter and other emissions from existing on-road heavy-duty diesel powered vehicles operating in California. These regulations were adopted by CARB in December 2008 and last amended in December 2014. Beginning January 1, 2012, the Statewide Truck and Bus rule began requiring heavier trucks to be retrofitted diesel exhaust filters and requires older truck replacement which started in January 2015. By 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent.

CARB Air Quality and Land Use Handbook

In addition to the above listed programs and regulations, CARB's *Air Quality and Land Use Handbook* (CARB 2005, p. 4) provides recommendations for siting new sensitive land uses. These recommendations include a 1,000-foot buffer between new sensitive land uses and freeways or urban roads with 100,000 vehicles per day. The Handbook also recommends to avoid the placement of new sensitive land uses within 1,000 feet of a distribution center (accommodating more than 100 trucks per day, 40 trucks with transport refrigeration units (TRUs), or where TRUs operate more than 300 hours a week) and to take into account the configuration of existing distribution centers and avoid locating residences and other sensitive land uses near entry and exit points. These are recommendations, not mandates, and land use decisions ultimately lie with the local agency which needs to balance other considerations.

Other Regulations

Also, some statewide regulations proposed to reduce one form of pollutant have the added benefit of reducing other forms of pollution. For example, when CARB approved the Heavy- Duty Vehicle Greenhouse Gas Reduction Measure in 2008 and the most recent amendments in December 2014 to reduce greenhouse gas emissions from heavy-duty trucks, it also reduces NO_X emissions. This measure requires a compliance schedule for trucks to be certified under the EPA SmartWay Program, which reduces fuel consumption by improving fuel efficiency through improvements to tractor and trailer aerodynamics and low-rolling resistance tires. On February 1, 2005, a requirement limiting the idling of diesel-fueled commercial vehicles to five minutes at any location pursuant to Section 2485 of Chapter 10 within Title 13 of California Code of Regulations was adopted. Similarly, Section 2449 prohibits construction equipment and truck idling times shall be prohibited in excess of five minutes on site.

Off-road diesel vehicles are also regulated under CARB for both in-use (existing) and new engines. Off-road diesel vehicles include construction equipment.

There have been four sets of off-road standards implemented by CARB, known as Tiers. Tier 1 standards began in 1996. Tier 2 and 3 were adopted in 2000 and were more stringent than the

first tier. Tier 2 and 3 standards were completely phased in by 2006 and 2008, respectively. In December 2004, CARB adopted the Tier 4 or fourth phase of emission standards for late model year engines. These emission standards are nearly identical to those finalized by the EPA in May 2004. These standards, which commenced in 2011, are estimated to decrease PM and NO_X emissions by 90 percent below pre-2011 levels.

Since most off-road vehicles today have no emission controls and can last 30 years or longer, CARB approved a regulation in 2007 to reduce emissions from existing off-road diesel vehicles used in construction and other industries. This regulation establishes emission rates targets that decline over time to accelerate turnover to newer, cleaner engines and require exhaust retrofits to meet these targets. The regulation took effect on the larger fleets first, with average compliance dates in 2010, while medium and small fleet requirements achieved compliance in 2013 and 2015, respectively. This regulation also includes the Surplus Off-Road Opt-in for NOX (SOON) program. The local air districts may opt into the SOON program to reduce NO_X emissions beyond what is required by the regulation. Staff at SCAQMD proposed Rule 2449 which would implement the SOON program. This rule was adopted by SCAQMD in 2008. Opting into this program was anticipated to achieve a 12 ton per day reduction in NO_X by 2014.

5.2.3 Project Design Considerations

The Project includes several features that will reduce Project-related emissions both during construction and operation.

Sustainability Features

As described in DEIR Section 3.2.5 (Sustainability Features), the Project would meet or exceed all applicable standards under California's Green Building Code Title 24 standards. This will be accomplished by incorporating, at minimum, the following sustainability features or other features that are equally efficient:

Energy Efficiency

- Design building shells and components, such as electrical systems, windows, and roof systems to comply with the provisions of the Title 24 standards for non-residential buildings. The Project would be constructed in accordance with energy efficiency standards effective at the time building permits are issued. The effective date of the 2019 Building Energy Efficiency Standards was January 1, 2020, and it is anticipated that non-residential buildings will use approximately 30 percent less energy due to lighting upgrades under the revised standards.
- Use of Energy Star products such as appliances, building products, heating and cooling equipment, appliances, and other energy-efficient equipment will be utilized.
- Install efficient lighting and lighting control systems. LEDs will be installed for outdoor lighting, which will incorporate motion sensors that turn lighting off when not in use.

- Installation of trees within landscaping along the south and west elevations of Building A, and along the west elevations of Building B to provide shade and thereby potentially reduce energy use.
- Install skylights on the rooftops of both buildings and incorporate the use of natural lighting when possible.
- Achieve construction energy efficiencies and energy conservation through bulk purchase, transport, and use of construction materials. Use of materials in bulk reduces energy demands associated with preparation and transport of construction materials as well as transport and disposal of construction waste.
- The Project proposes conventional industrial uses that are not inherently energy intensive and reflect contemporary energy efficient/energy conserving designs and operational programs.

Renewable Energy

- Design buildings to have "solar ready" roofs that will structurally accommodate later installation of rooftop solar panels. Building operators providing rooftop solar panels will submit plans for solar panels prior to occupancy.

Water Conservation and Efficiency

- Create water-efficient landscapes in compliance with the City's Water Efficient Landscape and Irrigation Ordinance in 19.570.
- Include landscaping in areas of parking lots to reduce the heat island effect.
- Install water-efficient irrigation systems and devices according to the City's Water Efficient Landscape and Irrigation Ordinance 19.570, which complies with the California Department of Water Resources Model Efficient Landscape Ordinance.
- Design buildings to be water-efficient; install water-efficient fixtures and appliances.
- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff.
- Provide education about water conservation and available programs and incentives to the building operators to distribute to employees.

Solid Waste Measures

- Sort, recycle, and divert from landfills Project-related construction and demolition waste in accordance with mandatory regulatory requirements.
- Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas.
- The property operator will provide readily available information provided by the City for employee education about reducing waste and available recycling services.

Transportation and Motor Vehicles

- Limit idling times of construction vehicles to no more than five minutes in accordance with CCR, Title 13, Motor Vehicles, section 2449(d)(3) Idling.
- Implement sidewalks to facilitate and encourage pedestrian and access, which would reduce VMT and associated energy consumption.
- Provide a total of 39 EV parking stalls (24 within Parcel 1 for Building A and 15 within Parcel 2 for Building B) to encourage the use of low or zero-emission vehicles.
- Provide a total of 13 clean air/van pool parking stalls (8 within Parcel 1 for Building A and 5 within Parcel 2 for Building B) to support and encourage ridesharing.
- Promote the use of bicycles as an alternative means of transportation by providing short-term and/or long-term bicycle parking accommodations in accordance with the California Green Buildings Standards Code Sections 5.710.6.2.1 and 5.710.6.2.2.
- The building operator will support and encourage ridesharing and transit for the construction crew.

On-Site Equipment and Loading Docks

- The Project will require building operators (by contract specifications) to turn off equipment, including heavy-duty equipment, motor vehicles, and portable equipment when not in use for more than five minutes. Truck idling shall not exceed five minutes in time. All facilities will post signs requiring that trucks shall not be left idling for more than five minutes pursuant to Title 13 of the California Code of Regulations, Section 2485, which limits idle times to not more than five minutes.

Construction

- Require construction equipment to turn off when not in use.
- Use locally produced and/or manufactured building materials for at least 10% of the construction materials used for the Project.
- Use “green” building materials where feasible, such as those materials that are resource-efficient and recycled and manufactured in an environmentally conscious way.
- During grading, heavy-duty construction equipment (i.e., excavators, graders, scrapers, dozers, tractor/loader/backhoes, etc.) shall be CARB/U.S. Environmental Protection Agency Tier 3 certified. All construction equipment is subject to the CARB In-Use Off-Road Diesel-Fueled Fleets Regulation. This regulation, which applies to all off-road diesel vehicles 25 horsepower or greater, limits unnecessary idling to 5 minutes, requires all construction fleets to be labeled and reported to CARB, bans Tier 0 equipment and phases

out Tier 1 and 2 equipment (thereby replacing fleets with cleaner equipment), and requires that fleets comply with Best Available Control Technology requirements.[1]

5.2.4 Thresholds of Significance

The City's has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance thresholds in Appendix G ("Environmental Checklist") of the *State CEQA Guidelines*. The Environmental Checklist prepared by the City for the Project (Appendix A) indicates that impacts related to the Sycamore Hills Distribution Center Project may be considered potentially significant if the proposed Project would:

- (Threshold A) conflict with or obstruct implementation of the applicable air quality plan;
- (Threshold B) result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard;
- (Threshold C) expose sensitive receptors to substantial pollutant concentrations;
- (Threshold D) result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

5.2.5 Environmental Impacts

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

As listed in Section 5.2.2.3 Regional Regulations, Project-applicable air quality plans include the 2016 AQMP, objectives and policies of the GP 2025's Air Quality Element, and the City's applicable 2008 Good Neighbor Guidelines. Discussions of the Project's consistency with the 2016 AQMP and the Good Neighbor Guidelines is provided below. Additionally, a brief summary is provided discussing the Project's consistency with the General Plan 2025 Air Quality Element. Refer to Appendix B for the analysis of the Project's consistency with General Plan 2025 Air Quality Element.

2016 AQMP

As stated previously, the Basin is designated as in attainment or unclassifiable attainment (expected to be meeting the standard despite a lack of monitoring data) for all federal air quality standards except for the 8-hour ozone and $PM_{2.5}$ standards. The Basin is also designated as in nonattainment for state air quality standards for 8-hour ozone and $PM_{2.5}$, and additionally is in nonattainment of state PM_{10} standards. The regional air quality plan, the 2016 AQMP, outlines measures to reduce emissions of ozone and $PM_{2.5}$. Whereas reducing PM concentrations is

[1] Air Quality Analysis for the Sycamore Hills Distribution Project, page 34, contained in Appendix C of this EIR.

achieved by reducing emissions of $PM_{2.5}$ to the atmosphere, reducing ozone concentrations is achieved by reducing the precursors of photochemical formation of ozone, VOC, and NO_X.

A project's consistency with the AQMP is determined by two criteria: whether the project is consistent with the land use as designated in the local general plan; and if the project would result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards (NAAQS and CAAQS) or interim emissions reductions specified in the AQMP.

In regard to the first criteria, the growth forecasting for the AQMP is based in part on the land uses established by local general plans. Thus, if a project is consistent with land use as designated in the local general plan, it can normally be considered consistent with the AQMP. Projects that propose a different land use than is identified in the local general plan may also be considered consistent with the AQMP if the proposed land use is less intensive than buildout under the current designation. For projects that propose a land use that is more intensive than the current designation, analysis that is more detailed is required to assess conformance with the AQMP.

The Project site has a land use designation of B/OP – Business/Office Park – in the GP 2025 and is zoned BMP-SP - Business and Manufacturing Park and Specific Plan (Sycamore Canyon Business Park (SCBPSP)) Overlay Zones. The Specific Plan designates the project site as Industrial. Permitted land uses include light industrial, manufacturing, distribution and warehousing, and product assembly. The Project would be consistent with the land use and zoning designations and would therefore be consistent with the growth assumptions of the 2016 AQMP. The Project is consistent with the land use designations in the GP 2025 and the SCBPSP Zone, and therefore is also consistent with the AQMP.

As mentioned above, another factor used to determine if a project would conflict with implementation of the AQMP is determining if the project would result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards (NAAQS and CAAQS) or interim emissions reductions specified in the AQMP. NAAQS and CAAQS violations could occur if project emissions would exceed regional significance thresholds or localized significance thresholds (LSTs).

Table 5.2-6 shows the total emissions in tons per year over the one-year construction period and compares emissions to the General Conformity *de minimus* levels. Table 5.2-7 summarizes the total projected construction maximum daily emission levels for each criteria pollutant and compares the emissions to the SCAQMD regional significance thresholds. As shown in Tables 5.2-6 and 5.2-7, construction and operational emissions would be less than the regional significance thresholds. Additionally, as shown in Tables 5.2-8 and 5.2-9 in the following section, construction and operational emissions would be less than the LSTs. Therefore, the Project would not result in an air quality violation and would not conflict with or obstruct the implementation of the AQMP or applicable portions of the SIP and potential impacts would be **less than significant with Mitigation Measure MM AIR-1**.

Table 5.2-6 – Total Annual Construction Emissions Comparison to General Conformity De Minimis Levels

Construction	Emissions (tons per year)					
	ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Year 2021 Emissions (tons/year)	0.35	3.29	2.78	0.01	0.51	0.25
Year 2022 Emissions (tons/year)	1.77	1.61	1.95	0.01	0.33	0.13
Total Emissions (tons)	**2.12**	**4.91**	**4.73**	**0.01**	**0.83**	**0.38**
Maximum Annual Emissions (tons/year)	**1.77**	**3.29**	**2.78**	**0.01**	**0.51**	**0.25**
De Minimus Levels	*10*	*10*	*100*	*--*	*100*	*70*
Exceed Threshold?	*No*	*No*	*No*	*--*	*No*	*No*

Table 5.2-7 – Maximum Daily Construction Emissions Comparison to SCAQMD Significance Thresholds

Construction	Emissions (pounds per day)					
	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Site Preparation	4	41	22	<1	9	6
Grading	4	46	32	<1	6	2
Building Construction/Architectural Coatings[1]	32	29	34	<1	6	2
Paving/Architectural Coatings[1]	32	46	34	<1	2	1
Maximum Daily Emissions[2]	**32**	**46**	**34**	**<1**	**9**	**6**
SCAQMD Regional Threshold	*75*	*100*	*550*	*450*	*150*	*55*
Exceed Threshold?	*No*	*No*	*No*	*No*	*No*	*No*

[1]The architectural coatings phase of construction was modeled simultaneously with building construction and parking lot paving emissions.
[2]Emissions were rounded to the nearest whole number, Emissions reported as <1 indicate that emissions were calculated to be less than 0.5 pound per day.

General Plan 2025

The Project site has a land use designation of B/OP – Business/Office Park – in the GP 2025 and is zoned BMP-SP - Business and Manufacturing Park and Specific Plan (Sycamore Canyon Business Park (SCBPSP)) Overlay Zones. The Specific Plan designates the project site as Industrial. Permitted land uses include light industrial, manufacturing, distribution and warehousing, and product assembly. As discussed in Section 3 Project Description, the Project's warehouse buildings are proposed for high cube transload short-term use, primarily for the short-term storage and/or consolidation of manufactured goods. The Project would be consistent with the land use and zoning designations and would therefore be consistent with the growth assumptions of the 2016 AQMP. The Project is consistent with the land use designations in the GP 2025 and the SCBPSP and the Zone.

Although manufacturing is a permitted use in the SCBPSP and the Zone, the proposed Project is for high cube transload short-term use, which is the proposed land use analyzed in the *Traffic Operations Analysis* prepared by Urban Crossroads (Appendix K) and the *Air Quality Analysis for the Sycamore Hills Distribution Project* prepared by RECON (Appendix C). As outlined in the Project Description, the Project is a speculative development, and the tenants are unknown at this time. Therefore, in order to ensure future use of the site is consistent with high cube transload

short-term warehouse use, and the analysis contained herein, Mitigation Measure **MM AIR-1** is required.

Good Neighbor Guidelines

Additionally, the Project was evaluated for consistency with the City's *Good Neighbor Guidelines for Siting New and/or Modified Warehouse Distribution Facilities* (Good Neighbor Guidelines; City of Riverside 2008). The Good Neighbor Guidelines were designed to help minimize the impacts of DPM from on-road trucks associated with warehouses and distribution centers on existing communities and sensitive receptors located in the region. The Good Neighbor Guidelines goals and strategies, adopted by the City in 2008, applicable to the Project include:

- Minimize exposure to diesel emissions to neighbors that are situated in close proximity to the warehouse/distribution center;
    - Recommended strategy: Design facilities to allow for the queuing of truck on-site and away from sensitive receptors. Conversely, prevent the queuing of trucks on streets or elsewhere outside of facility in compliance with Title 10 – Vehicles and Traffic – Chapter 10.44 – Stopping, Standing and Parking.

      Project consistency: Based on the Project location and design, no truck queuing would occur next to sensitive receptors, which are located south of Alessandro Boulevard. Truck queuing would not occur outside the facility.
    - Recommended strategy: To the extent possible, locate driveways, loading docks and internal circulation route away from residential uses or any other sensitive receptors.

      Project consistency: Driveways, loading docks, and internal circulation routes are not adjacent to sensitive receptors. Further, as calculated in this analysis, emissions due to on-site operations would not expose sensitive receptors to substantial pollutant concentrations.
    - Recommended strategy: Conduct SCAQMD URBEMIS and EMFAC computer models as appropriate, to initially evaluate warehouse and distribution projects on a case by case basis to determine the significance of air quality impacts and whether air quality thresholds would be exceeded as a result of the project. Where thresholds are exceeded, a more detailed air quality specialist is required to be prepared and submitted by the project applicant.

      Project consistency: As calculated and concluded in the Project's Air Quality Analysis and summarized within this section of the EIR, the Project would not result in significant air quality impacts.
    - Recommended strategy: Enforce compliance with Riverside Municipal Code Section 19.880 – "Transportation Demand Management Regulations". This section of the Code requires trip reduction plans to be submitted for all businesses, including warehouses, with over one hundred employees to reduce work-related

vehicles trips by six and one half percent from the number of trips related to the project.

Project consistency: The Project would include transportation demand management measures that would reduce emissions associated with employee trips. These include access to public transit (Routes 20 and 208), bicycle parking, clean air/van pool parking spaces, and electric vehicle parking.

- Eliminate diesel trucks from unnecessarily traversing through residential neighborhoods;
    - Recommended strategy: Require warehouse/distribution centers to establish a specific truck route between the warehouse/distribution center and the State Route 60 and Interstate 215 freeways for City approval as part of the Design Review process. In addition, a haul route plan for construction activities should also be provided as part of the Design Review process.

      Project consistency: The Project site is located one mile west of Interstate 215, with direct access via Alessandro Boulevard which is an existing truck route.
    - Recommended strategy: Require warehouse/distribution centers to clearly specify all entrance and exit points on the site plan submitted for City review and approval.

      Project consistency: The Project site plans indicate all entrance and exit points.
    - Recommended strategy: Require warehouse/distribution centers to provide on-site signage for directional guidance to trucks entering and exiting the facility.

      Project consistency: On-site signage for directional guidance will be provided.
    - Recommended strategy: Require warehouse/distribution centers to provide signage or flyers that advise truck drivers of the closest restaurants, fueling stations, truck repair facilities, lodging and entertainment.

      Project consistency: The future tenants are unknown at this time; however, this information is readily available to truck drivers.
- Eliminate trucks from using residential areas and repairing vehicles on the streets;
    - Recommended strategy: Enforce compliance with Riverside Municipal Code Section 10.44.155 – “Parking of certain commercial vehicles, trailers and semi-trailers prohibited; exceptions”, Section 10.44.160 – “Parking of certain commercial vehicles prohibited in residential districts” and Section 10.44.040 “Parking for certain purposes prohibited”.

      Project consistency: The Project would comply with all Municipal Code requirements. No trucks would be parked off-site.
- Reduce and/or eliminate diesel idling within the warehouse/distribution center;
    - Recommended strategy: Promote the installation of on-site electric hook-ups to eliminate the idling of main and auxiliary engines during loading and unloading of

cargo and when trucks are not in use – especially where Transportation Refrigeration Units are proposed to be used.

Project consistency: The Project would not include Transportation Refrigeration Units. All trucks would be required to comply with the CARB idling limit of 5 minutes.

- Recommended strategy: Implement General Plan 2025 Program Final Program Environmental Impact Report, Mitigation Measure MM Air 12. This Mitigation Measure requires that all new truck terminals, warehouses and other shipping facilities requiring the use of refrigerated trucks and with more than 50 truck trips per day shall provide electrical hookups for the refrigerated units to reduce idling and its associated air quality pollutants. Additionally, future tenant improvements involving conversion of a warehouse for refrigeration storage shall include electrical hookups for refrigerated units.

  Project consistency: The Project would not include Transportation Refrigeration Units or refrigeration storage.

- Recommended strategy: Require signage (posted inside and outside of the warehouse facility) to inform truck drivers of CARB regulations, idling limits, authorized truck route, and designated truck parking locations. Post signs requesting truck drivers to turn off engines when not in use and restrict idling within facilities to less than 5 minutes.

  Project consistency: The Project would include signage regarding idling limits, truck routes, and parking.

Additionally, the City's Guidelines recommend the enforcement of the Riverside Municipal Code. As discussed in Section 5.2.2.3 above, on November 10, 2020, the Riverside City Council adopted updates to the Good Neighbor Guidelines, in addition to associated amendments to Title 19 – Zoning Code of the Riverside Municipal Code (RMC), the Hunter Business Park Specific Plan, and the Sycamore Canyon Business Park Specific Plan related to siting industrial uses in the City when located adjacent to sensitive receptors, including residential neighborhoods, schools, parks, playgrounds, day care centers, nursing homes, hospitals, and other public spaces. City Council action also allowed any project achieving substantial completion within 90 days of the effective date of the implementing ordinance to continue to be subject to the 2008 GNG. As this Project was deemed complete prior to adoption of the updated GNG, it does not need to comply with the updated GNG.

The updated 2020 Good Neighbor Guidelines include new requirements for technical studies and new guidelines related to noise and neighborhood character. The following is a short summary of the applicable updates:

- **Technical Studies:** The 2020 GNGs require the preparation of an Air Quality Analysis, and Health Risk Assessments for industrial uses within 1,000 feet of sensitive receptors.

Project Consistency: The Project has completed an Air Quality Analysis (Appendix C) and Health Risk Assessments (Appendix C) as part of the EIR process.

- **Noise:** The updated guidelines include measures related to minimizing noise from construction activities and ensuring compliance with Title 7 – Noise of the Riverside Municipal Code as it relates to noise in residential neighborhoods.

  Project Consistency: As outlined in Section 5.11 Noise, **Mitigation Measure MM NOI-1** is required to minimize construction noise and operational noise generated by the Project will comply with the noise standards in Title 7 of the RMC.

- **Neighborhood Character:** The new guidelines incorporate tiered development standards in Title 19 – Zoning Code related to building setbacks, height, and size, based on proximity to residential uses. The guidelines also require screening of industrial uses from Sensitive Receptors, and landscaping to soften visual impacts.

  Project Consistency: The tiered development standards of Title 19 do not apply to the Project, as the proposed buildings are located more than 800 feet from residential uses. As outlined in Section 5.1 Aesthetics, extensive design considerations are included in the Project, as well as **Mitigation Measure MM AES-2**, to minimize visual impacts from the Project on nearby sensitive receptors.

Although the Project is not required to comply with the updated Title 19 development standards or the updated GNGs, the project is consistent with all new requirements related to warehouse uses.

Thus, as outlined above, the Project is consistent with and would not conflict with any of applicable 2008 Good Neighbor Guidelines and recommended strategies; potential impacts would be **less than significant with implementation of Mitigation Measure MM AIR-1,** as outlined below.

MM AIR-1: The project applicant is required to record a covenant on the property (Parcels 1 and 2) that prohibit manufacturing use. Proof of the record of covenant shall be submitted to the City of Riverside Planning Department prior to issuance of Building Permits.

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

As discussed in Section 4.3 of the Air Quality Analysis and previously shown in Table 5.2-5 of this section, the Basin is classified as in attainment for all criterion pollutants except for ozone, PM_{10}, and $PM_{2.5}$. The Basin is designated as a nonattainment area for federal AAQS for the 8-hour ozone and $PM_{2.5}$ standards and is in nonattainment area under state PM_{10} standards. Ozone is not emitted directly but is a result of atmospheric activity on precursors. NO_X and ROG are known as the chief “precursors” of ozone. These compounds react in the presence of sunlight to produce ozone.

As previously shown in Table 5.2-7 (Maximum Daily Construction Emissions Comparison to SCAQMD Significance Thresholds) and in Table 5.2-8 (Summary of Project Operational Emissions), emissions of ozone precursors (ROG and NOX), PM_{10}, and $PM_{2.5}$ from construction and operation of the Project would be below the SCAQMD's thresholds of significance. These thresholds were developed based on the CAA *de minimis* level, which are designed to provide limits below which project emissions from an individual project would not significantly affect regional air quality or the timely attainment of the NAAQS and CAAQS. Additionally, as shown in Tables 5.2-7 and 5.2-8, maximum localized construction and operational emissions would not exceed any of the SCAQMD recommended localized screening thresholds. SCAQMD considers the thresholds for project-specific impacts and cumulative impacts to be the same. Therefore, the Project construction and operational emissions would not result in a project-specific or cumulatively considerable net increase in emissions of ozone, PM_{10}, or $PM_{2.5}$, and impacts would be **less than significant with Mitigation Measure MM AIR-1.**

Table 5.2-8 – Summary of Project Operational Emissions

Source	Emissions (pounds per day)					
	ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
WINTER						
Area Sources	14	<1	<1	<1	<1	<1
Energy Sources	<1	<1	<1	<1	<1	<1
Mobile Sources – Passenger Cars	1	1	17	<1	10	3
Mobile Sources – Trucks	2	37	17	<1	10	3
Total	**17**	**38**	**34**	**<1**	**19**	**6**
Significance Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceed Threshold?	*No*	*No*	*No*	*No*	*No*	*No*
SUMMER						
Area Sources	14	<1	<1	<1	<1	<1
Energy Sources	<1	<1	<1	<1	<1	<1
Mobile Sources – Passenger Cars	1	1	19	<1	10	3
Mobile Sources – Trucks	2	36	16	<1	10	3
Total	**17**	**37**	**36**	**<1**	**19**	**6**
Significance Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceed Threshold?	*No*	*No*	*No*	*No*	*No*	*No*
Note: Emissions were rounded to the nearest whole number. Emissions reported as <1 indicate that emissions were calculated to be less than 0.5 pound per day.						

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

Localized Significance Thresholds (LSTs)

LSTs were developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities. To address the issue of localized significance, the SCAQMD adopted LSTs that show whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects.

A sensitive receptor is a person in the population who is more susceptible to health effects due to exposure to an air contaminant than is the population at large. Examples of sensitive receptor locations in the community include residences, schools, playgrounds, childcare centers, churches, athletic facilities, retirement homes, and long-term health care facilities. The sensitive receptors nearest to the Project site include single and multi-family residences approximately 300 feet south and southeast of the Project site across Alessandro Boulevard. The Project was analyzed for its potential to result in significant health risk impacts resulting from short-term construction and long-term operational emissions. Sections 6.3.1 (Construction Localized Significance Thresholds Calculations) and 6.3.2 (Operational Localized Significance Thresholds) of the Project's Air Quality Analysis provide discussions of how LSTs were calculated.

Results of the LST analysis indicate that the project would not exceed the SCAQMD LSTs during construction (see Table 5.2-9, Localized Construction Emissions). Results of the LST analysis also indicate that the project would not exceed the SCAQMD LSTs during operational activity (see Table 5.2-10, Localized Operational Emissions). The LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable NAAQS or CAAQS at the nearest residence or sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses. Because construction and operational activity would not result in an exceedance of the SCAQMD's LSTs, sensitive receptors would not be exposed to substantial criteria pollutant concentrations during Project construction or operation and impacts would be **less than significant**.

Table 5.2-9 – Localized Construction Emissions

	CO	NO_x	PM_{10}	$PM_{2.5}$
Maximum Daily On-Site Emission	33	39	9	5
LST Threshold	6,860	488	75	31
Threshold Exceeded?	No	No	No	No

Table 5.2-10 – Localized Operational Emissions

	CO (ppm)		NO_x (ppm)		PM_{10} (µg/m^3)		$PM_{2.5}$ (µg/m^3)
	Averaging Time						
	1-Hr	8-Hr	1-Hr	Annual	24-Hrs	Annual	24-Hrs
Peak Localized Emission Concentration	0.066	0.044	0.033	0.006	0.044	0.022	0.043
Background Concentration[1]	2.50	1.90	0.073	0.015	--	--	--
Total Concentration	**2.566**	**1.944**	**0.106**	**0.021**	**0.044**	**0.022**	**0.043**
LST Threshold	*20*	*9*	*0.18*	*0.03*	*2.5*	*1*	*2.5*
Threshold Exceeded?	No	No	No	No	No	No	No
[1]Highest concentration from the last three years of available data (see Table 5.2-1)							

Diesel Particulate Matter (DPM)

Long-Term Operational DPM

The Project-specific HRA includes an evaluation of diesel particulate matter (DPM) emissions associated with diesel truck traffic traveling along Alessandro Boulevard, a designated truck route, and three new driveways, proposed to be constructed, one on Alessandro Boulevard and two on Barton Street, in the vicinity of the proposed Project, and potential cancer risks to existing nearby sensitive receptors, including residents and/or adjacent workers. SCAQMD identifies that if a proposed Project is expected to generate/attract heavy-duty diesel trucks, which emit DPM, preparation of a mobile source HRA is recommended. This document serves to meet the SCAQMD's request for preparation of an HRA. The purpose of the Project specific HRA is to document the increased cancer and noncancer health risk levels from project-related emissions of toxic air contaminants (TACs) on existing nearby sensitive receptors, including residents and/or adjacent workers.

Cancer Risk

The SCAQMD CEQA Air Quality Handbook (1993) states that emissions of TACs are considered significant if an HRA shows an increased risk of greater than 10 in one million. The SCAQMD has established an incidence rate of ten (10) persons per million as the maximum acceptable incremental cancer risk due to DPM exposure. This threshold serves to determine whether or not a given project has a potentially significant development-specific and cumulative impact.

Excess cancer risks are estimated as the upper-bound incremental probability that an individual will develop cancer over a lifetime as a direct result of exposure to potential carcinogens over a specified exposure duration. The estimated risk is expressed as a unitless probability. The cancer risk attributed to a chemical is calculated by multiplying the chemical intake or dose at the human exchange boundaries (e.g., lungs) by the chemical-specific cancer potency factor (CPF). A risk level of 10 in one million implies a likelihood that up to 10 people, out of one million equally exposed people, would contract cancer if exposed continuously (24 hours per day) to the levels of toxic air contaminants over a specified duration of time. As an example, the risk of dying from accidental drowning is 1,000 in a million, which is 100 times more than the SCAQMD's threshold of 10 in one million. The nearest comparison to 10 in one million is the 7 in one million lifetime chance that an individual would be struck by lightning.

Non-Carcinogenic Risk

The SCAQMD has also established non-carcinogenic risk parameters for use in HRAs. Non-carcinogenic risks are quantified by calculating a "hazard index," expressed as the ratio between the ambient pollutant concentration and its toxicity or Reference Exposure Level (REL). An REL is a concentration at or below which health effects are not likely to occur. A hazard index less of than one (1.0) means that adverse health effects are not expected. Within this analysis, non-carcinogenic exposures of less than 1.0 are considered less-than-significant.

Residential Exposure

The residential land use with the greatest potential exposure to Project DPM source emissions is located at existing residential homes approximately 225 feet south of the Project site, across Alessandro Boulevard. At the maximally exposed individual receptor (MEIR), the maximum incremental cancer risk attributable to Project DPM source emissions is estimated at 0.49 in one million, which is less than the threshold of 10 in one million. At this same location, non-cancer risks were estimated to be 0.0002, which would not exceed the applicable threshold of 1.0. As such, the Project will not cause a significant human health or cancer risk to adjacent residences. All other residential uses located farther away from the Project would be exposed to less emissions and therefore less risk than the MEIR identified herein. As DPM generally dissipates with distance from the source, all other residential receptors in the vicinity of the Project site would be exposed to less emissions and therefore less risk than the MEIR identified herein. As such, the Project will not cause a significant human health or cancer risk to nearby residences.

Worker Exposure Scenario

The worker receptor land use with the greatest potential exposure to Project DPM source emissions is located immediately adjacent to the Project site at the adjacent industrial use/ wastewater treatment plant approximately 145 feet to the west. At the maximally exposed individual worker (MEIW), the maximum incremental cancer risk impact at this location is 0.08 in one million which is less than the threshold of 10 in one million. Maximum non-cancer risks at this same location were estimated to be 0.0003, which would not exceed the applicable threshold of 1.0. As such, the Project will not cause a significant human health or cancer risk to adjacent workers. All other modeled worker sites located farther away from the Project would be exposed to less emissions and therefore less risk than the MEIW identified herein. As such, the Project will not cause a significant human health or cancer risk to adjacent workers.

School Children Exposure

The school site land use with the greatest potential exposure to Project DPM source emissions is at the Taft Elementary School located approximately 1.1-mile (6,027 feet) northwest of the Project site. At the maximally exposed individual school child (MEISC), the maximum incremental cancer risk impact attributable to the Project at this location is calculated to be an estimated 0.003 in one million which is less than the significance threshold of 10 in one million. At this same location, non-cancer risks attributable to the Project were calculated to be 0.000006, which would not exceed the applicable significance threshold of 1.0. Any other schools located at a farther distance from the Project site would be exposed to less emissions and consequently less impacts than what is disclosed for the MEISC. As such, the Project will not cause a significant human health or cancer risk to nearby school children.

Short-Term Construction DPM

Mobile HRAs are typically conducted to evaluate long-term exposure (e.g. 9 or 30 years) diesel particulate matter (DPM) emissions associated with a project's long-term diesel truck travel (i.e. those traveling to and from warehouses) on nearby sensitive receptors (residences, schools, etc.).

Heavy-duty off-road construction equipment (graders, excavators, dozers, scrapers, loaders, etc.) typically have diesel engines and emit DPM emissions. However, construction activity is typically short-term (1-2 years or less), as is anticipated for the proposed Sycamore Hills Distribution Center project, and does not constitute long-term exposure, typically used to generate risk estimates. As outlined above, construction emissions would not exceed SCAQMD thresholds established to protect public health and air quality. Therefore, the health risk associated with construction emissions would be less than significant for the surrounding sensitive uses and no mitigation is required.

Because construction and operational activity would not result in an exceedance of the SCAQMD's DPM cancer risk exposure threshold of 10 in one million, or non-cancer risk threshold of 1.0, sensitive receptors would not be exposed to substantial DPM pollutant concentrations during Project construction or operation, and impacts would be **less than significant with Mitigation Measure MM AIR-1**.

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

During construction, diesel equipment may generate some nuisance odors. Sensitive receptors near the Project site include residential uses approximately 300 feet south of the Project site; however, exposure to odors associated with Project construction would be short term and temporary in nature. It should also be noted that all construction equipment is subject to the CARB In-Use Off-Road Diesel-Fueled Fleets Regulation. This regulation, which applies to all off-road diesel vehicles 25 horsepower or greater, limits unnecessary idling to 5 minutes, requires all construction fleets to be labeled and reported to CARB, bans Tier 0 equipment and phases out Tier 1 and 2 equipment (thereby replacing fleets with cleaner equipment), and requires that fleets comply with Best Available Control Technology requirements. Implementation of this measure reduces construction exhaust emissions, thereby also reducing construction equipment odors. Additionally, SCAQMD Rule 402 addresses nuisance emissions, including odors. Rule 402 states, "A person shall not discharge from any source whatsoever such quantities or air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have natural tendency to cause, injury or damage to business or property."

Due to the distance to the residential receptors, implementation of CARB regulations, the short-term nature of construction, and enforcement of Rule 402, construction odor impacts would be less than significant.

The following list provides some common types of facilities that are known producers of objectionable odors. This list of facilities is not meant to be all-inclusive.

- Wastewater Treatment Plant
- Wastewater Pumping Facilities
- Sanitary Landfill

- Transfer Station
- Composting Facility
- Petroleum Refinery
- Asphalt Batch Plant
- Chemical Manufacturing
- Fiberglass Manufacturing
- Painting/Coating Operations
- Rendering Plant
- Coffee Roaster
- Food Processing Facility
- Confined Animal Facility/Feed Lot/Dairy
- Green Waste and Recycling Operations
- Metal Smelting Plants

The Project does not include any of these uses that are typically associated with odor complaints. The Project does not propose any uses or activities that would result in potentially significant operational-source odor impacts. The Project proposes the operation of a high-cube warehouse, which is not included on CARB's list of facilities that are known to be prone to generate odors. During operation of the Project, odors that could be emitted from trucks would be required to comply with CARB's idling limit of 5 minutes, and these trucks would not produce a significant number of odors. Consistent with City requirements, all Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with solid waste regulations, thereby precluding substantial generation of odors due to temporary holding of refuse on-site. The Project is not expected to generate significant objectionable odors affecting a substantial number of people. Impacts would be **less than significant without mitigation.**

5.2.6 Proposed Mitigation Measures

As the Project does not exceed any of the Air Quality significance thresholds and potential impacts are expected to be less than significant. Therefore, no mitigation measures specific to air quality are required to reduce potential impacts from the proposed Project as described in Section 3.0 Project Description. However, **Mitigation Measure MM AIR-1** is required to ensure that the actual use of the site is consistent with the use described in the Project Description and analyzed in the project specific air quality analyses.

MM AIR-1: The project applicant is required to record a covenant on the property (Parcels 1 and 2) that prohibit manufacturing use. Proof of the record of covenant shall be submitted to the City of Riverside Planning Department prior to issuance of Building Permits.

5.2.7 Cumulative Environmental Effects

Due to the defining geographic and meteorological characteristics of the Basin, the cumulative area for air quality impacts is the Basin itself. As discussed in Section 5.2.6, the portion of the Basin within which the City is located is designated as a nonattainment area for ozone, $PM_{2.5}$, and PM_{10} under state standards; and for ozone and $PM_{2.5}$ under both federal standards. Project emissions within the context of SCAQMD's regional emissions thresholds provide an indicator of potential cumulative impacts within the Basin. Cumulative localized impacts for pollutants are also considered and reflect Project air pollutant emissions in the context of ambient conditions in the Project vicinity.

As previously discussed, SCAQMD considers the thresholds for project-specific impacts and cumulative impacts to be the same. Therefore, projects that exceed project-specific significance thresholds are considered by SCAQMD to be cumulatively considerable. Based on SCAQMD's regulatory jurisdiction over regional air quality, it is reasonable to rely on its thresholds to determine whether there is a cumulative air quality impact. None of the SCAQMD mass daily significance thresholds are exceeded during Project construction and operation of proposed high cube transload short-term use warehouses. Therefore, the Project would not have a cumulatively considerable increase in emissions. Moreover, in terms of localized air quality impacts, construction and operation of the Project would not have a cumulatively considerable impact due to criteria pollutant emissions, nor would the Project result in significant and unavoidable cumulative impacts to air quality **with implementation of Mitigation Measure MM AIR-1**.

5.2.8 References

The following references were used in the preparation of this section of the DEIR:

2016 AQMP	South Coast Air Quality Management District 2016 Air Quality Management Plan. (Available at https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp).
Air Quality Analysis 2020	RECON, Air Quality Analysis for the Sycamore Hills Distribution Project, Riverside, California. September 2020. (Appendix C)
CALGreen Code 2016	California Green Building Standards Code, 2016. (Available at https://www.ladbs.org/docs/default-source/publications/code-amendments/2016-calgreen_complete.pdf?sfvrsn=6).
CARB 2005	California Air Resources Board, *Air Quality and Land Use Handbook: A Community Health Perspective*, April 2005. (Available at https://ww3.arb.ca.gov/ch/handbook.pdf).
CARB 2013	California Air Resources Board, *The California Almanac of Emissions and Air Quality – 2013 Edition*, 2013. (Available at https://ww3.arb.ca.gov/aqd/almanac/almanac13/almanac13.htm.)

CARB 2016	California Air Resources Board, *Ambient Air Quality Standards*, 2016. (Available at https://ww2.arb.ca.gov/sites/default/files/2020-03/aaqs2_0.pdf).
Construction HRA Memo 2020	Urban Crossroads, Construction Health Risk Assessment Memorandum, September 2020. (Appendix C)
HRA 2020	Urban Crossroads, Sycamore Hills Distribution, Mobile Source Health Risk Assessment, City of Riverside, California. September 2020. (Appendix C)
SCAQMD, 1993	South Coast Air Quality Management District California Environmental Quality Act Air Handbook. November 1993.
SCAQMD 2000	South Coast Air Quality Management District, *Multiple Air Toxics Exposure Study (MATES-II)*, March 2000. (Available at www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-ii.)
SCAQMD 2005	South Coast Air Quality Management District, *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*, May 2005. (Available at https://www.aqmd.gov/home/research/guidelines/planning-guidance/guidance-document.)
SCAQMD 2008a	South Coast Air Quality Management District, *Multiple Air Toxics Exposure Study (MATES-III)*, September 2008. (Available at www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-iii/mates-iii-final-report.)
SCAQMD 2014	South Coast Air Quality Management District, *Multiple Air Toxics Exposure Study (MATES-IV)*, May 2015. Available at https://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-iv.)
SCAQMD 2020	South Coast AQMD Rule Book. (Available at http://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book).
SCAQMD 2021	South Coast AQMD MATES V Air Toxics Exposure Study. (Available at https://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v).
Section 44300	Health and Safety Code Section 44300, “Air Toxics ‘Hot Spots’ Information Assessment Act of 1987. (Available at https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=HSC&division=26.&title=&part=6.&chapter=1.&article=).
EPA, 2016	U.S. Environmental Protection Agency, *Criteria Air Pollutants*. (Available at https://www.epa.gov/criteria-air-pollutants).

5.3 Biological Resources

Based on Appendix G of the *State CEQA Guidelines,* the analysis in the Initial Study (IS/NOP) prepared for this Project (Appendix A), and comments received during the NOP public review period (Appendix A), this section evaluates the Project's potential impacts to biological resources. Specifically, this EIR section will evaluate potential impacts related to sensitive species and habitats, wetlands, wildlife movement, and local policies or ordinances related to biological resources and habitat conservation plans.

The discussion in this section is based on the following reports:

- *Determination of Biologically Equivalent or Superior Preservation (DBESP) Report for Impacts to Riparian/Riverine Resources*, January 2021, (RVA).
- *Biological Resources and Western Riverside County Multiple Species Habitat Conservation Plan Consistency Report*, September 2020 (Wood(a));
- *Jurisdictional Delineation Report, Sycamore Hills Distribution Center, City of Riverside, Riverside County, California*, December 2020 (Wood(b));
- *Least Bell's Vireo, Southwestern Willow Flycatcher & Yellow-Billed Cuckoo Survey Results for the Sycamore Hills Distribution Center*, August 2020, (Kidd Biological); and
- *Sycamore Hills Distribution Center Burrowing Owl Focused Survey Report*, September 2020 (ELMT Consulting).

These reports are contained in their entirety in Appendix D of this DEIR.

5.3.1 Setting

The approximately 48.64-acre Project site is currently undeveloped with no existing structures. Surrounding land uses include preserved open space to the north as part of Sycamore Canyon Wilderness Park, Metropolitan Water District's water treatment plant to the west across Barton Street; single-family residential and commercial to the south, across Alessandro Boulevard; a storage facility to the southwest; and undeveloped land to the east. (Wood(a), p.1)

The Project site contains an existing 11.6 acre Restricted Property area, as shown in Figure 3.0-3 – Project Site Map, intended for preservation in a natural condition.

The Project site was formerly owned by the Grove Community Church where a new church was planned to be constructed in the future. However, as the site is located within the C-1 Primary Approach/Departure Zone of the March Air Reserve Base/ Inland Port Airport Land Use Compatibility Plan, and due to restrictions regarding the height of the building and the maximum number of people allowed to congregate at any time, it was not conducive to the church's plans. March Joint Powers Authority (MJPA) assisted the church in finding a new location for the church, approximately one mile to the southwest at 19900 Grove Community Drive, Riverside.

Construction of the Grove Community Church at the off-site 19900 Grove Community Drive location had impacts to a jurisdictional drainage and associated riparian habitat at that location.

To mitigate for impacts from construction of the church at the off-site location, the U.S. Army Corps of Engineers required that the on-site jurisdictional drainage and riparian habitat along Alessandro Boulevard be set aside and preserved in a legally designated "Restricted Property," as a condition of the Clean Water Act Section 404 permit that was issued for the construction of the church. The "Restricted Property" was recorded in 2009.

MJPA purchased the Project site property from the church with the intent to sell and to convey title of the "Restricted Property" area to the City of Riverside. However, a parcel map was not created, and the title transfer did not take place. MJPA is still the owner of the entire Project site property. The Project applicant intends to purchase the property from MJPA upon project entitlement approvals.

The Project site is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) area. The MSHCP is intended to conserve species and their associated habitats throughout Western Riverside County. The MSHCP encompasses approximately 1.26 million acres. The City is a Permittee to the MSHCP; thus, the Project is required to comply with applicable provisions of the MSHCP (GP 2025, p. 5.4-31). The Project site is located within the *Cities of Riverside and Norco Area Plan* of the MSHCP. The Project site is not in a criteria area for the MSHCP (not within a Criteria Cell, Cell Group, habitat core or linkage). However, it is immediately adjacent to the Sycamore Canyon Wilderness Park to the north, which is designated as Public Quasi Public (PQP) lands and Existing Core D of the MSHCP conservation area. The Project site is also within the *Stephens' Kangaroo Rat Habitat Conservation Plan* (SKRHCP).

Vegetation

As shown on Figure 5.3-1 - Vegetation Communities Map, the Project site includes the following vegetation categories or types: non-native grassland, riparian woodland, Riversidean sage scrub, and disturbed. The biological study area (BSA) is covered with Non-Native Grassland crossed by several drainages, some of which contain Riparian Woodland. Patches of sparse Riversidean Sage Scrub are present in the uplands. Several unpaved trails, which fall in the disturbed category, cross the uplands and drainages within the BSA.

Non-native Grassland

Non-native grassland (40.71 acres in the BSA) supports a dense to sparse cover of annual grasses. Dominant species include non-native species such as wild oats (*Avena* spp.), red brome (*Bromus madritensis* ssp. *rubens*), and non-native forbs such as short-pod mustard (*Hirschfeldia incana*) and filaree (*Erodium* spp.). A variety of native forbs are associated with this habitat, but their presence is episodic and rainfall dependent. Plants will generally be dead through the summer to fall dry season, with germination beginning with the fall to winter rains and growth and seed-set through the spring. (Wood(a) p.16).

Riparian Woodland

The riparian woodland (5.12 acres in the BSA) is dominated by trees and shrubs such as willows (Salix sp.) and cottonwood (Populus fremontii) for the over-story species, and mulefat (Baccharis salicifolia) for understory. The understory is relatively sparse, lacking a well-developed mid-story

canopy with herbaceous plant species more common than shrubs. The vegetation in this community has suffered from drought and homeless occupation, with some trees and shrubs dead or dying. None of the plant species mentioned here are special-status, but riparian communities provide potential habitat for special-status species. (Wood(a) p.16).

Riversidean Sage Scrub

Riversidean Sage Scrub (1.68 acres in the BSA) is dominated by low-statured, aromatic, drought-deciduous shrubs, and subshrub species. Characteristic species present in the BSA include brittlebush (Encelia farinosa), California buckwheat (Eriogonum fasciculatum), and California sagebrush (Artemisia californica). None of the plant species mentioned here are special-status, but Riversidean Sage Scrub provides potential habitat for special-status species. (Wood(a) p.16).

Disturbed

Several open, cleared dirt trails crisscross the study area, comprising 0.76 acre in the BSA. The trails are not vegetated and are used by both humans and animals (Wood(a) p.14).

	No Impact	Permanent	Temporary	Grand Total
Disturbed	0.15	0.60	0.01	0.76
Non-native Grassland	8.14	32.43	0.14	40.71
Riparian	4.56	0.54	0.02	5.12
Riversidean Sage Scrub	0.27	1.41		1.68
Grand Total	**13.12**	**34.99**	**0.16**	**48.27**

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Project Boundary

Vegetation Community

- Disturbed (0.76 acres)
- Non-native Grassland (40.71 acres)
- Riparian (5.12 acres)
- Riversidean Sage Scrub (1.68 acres)

Impacts

- No Impact (13.12 acres)
- Permanent (34.99 acres)
- Temporary (0.16 acres)

1 inch = 200 feet

0 200 Feet

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RVA wood.

Vegetation Communities Map

Figure 5.3-1

Sensitive Plant Species

One special status plant species, paniculate tarplant (*Deinandra paniculata*), has been noted incidentally during site visits. Individuals of tarplant (*Deinandra paniculata*) have been seen scattered throughout the non-native grassland areas of the BSA, especially in years with ample rainfall. Paniculate tarplant, which is not covered by the MSHCP, is an annual which has a CNPS California Rare Plant Rank (CRPR) of 4.2. Paniculate tarplant is not state or federally listed as threatened or endangered, and List 4 plants have the lowest sensitivity ranking in the CNPS system as “Plants of Limited Distribution - A Watch List”. Paniculate tarplant primarily blooms from April through November but has been recorded blooming in March and December at some locations (Wood(a) p.16).

Three additional special status plant species and one vegetation community have been recorded in the California Native Diversity Database (CNDDB) records within two miles of the Project site and include (Wood(a) p.17):

- Centromadia pungens ssp. laevis, smooth tarplant (MSHCP, CNPS 1B.1). This species has a designated survey area in the MSHCP, but the Project is not within that survey area.
- Chorizanthe parryi var. parryi, Parry's spineflower (MSHCP, CNPS 1B.1). Habitat is present in the BSA.
- Lepidium virginicum var. robinsonii, Robinson's pepper-grass (CNPS 4.3, not covered by MSHCP). Habitat is present in the BSA.
- Southern Sycamore Alder Riparian Woodland. This is a California Department of Fish and Wildlife (CDFW) recognized special-status vegetation community that does not occur in the BSA.

Wildlife

Common wildlife species detected during biological resource assessments include common side-blotched lizard (Uta stansburiana), Nuttall's woodpecker (Picoides nuttallii), bushtit (Psaltriparus minimus), Anna's hummingbird (Calypte anna), house finch (Carpodacus mexicanus), California ground squirrel (Otospermophilus beecheyi), coyote (Canis latrans), and desert cottontail (Sylvilagus audubonii).

The following special status wildlife species were encountered during surveys in the BSA:

2019

- *Circus hudsonius*, northern harrier (MSHCP, SSC)
- *Accipiter cooperii*, Cooper's hawk (MSHCP; WL)
- *Lepus californicus bennettii,* San Diego black-tailed jackrabbit (MSHCP; SSC)
- *Dipodomys stephensi*, Stephens' kangaroo rat (observed burrows & sign; MSHCP; FE; ST)
- *Neotoma* sp., wood rat middens* (MSHCP; SSC)

2014-2018

- *Crotalus ruber*, red-diamond rattlesnake (MSHCP; SSC; S)
- *Selasphorus rufus/sasin*, rufous/Allen's hummingbird (rufous is a BCC). During the migratory period when rufous and Allen's occur together, most individuals cannot be identified to species level.
- *Phalacrocorax auritus*, double-crested cormorant (MSHCP; WL)
- *Empidonax traillii*, willow flycatcher (MSHCP; SE; BCC)
- *Vireo bellii pusillus*, least Bell's vireo (MSHCP; FE, SE)
- *Eremophila alpestris actia*, California horned lark (MSHCP; WL)
- *Spinus lawrencei,* Lawrence's goldfinch (BCC)
- *Setophaga petechia brewsteri,* yellow warbler (MSHCP; BCC; SSC)
- *Aimophila ruficeps canescens*, southern California rufous-crowned sparrow (MSHCP; WL)

FE - Federally Endangered; BCC – United States Fish and Wildlife Service Birds of Conservation Concern; SE – California State Endangered, ST – California State Threatened, WL - CDFW Watch List, SSC - CDFW Species of Special Concern; S- USFS Sensitive.

*The MSHCP / SSC San Diego desert woodrat *Neotoma lepida* ssp. *intermedia* is the expected species within the study area.

All of the avian, reptile, and mammals species above could be found foraging and/or breeding in the non-native grassland community and the associated riparian habitat with the exception of a double-crested cormorant (flyover only). Rufous hummingbird may forage, but only in migration; they do not breed in Southern California. The willow flycatchers detected in the BSA were migrants present for foraging only, likely of more northerly subspecies which do not nest in southern California (E.t. adastus or E.t. brewsteri), and not southwestern willow flycatchers (subspecies E.t. extimus). USFWS protocol does not recognize willow flycatchers as the

"southwestern" species unless they are found to be nesting or if they stay on-site past the migratory period.

CNDDB records of additional special status species recorded in the past within two miles of the project site are shown on Figure 5.3-2 - CNDDB Occurrences Map. These records include many of the species already recorded in the BSA, but also:

- *Aspidoscelis hyperythra,* orange-throated whiptail (MSHCP, WL). Habitat present in the BSA.
- *Agelaius tricolor*, tricolored blackbird (MSHCP, ST, SSC, BCC). No habitat present in the BSA.
- *Chaetodipus fallax fallax*, northwestern San Diego pocket mouse (MSHCP, SSC). Habitat present in the BSA.
- *Spea hammondii*, western spadefoot (MSHCP, SSC). Like fairy shrimp, this species requires temporary pools to breed. No breeding habitat is present.
- *Onychomys torridus ramona*, southern grasshopper mouse (not covered by MSHCP, SSC). Habitat present in the BSA.
- *Lanius ludovicianus*, loggerhead shrike (MSHCP, SSC, BCC). Habitat present in the BSA.
- *Athene cunicularia*, burrowing owl (MSHCP, SSC, BCC). This species has a designated survey area in the MSHCP, and the project is within it. Focused surveys in 2018 and 2020 did not detect the species.
- *Dipodomys merriami parvus*, San Bernardino kangaroo rat (MSHCP, FE, state candidate for listing as endangered, SSC). This species has a designated survey area in the MSHCP, and the project is not within that survey area.
- *Phrynosoma blainvillii*, coast horned lizard (MSHCP, SSC). Habitat present in the BSA.
- *Nyctinomops femorosaccus*, pocketed free-tailed bat (SSC, not covered by MSHCP). No roosting habitat in the BSA could forage.
- *Perognathus longimembris brevinasus*, Los Angeles pocket mouse (MSHCP, SSC). This species has a designated survey area in the MSHCP, and the project is not within that survey area.

Threatened or Endangered Wildlife

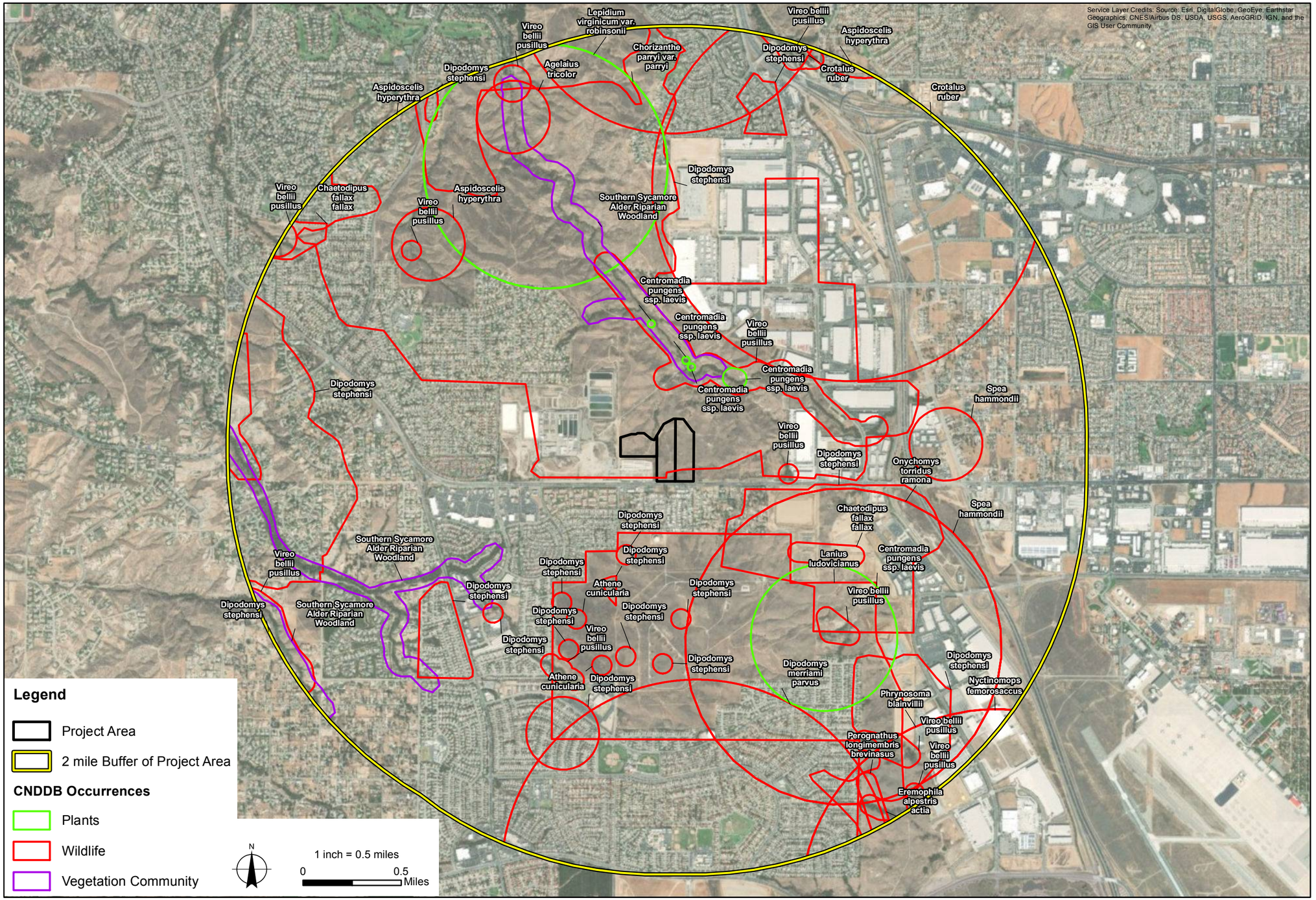
Least Bell's vireo and Stephens' kangaroo rat (SKR) are the only federally and state listed threatened and/or endangered species that have been observed in the study area. Stephens' kangaroo rat burrows, scat, sign, and tracks are present throughout the entire grassland areas. (Wood(a) p.28)

Least Bell's vireos (LBVI) were detected in the BSA during 2014 focused surveys. (Wood(a) p.28) A focused survey was also conducted in 2020. Two (2) singing LBVI males were present on May 5, 2020 during the second survey; however, for all subsequent surveys only one male remained throughout the 2020 season. This individual was observed only at the northernmost part of the

survey area and was often seen with a mate. Later in the season, the pair was also seen with a fledgling. (Kidd, p. 10) The 2020 LBVI observation locations are shown on Figure 5.3-3 - Least Bell's Vireo Location Map.

Burrowing Owl

Burrowing owl (*Athene cunicularia*; BUOW) is protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code and is a CDFW SSC. Based on the results of the 2018 and 2020 BUOW focused surveys, no BUOW or evidence of recent or historic use by BUOW were observed on the Project site. As a result, BUOW are presumed absent on the Project site (ELMT p. 15). Although no individual BUOW or BUOW sign was observed during the surveys, potentially suitable BUOW burrows were recorded via CNDDB observations within a five (5) mile radius of the BSA as shown on Figure 5.3-5 – CNDDB BUOW Observations.



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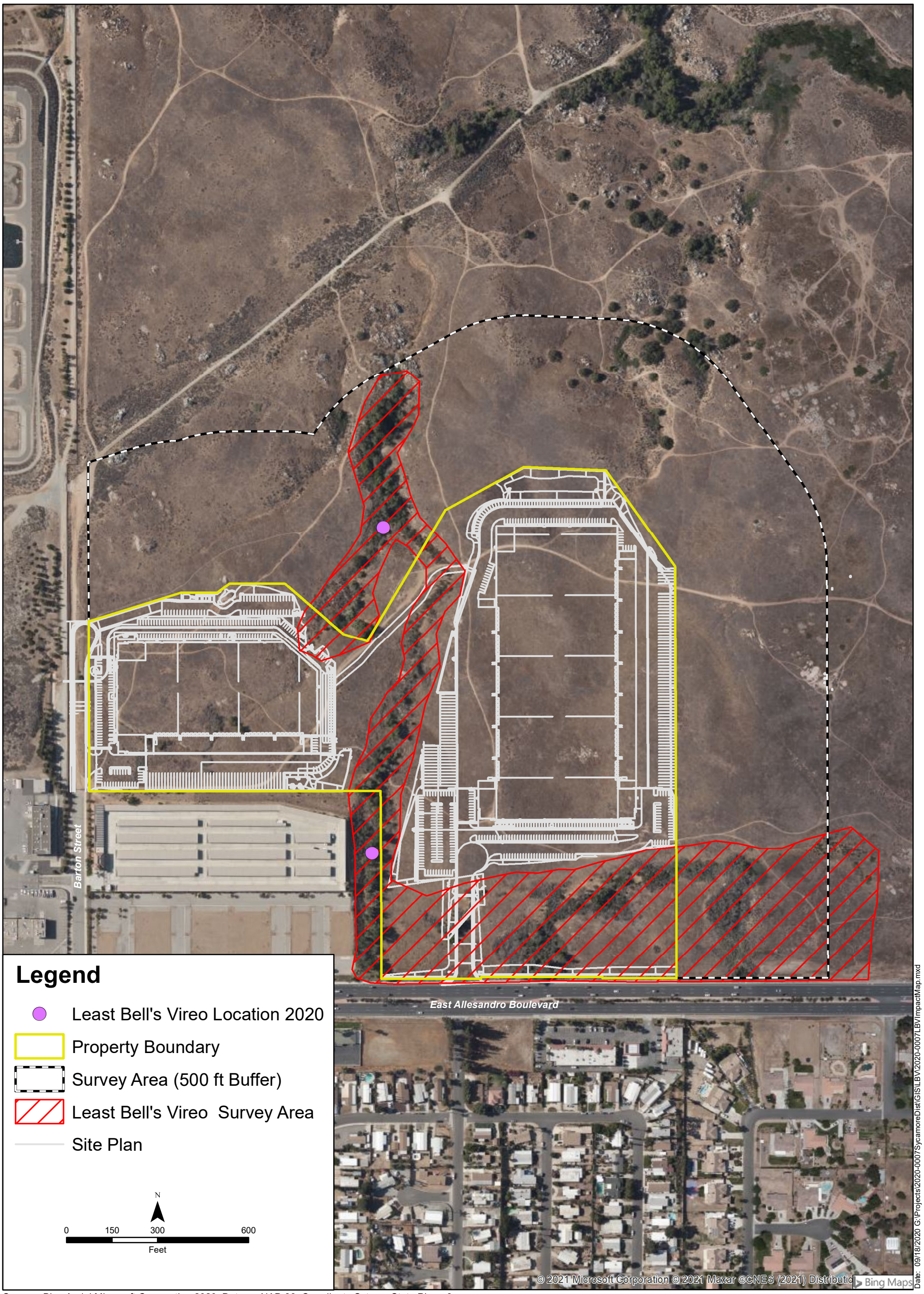
CNDDB Occurrences Map

Figure 5.3-2



Source: Bing Aerial Microsoft Corporation 2020, Datum: NAD 83, Coordinate Sytem: State Plane 6

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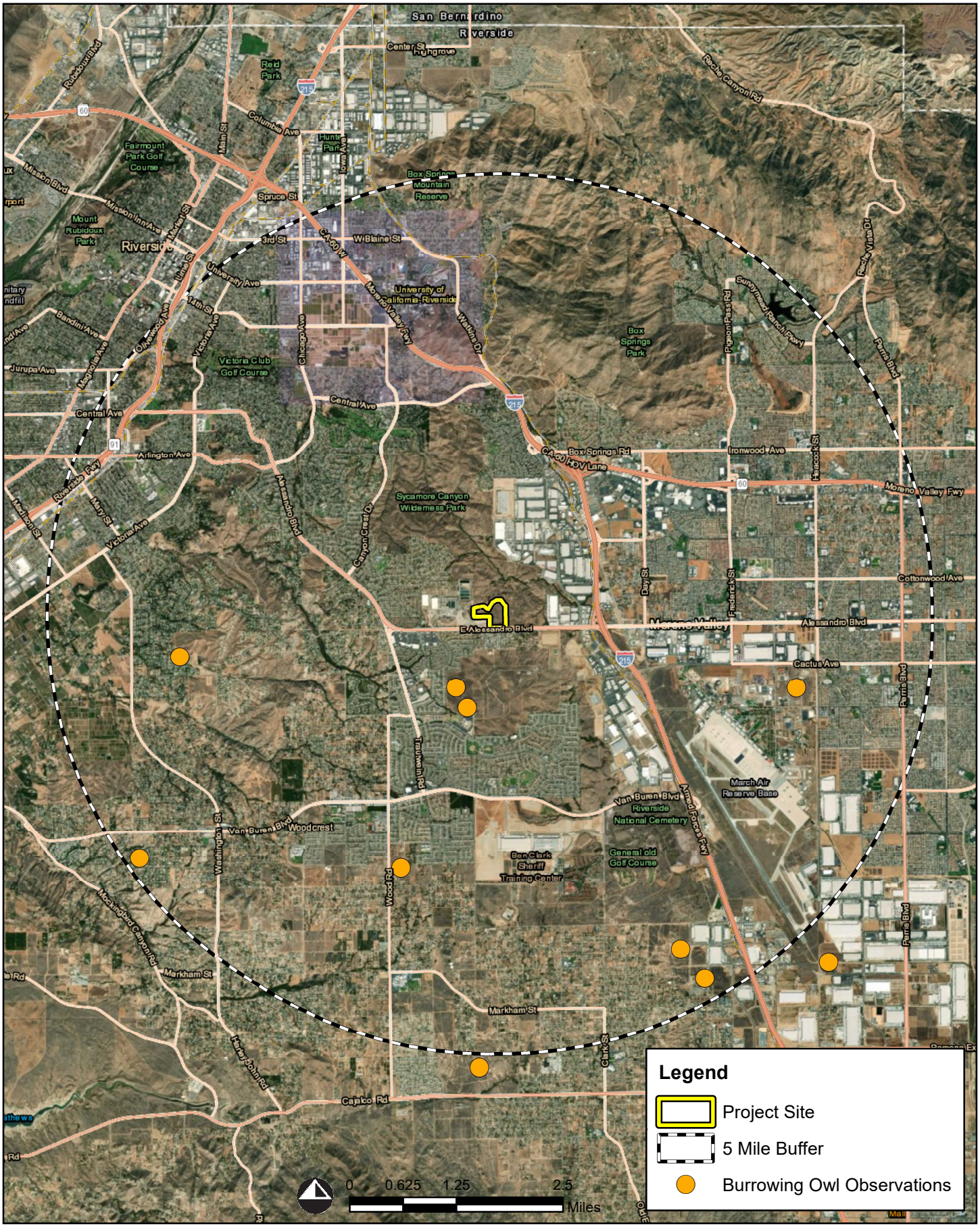
Least Bell's Vireo Location Map

Figure 5.3-3



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CNDDB BUOW Observations

Figure 5.3-4

RVA

ELMT CONSULTING

Jurisdictional Resources

A delineation of jurisdictional waters, wetlands, and associated riparian habitat on the Project site was prepared (Appendix C). The purpose of the delineation is to determine the extent of State and Federal jurisdiction within the Project site potentially subject to regulation by the: USACE under Section 404 of the Clean Water Act (CWA), RWQCB under Section 401 of the CWA and Porter-Cologne Water Quality Act, and CDFW under Section 1602 of the state Fish and Game Code and to determine potential impacts from development of the Project. The Project site contains two jurisdictional drainages identified as Drainage A and Drainage B and a riparian area identified as Area C (Wood(b), p.22) as shown in Figure 5.3-5 – Drainages Map. Table 5.3-1 includes the drainages identified on the Project site, their jurisdictional status and area of jurisdiction, length of waterway within the Project site, and classification of aquatic resource.

Table 5.3-1: Summary of Jurisdictional Areas

Drainage ID	Non-Wetland WUS, WSC (acres)	CDFW Jurisdiction (acres)	Length (feet)	Latitude/ Longitude	Cowardin Class	Class of Aquatic Resource
A	0.08	0.35	1,183	33.91902/ -117.31228	R4SBW	Non-Section 10-Non wetland
B	0.11	1.36	918	33.91961/ -117.31018	R4SBW	Non-Section 10-Non wetland
Area C	0	3.45	n/a	33.91740/ -117.30845	n/a	Non-Section 10-Non wetland
Total	**0.19**	**5.16**	**2,101**	**n/a**	**n/a**	**n/a**

WUS-Waters of the United States, WSC-Waters of the State
CDFW-California Department of Fish and Wildlife
R4SBW-Riverine, Intermittent, Streambed, Intermittently Flooded/Temporary based on Classification of Wetlands and Deepwater Habitats of the United States

Drainage A

Drainage A enters the BSA near the northern portion of the western boundary and flows for approximately 1,183 feet before exiting the site near the middle of the northern boundary as shown on Figure 5.3-5- Drainages Map. USACE jurisdiction averaged 3 feet wide based on ordinary high water mark (OHWM) limits which included a break in bank slope and change in substrate. CDFW jurisdiction ranged from 3 feet wide based on the bankfull width in the upland vegetated portions of the drainage to 65 feet wide based on the extent of riparian vegetation. The banks of Drainage A ranged from vertically-incised to steeply-sloping with depths averaging 6 inches to 1 foot. Drainage A contained sparsely vegetated sections and areas of dense riparian vegetation. The sparsely-vegetated portions of the streambed of Drainage A were dominated by short-pod mustard (*Hirschfeldia incana*), western marsh cudweed (*Gnaphalium palustre*), and pygmy-weed (*Crassula connata*). The patches of riparian vegetation located at the center of the site, the southern corner, and small patches near Barton Street were dominated by mulefat (*Baccharis salicifolia*), willow (*Baccharis salicina*), Goodding's black willow (*Salix gooddingii*), arroyo willow (*Salix lasiolepis*), red willow (*Salix laevigata*) and blue elderberry (*Sambucus nigra* subsp*. caerulea*). (Wood(b), pp. 22-23)

The presence of USACE jurisdictional wetlands was investigated by recording the soil and hydrology characteristics and vegetation from a sampling point at the downstream end of Drainage A. Based on the jurisdictional delineation and as shown in Table 5.3-1 Drainage A consists of a total of 0.08 acre of non-wetland WUS and WSC, and 0.35 acres under CDFW jurisdiction (Wood(b), p. 22-23).

Drainage B

Drainage B enters the BSA near the middle of the southern boundary and flows for approximately 981 feet before exiting the site near the middle of the northern boundary as shown on Figure 5.3-5 – Drainages Map. USACE jurisdiction averaged 5 feet wide based on OHWM limits which included the destruction of terrestrial vegetation. CDFW jurisdiction ranged from 30 to 100 feet wide based on the extent of riparian vegetation. The banks of Drainage B ranged from gently-sloping to vertically-incised with depths averaging 1 to 2 feet (Wood(b), p. 23).

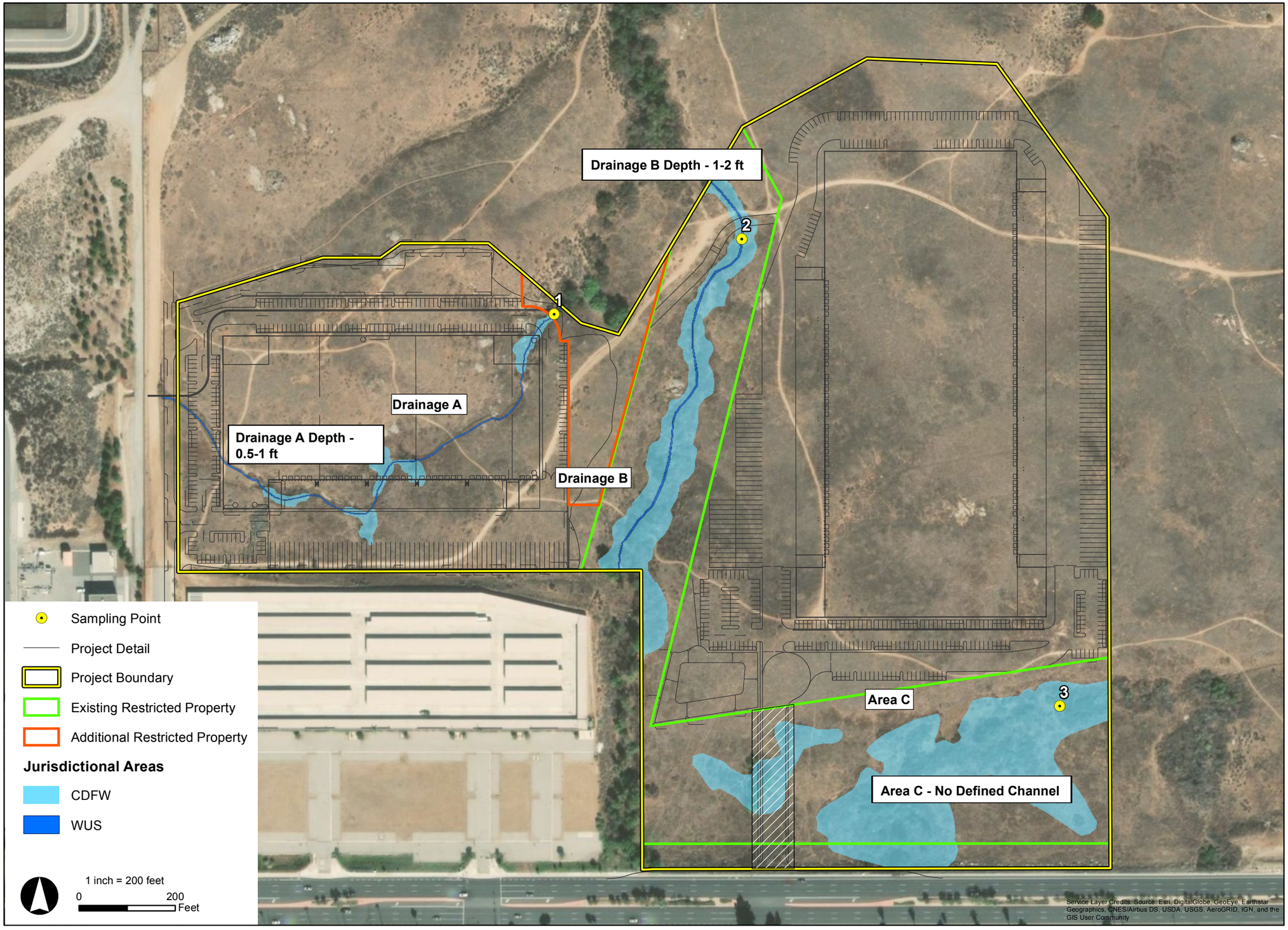
Drainage B contained dense riparian vegetation throughout the entire on-site extent. The canopy layer was dominated by Fremont cottonwood (*Populus fremontii* subsp.*fremontii*,) and red willow (*Salix laevigata)*. The understory was dominated by mulefat (*Baccharis salicifolia)*, willow (*Baccharis salicina*), hoary nettle (*Urtica dioica* subsp. *holosericea*), saltgrass (*Distichlis spicata*), and emergent grasses. (Wood(b), p. 23)

The presence of USACE jurisdictional wetlands was investigated by recording the soil and hydrology characteristics and vegetation from a sampling point at the downstream end of Drainage B. Based on the jurisdictional delineation and as shown in Table 5.3-1, Drainage B consists of a total of 0.11 acres of non-wetland WUS and WSC, and 1.36 acres under CDFW jurisdiction. (Wood(b), p. 22)

Area C

As shown in Figure 5.3-5 – Drainage Map, Area C contains riparian dominated habitat but does not exhibit a channel or other signs of confined water flow. It is located in the southeast portion of the BSA. There is no USACE jurisdiction associated with Area C due to a lack of an OHWM. CDFW jurisdiction totaled 3.45 acres based on the extent of riparian vegetation. Area C contain dense riparian vegetation dominated by mulefat (*Baccharis salicifolia)*, hoary nettle (*Urtica dioica* subsp. *Holosericea)*, willow (*Baccharis salicina*), branching phacelia (*Phacelia ramosissima*), and Goodding's black willow (*Salix gooddingii*) located in the southern portion of the Project site. (Wood(b), p. 23)

The presence of USACE wetlands was investigated by recording the soil and hydrology characteristics and vegetation at a sampling point within the eastern portion of Area C. The sampling point locations are shown on Figure 5.3-5 – Drainages Map. The sampling point in Area C exhibited hydrophytic vegetation but lacked hydric soils and wetland hydrology.



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RVA wood.

Drainages Map

Figure 5.3-5

5.3.2 Related Regulations

5.3.2.1 Federal Regulations

Federal Endangered Species Act

The Federal Endangered Species Act of 1973 (FESA) (16 U.S.C. 1531–1543) and subsequent amendments provide for the conservation of endangered and threatened species and the habitats on which they depend. A federally endangered species is one that is facing extinction throughout all or a significant portion of its geographical range. A federally threatened species is one likely to become endangered within the foreseeable future throughout all or a significant portion of its range. The presence of any federally threatened or endangered species on a site generally imposes severe constraints on development; particularly if development would result in a "take" of the species or its habitat which is prohibited under Section 9 of the FESA. The term "take," as defined under the FESA, means to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct." Harm in this sense can include any disturbance to habitats used by the species during any portion of its life history. Thus, if a listed species is present on the Project site and take of the species cannot be avoided, the Project proponent must obtain an incidental take permit, as issued by USFWS, through Section 7 or Section 10 Consultation. Habitat Conservation Plans (HCPs) for the impacted species must be developed in support of incidental take permits for non-federal projects to minimize impacts to the species and develop viable mitigation measures to offset the unavoidable impacts.

Clean Water Act

Pursuant to Section 404 of the CWA, the USACE regulates the discharge of dredged and/or fill material into waters of the U.S, including, but not limited to, grading, placing of rip-rap for erosion control, pouring concrete, laying sod, and stockpiling excavated material. The USACE has established a series of nationwide permits that authorize certain activities in WUS if a proposed activity can demonstrate compliance with standard conditions. Normally, the USACE requires an individual permit for an activity that will affect an area equal to or in excess of 0.5 acres of waters of the U.S., and projects that result in impacts less than 0.5 acre can be conducted pursuant to one of the nationwide permits, if consistent with the standard permit conditions.

The term WUS, as defined in the Code of Federal Regulations (CFR) Section 328.3, include all waters or tributaries to waters such as lakes, rivers, intermittent and perennial streams, mudflats, sand-flats, natural ponds, wetlands, wet meadows, and other aquatic habitats. Frequently, waters of the U.S., with at least intermittently flowing water or tidal influences, are demarcated by an OHWM. The OHWM is defined in CFR Section 328.3(e) as the line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas. In this region, the OHWM is typically indicated by the presence of an incised streambed with defined bank shelving.

The USACE defines a wetland (33 CFR 328.3(b)) as "those 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." Wetland vegetation is characterized by vegetation in which more than 50 percent of the composition of dominant plant species are obligate wetland, facultative wetland, and/or facultative species that occur in wetlands. As a result of the 2001 Solid Waste Agency of Northern Cook County (SWANCC) case, a wetland must show connectivity to a stream course in order for such a feature to be considered jurisdictional.

Generally, the USACE does not assert jurisdiction over swales and erosional features, and ditches excavated wholly in or draining only uplands and that do not carry a relatively permanent flow of water. However, the USACE does reserve the right to regulate these waters on a case-by-case basis. Additionally, as part of the USACE permitting process, consultation with USFWS is required under Section 7 of the FESA for projects that may affect listed species or their designated habitat.

According to Section 401 of the CWA, "any applicant for a federal permit for activities that involve a discharge to waters of the state, shall provide the federal permitting agency a certification from the state in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the federal Clean Water Act." Therefore, before the USACE will issue a Section 404 permit, applicants must apply for and receive a Section 401 water quality certification from the RWQCB.

Under Section 401 of the CWA, the RWQCB regulates all activities that are regulated by the USACE. Additionally, under the state's Porter-Cologne Water Quality Act, the RWQCB regulates all activities, including dredging, filling, or discharge of materials into "waters of the state" that are not regulated by the USACE due to a lack of connectivity with a navigable water body and/or lack of an OHWM. The definition of "waters of the state" under the state Water Code is any surface water or groundwater, including saline waters, within the boundaries of the state, but may also include isolated waterbodies.

The Navigable Waters Protection Rule

On January 23, 2020, the Environmental Protection Agency (EPA) and the Department of the Army published a final rule called "The Navigable Water Protection Rule."

In this final rule, the agencies interpret WUS to encompass:

- The territorial seas and traditional navigable waters;
- Perennial and intermittent tributaries that contribute surface water flow to such waters;
- Certain lakes, ponds, and impoundments of jurisdictional waters; and
- Wetlands adjacent to other jurisdictional waters.

The final rule excludes from the definition of WUS all waters or features not mentioned above, specifically clarifying that WUS do not include the following:

- groundwater, including groundwater drained through subsurface drainage systems;

- ephemeral features that flow only in direct response to precipitation, including ephemeral streams, swales, gullies, rills, and pools;
- diffuse stormwater runoff and directional sheet flow over upland;
- ditches that are not traditional navigable waters, tributaries, or that are not constructed in adjacent wetlands, subject to certain limitations;
- prior converted cropland;
- artificially irrigated areas that would revert to upland if artificial irrigation ceases;
- artificial lakes and ponds that are not jurisdictional impoundments and that are constructed or excavated in upland or non-jurisdictional waters;
- water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel;
- stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater run-off;
- groundwater recharge, water reuse, and wastewater recycling structures constructed or excavated in upland or in non-jurisdictional waters; and
- waste treatment systems.

This rule was published in the Federal Register on April 21, 2020 and went into effect on June 22, 2020.

Migratory Bird Treaty Act

The MBTA protects all common wild birds found in the United States, except the house sparrow, starling, feral pigeon, and resident game birds such as pheasant, grouse, quail, and wild turkey. Resident game birds are managed separately by each state. The MBTA makes it unlawful for anyone to kill, capture, collect, possess, buy, sell, trade, ship, import, or export any migratory bird including feathers, parts, nests, or eggs. Pursuant to the MBTA, it is unlawful to “take” (i.e., capture, kill, pursue, or possess) migratory birds or their nests. Nesting birds must not be disturbed. The MBTA requires that impacts to nesting bird species be minimized or eliminated by avoiding impacts to active nest sites present.

5.3.2.2 State Regulations

California Endangered Species Act

California Endangered Species Act (CESA) (Fish and Game Code 2050, et seq.) establishes that it is the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The state considers an “endangered” species one whose prospects of survival and reproduction are in immediate jeopardy. A “threatened” species is one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management. A “rare” species is one present in such small numbers throughout its portion of its known geographic range that it may become endangered if its present environment worsens. The rare species designation applies to California native plants. The term “species of special concern” is an informal designation used by CDFW for

some declining wildlife species that are not state candidates for listing. This designation does not provide legal protection but signifies that these species are recognized as sensitive by CDFW.

CESA mandates that state agencies should not approve projects which would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. Section 2080 provides the permitting structure for CESA. The "take" of a state-listed endangered or threatened species or candidate species will require incidental take permits as authorized by the CDFW. Thus, if a listed species is present on a project site and take of the species cannot be avoided, the project proponent must obtain an incidental take permit, as issued by the CDFW, through a 2081 permit or Memorandum of Understanding (MOU).

California Fish and Game Code

CDFW administers the Fish and Game Code. There are particular sections of the Fish and Game Code that are applicable to natural resource management. For example, Section 3503 of the Fish and Game Code states it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird that is protected under the MBTA. Fish and Game Code Section 3503.5 further protects all birds in the orders Falconiformes and Strigiformes, birds of prey such as hawks and owls, and their eggs and nests from any form of take. Fish and Game Code Section 3511 lists fully protected bird species where the CDFW is unable to authorize the issuance of permits or licenses to take these species.

Water resources are regulated by CDFW under Section 1600-1616 of the Fish and Game Code. Specifically, the Fish and Game Code mandates that "it is unlawful for any person to substantially divert or obstruct the natural flow or substantially changes the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds, without first notifying the department of such activity." CDFW jurisdiction includes ephemeral, intermittent, and perennial watercourses, including dry washes, characterized by the presence of hydrophytic vegetation, the location of definable bed and banks, and the presence of existing fish or wildlife resources. Further, CDFW jurisdiction is often extended to habitats adjacent to watercourses, such as oak woodlands in canyon bottoms or willow woodlands that function as part of the riparian system. Historic court cases have further extended CDFW jurisdiction to include watercourses that seemingly disappear but re-emerge elsewhere. Under the CDFW definition, a watercourse need not exhibit evidence of an OHWM to be claimed as jurisdiction. However, CDFW does not regulate isolated wetlands; that is, those that are not associated with a river, stream, or lake. Waters that are jurisdictional to CDFW require a Streambed Alteration Agreement between the CDFW and the project proponent as set forth in Section 1602.

Porter-Cologne Water Quality Control Act

This Act is the principal law governing water quality regulation in the state. It is the policy of the state, as set forth by this Act, that the quality of all of the WSC shall be protected, and that all activities and factors affecting the quality of water be regulated to attain the highest water quality within reason. Pursuant to this Act, the RWQCB regulates actions that would involve "discharging waste, or proposing to discharge waste, within any region that could affect the water of the state."

WSC are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state.”

5.3.2.3 Regional Regulations

Western Riverside County Multiple Species Habitat Conservation Plan

The MSHCP is a comprehensive, multi-jurisdictional HCP focusing on conservation of species and their associated habitats in western Riverside County. The overall goal of the MSHCP is to maintain biological and ecological diversity within a rapidly urbanizing region and allows Riverside County and its cities to better control local land use decisions and maintain a strong economic climate in the region while addressing the requirements of the state and federal ESAs.

The MSHCP serves as an HCP pursuant to Section 10(a)(1)(B) of the FESA, as well as a Natural Communities Conservation Plan (NCCP) under the state NCCP Act of 2001. The MSHCP encompasses all unincorporated Riverside County land west of the crest of the San Jacinto Mountains to the Orange County line, as well as the jurisdictional areas of the cities of Temecula, Murrieta, Lake Elsinore, Canyon Lake, Norco, Corona, Riverside, Moreno Valley, Banning, Beaumont, Calimesa, Perris, Hemet, San Jacinto, Menifee, Wildomar, Eastvale, and Jurupa Valley.

Rather than address sensitive species of an individual basis, the MSHCP provides for the collective conservation of the 146 covered species and their habitats. The MSHCP allows participating jurisdictions to authorize “take,” as defined under FESA, of plant and wildlife species identified within the MSHCP area. Under the MSHCP, the Wildlife Agencies (USFWS and CDFW) have granted “take authorization” for otherwise lawful actions, such as public and private development that may incidentally take or harm individual species or their habitat outside of the MSHCP conservation area, in exchange for the assembly and management of a coordination MSHCP conservation area, and as such, project applicants need not seek their own permits on a case-by-case basis from the USFWS and/or the CDFW.

The MSHCP is a “criteria-based plan” and does not rely on a hardline preserve map. Instead, within the MSHCP Plan Area, the MSHCP reserve will be assembled over time from a smaller subset of the Plan Area referred to as the Criteria Area. The Criteria Area consists of Criteria Cells or Cell Groupings, and flexible guidelines (criteria) for the assembly of conservation within the Criteria Cells or Cell Groupings. Criteria Cells and Cell Groupings also may be included within larger units known as Cores, Linkages, or Non-Contiguous Habitat Blocks.

In western Riverside County, many federal and state listed, or sensitive species and habitats are “covered species” under the MSHCP. In most instances the MSHCP requires no further surveys for most of the 146 covered species; however, Section 6 of the MSHCP states that additional surveys for 38 of these species is required if either the property occurs in a specific species survey area (e.g., BUOW, Criteria Area Species Survey Area [CASSA]) or if potential habitat exists on the property (e.g., LBVI, or Riverside fairy shrimp [*Streptocephalus wootoni*]). Further, the MSHCP includes policies for the review of projects in areas where habitat must be conserved (i.e., property within Criteria Cells) and policies for the protection of riparian habitats, vernal pools, and narrow endemic plants.

The City adopted the MSHCP on September 23, 2003 (Riverside Municipal Code, Chapter 16.72) and the federal and state Wildlife Agencies approved permits required to implement the MSHCP on June 22, 2004. Implementation of the MSHCP will conserve approximately 500,000 acres of habitat into a reserve system, including land already in public or quasi-public ownership and approximately 153,000 acres of land in private ownership that will be purchased or conserved through other means such as land acquisition and conservation easements. The money for purchasing private land comes from development mitigation fees imposed on new development within the boundaries of the MSHCP, as well as state and federal funds.

As a signatory to the MSHCP, the City adopted Ordinance No. 6709 (which is codified as Chapter 16.72 of the Riverside Municipal Code) and established a Local Development Mitigation Fee (LDMF) to be used by the Western Riverside County Regional Conservation Authority (RCA) to implement the MSHCP. The Project will participate in the MSHCP through the payment of the LDMF at the time building permits are issued pursuant to the provisions of Ordinance No. 6709.

Stephens' Kangaroo Rat Habitat Conservation Plan

The City is located within the boundary of the adopted Habitat Conservation Plan for the endangered Stephens' kangaroo rat (SKRHCP) administered by the Riverside County Habitat Conservation Agency (RCHCA). The SKRHCP mitigates impacts from development on the SKR by establishing a network of preserves and a system for managing and monitoring them. The SKRHCP initially established Core Reserves for the conservation of key SKR populations. Outside of the Core Reserves, the SKRHCP established a fee assessment area by which individual projects are granted coverage under the HCP by payment of SKR fees. The MSHCP, through its goals for SKR, reaffirms the conservation goals of the SKRHCP, while expanding the coverage area outside of the original coverage boundaries of the SKRHCP. Neither the SKRHCP nor MSHCP requires project-specific SKR surveys for sites located outside of the existing Core Reserves. Instead, payments of SKR fees are sufficient to obtain take authorization for SKR. Project proponent are required to pay the SKR Preservation Fee in effect at the time a grading permit is issued which is collected per Riverside Municipal Code Section 16.40.040.

5.3.2.4 Local Regulations

Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan (SCWP SKRMP)

The SCWP SKRMP was prepared with two purposes: update the park's conceptual development plan, and provide a coordinated Maintenance/Management Plan for the endangered SKR. Because the Sycamore Canyon Wilderness Park was designated as a core reserve in the SKRHCP, the City was required to prepare a Maintenance/Management Plan for the core reserve (SCWP SKRMP, p. 1).

The maintenance and management objectives of the SCWP SKRMP are to:

- Provide proper management of resources which ensure the preservation of all native plant and animal species with particular focus on preservation of SKR and its habitat;

- Preserve, maintain, restore and enhance the existing natural landscape for the benefit of the park visitor in a manner compatible with protection of biological resources;
- Preserve, maintain, and enhance the existing archaeological sites;
- Protect existing viewsheds and provide for optimum view opportunities within the site; and
- Encourage repeat visitation (SCWP SKRMP, p. 21).

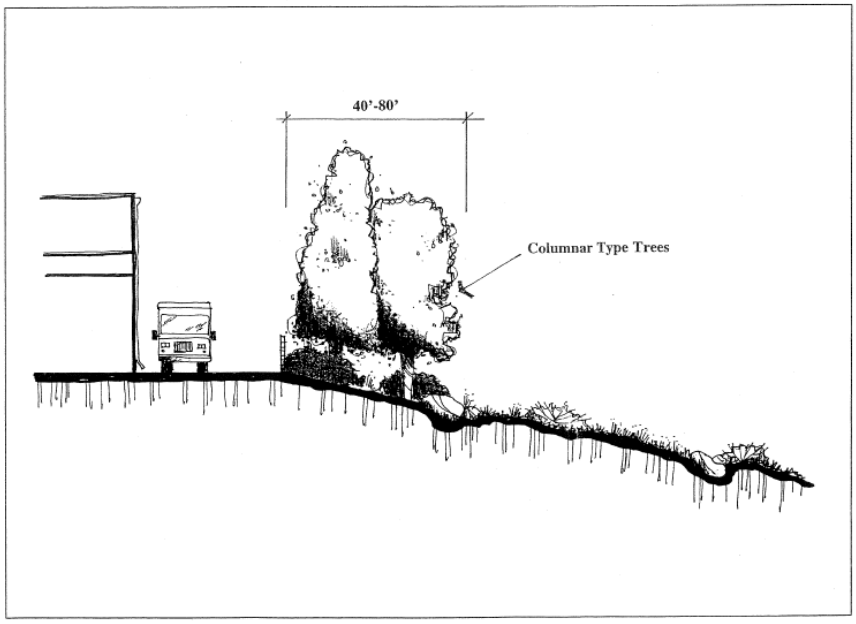
For the purpose of habitat management planning, the SCWP SKRMP divides the Park site into seven separate Management Units (MU's), ranging in size from just under 60 acres to a little over 775 acres. Dividing the site into MUs allows the Reserve Manager to evaluate the resources and management needs of the different segments of the Park in a more detailed manner. The Project site is adjacent to MU 5 (SCWP SKRMP, Figure 3-11).

This plan also examines a variety of alternatives for trailheads, edge treatments, and interpretive day-use facilities that will avoid impacts to the SKR habitat (SCWP SKRMP, p. 163). One of two minor trailheads is planned at the northerly terminus of Barton Street at the Park boundary and adjacent to the proposed Project. The second is at Sycamore Canyon Boulevard and Cottonwood Avenue. The Barton Street location is planned to include the typical trailhead shade structure and is sited in a location conducive to on-street parking (SCWP SKRMP, p. 7).

The SCWP SKRMP also identifies appropriate edge treatments between the park and other uses. It requires a 7-foot high masonry wall edge treatment along all commercial/industrial development adjacent to the park. This wall shall only have emergency vehicle access gates as required. To soften the visual impacts of the masonry wall, a planted area consisting of columnar trees and fire-resistant shrubs must stretch out a maximum of 80-feet from the wall as illustrated in Figure 6-8 of the SCWP SKRMP, shown below. The SCWP SKRMP indicates the edge treatment solid wall could be substituted with an open 6-foot-high iron fence, which would require a 100-foot swath of stubble management along the property line. Swathing involves the cutting of grass, weeds, or crops often by a mechanical swather which leaves a narrow strip of uniform stubble or stems on the ground as illustrated in Figure 6-6 of the SCWP SKRMP, shown below. However, this will eliminate any opportunity to screen the industrial area from park visitors as well as create higher risk of wildfire ignition. (SKR SKRMP, Section 6.7.5 Industrial/Commercial Edge Treatment, p. 176) The Project has appropriate edge treatments with the park, consistent with the SCWP SKRMP, as it includes 8-12 foot high solid walls (around development and along the northern boundary of Parcel 2), a 6-8 foot-high metal fence (along the northwest, western and southern boundaries of Parcel 2 and along the southern boundary of Parcel 1), and 4-foot high metal fence on top of 4-foot high solid wall (along the northern boundary of Parcel 2). Additionally, the trailhead parking lot (Parcel C) provides additional paving, decomposed granite, and landscaping that will function similar or better than stubble management for fire control.

Fire management for the SCWP SKRMP is an essential planning tool in Southern California. The SCWP SKRMP considers fire from two different perspectives: control of wildland fire, and fire as a management tool. The three SKR habitat management techniques recommended for Sycamore Canyon Wilderness Park are mowing, grazing, and controlled burning (SCWP SKRMP, p. 21).

SYCAMORE CANYON
WILDERNESS PARK
Conceptual Development
Plan Revision

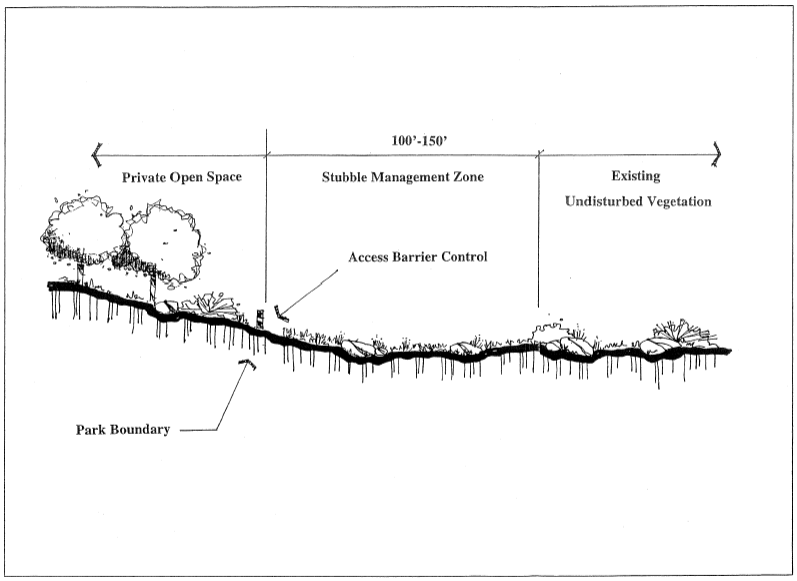


Industrial/Commercial
Edge Treatment

Figure 6-8

Dangermond & Associates
Recreation and Environmental Planning

SYCAMORE CANYON
WILDERNESS PARK
Conceptual Development
Plan Revision



Open Space
Edge Treatment

Figure 6-6

Dangermond & Associates
Recreation and Environmental Planning

Urban Forestry Policy Manual

The City's Urban Forestry Policy Manual is a guideline for the planting, pruning, preservation, and removal of all trees in the City rights-of-way and recreational facilities. These specifications are based on national standards for tree care established by the International Society of Arboriculture, the National Arborists Association and the American National Standards Institute. The manual incorporates input from Public Works Department staff, the Parks, Recreation, and Community Services Commission and staff, City Council, various other commissions and the citizens of the City. The manual is a reference for use by City staff, private contractors, volunteer organizations, and citizens when working in and around trees within City jurisdiction. Moreover, the Urban Forestry Policy Manual does not relate to private property trees.

Comprehensive Park, Recreation & Community Services Master Plan

The Riverside Comprehensive Park, Recreation & Community Services Master Plan serves as a guide and implementation tool for the management and development of parks and recreational facilities and programs for the City. This Master Plan is based on the current demographics and community input. The needs and recommendations presented should be re-evaluated every five to ten years to assess for any significant modifications that may influence the local community's recreation needs. The Master Plan is a reference for use by City staff. Therefore, the Comprehensive Park, Recreation & Community Services Master Plan does not relate to the Project site. However, Parcel C of the Project is proposed to be developed with a trailhead parking lot for the Sycamore Canyon Wilderness Park. The proposed trailhead parking lot is not required but is being provided by the applicant as an amenity to the City's Sycamore Canyon Wilderness Park, though it should be noted that Parcel C will not be formally incorporated into the Park.

Riverside General Plan 2025

The GP 2025 contains objectives and policies to protect biological resources within the City in the Open Space and Conservation Element. The following objectives and policies are applicable to the Project:

Objective LU-7: Preserve and protect significant areas of native wildlife and plant habitat, including endangered species.

> **Policy LU-7-1:** Continue to maintain Sycamore Canyon Wilderness Park as primarily a functioning wildlife habitat.
>
> **Policy LU-7-2:** Design new development adjacent and in close proximity to native wildlife in a manner which protects and preserves habitat.
>
> **Policy LU-7-3:** Continue to require natural open space easements in conjunction with new development in hillside and arroyo areas over non-graded areas of the development.
>
> **Policy LU-7-4:** Continue to participate in the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP).

Objective OS-1: Preserve and expand open space areas and linkages throughout the City and sphere of influence to protect the natural and visual character of the community and to provide for appropriate active and passive recreational uses.

Policy OS-1.1: Protect and preserve open space and natural habitat wherever possible.

Policy OS-1.5: Require the provision of open space linkages between development projects, consistent with the provisions of the Trails Master Plan, Open Space Plan and other environmental considerations including the MSHCP.

Policy OS-1.6: Ensure that any new development that does occur is effectively integrated through convenient street and/or pedestrian connections, as well as through visual connections.

Objective OS-2: Minimize the extent of urban development in the hillsides, and mitigate any significant adverse consequences associated with urbanization.

Policy OS-2.2: Limit the extent and intensity of uses and development in areas of unstable terrain, steep terrain, scenic vistas, arroyos and other critical environmental areas.

Policy OS-2.3: Control the grading of land, pursuant to the City's Grading Code, to minimize the potential for erosion, landsliding and other forms of land failure, as well as to limit the potential negative aesthetic impact of excessive modification of natural landforms.

Policy OS-2.4: Recognize the value of ridgelines, hillsides and arroyos as significant natural and visual resources and strengthen their role as features which define the character of the City and its individual neighborhoods.

Objective OS-5: Protect biotic communities and critical habitats for endangered species throughout the General Plan Area.

Policy OS-5.1: Preserve significant habitat and environmental sensitive areas, including hillsides, rock outcroppings, creeks, streams, viewsheds and arroyos through application of the RC Zone standards and the Hillside/Arroyo standards of the City's Grading Code.

Policy OS-5.2: Continue to participate in the MSHCP Program and ensure all projects comply with applicable requirements.

Policy OS-5.3: Continue to participate in the Stephens' Kangaroo Rat (SKR) Habitat Conservation Plan including collection of mitigation fees.

Policy OS-5.4: Protect native plant communities in the General Plan Area, including sage scrub, riparian areas and vernal pools, consistent with the MSHCP.

5.3.3 Project Design Considerations

Walls and Fences

As described in Section 3.0 Project Description, and shown on Figure 3.0-11 – Fencing Plan, several different fences and walls will be installed with the most northern being a 42-inch cable rail theme fence along the northern property line, adjacent to the Sycamore Canyon Wilderness Park. The 42-inch cable rail theme fence will also extend along the western side of Parcel 1 and the boundary of Parcel A, the Restricted Property/Conservation Area. The 42-inch cable rail theme fence will also run along Parcels A and B Conservation Areas southern boundary and frontage along Alessandro Boulevard and on both sides of the Parcel 1/ Building A driveway on

Alessandro Boulevard. An 8-foot-high concrete screen wall will be constructed around the east, north and west sides of Building A at the outer edge of the drive aisles and parking area. A 6-foot to 8-foot-high metal fence will be placed along the outer edge of the drive aisles and parking area on the south side of Building A. An 8-foot-high metal sliding gate and 15-feet high concrete screening walls will be located on both sides of the southern end of Building A that faces Alessandro Boulevard to screen views of the dock doors and loading areas from Alessandro Boulevard.

This 8-foot-high concrete screen wall will be installed around the northeast, east, and southeast sides of Building B, at the outer edge of the drive aisles and parking areas, adjacent to the Parcel A Conservation Area. A 6-foot to 8-foot-high metal fence will be placed along the northwestern, western, and southern sides of Building B at the outer edge of the drive aisles and parking areas. To separate the Building B northern parking lot/property line and the trail head parking lot an 8-foot-high combination screening fence/wall, consisting of a 4-foot high tubular steel metal fence on top of a 4-foot high screen wall, will be installed. An 8-foot-high metal sliding gate and 15-feet high concrete screening walls will be located on the south side of Building B facing west to Barton Street to screen views of the dock doors and loading area from Barton Street.

Trailhead Parking Lot

The trailhead parking lot, which is located along the northern side of Building B, will serve as a buffer between the warehouse operations and the wilderness park. The trailhead operational hours will be consistent with the operational hours of the wilderness park, open from dusk to dawn. Therefore, there would not be vehicle headlights at nighttime shining into the park from the trailhead parking lot.

Restricted Property

Parcels A and B contain the existing 11.6-acre Restricted Property that landlocks Parcel 1. Parcel C will be designated for a trailhead parking. Parcels A, B, and C are described in more detail below:

- Parcels A and B are on the west and east sides, respectively, of the proposed access road on Alessandro Boulevard. The proposed Project includes removing 0.81 acres of the Restricted Property to create a driveway connecting Parcel/ Building A to Alessandro Boulevard. As part of mitigation for the Project, 1.44 acres will be incorporated into Parcel A, for a net gain of 0.63 acre of new Restricted Property.

  The access road would include two elliptical shaped corrugated metal pipes measuring 38 inches high and 57 inches wide to allow drainage and wildlife connectivity between Parcel A and Parcel B. Parcels A and B will be managed in perpetuity by a professional conservation organization funded by the applicant as part of mitigation for the Project. Thus, Parcel A and B will have a total of 12.23 acres of Restricted Property, which will be placed under a Conservation Easement.

Project impacts to the existing Restricted Property and the associated riparian/riverine resources will be mitigated via the implementation of the Determination of Biologically Equivalent or Superior Preservation (DBESP) Report and Mitigation Planting Plan. Per the DBESP, the mitigation

proposed and approved by the wildlife agencies includes the creation (establishment) of 0.61 acres of riparian woodland of a type jurisdictional to CDFW, adjacent to the existing CDFW riparian woodland area south of the Project area and north of Alessandro Blvd. In addition, Project will enhance a total of 1.58 acres of riparian habitat: 0.01 acre in Drainage A, 1.34 acres in Drainage B, and 0.23 acre in Area C, and temporary impacts to 0.02 acre of riparian habitat in Drainage B will be restored. The DBESP findings showed the proposed enhanced riparian/riverine resources would provide a biologically superior riparian habitat for riparian species, including LBVI.

5.3.4 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the *State CEQA Guidelines*. They City generally utilizes the CEQA significance thresholds in Appendix G ("Environmental Checklist") of the *State CEQA Guidelines*. The Environmental Checklist prepared by the City for the Project (Appendix A of this EIR) indicates that impacts related to the Sycamore Hills Distribution Center Project may be considered potentially significant if the Project would:

- (Threshold A) have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- (Threshold B) have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service;
- (Threshold C) have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- (Threshold D) interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- (Threshold E) conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- (Threshold F) conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5.3.5 Environmental Impacts

Threshold A: *Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

The Biological Resources & MSHCP Consistency Report (Appendix C) prepared for the Project identified the presence of some listed species on the site. The Project site is located within the MSHCP area, within the *Cities of Riverside and Norco Area Plan*. It is also within the SKRHCP. The Project site is not in a criteria area for the MSHCP (not within a Criteria Cell, Cell Group, habitat core or linkage), but is immediately adjacent to the Sycamore Canyon Wilderness Park to the north which is designated as Public Quasi Public (PQP) lands and Existing Core D of the MSHCP conservation area, as illustrated in Figure 5.3-6 – Riverside County MSHCP Conserved Lands. The Sycamore Canyon Wilderness Park is also designated as part of the Sycamore Canyon-March Air Force Base (AFB) Core Reserve of the SKRHCP.

Special-Status Plant Species

As mentioned in Section 5.3.1, several individuals of paniculate tarplant were found throughout the "non-native grassland" areas of the BSA. Paniculate tarplant is not a MSHCP-covered species and only has a CRPR of 4.2. CNPS List 4 plants have the lowest sensitivity ranking in the CNPS system, "Plants of Limited Distribution - A Watch List." The Project site also contains suitable habitat for Parry's spineflower and Robinson's pepper-grass, although they have not been observed on site. As smooth tarplant and Parry's spineflower are MSHCP-covered species, potential impacts to these plants are mitigated through compliance with the Plan and payment of the MSHCP fee. Southern Sycamore Alder Woodland, a special-status vegetation community, does not occur on-site and would not be impacted by the Project. Like paniculate tarplant, Robinson's pepper-grass is not covered by the MSHCP. Robinson's pepper-grass is not state or federally listed as threatened or endangered, and CNPS List 4 plants have the lowest sensitivity ranking in the CNPS system as "Plants of Limited Distribution - a Watch List." It is not known to occur on site, but it has not been specifically surveyed for.

Impacts from the Project on paniculate tarplant are not expected to be significant as it is not expected to substantially reduce the habitat for this species throughout its range. To further reduce impacts to this species, **MM BIO-1** will be implemented which will require a qualified biologist collect seed for paniculate tarplant and Robinson's pepper-grass throughout the proposed development footprint of the Project. The seeds shall be stored in accordance with the biologist's recommendations. On site restoration efforts shall incorporate the collected seed or salvaged topsoil. With the implementation of **MM BIO-1** I potential impacts to these sensitive plant species would be **less than significant with mitigation**.

Threatened and Endangered Wildlife

LBVI is a Federally and State listed species and covered by the MSHCP. The focused study conducted between April 21 and August 9, 2020, resulted in the observation of two (2) LBVI males within the riparian woodland habitat on-site. (Kidd, p. 9) Focused surveys conducted in 2014 also resulted in observations of LBVI. (Wood(a) p.28) Therefore, the on-site riparian woodland habitat is occupied by LBVI.

Noise from construction activities could adversely impact LBVI if construction were to occur while LBVI is present in the on-site riparian habitat (refer to Section 5.11 Noise of this EIR). Implementation of Mitigation Measure **MM NOI-1**, which requires a temporary noise barrier between the construction activities and the adjacent Sycamore Canyon Wilderness Park, and

between construction activities and on-site conservation areas, would reduce potential impacts from construction activities on LBVI to **less than significant with mitigation**.

The Project will result in 0.80 acre of permanent impacts and 0.02 acre temporary impacts to riparian/riverine areas, which serve as habitat for LBVI. However, mitigation measures **MM BIO-2** through **MM BIO-7** (described in more detail in Section 5.3.6), would be implemented to reduce potential impacts:

- **MM BIO-2:** This measure details avoidance and minimization measures to help avoid direct construction impacts to riparian plant communities to the greatest extent feasible.
- **MM BIO-3:** This measure would require the construction contractor to supervise provision and maintenance of all standard control BMPs to reduce fugitive dust emissions during soil excavation, grading, or other subsurface disturbances.
- **MM BIO-4:** This measure would require the implementation of a SWPPP as required by the California General Construction Storm Water Permit pursuant the Regional Board regulations.
- **MM BIO-5**: Construction worker training shall be provided by a qualified biologist on the first day of construction and the Project boundaries shall be clearly marked to prevent accidental/unauthorized intrusions during construction. Staging areas for storage of materials and heavy equipment shall be prohibited within 20 feet from the top of the slope adjacent to the conserved riparian habitat.
- **MM BIO-6:** Implementation of this measure will result in a total of 1.58 acres of riparian habitat enhancement and creation (establishment) of 0.61 acres of in-kind riparian woodland in Area C.
- **MM BIO-7:** This measure will require payment of the MSHCP mitigation fee to the City of Riverside prior to issuance of a grading permit for the Project.

Potential direct and indirect impacts to LBVI will be reduced to **less than significant with** implementation of Mitigation Measures **MM BIO-2** through **MM BIO-7.**

SKR is a Federally endangered, State threatened species and covered by the SKRHCP and the MSHCP. Suitable habitat is found on the Project site. SKR burrows, scat, and tracks were observed throughout the grassland areas. Although the Project site is located adjacent to the Sycamore Canyon Wilderness Park, which is designated as part of the Sycamore Canyon - March Air Force Base Core Reserve of the SKRHCP, the Project site itself is not within this reserve. In order to reduce potential impacts to SKR, **MM BIO-8** requires the payment of the SKRHCP fee be provided to the City prior to issuance of a grading permit. With implementation of **MM BIO-8** potential impacts to SKR to are reduced to **less than significant with mitigation**.

Special-Status Wildlife Species

Several special-status wildlife species have been observed at the Project site and include (Wood(a) p. 27):

- *Circus hudsonius*, northern harrier (MSHCP, SSC)
- *Accipiter cooperii*, Cooper's hawk (MSHCP; WL)
- *Lepus californicus bennettii,* San Diego black-tailed jackrabbit (MSHCP; SSC)
- *Neotoma* sp., wood rat middens* (MSHCP; SSC)
- *Crotalus ruber*, red-diamond rattlesnake (MSHCP; SSC; S)
- *Selasphorus rufus/sasin*, rufous/Allen's hummingbird (rufous is a BCC)
- *Phalacrocorax auritus*, double-crested cormorant (MSHCP; WL)
- *Empidonax traillii*, willow flycatcher (MSHCP; SE; BCC)
- *Eremophila alpestris actia*, California horned lark (MSHCP; WL)
- *Spinus lawrencei,* Lawrence's goldfinch (BCC)
- *Setophaga petechia brewsteri,* yellow warbler (MSHCP; BCC; SSC)
- *Aimophila ruficeps canescens*, southern California rufous-crowned sparrow (MSHCP; WL).

All of the avian, reptile and mammal species above could be found foraging and/or breeding in the non-native grassland community and the associated riparian habitat with the exception of a double-crested cormorant (flyover only). Rufous hummingbird may forage, but only in migration; they do not breed in southern California. The willow flycatchers detected in the BSA were migrants present for foraging only, likely of more northerly subspecies which do not nest in southern California (E.t. adastus or E.t. brewsteri), and not southwestern willow flycatchers (subspecies E.t. extimus). USFWS protocol does not recognize willow flycatchers as the "southwestern" species unless they are found to be nesting or if they stay on-site past the migratory period. (Wood(a) pp. 27-28)

The MSHCP covers most of these special status wildlife species. Rufous hummingbird and Lawrence's goldfinch are not covered by the MSHCP. However, they are protected by the Federal Migratory Bird Treaty Act (MBTA) (**MM BIO-9)**. Compliance with the MSHCP (outlined in detail in Threshold A) and payment of the MSHCP fee (**MM BIO-7**), are required to reduce potential impacts to these observed MSHCP-covered sensitive wildlife species to **less than significant levels with mitigation.**

CNDDB records of additional special status species recorded in the past within two miles of the Project site are shown on Figure 5.3-2. These records include many of the species already recorded in the BSA listed above, but also the following (Wood(a) p. 28):

- *Aspidoscelis hyperythra,* orange-throated whiptail (MSHCP, WL). Habitat present in the BSA.

- *Agelaius tricolor*, tricolored blackbird (MSHCP, ST, SSC, BCC). No habitat present in the BSA.
- *Chaetodipus fallax fallax*, northwestern San Diego pocket mouse (MSHCP, SSC). Habitat present in the BSA.
- *Spea hammondii*, western spadefoot (MSHCP, SSC). Like fairy shrimp, this species requires temporary pools to breed. No breeding habitat is present.
- *Onychomys torridus ramona*, southern grasshopper mouse (not covered by MSHCP, SSC). Habitat present in the BSA.
- *Lanius ludovicianus*, loggerhead shrike (MSHCP, SSC, BCC). Habitat present in the BSA.
- *Athene cunicularia*, burrowing owl (MSHCP, SSC, BCC). This species has a designated survey area in the MSHCP, and the project is within it. 2018 and 2020 surveys did not detect the species.
- *Dipodomys merriami parvus*, San Bernardino kangaroo rat (MSHCP, FE, state candidate for listing as endangered, SSC). This species has a designated survey area in the MSHCP, and the project is not within that survey area.
- *Phrynosoma blainvillii*, coast horned lizard (MSHCP, SSC). Habitat present in the BSA.
- *Nyctinomops femorosaccus*, pocketed free-tailed bat (SSC, not covered by MSHCP). No roosting habitat in the BSA could forage.
- *Perognathus longimembris brevinasus*, Los Angeles pocket mouse (MSHCP, SSC). This species has a designated survey area in the MSHCP, and the project is not within that survey area.

Compliance with the MSHCP (outlined in detail in Threshold D) and payment of the MSHCP fee (**MM BIO-7**), are required to reduce potential impacts to MSHCP-covered sensitive wildlife species with the potential to occur on site to **less than significant with mitigation.**

Although not covered by the MSHCP, the loss of habitat and/or individuals of southern grasshopper mouse or foraging habitat for pocketed free-tailed bat would not be considered significant. These species are not state or federally listed as threatened or endangered, and are of potential occurrence onsite, but not known to occur. The proposed 12.23 acres of Restricted Property/ Conservation Area and the 1,500-acre Sycamore Canyon Wilderness Park immediately to the north would continue to provide ample habitat for these species in the project area; thus, the small incremental loss of potential habitat from development of the project would not be significant. (Wood(a) p.29) Potential impacts to southern grasshopper mouse and pocketed free-tailed bat would be **less than significant without mitigation**.

As previously mentioned in Section 5.3.1, no BUOW were identified in the Project site during the 2018 and 2020 focused surveys. BUOW is a MSHCP covered species. Although no individual BUOW were identified, as the site contains suitable BUOW habitat, a 30-day BUOW pre-construction clearance survey (**MM BIO-10**) is required pursuant to the MSHCP and to ensure BUOW are not utilizing the site for nesting prior to construction start. Implementation will ensure potential impacts to BUOW are **less than significant with mitigation**.

The Project site may support nests utilized by birds protected under MBTA of 1918 (Code of Federal Regulations Section 10.13) or the California Fish and Game Code, as discussed under Section 5.2.2 – Related Regulations, above. Thus, the potential exists for construction-related disturbance to nesting birds. All migratory non-game native bird species are protected by the international treaty under the MBTA. Pursuant to the MBTA, it is unlawful to "take" (i.e., harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect) migratory birds or their nests. Many native bird species are covered under the MBTA. Impacts can be minimized or eliminated by avoiding impacts to potential nest sites present on the Project site. While there is no established protocol for nest avoidance, when consulted, CDFW generally recommends avoidance buffers of about 500 feet for birds-of-prey, and 100 to 300 feet for songbirds. Mitigation measure **MM BIO-9** is required to reduce potential impacts to these special-status bird species and any active nests to **less than significant levels with mitigation.**

In summary, impacts to species identified as a candidate, sensitive, or special status species will be **less than significant with mitigation measures MM BIO-1 through MM BIO-10 and MM-NOI-1.**



Source: Bing Aerial Microsoft Corporation 2020, Datum: NAD 83, Coordinate Sytem: State Plane 6

SYCAMORE HILLS DISTRIBUTION CENTER

RVA

Riverside County MSHCP Conserved Lands

Figure 5.3-6

Threshold B: *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?*

The Project site is dominated by disturbed non-native grassland with two drainages containing some riparian vegetation labeled as Drainage A and Drainage B, and a third area labeled as Area C which exhibits riparian features but does not exhibit a channel or other signs of confined water flow.

Drainage A

As previously described in Section 5.3.1, Setting, Jurisdictional Resources, Drainage A contains sparsely vegetated sections and areas of dense riparian vegetation dominated by short-pod mustard, western marsh cudweed (*Gnaphalium palustre*), and pygmy-weed (*Crassula connata*). The patches of riparian vegetation were dominated by mulefat (*Hirschfeldia incana*), willow baccharis, (*Baccharis salicina*), Goodding's black willow (*Salix gooddingii*), arroyo willow (*Salix lasiolepis*), red willow (*Salix laevigata*) and blue elderberry (*Sambucus nigra subsp. caerulea*).

Drainage B

Drainage B contains dense riparian vegetation throughout the entire on-site extent. The canopy layer is dominated by Fremont cottonwood (*Populus fremontii* subsp. *fremontii*) and red willow. The understory was dominated by mulefat (*Hirschfeldia incana)*, willow (Baccharis *salicina)* hoary nettle (*Urtica dioica subsp. holosericea*), saltgrass (*Distichlis spicata*), and emergent grasses. Herbs are more common than shrubs the Project site lacks a well-develop mid-story canopy, and the understory is relative sparse.

Area C

Area C is located in the southeastern portion of the Project site. Area C contains dense riparian vegetation dominated by mulefat (*Hirschfeldia incana)*, hoary nettle, willow (Baccharis *salicina)*, branching phacelia (*Phacelia ramosissima*), and Goodding's black willow (*Salix gooddingii)*. The presence of USACE wetlands was investigated and although the sampling point exhibited hydrophytic vegetation it lacked hydric soils and wetland hydrology. There is no USACE WUS associated with Area C due to lack of OHWM. The extent of CDFW jurisdiction/riparian area on-site for Area C is 3.45 acres based on the extent of riparian vegetation.

Table 5.3-2 outlines impacts to jurisdictional areas onsite, WUS, and WSC from the Project. Drainage A would have 0.08 acre or 1,083 linear feet (LF) of permanent impacts to WUS and 0.23 acre of permanent impact to WSC. Drainage B would have 0.002 acres or 21 linear feet of temporary impacts to WUS and 0.017 acre of temporary impacts to WSC due to a temporary use of crossing over the drainage during construction. Area C is expected to have 0.57 acre of permanent impacts to WSC due to construction of the access road/driveway to building A (Wood(b) p. 25).

Table 5.3-2 Impacts to Jurisdictional Areas

Drainage	Temporary Impacts to non-wetland WUS	Permanent Impacts to non-wetland WUS	Temporary Impacts to CFW Jurisdiction	Permanent Impacts to CDFW Jurisdiction
A	0	0.08 acre 1,083 linear feet	0	0.23 acre
B	0.002 acre 21 linear feet	0	0.017 acre	0
Area C	0	0	0	0.57 acre
Total	**0.002 acre 21 linear feet**	**0.08 acre 1,083 linear feet**	**0.017 acre**	**0.80 acre**

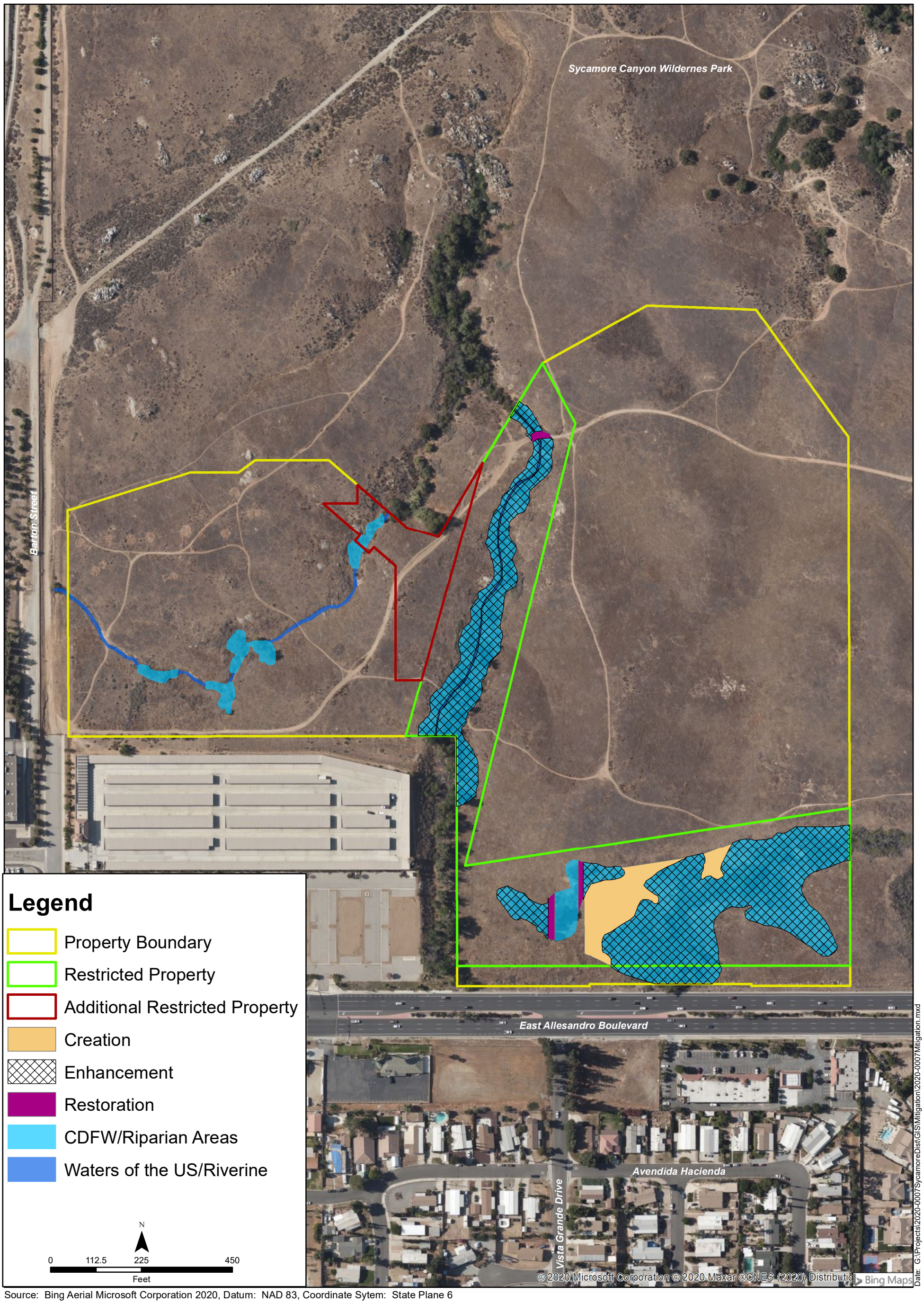
WUS - Waters of the United States

Based on the Project site plan (Figure 3.0-8 - Site Plan), impacts to riparian habitat cannot feasibly be avoided, and as such, a Project-level (Determination of Biologically Equivalent or Superior Preservation (DBESP) is required per the MSHCP.

Implementation of the Project will result in some areas being temporarily and permanently impacted, and therefore, the Project applicant is required to obtain a Section 404 Permit from USACE, Section 401 Certification from RWQCB, and Streambed Alteration Agreement from CDFW and comply with the provisions of such permits (Wood(b) pp. 28-30). Project impacts require mitigation to be reduced to less than significant levels.

As described in Section 5.3.5 – Project Design Considerations and Threshold A, above, the Project proposes to mitigate permanent and temporary impacts with creation and restoration on-site, as further detailed in the DBESP Report and Mitigation Plan (Appendix C) and in mitigation measure **MM BIO-6**. On-site mitigation will include creation of 0.61 acre of riparian woodland, of a type jurisdictional to CDFW, adjacent to the existing CDFW riparian woodland area south of the project area and north of Alessandro Blvd. In addition, the Project will enhance a total of 1.58 acres of riparian habitat within Drainage A and B and Area C, within the on-site Restricted Property/Conservation Area. Temporary impacts to 0.017 acre of riparian habitat in Drainage B will be restored. The DBESP determined that the riparian/riverine resources proposed to be enhanced and conserved in perpetuity would provide a biologically superior riparian habitat for riparian species, including LBVI. The creation of riparian habitat in Area C on the southernmost portion of the Project site would provide biologically superior habitat by connecting two patches of riparian habitats allowing for more acreage of habitat and movement opportunities for small wildlife species.

No other sensitive natural communities were identified at the Project site. As mentioned previously, most vegetation in the Project site is non-native grasslands. Impacts to WUS, WSC, riparian habitat and other sensitive natural communities will be **less than significant with mitigation measures MM BIO-2 through MM BIO-7.**



Source: Bing Aerial Microsoft Corporation 2020, Datum: NAD 83, Coordinate Sytem: State Plane 6

SYCAMORE HILLS DISTRIBUTION CENTER

RVA

Mitigation Plan

Figure 5.3-7

Threshold C: *Would the Project would 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?*

As discussed in Threshold B above, a jurisdictional delineation was prepared for the Project site (Wood(b)) to determine the extent and location of jurisdictional features including WUS regulated by USACE pursuant to Section 404 of the CWA. WUS are defined to include waters, streams, and wetlands that have an above-ground or below-ground connection to navigable waters, and tributaries to these waters. In non-tidal waters, the limits of jurisdiction under this definition are defined by the OHWM identified through field observation of features such as shelving and debris deposits, or beyond the OHWM to the limit of any adjacent wetlands, if present. The USACE defines a wetland by three criteria: hydrology, soils, and vegetation.

As previously shown in Figure 5.3-5 Drainages, the Project site contains three jurisdictional features, identified as Drainage A and Drainage B and a riparian area identified as Area C. None of these features are defined as "wetlands" per Section 404. While the Project will permanently impact these jurisdictional features, including 0.08 acre of WUS and 0.80 acre of WSC (Wood(b), p.25), these features regulated by USACE as defined in Section 404 of the CWA do not contain the criteria for wetlands (see Table 5.3-2). The Project will not result in impacts to protected wetlands. As discussed above in Threshold B, impacts to WUS, WSC, riparian habitat and other sensitive natural communities will be **less than significant with mitigation measures MM BIO-2 through MM BIO-7.**

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?*

Due to the Project's location adjacent to Alessandro Boulevard, a six lane, divided roadway, the Project site is not anticipated to serve as a wildlife corridor from areas to the southwest, south and southeast to the Sycamore Canyon Wilderness Park to the north. Wildlife that occurs within the site may use the existing drainages and associated riparian vegetation through the site north to the Sycamore Canyon Wilderness Park, or east to the adjacent undeveloped private property.

The new elevated driveway which crosses Area C includes two separate culvert under-crossings: one that crosses in a southwest to northeast direction with two 38-inch high x 57-inch wide arch pipes and one that crosses in a west to east direction with one 38-inch high x 57-inch wide arch pipe. This was included in the design as requested by the wildlife agencies and the RCA during the pre-application meeting at RCA (October 2018). It will provide hydrological connection and allow for wildlife to move across Area C without having to cross the driveway. Animals likely to use these under-crossings include most terrestrial amphibians, reptiles, and mammals that have been recorded onsite such as Baja California treefrog (*Pseudacris hypochondriaca*), western fence lizard (*Sceloporus occidentalis*), red-diamond rattlesnake (*Crotalus ruber*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), coyote (*Canis latrans*), and bobcat (*Lynx rufus*). Wall nesting birds such as black phoebe (*Sayornis nigricans*) and barn swallow (*Hirundo rustica*) may also utilize the culvert. (Wood(a) p. 29) No native nursery sites were identified on site. Impacts are considered **less than significant,** and no mitigation is required.

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

The Project is consistent with the City's General Plan 2025 policies. Specifically, as outlined in Thresholds A and B above, the Project is consistent with **Objective LU-7:** Preserve and protect significant areas of native wildlife and plant habitat, including endangered species. Refer to Appendix B for a complete analysis of the Project's consistency with applicable General Plan 2025 policies.

In addition, the project is consistent with the following objectives of the Open Space Element of the General Plan:

- **Objective OS-1:** Preserve and expand open space and linkages throughout the City and sphere of influence to protect the natural and visual character of the community and to provide for appropriate active and passive recreational uses.

  Parcel C is proposed to be developed within a trailhead parking lot which will include improved decomposed granite parking lot, landscaping, a shade structure with benches, a bike rack, a drinking fountain (including for pets), and ADA (Americans with Disabilities Act) compliant parking spaces and sidewalk. Trail fencing, gates, and signage will also be installed to direct access, circulation and trail connection to existing trails as well as the master planned multipurpose trail on the west side of Barton Street.

  Objective OS-2: Minimize the extent of urban development in the hillsides, and mitigate any significant adverse consequences associated with urbanization.

  The Project is not located on any hillsides.

- **Objective OS-5:** Protect biotic communities and critical habitats for endangered species throughout the General Plan Area.

Additional local policies and ordinances protecting biological resources in the City of Riverside include the SKRHCP, MSHCP, Lake Matthews Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan (Lake Matthews MSHCP/NCCP), and the City's Urban Forest Tree Policy. The Project site is not within or near the Lake Matthews MSHCP/NCCP (GP 2025, Figure OS-6). The Project site is adjacent to the Sycamore Canyon Wilderness Park, which is a designated Core Reserve Area for the SKRHCP and Public Quasi Public (PQP) lands and Existing Core D of the MSHCP conservation area. Since the City is a permittee to the MSHCP, the Project is required to be compliant with all MSHCP policies. See Threshold F below for a discussion of the Project's compliance with the MSHCP.

Development of the Project site is subject to the edge treatment and other provisions of the *Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan.* The SCWP SKRMP identifies appropriate edge treatments between the park and other uses. It requires a 7-foot high masonry wall edge treatment with possible substitution of a 6 foot high tubular steel fence per the City's Parks, Recreation, and Community Services Department Standard Detail No. 5520 and specifications. The fence per Standard Detail No. 5520 is preferred by the City's Parks, Recreation, and Community Service

Department to improve the visible connection to the conservation area, provide an open visible sense of security for trail users and to reduce the opportunity for graffiti. Fencing and walls around the Project site have been designed to be compliant with requirements in the SCWP SKRMP.

As previously discussed under Section 5.3-4 Project Design Considerations, the Project includes perimeter walls to minimize noise and vehicle headlights from on-site operations to adjacent sensitive uses including the Sycamore Canyon Wilderness Park and on-site conservation areas.

As shown on Figure 3.0-11 – Fencing Plan, several different fences and walls will be installed with the most northern being a 42-inch cable rail theme fence along the northern property line, adjacent to the Sycamore Canyon Wilderness Park. The 42-inch cable rail theme fence will also extend along the western side of Parcel 1 and the boundary of Parcel A, the Restricted Property/Conservation Area. The 42-inch cable rail theme fence will also run along Parcels A and B Conservation Areas southern boundary and frontage along Alessandro Boulevard and on both sides of the Parcel 1/ Building A driveway on Alessandro Boulevard. An 8-foot-high concrete screen wall will be constructed around the east, north and west sides of Building A at the outer edge of the drive aisles and parking area. A 6-foot to 8-foot-high metal fence will be placed along the outer edge of the drive aisles and parking area on the south side of Building A. An 8-foot-high metal sliding gate and 15-feet high concrete screening walls will be located on both sides of the southern end of Building A that faces Alessandro Boulevard to screen views of the dock doors and loading areas from Alessandro Boulevard.

This 8-foot-high concrete screen wall will be installed around the northeast, east, and southeast sides of Building B, at the outer edge of the drive aisles and parking areas, adjacent to the Parcel A Conservation Area. A 6-foot to 8-foot-high metal fence will be placed along the northwestern, western, and southern sides of Building B at the outer edge of the drive aisles and parking areas. To separate the Building B northern parking lot/property line and the trail head parking lot an 8-foot-high combination screening fence/wall, consisting of a 4-foot high tubular steel metal fence on top of a 4-foot high screen wall, will be installed. An 8-foot-high metal sliding gate and 15-feet high concrete screening walls will be located on the south side of Building B facing west to Barton Street to screen views of the dock doors and loading area from Barton Street.

The City has also adopted an *Urban Forestry Policy Manual* to establish guidelines for planting, pruning, preservation, and removal of all trees in City rights-of-ways (PW). The City Public Works Department is responsible for the maintenance of all street trees planted by the Project within City right-of-way in accordance with the *Urban Forestry Policy Manual* (PW, p. 14). The Project does not propose the removal of any existing trees within public rights-of-way. Therefore, with regard to conflicts with local ordinances to protect biological resources, impacts will be **less than significant without mitigation**. The Project's consistency with the MSHCP and SKRHCP are discussed in more detail under Threshold F below.

Threshold F: *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?*

Western Riverside County Multiple Species Habitat Conservation Plan

The Project site is located within the MSHCP Plan Area. The site is not located in a Criteria Cell. The Project site is flanked by PQP Lands within the Sycamore Canyon Wilderness Park, which is located directly north of the site. The MSHCP requires that projects comply with its Sections 6.1.2 (Protection of Species within Riparian/Riverine Areas and Vernal Pools), 6.1.3 (Protection of Narrow Endemic Plant Species), 6.1.4 (Urban and Wildlands Interface), 6.3.2 (Additional Survey Needs and Procedures), Appendix C (Standard Best Management Practices), and Section 7.5.3 (Construction Guidelines). The Project's consistency with each of these sections is discussed below.

Section 6.1.2 Protection of Species within Riparian/Riverine Areas and Vernal Pools

The Project site was found to have suitable habitat for wildlife species that commonly occur in riparian/riverine habitats associated with Section 6.1.2 of the MSHCP such as LBVI. The riparian woodland habitat present within the drainages that traverse portions of the Project site along the center, southern and western area is potential breeding habitat for the State and Federally-endangered LBVI (Wood(a), p. 37-38). Focused surveys, following USFWS protocol were conducted in 2014 and 2020 for least Bell's vireo, southwestern willow flycatcher, and western yellow billed cuckoo. LBVI were detected within the riparian/riverine habitat on-site, but southwestern willow flycatcher and western yellow billed cuckoo were not. A DBESP was prepared as impacts to riparian/riverine areas and occupied LBVI habitat on-site could not be completely avoided. Since LBVI were observed, 90 percent of the occupied portions of the property that provide for long-term conservation value for the LBVI shall be conserved in a manner consistent with conservation of the vireo. In addition, Mitigation Measure **MM BIO-6** includes the enhancement and creation of in-kind riparian woodland in Area C as well as the restoration of Drainage B. Non-jurisdictional and non-riparian/riverine slopes with be restored with native seed mix. A culvert will be installed to provide a hydrological connection and for use as a wildlife corridor. The conservation area will be managed by the Rivers and Lands Conservancy or other CDFW approved entity. With implementation of **MM BIO-6** the Project is consistent with Section 6.1.2.

According to the field study conducted by Wood(a), the Project site does not contain habitat for fairy shrimp. As previously mentioned in Section 5.2.1 under Sensitive Wildlife Species, fairy shrimp occur in natural vernal pools and other less natural features such as stock ponds, road ruts, and compacted soils. Vernal pools are seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season.

Section 6.1.3 Protection of Narrow Endemic Plant Species

The Project site is not located in a Narrow Endemic Species Survey Area, or in a Criteria Area Species Survey Area for plants, and no focused surveys for these species are required. As such, the Project is consistent with Section 6.1.3 of the MSHCP.

Section 6.1.4 Guidelines Pertaining to Urban Wildlands Interface

The MSHCP Urban/Wildland Interface Guidelines are intended to address indirect effects associated with locating development in proximity to the MSHCP Conservation Area. The Project is adjacent to the Sycamore Canyon Wilderness Park, identified in the MSHCP as Existing Core D. To minimize Edge Effects MSHCP Section 6.1.4 identifies guidelines applicable to Projects adjacent to Conservation Areas. The City, as the MSHCP Permittee, is to consider these guidelines in reviewing the Project. The MSHCP Urban/Wildland Interface Guidelines address: drainage, toxics, lighting, noise, invasives, barriers, and grading as discussed below in Table 5.3-3 – Project Compliance with MSHCP Urban/Wildlands Interface Guidelines**.**

Table 5.3-3 - Project Compliance with MSHCP Urban/Wildlands Interface Guidelines

MSHCP Guidelines	Project Features
Drainage	
Proposed Developments in proximity to the MSHCP Conservation Area shall 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 shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas into the MSHCP Conservation Area. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that may 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 shall occur to ensure effective operations of runoff control systems.	In the post-Project condition, Drainage A storm water runoff will continue to flow through the site via an underground 48” pipe that will cross through the Project along the northern parking lot of Building B and will continue to convey the discharge flows to concentration point 2-1 and then flows to POD-2. POD-2 is located near the northeast corner of the western development, Building B. Runoff from these areas will first surface flow into Filterras for water quality treatment prior to discharging into an underground detention system. Pollutant sources are projected to include on-site drain inlets, landscape/outdoor pesticide use, refuse areas, plazas, sidewalks, loading docks, and parking lots. The continued conveyance of stormwater and non-stormwater runoff and connectivity to Drainage B as well as Area C will not be altered and the hydrology support to the riparian/riverine areas located outside and downstream of the Project site will not be cut off or significantly reduced. The Project would be required to comply with the NPDES Statewide General Construction Permit (Order No. 09-09-DWQ). The permit requires preparation of an effective Storm Water

MSHCP Guidelines	Project Features
	Pollution Prevention Plan (SWPPP), which describes erosion and sediment control BMPs to prevent stormwater pollution during construction. The SWPPP must be prepared by a Qualified SWPPP Developer and implemented on site by a Qualified SWPPP Practitioner. Through compliance with the regulatory requirements of the NPDES Statewide General Construction Permit and on-site drainage facilities, the Project is not expected to violate any water quality standards or waste discharge requirements during construction. Once the Project is constructed, operation of the site will have the potential to generate types of pollutants. However, with the implementation of the PWQMP, the Project would follow Site Control, Source Control, and Treatment Control BMPs. Due to the Project design, the Project is consistent with the MSHCP Urban/Wildlands Interface Drainage Guidelines.
Toxics	
Land uses proposed in proximity to the MSHCP Conservation Area that use	The Project is required to implement a Project Specific Water Quality Management Plan

MSHCP Guidelines	Project Features
chemicals or generate bioproducts such as manure that are potentially toxic or may adversely affect wildlife species, habitat, or water quality shall incorporate measures to ensure that application of such chemicals does not result in discharge to the MSHCP Conservation Area. Measures such as those employed to address drainage issues shall be implemented.	(WQMP) with Best Management Practices (BMPs) to address the Project's pollutants and preventing them from being discharged into Drainage B or Area C and offsite into downstream receiving waterbodies, including Sycamore Canyon Creek and the Santa Ana River. Implementation of mitigation measures and BMPs will also prevent the discharge of toxics. The Project does not propose to use chemicals, or generate bioproducts, such as manure, that are potentially toxic or may adversely affect wildlife species and therefore is consistent with the MSHCP Urban/Wildlands Interface Drainage Guidelines.
Lighting	
Night lighting shall be directed away from the MSHCP Conservation Area to protect species within the MSHCP Conservation Area from direct night lighting. Shielding shall be incorporated in project designs to ensure ambient lighting in the MSHCP Conservation Area is not increased.	The warehouse buildings will have nighttime lighting for security; however, the lights will be shielded downwards per Mitigation Measure **MM AES-1** and will have motion detectors and will only be turned on if and when employees are present. As stated in Mitigation Measure **MM AES-2**, a photometric study is required by the City to ensure that the light sources will be shielded to minimize off-site glare, will not direct light skyward and will be directed away from adjacent properties and public right-of-way. If lights are proposed to be mounted on buildings, down-lights shall be utilized. Light poles shall not exceed 20-feet in height. The trail head parking lot, which is located along the northern side of Building B, is a buffer between the warehouse operations and the wilderness park/preserve. The parking lot will have a gate at its entrance to control access from dusk to dawn. As vehicles would not be allowed in the parking lot between dusk and dawn there would not be any vehicle headlights shining into the park from the

MSHCP Guidelines	Project Features
	parking lot. These restrictions will allow the Project to stay consistent with the MSHCP Guidelines.
Noise	
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.	Construction noise is anticipated to exceed 65 dBA(A) Leq at the sensitive riparian habitat between the buildings (Drainage B). Construction noise impacts will be minimized with implementation of a mitigation measure **MM NOI-1**. As least Bell's vireo are present in the Sycamore Canyon Wilderness Park adjacent to the site and Parcel A and Parcel B within the site, construction noise impacts shall be minimized through implementation of a 12-foot temporary noise barrier. The barrier may be constructed with 1-inch plywood and provide a reduction of at least 10 dB(A) to ensure noise levels do not exceed 65 dB(A) at the Sycamore Canyon Wilderness Park and on-site conservation areas. As stated in Section 5.11 Noise, the Western Riverside County Regional Conservation Authority recommends a noise limit of 65 dB(A) Leq for construction[1]. These construction and operational limits were applied at the boundary between the Project site and the Sycamore Canyon Wilderness Park and at the edge of the on-site conservation areas. Section 9.52.040 of the Municipal Code states that the maximum noise levels from stationary noise sources at the property line of a sensitive

[1] The Riverside Municipal Code (RMC) indicates that noise project construction noise levels are considered exempt from municipal regulation of activities occur within the hours specified in section 7.35.020 (G), provided a permit has been obtained from the City as required. However, neither the City of Riverside General Plan nor RMC establish numeric maximum acceptable construction source noise levels at potentially affected receivers, either residential or sensitive biological resources. Because the Riverside GP and the RMC do not establish numeric maximum acceptable construction source noise levels a numeric threshold based on guidance from the Western Riverside County Regional Conservation Authority (RCA) is used for analysis of daytime construction impacts. A maximum acceptable construction source noise level of 65 dBA is recommended by the RCA for sensitive riparian/riverine areas.

MSHCP Guidelines	Project Features
	receptor are to remain below 45 dB(A) L_{eq} during the nighttime hours (10:00 p.m. to 7:00 a.m.) and are not to exceed 55 dB(A) L_{eq} during the daytime hours (7:00 a.m. to 10:00 p.m.). Section 9.52.020[I] states that sound emanating from private construction projects located within on-quarter mile from an inhabited dwelling is exempt from the provisions of Chapter 9.52, if construction occurs between the hours of 6:00 a.m. and 6:00 p.m. during the months of June through September, and between the hours of 7:00 a.m. and 6:00 p.m. during the months of October through May. Daytime operational noise from the warehouses would range from 32 to 48 dB(A) L_{eq} and nighttime noise levels would range from 25 to 42 dB(A) L_{eq}. Noise levels would be less than the applicable daytime and nighttime Title 7 Noise Ordinance limits at the property lines. At the edge of the Sycamore Canyon Wilderness Park and on-site conservation areas, daytime noise levels due to future Project on-site noise sources would range from 32 to 51 dB(A) L_{eq} and nighttime noise levels due to future Project on-site noise sources would range from 30 to 45 dB(A) L_{eq}. Future operational noise levels generated by the on-site noise sources would not exceed the applicable Title 7 residential noise level limits of 55 dB(A) L_{eq} during the daytime hours and 45 dB(A) L_{eq} during the nighttime hours at the property line of the adjacent Sycamore Canyon Wilderness Park and on-site conservation areas. The Project would not result in increased noise that would adversely affect sensitive wildlife and the Project is consistent with the MSHCP Urban/Wildlands Interface Guidelines.

MSHCP Guidelines	Project Features
Invasives	
When approving landscape plans for Development that is proposed adjacent to the MSHCP Conservation Area, Permittees shall consider the invasive, non-native plant species listed in Table 6-2 [of the MSHCP] and shall require revisions to landscape plans (subject to the limitations of their jurisdiction) to avoid the use of invasive species for the portions of Development that are adjacent to the MSHCP Conservation Area. Considerations in reviewing the applicability of this list shall include proximity of planting areas to the MSHCP Conservation Areas, species considered in the planting plans, resources being protected within the MSHCP Conservation Area and their relative sensitivity to invasion, and barriers to plant and seed dispersal, such as walls, topography, and other features.	The landscape plans will not include any of the species included on the MSHCP Table 6-2, Plants That Should Be Avoided Adjacent to The MSHCP Conservation Area (Wood(a) page 34-36). All non-native species will be removed and will be enhanced by replacing them with native species approved by the USFW. Drainage B will be a restoration area and also include planting native species. Subsequent irrigation will be done in all area with the most appropriate method being determined by the restoration contractor (Wood(c) page 4-6). The Project's landscape plans do not include any invasive species and therefore the Project is consistent with the MSHCP Urban/Wildlands Interface Invasive Guidelines.
Barriers	
Proposed land uses adjacent to the MSHCP Conservation Area shall 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.	A 42-inch high cable rail theme fence will be located along the northern property line of Parcel 1, behind Building A, separating the Sycamore Canyon Wilderness Park and Parcel 1/Building A. A 4-foot high concrete wall with 4-foot high tubular steel metal fence on top will be constructed along the northern side of the Parcel 2/Building B site. Therefore, because the Project incorporates barriers to minimize unauthorized public access or illegal trespasses or dumping, between the Project site and the Sycamore Wilderness Park to the north, the Project is consistent with the MSHCP Urban/Wildlands Interface Barrier.

MSHCP Guidelines	Project Features
Grading/Land Development	
Manufactured slopes associated with proposed site development shall not extend into the MSHCP Conservation Area.	There is limited grading that will extend into the additional (newly proposed) Restricted Property, required for the construction of the retaining wall and storm drain outlet at the northeast corner of Building B/Parcel 2. This grading is needed to avoid the 100 linear feet of drainage course and associated riparian vegetation. Project does not propose any grading within the Sycamore Canyon Wilderness Park. Further, a temporary fence will be installed to provide a barrier during construction between the Project site and the Park area. No equipment will need to access the site from the Sycamore Canyon Wilderness Park. Therefore, the Project is consistent with the MSHCP Urban/Wildlands Interface Grading/Land Development Guidelines.

For the reasons set forth above, the Project will be compliant with Section 6.1.4 of the MSHCP.

MSHCP Section 6.3.2 Additional Survey Needs and Procedure

The Project is located in an Additional Survey Area for BUOW. Previous surveys have determined suitable habitat for BUOW on the Project site and per Section 6.3.2 of the MSHCP, focused surveys are warranted. As discussed under Threshold A, the 2018 and 2020 focused surveys demonstrated that no BUOW were identified in the Project site. BUOW is a species covered under the SSC and MSHCP. A preconstruction survey for BUOW will be conducted 30 days prior to ground disturbing activities per **MM BIO-10** below. The Project will be compliant with Section 6.3.2 of the MSHCP with implementation of this mitigation measure.

MSHCP Appendix C Standard Best Management Practices

Appendix C identifies standard BMPs to be implemented during construction of projects in proximity to the MSHCP Conservation Area. The BMPs cover issues such as biological monitoring, water pollution and erosion, defining the Project's limits to minimizing the footprint of disturbance, identification and avoidance of jurisdictional resources, and if feasible, equipment storage. With implementation of mitigation measure **MM BIO-11** below, the Project will be compliant with BMPs in Appendix C.

Section 7.5.3 Construction Guidelines

Section 7.5 of the MSHCP sets forth *Guidelines for Facilities Within the Criteria Area and PQP Lands*. Section 7.5.3 outlines construction guidelines. Because the Project does not propose any construction within an MSHCP Criteria Area or PQP lands, the construction guidelines in Section 7.5.3 are not applicable.

Stephen's Kangaroo Rat Habitat Conservation Plan

The Project site is not within an SKRHCP Core Reserve. For compliance with SKRHCP, MM BIO-8 will require the Project proponent to pay the SKR mitigation fee in effect at the time a grading permit is issued.

Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan

The Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan identifies appropriate edge treatments between the park and other uses. It requires a 7 foot high masonry wall edge treatment with possible substitution of a 6-foot tall wrought iron fence per the City of Riverside Parks, Recreation, and Community Services Department Standard Detail No. 5520 and specifications. The Standard Detail No. 5520 fence is preferred by the Parks Department to improve the visible connection to the conservation area, provide an open visible sense of security for trail users and to reduce the opportunity for graffiti.

Fencing and walls around the Project site have been designed to be compliant with requirements in the SCWP SKRMP. As shown on Figure 3.0-11 – Fencing Plan, several different fences and walls will be installed with the most northern being a 42-inch cable rail theme fence along the northern property line, adjacent to the Sycamore Canyon Wilderness Park. The 42-inch cable rail theme fence will also extend along the western side of Parcel 1 and the boundary of Parcel A, the Restricted Property/Conservation Area. The 42-inch cable rail theme fence will also run along Parcels A and B Conservation Areas southern boundary and frontage along Alessandro Boulevard and on both sides of the Parcel 1/ Building A driveway on Alessandro Boulevard. An 8-foot-high concrete screen wall will be constructed around the east, north and west sides of Building A at the outer edge of the drive aisles and parking area. A 6-foot to 8-foot-high metal fence will be placed along the outer edge of the drive aisles and parking area on the south side of Building A. An 8-foot-high metal sliding gate and 15-feet high concrete screening walls will be located on both sides of the southern end of Building A that faces Alessandro Boulevard to screen views of the dock doors and loading areas from Alessandro Boulevard.

This 8-foot-high concrete screen wall will be installed around the northeast, east, and southeast sides of Building B, at the outer edge of the drive aisles and parking areas, adjacent to the Parcel A Conservation Area. A 6-foot to 8-foot-high metal fence will be placed along the northwestern, western, and southern sides of Building B at the outer edge of the drive aisles and parking areas. To separate the Building B northern parking lot/property line and the trail head parking lot an 8-foot-high combination screening fence/wall, consisting of a 4-foot high tubular steel metal fence on top of a 4-foot high screen wall, will be installed. An 8-foot-high metal sliding gate and 15-feet

high concrete screening walls will be located on the south side of Building B facing west to Barton Street to screen views of the dock doors and loading area from Barton Street.

The Project proposes trailhead improvements at the northern terminus of Barton Street. Construction of trailhead improvements include a parking lot located north of Building B, a sidewalk, shade structure, bike rack, drinking fountains, fencing, and a fire departments access gate for consistency with the Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan.

The Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan and impacts are considered **less than significant with mitigation incorporated**.

5.3.6 Proposed Mitigation Measures

An EIR is required to describe feasible mitigation measures that could minimize significant adverse impacts (State CEQA Guidelines Section 15126.4).

The following mitigation measures (MM) have been proposed for the Project to avoid and/or minimize potential impacts to sensitive biological resources.

MM BIO-1: Prior to issuance of a grading permit, a qualified biologist shall collect seed for paniculate tarplant and Robinson's pepper-grass throughout the proposed development footprint of the project. The seeds shall be stored in accordance with the biologist's recommendations until restoration efforts are commenced within the existing and additional Restricted Property/conservation area. If seed is not collected prior to grading permit issuance then topsoil, where identified by the qualified biologist, shall be salvaged and temporarily stored in accordance with the qualified biologists' recommendations until restoration efforts are commenced. On site restoration efforts shall incorporate the collected seed or salvaged topsoil.

MM NOI-1: Prior to issuance of grading and construction activities, should least Bell's vireo be present in the Sycamore Canyon Wilderness Park within 300 feet of the Project site, in Parcel A on-site conservation area, or within Parcel B on-site conservation area within 100 feet of the development footprint, construction noise impacts shall be minimized through implementation of the following measure:

1. A 12-foot high temporary noise barrier shall be installed at the perimeter of the limits of disturbance between the construction activities and the adjacent Sycamore Canyon Wilderness Park to the north and east, and the on-site conservation areas as shown in Figure 5.11-5 – Construction Barrier. The barrier shall be continuous without openings, holes, or cracks, and shall reach the ground. The barrier may be constructed with 1-inch plywood and provide a reduction of at least 10 dB(A) to ensure noise levels do not exceed 65 dB(A) L_{eq} at the Sycamore Canyon Wilderness Park and on-site conservation areas. Other barrier materials providing the same reduction shall also be permitted.

2. Heavy grade rubber mats/pads shall be used within the bed of the trucks. These mats will help attenuate initial impact noise generated when an excavator drops rock and debris into the bed of the truck. These mats must be maintained and/or replaced as necessary.
3. During all Project site excavation and grading on-site, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturer standards.
4. The contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the Project site.
5. Equipment shall be shut off and not left to idle when not in use.
6. The contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise/vibration sources and sensitive receptors nearest the Project site during all Project construction.
7. The Project proponent shall mandate that the construction contractor prohibit the use of music or sound amplification on the Project site during construction.
8. The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment (7:00 a.m. to 6:00 p.m. on weekdays, and 8:00 a.m. to 5:00 p.m. on Saturdays).
9. The use of heavy equipment or vibratory rollers and soil compressors shall be limited along the Project boundaries to the greatest degree possible. It is acknowledged that some soil compression may be necessary along the Project boundaries.
10. Any jackhammers, pneumatic equipment and all other portable stationary noise sources shall be shielded, and noise shall be directed away from sensitive receptors.
11. For the duration of construction activities, the construction manager shall serve as the contact person should noise levels become disruptive to local residents. A sign should be posted at the Project site with the contact phone number. This sign shall be posted at the Alessandro Boulevard frontage as well as the Barton Street frontage.

MM BIO-2: The Project has been designed to avoid direct construction impacts to riparian plant communities to the greatest extent feasible. Avoidance and minimization measures shall be included in the Project specifications for implementation during construction to further reduce the potential for any temporary, indirect impacts to occur to these areas during construction activities, including the following:

- Trash and other debris shall be properly disposed of and not left on-site in areas where it could fall into protected habitat.
- Project boundaries shall be clearly marked with fencing, or other suitable type of marking material as directed by a qualified biologist. Vehicles and other Project construction personnel shall stay within these delineated Project boundaries.
- Sensitive areas (i.e., jurisdictional drainage features, riparian habitats, and MSHCP Conservation Areas) in proximity to the construction footprint shall be clearly marked,

with fencing or other suitable type of marking material as directed by a qualified biologist, for awareness and avoidance.

- Refueling, washing, or other vehicular maintenance activities shall occur a minimum of 100 feet away from riparian areas, including the conserved riparian habitat.
- Equipment would be maintained and checked at least on a daily basis for leaks.
- All vehicle leaks or other hazardous material leaks shall be contained and cleaned up immediately. All contaminated soil shall be removed from the site and disposed of properly.

MM BIO-3: During soil excavation, grading, or other subsurface disturbances, the construction contractor shall supervise provision and maintenance of all standard dust control BMPs to reduce fugitive dust emissions, including but not limited to the following actions:

- Water any exposed soil areas a minimum of twice per day, or as allowed under any imposed drought restrictions. On windy days or when fugitive dust can be observed leaving the construction site, additional water shall be applied at a frequency to be determined by the on-site construction superintendent.
- Pave, periodically water, or apply chemical stabilizer to construction access/egress points.
- Minimize the amount of area disturbed by clearing, grading, earthmoving, or excavation operations at all times.
- Operate all vehicles on graded areas at speeds less than 15 miles per hour.
- Cover all stockpiles that would not be utilized within three days with plastic or equivalent material, to be determined by the on-site construction superintendent, or spray them with a non-toxic chemical stabilizer.

MM BIO-4: During construction, to address potential short-term impacts to water quality within the on-site drainages from construction runoff that may carry storm water pollutants, a SWPPP shall be implemented by the construction contractor as required by the California General Construction Storm Water Permit pursuant the Regional Board regulations. The SWPPP shall identify BMPs related to the control of toxic substances, including construction fuels, oils, and other liquids. These BMPs would be implemented by the construction contractor prior to the start of any ground clearing activity, shall be subject to periodic inspections by the City and the Project's hydrological consultant, shall be maintained throughout the construction period and remain in place until all landscape and permanent BMPs are in place. BMPs shall be monitored and repaired if necessary, to ensure maximum erosion, sediment, and pollution control.

- The use of erosion control materials potentially harmful to fish and wildlife species, such as mono-filament netting (erosion control matting) or similar material, within and adjacent to conserved riparian habitat shall be prohibited.

- All fiber roles,[2] straw waddles, and/or hay bales utilized within and adjacent to the Project site shall be free of non-native plant materials.
- Construction contractor shall comply with all litter and pollution laws. All contractors, subcontractors, and employees shall also obey these laws.
- Water containing mud, silt, or other pollutants from grading, aggregate washing, or other activities shall not be allowed to enter the conserved riparian habitat or be placed in locations that may be subjected to high storm flows.
- Spoil sites shall not be located within jurisdictional areas and MSHCP Conservation Areas or locations that may be subjected to high storm flows, where spoil shall be washed back into the conserved riparian habitat where it would impact streambed habitat and aquatic or riparian vegetation.
- Raw cement/concrete or washings thereof, asphalt, paint, or other coating material, oil or other petroleum products, or any other substances which could be hazardous to fish and wildlife resources resulting from Project related activities shall be prevented from contaminating the soil and/or entering the conserved riparian habitat. These materials, placed within or where they may enter the conserved riparian habitat or any party working under contract to the construction contractor, shall be removed immediately.
- No equipment maintenance shall be done within or near the conserved riparian habitat where petroleum products or other pollutants from the equipment may enter these areas under any flow.
- No broken concrete, cement, debris, soil, silt, sand, bark, slash, sawdust, rubbish, or washings thereof, oil or petroleum products, or other organic or earthen material from any construction or associated activity of whatever nature shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into the conserved riparian habitat. When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the conserved riparian habitat.

MM BIO-5: Prior to issuance of grading permit, the following measures shall be incorporated into the construction documents and specifications, and implemented by the contractor, to avoid potential construction-related impacts to the conserved riparian habitat outside of the approved disturbance limits:

- Construction worker training shall be provided by a qualified biologist at the first on-site construction meeting;
- Project boundaries shall be clearly marked and or signs shall be erected near the top of slope adjacent to the conserved riparian habitat to prevent accidental/unauthorized intrusions during construction; and

[2] Fiber rolls or erosion control mesh shall be made of loose-weave mesh that is not fused at the intersections of the weave, such as jute, or coconut (coir) fiber, or other products without welded weaves. Non-welded weaves reduce entanglement risks to wildlife by allowing animals to push through the weave, which expands when spread.

- Staging areas for storage of materials and heavy equipment, and for fueling, cleaning, or maintenance of construction vehicles or equipment, shall be prohibited within 20 feet from the top of slope adjacent to the conserved riparian habitat.

MM BIO-6: Prior to issuance of occupancy permit, in order to reduce impacts to on-site Riparian/Riverine areas and suitable habitat for LBVI, on-site mitigation shall include:

1. Enhancement of a total of 1.58 acres of riparian habitat: 0.01 acre in Drainages A, 1.34 acres in B, and 0.23 acre in Area C.
2. Create (establish) 0.61 acre of in-kind riparian woodland in Area C.
3. Restoration of 0.02 acre of riparian habitat in Drainage B.
4. The non-jurisdictional, non- riparian/riverine upland areas of slopes associated with the access road will be restored/ replanted with native seed mix.
5. The roadway/access to Parcel 1/ Building A shall include culverts to provide a hydrological connection to the riparian habitat on the east side of the roadway and a corridor for small wildlife species.
6. Revise the existing Restricted Property to include Parcel A (7.19 acres) and Parcel B (5.04 acres), with a combined area of 12.23 acres. The revised 12.23 Restricted Property shall be managed in perpetuity with an endowment funded by the developer and by a CDFW approved 3rd party (such as Rivers and Lands Conservancy "RLC").

MM BIO-7: In order to reduce potential impacts to MSHCP covered species, payment of the MSHCP mitigation fee shall be provided to the City of Riverside prior to issuance of a grading permit for the project.

MM BIO-8: Payment of the SKRHCP fee shall be provided to the City of Riverside prior to issuance of a grading permit for the Project.

MM BIO-9: If construction activity is conducted between September 1st and January 31st, then this mitigation measure is required prior to issuance of a grading permit. Federal Migratory Bird Treaty Act (MBTA) and/or state code protect all native bird species - both common and special status. In most scenarios, MSHCP coverage does not override the nesting bird protections provided by these. Impacts to nesting birds, both direct and indirect, can be minimized or eliminated by conducting work activities outside of the local breeding season. Although nesting can occur in any month in southern California for some species, breeding in the study area, given the habitat, would primarily be expected from about 1 February through 31 August. Work from about 1 September through 31 January would avoid most negative affects to birds and nesting activity. If work must be done during the breeding season, surveys for nesting birds should occur no more than three (3) days prior to all vegetation clearing and ground disturbance. If active nests are found, they should be avoided until young have fledged. While there is no established protocol for nest avoidance, when consulted the CDFW generally recommends avoidance buffers of about 500 feet for raptors and threatened/endangered species and 100 – 300 feet for non-raptors.

Adherence to these nesting bird recommendations will also avoid and/or mitigate impacts to special status bird species known from the project site which are not covered by the MSHCP.

MM BIO-10: A focused BUOW survey must be conducted during the breeding season (four visits between 1 March - 31 August). Regardless of the result of those surveys, because of the presence of suitable habitat that could be occupied at any time, a one-day preconstruction survey must also be conducted 30 days or less before groundbreaking.

MM BIO-11: During construction standard BMPs from Volume I, Appendix C of the MSHCP shall be implemented to avoid impacts to biological resources of the MSHCP. The following standard BMPs shall be included as Environmental Requirement Notes on the final grading plans to be reviewed and approved by City Staff prior to issuance of a grading permit. The measures are as follows:

1. A condition shall be placed on grading permits requiring a qualified biologist to conduct a training session for project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act (Act) and the MSHCP, the need to adhere to the provisions of the Act and the MSHCP, the penalties associated with violating the provisions of the Act, the general measures that are being implemented to conserve the species of concern as they relate to the project, and the access routes to and project site boundaries within which the project activities must be accomplished.
2. Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.
3. The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.
4. The upstream and downstream limits of projects disturbance plus lateral limits of disturbance on either side of the stream shall be clearly defined and marked in the field and reviewed by the biologist prior to initiation of work.
5. Projects should be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.
6. Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season of riparian species identified in MSHCP Global Species Objective No. 7.
7. When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing or other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.

8. Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, USFWS, and CDFW, RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.
9. Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.
10. The qualified project biologist shall monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint.
11. The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.
12. Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.
13. To avoid attracting predators of the species of concern, the project site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).
14. Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.

5.3.7 Cumulative Environmental Effects

The Project site and cumulative development projects are located within the MSHCP; thus, the geographic scope for cumulative impacts to biological resources are the MSHCP plan area. As stated in Section 5.3.3.2 (Biological Resources, Related Regulations), the overall biological goal of the MSHCP is to conserve covered species and their habitats, as well as to maintain biological diversity and ecological processes while allowing for future economic growth within a rapidly urbanizing region.

Because the City and all cities within western Riverside County are signatories to the MSHCP, all projects within the City are required to comply with the MSHCP and conduct biological habitat assessments/focused surveys as necessary and to pay the MSHCP mitigation fee. Compliance

with the MSHCP provides mitigation for direct, indirect, and cumulative impacts to covered species. As required by the MSHCP, a Habitat Assessment and MSHCP Compliance Report, jurisdictional delineation, and focused surveys for LBVI and BUOW were conducted to assess potential impacts associated with the Project. Additionally, because the Project will impact riparian/riverine resources and occupied LBVI habitat a DBESP was prepared that includes on-site mitigation that will result in superior riparian habitat conditions than currently occur on the site.

The Project is required to adhere to mitigation measures **MM BIO 1** through **MM BIO 11** to reduce impacts to less than significant and ensure compliance with the MSHCP and the SKR HCP. Cumulative development projects within the MSHCP plan area and SKR HCP area will also be required to pay mitigation fees and implement additional mitigation measures will be identified on a project-specific level as they are proposed and approved. Because compliance with the MSHCP is intended to address all projects within the Western Riverside County region, it addresses and provides mitigation for cumulative impacts to biological resources for the area of coverage. (GP2025 FPEIR, p. 7-10) Therefore, because the Project and cumulative development projects are required to comply with the MSHCP and the MSHCP provides mitigation for direct, indirect, and cumulative impacts to covered species, cumulative impacts are **less than significant with mitigation**.

5.3.8 References

The following references were used in the preparation of this section of the DEIR:

ELMT	ELMT Consulting, Inc., *Sycamore Hills Distribution Center, Riverside County, California, Burrowing Owl Focused Survey Report*, September 2020 (Appendix D)
GP 2025	City of Riverside, *General Plan 2025*, certified November 2007 with subsequent amendments to various elements. (Available at http://www.riversideca.gov/planning/gp2025program/general-plan.asp, accessed February 2020.)
GP 2025 FPEIR	City of Riverside, *General Plan 2025 Program Environmental Impact Report* (SCH# 2004021108), certified November 2007. (Available athttps://riversideca.gov/cedd/planning/city-plans/general-plan-0, accessed February 2020)
Kidd	Kidd Biological, Inc., *2020 Least Bell's Vireo, Southwestern Willow Flycatcher & Yellow-Billed Cuckoo Survey Results for the Sycamore Hills Distribution Center, Riverside County, California*, August 2020 (Appendix D)
RVA	RVA, Inc. *Determination of Biologically Equivalent or Superior Preservation (DBESP) Report for Impacts to Riparian/Riverine Resources*, January 2021. (Appendix D)

PW	City of Riverside Public Works Department, *Urban Forestry Policy Manual*, August 2015. (Available at https://www.riversideca.gov/publicworks/trees/pdf/UrbanForestry-TOC.pdf, accessed February 2020.)
SCWP SKR and Dev Plan	Dangermond & Associates, O'Farrell Biological Consulting, Firewide 2000, Inc., Tierra Madre Consultants, Inc., *Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan*, March 1999. (Available at http://www.riversideca.gov/planning/pdf/SpecificPlans/SycCynMnmgtPlan_Up datedConceptualPlan.pdf, accessed February 2020)
Western Riverside County MSHCP	*Western Riverside County Multiple Species Habitat Conservation Plan*, Volume 1-The Plan, Section 3. 2019 (Available at https://rctlma.org/Portals/0/mshcp/volume1/sec3.html, accessed February 2020)
Wood(a)	Wood Environmental & Infrastructure, Inc., *Sycamore Hills Distribution Center Project Biological Assessment and Western Riverside County Multiple Species Habitat Conservation Plan Consistency Report*, September 2020 (Appendix D)
Wood(b)	Wood Environmental & Infrastructure, Inc., *Jurisdictional Delineation Report, Sycamore Hills Distribution Center, City of Riverside, Riverside County, California,* December 2020 (Appendix D)
Wood(c)	Wood Environmental & Infrastructure, Inc., *Mitigation Planting Plan, City of Riverside, Riverside County, California,* November 2018 (Appendix D)

5.4 Cultural Resources

Based on Appendix G of the *State CEQA Guidelines* and comments received during the NOP public comment period, this section evaluates the Project's potential impacts to historical resources, unique archaeological resources, tribal cultural resources, and disturbing human remains.

The following discussion is based on the *Phase I and Phase II Cultural Resource Investigations for the Sycamore Hills Distribution Center Project, City of Riverside, Riverside County, California*, prepared by Applied Earthworks (AE) in October 2018 and updated in July 2020; This report is included as Appendix E of this DEIR. Portions of the report are confidential by law and have been omitted from the Appendix.

5.4.1 Setting

Area of Potential Effects

The Area of Potential Effects (APE) is defined as the geographic area within which the Project has the potential to directly or indirectly cause alterations to historic properties, per CFR § 800.16(d). The APE identified in the *Phase I and Phase II Cultural Resource Investigations* for the Project includes approximately 48.64-acre Project site of vacant land. The Study Area used in the *Phase I and Phase II Cultural Resource Investigations* includes the APE/Project site and the area within a 1-mile radius of the Project site. Ground disturbance in the northern portion of the site may reach a maximum depth of 16 feet below the current grade.

Environmental Setting

The Project is within the northeastern part of the geologically complex Peninsular Ranges geomorphic province. The Peninsular Ranges are a northwest-southeast oriented complex of blocks that extend 125 miles from the Transverse Ranges and Los Angeles Basin to the tip of Baja California. The Peninsular Ranges are bounded to the east by the Colorado Desert and range in width from 30 to 100 miles. The Project is approximately 3.5 miles northeast of Lake Mathews and 1.5 miles southwest of Box Springs Mountain, within the central part of the Perris Block, a relatively stable rectangular structural unit positioned between the Elsinore and San Jacinto fault zones.

The geology in the vicinity of the Project consists largely of Cretaceous plutonic rocks that are part of the composite Peninsular Ranges batholith. East of the Project, very old alluvial fan deposits flank the west side of the San Jacinto Valley and form a low relief and nearly level plain, which are likely derived from the Val Verde Pluton and the Box Spring Mountains. Similarly, to the west is a very old alluvial fan forming the eastern side of the Santa Ana Valley that is likely also derived from the Val Verde Pluton and the western slopes of the Box Spring Mountains.

Much of the Project consists of biotite-hornblende tonalite, the principal plutonic rock type of the Val Verde Pluton. The tonalite is a relatively weathered, homogeneous, gray granitic rock that is mostly massive and occasionally foliated.

Soils within the Project, as mapped by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), are all derived from alluvium from granitic bedrock, which is usually deeply weathered. Mapped soil series with a buried A (Ab) horizon are considered to have a higher probability of a cultural resource. None of the mapped soil series has a buried A (Ab) horizon; therefore, intact and significant buried cultural deposits are unlikely. The majority of the APE consists of Ramona and Fallbrook soils. Ramona fine sandy loams are nearly level to moderately steep on terraces and fans at elevations of 250 to 3,500 feet AMSL. Fallbrook soils are gently rolling to very steep on round hills at elevations of 200 to 3,000 feet AMSL or as high as 3,500 feet AMSL on south-facing slopes. Bedrock outcrops are common in some areas. As the climate of the region is largely determined by topographic features, climate, in turn, largely dictates the character of the biotic environment exploited by native populations. The climate of the Project is characterized as Mediterranean, with hot, dry summers and cool, moist winters. It has a semi-arid precipitation regime; significant changes in temperature and moisture occur based on elevation and exposure, particularly in the nearby mountains. The average annual rainfall ranges from 9 to 16 inches and the mean annual temperature varies from 59 to 65 °F.

Prehistoric Setting

The prehistoric cultural setting of the Project provides a context for understanding the types, nature, and significance of the prehistoric cultural resources identified within the general Project. Native American occupation of the inland valleys of southern California can be divided into seven cultural periods:

- Paleoindian (ca. 12,000–9500 years before present [B.P.]);
- Early Archaic (ca. 9500–7000 B.P.);
- Middle Archaic (ca. 7000–4000 B.P.);
- Late Archaic (ca. 4000–1500 B.P.);
- Saratoga Springs (ca. 1500–750 B.P.);
- Late Prehistoric (ca. 750–410 B.P.); and
- Protohistoric (ca. 410–180 B.P.), which ended in the ethnographic period.

Due to the nature of the prehistoric archaeological bedrock milling sites identified within a 1-mile-wide radius of the Project, the prehistoric cultural setting discussed below begins at the Middle Archaic period.

The data presented herein regarding the sequence of prehistoric use, adaptation, and occupation of the interior valleys and mountain localities of southern California are summarized from a synthesis of more than 10 years of archaeological research conducted at Diamond Valley Lake as part of the Eastside Reservoir Project (ESRP), located approximately 22 miles south-southeast of the Project. For the most part, the prehistory of the inland valleys of southern California that characterizes the Project has been less thoroughly understood than that of the nearby desert and coastal regions. Prior to the ESRP cultural resources studies, no comprehensive synthesis had been developed specifically for the interior valley and mountain localities of cismontane southern California that characterizes the region.

Middle Archaic Period (ca. 7000 – 4000 B.P.)

The Middle Archaic saw a reversal of the weather patterns, which had prevailed throughout much of cismontane southern California for several millennia. By about 6000 B.P., local environmental conditions ameliorated while conditions in the deserts deteriorated, reaching maximum aridity of the postglacial period proposes that a westerly air flow pattern returned to southern California, while the monsoonal weather patterns in the deserts retreated. As a result, the inland areas may have seen increased effective moisture, while the interior deserts, no longer receiving moist monsoonal flow and now in the rainshadow of the Transverse and Peninsular Ranges, became quite arid. This suggests that cismontane southern California, including the inland valleys of San Bernardino and western Riverside counties, may have been a relatively more hospitable environment than the interior deserts during the middle Holocene. The ESRP study indicated an increase in prehistoric use and occupation after about 6000 B.P., in comparison to the earlier periods, in the inland areas of cismontane southern California. The more intensively used residential locations occur along alluvial fan margins, while less intensively used areas tend to be situated on arroyo bottoms or upland benches. This interval has been described frequently as the "Milling Stone Horizon" because of the preponderance of milling tools, such as manos and milling stones, in the archaeological assemblages of sites dated to this era. In the coastal and inland regions of southern California, this period of cultural development is marked by the technological advancements of seed grinding for flour and possibly the first use of marine resources, such as shellfish and marine mammals. The artifact inventory of this period also includes other ground stone artifacts, such as crude hammerstones, as well as flaked stone artifacts, such as scraper planes, choppers, large drills, crescents, and large leaf-shaped projectile points and knives. The artifact assemblage also includes likely nonutilitarian artifacts, such as beads, pendants, charmstones, discoidals, spherical stones, and cogged stones.

Late Archaic Period (ca. 4000 – 1500 B.P.)

The Late Archaic period was a time of cultural intensification in southern California. The beginning of the Late Archaic coincides with the Little Pluvial, a period of increased moisture in the region. Effective moisture continued to increase in the desert interior by approximately 3600 B.P. and lasted throughout most of the Late Archaic. This ameliorated climate allowed for more extensive occupation of the region. By approximately 2100 B.P., however, drying and warming increased, perhaps providing motivation for resource intensification. Archaeological site types that typify this time period include residential bases with large, diverse artifact assemblages, abundant faunal remains, and cultural features, as well as temporary bases, temporary camps, and task-specific activity areas. In general, sites showing evidence of the most intensive use tend to be on range-front benches adjacent to permanent water sources, such as perennial springs or larger streams, while less intensively used locales occur either on upland benches or on the margins of active alluvial fans.

Data from Late Archaic component archaeological sites also suggest increased sedentism during this period, with a change to a semi-sedentary land-use and collection strategy. The profusion of features, and especially refuse deposits in Late Archaic components, suggests that seasonal encampments saw longer use and more frequent reuse than during the latter part of the preceding

Middle Archaic period, with increasing moisture improving the conditions of southern California after ca. 3100 B.P. Drying and warming after ca. 2100 B.P. likely exacted a toll on expanding populations, influencing changes in resource procurement strategies, promoting economic diversification and resource intensification, and perhaps resulting in a permanent shift towards greater sedentism.

The subsistence base broadened during the Late Archaic period. The technological advancement of the mortar and pestle may indicate the use of acorns, an important storable subsistence resource. Hunted resources also presumably gained importance in the diet with an abundance of broad, leaf-shaped blades and heavy, often stemmed or notched projectile points found in association with large numbers of terrestrial and aquatic mammal bones. Other characteristic features of this period include the appearance of bone and antler implements and the occasional use of asphaltum and steatite. Most chronological sequences for southern California recognize the introduction of the bow and arrow by 1500 B.P., marked by the appearance of small arrow points and arrow shaft straighteners.

Technologically, the artifact assemblage of this period was similar to that of the preceding Middle Archaic; new tools were added either as innovations or as “borrowed” cultural items. Diagnostic projectile points of this period are still fairly large (dart point size), but also include more refined notched (Elko), concave base (Humboldt), and small stemmed (Gypsum) forms. Late in the period, Rose Spring arrow points appeared in the archaeological record in the deserts, reflecting the spread of the bow and arrow technology from the Great Basin and the Colorado River region. This projectile point type was not found at the ESRP study area, and there is no evidence suggesting that the bow and arrow had come into use at this time in the inland regions of southern California.

Saratoga Springs Period (ca. 1500 – 750 B.P.)

Because paleoenvironmental conditions were little changed from the preceding period, cultural trends in the early portion of the Saratoga Springs period were, in large part, a continuation of the developments begun during the end of the Late Archaic period. However, the Medieval Warm Period (MWP), also known as the Medieval Climate Optimum, or Medieval Climatic Anomaly, was a time of even more persistent drought, began by 1060 B.P. Significantly warmer and drier conditions ensued. These climatic changes were experienced throughout the western United States, although the inland areas of cismontane southern California may have been less affected than the desert interior. The MWP continued through the first 200 years of the Late Prehistoric period until approximately 550 B.P.

Although it has been anticipated that intensive use of the inland areas of cismontane southern California during the MWP may have been curtailed altogether, owing to inhospitable climate and concomitant decline in water and food sources, this does not appear to be the case. While land-use and procurement strategies experienced profound changes during this time, the response to deteriorating conditions was not abandonment of the inland areas, but rather intensification. Climatic conditions of warming and drying that began ca. 2100 B.P., toward the end of the Late

Archaic period, had already triggered an intensification process that established productive strategies for dealing with resource stress. With the onset of the MWP, those strategies were further refined and intensified. The focal shift of prehistoric activity from alluvial fan margins to mountain-front benches adjacent to permanent water sources, which was initiated during the Late Archaic period, continues to be seen in the Saratoga Springs component archaeological sites.

The frequency of refuse deposits and artifact and toolstone caches during the MWP is slightly higher than during the preceding Late Archaic period and much higher than during the latter portion of the subsequent Late Prehistoric period. The frequency of artifact and toolstone caches more than doubled during the Saratoga Springs period from the preceding period, while the frequency of human remains reached the highest point of any time in the archaeological record. The intentional caching of toolstone and ground stone tools suggests that people anticipated returning to the same locations. The midden-altered sediments, which appear for the first time during the Saratoga Springs period, support the continued re-use of desired locations.

Archaeological assemblages demonstrate the comparative importance of plant foods as a primary food source during the MWP than in any other prehistoric period; plant processing intensified, and acorns apparently became an important staple. Faunal assemblages also show that resource stress was accommodated with similar strategies by intensifying the use of lagomorphs and by further expanding diet breadth, adding animals (i.e., medium-sized carnivores) that were rarely consumed during other periods of prehistory. The most abundant evidence of trade also occurs during the MWP, suggesting that exchange was another mechanism for dealing with resource stress.

Late Prehistoric Period (ca. 750 – 410 B.P.)

The MWP extended into the Late Prehistoric period, ending about 550 B.P. The cultural trends and patterns of land use that characterized the MWP, including the portion that extends into the earlier part of the Late Prehistoric period were discussed above. At the end of the MWP, however, and lasting throughout the ensuing Protohistoric period, a period of cooler temperatures and greater precipitation ushered in the Little Ice Age, during which time ecosystem productivity greatly increased along with the availability and predictability of water resources.

During this time, Lake Cahuilla in the Coachella Valley began to recede. As a result, the large Patayan populations occupying its shores began moving eastward to the Colorado River basin or westward into areas such as Anza Borrego, Coyote Canyon, the Upper Coachella Valley, the Little San Bernardino Mountains, and the San Jacinto Plain. The final desiccation of Lake Cahuilla, which had occurred by approximately 370 B.P. (A.D. 1580), resulted in a population shift away from the lakebed into the Peninsular Ranges and inland valleys to the west, such as the Project area, as well as to the Colorado River regions to the east.

With the return of more mesic conditions post-550 B.P., which resulted in less resource stress, studies at five residential sites comprising 16 separate components at ESRP indicate that that people returned to a less intensive, semisedentary land-use strategy similar to that identified during the Late Archaic period. The number and frequency of artifact and toolstone caches were reduced; hearth features become slightly more common. Rock art also first appeared in

association with Late Prehistoric components that post-date the MWP. The decrease in the number of artifact and toolstone caches and the first appearance of rock art during this time suggest that residential sites are now occupied on a year-round basis.

A reduction in emphasis on plant foods—especially acorns, which require intensive preparation—is also visible in the archaeological record, and likely accounts for the reduction in refuse deposits, fire-altered rock weights, and midden development visible toward the end of the Late Prehistoric period. The reduction in mortars, pestles, and other grinding tools after the MWP suggests that the intensive procurement and processing of acorns and other plant foods was no longer as critical as previously; this pattern is further supported by a decline in the effort expended in shaping grinding tools. It is possible that the portable milling toolkit was supplemented substantially by bedrock milling features; however, bedrock features cannot be dated, and, therefore, cannot be assigned to any particular time period(s).

Percentages of projectile points also increased somewhat after the MWP. Cottonwood Triangular points began to appear in inland assemblages at this time, and Obsidian Butte obsidian (located in the southeastern Salton Sea Basin and exposed by the desiccation of Lake Cahuilla) becomes much more common, suggesting an increased focus on large mammals. However, the lower ratio of late-stage bifaces indicates that hunting methods returned to random-encounter strategies, rather than the logistical forays of the preceding period. Of particular note, faunal assemblages produced an anomalously high lagomorph index after the MWP, suggesting a very wet climatic regime with dense undergrowth well suited to cottontails. Finally, the percentage of nonutilitarian artifacts declined considerably, suggesting that trade was no longer critical for assuring food supplies.

Protohistoric Period (ca. 410 – 180 B.P.)

The productive conditions of the Little Ice Age continued throughout the Protohistoric period. Generally speaking, sedentism intensified during the Protohistoric period, with small, but apparently fully sedentary villages forming. Increased hunting efficiency (through use of the bow and arrow) and widespread exploitation of acorns and other hard nuts and berries (indicated by the renewed abundance of mortars and pestles) provided reliable and storable food resources. This, in turn, promoted greater sedentism. Related to this increase in resource utilization and sedentism are sites with deeper middens, suggesting central-based wandering or permanent habitation. These would have been the villages, or rancherias, noted by the early nonnative explorers.

The most striking change in material culture during this time is the local manufacture of ceramic vessels and ceramic smoking pipes. Although pottery was known in the Colorado Desert as long ago as 800 B.P., ceramic technology in the Project region appears to date to approximately 350 B.P. Additionally, abundant amounts of lithic raw material from Obsidian Butte were imported into the region. Cottonwood Triangular points were supplemented by Desert Side Notched points. Late in this period, some European trade goods (i.e., glass trade beads) were added to the previous cultural assemblages.

Ethnographic Setting

Archival and published reports suggest the Project area is situated where the traditional use territories of the Serrano, Cahuilla, Luiseño, and Gabrielino overlap, just south of the present City of San Bernardino. All of these cultural groups spoke languages belonging to the Takic branch of the Shoshonean family, a part of the larger Uto-Aztecan language stock. In the following sections, specific aspects of Serrano, Cahuilla, Luiseño, and Gabrielino ethnography and ethnohistory are explored.

Social Structure

Prior to the Mission period (i.e., prior to 1769), the Serrano, Cahuilla, and Luiseño, had nonpolitical, nonterritorial patrimoieties that governed marriage patterns as well as patrilineal clans and lineages. The words for these moieties mean “Coyote” and “Wildcat.” These cultural groups had political-ritual-corporate units (clans) composed of three to 10 lineages, distinctly different, named, claiming a common genitor, with one lineage recognized as the founding lineage. Clans owned a large territory in which each lineage owned a village site and specific resource areas. Clan lineages cooperated in large communal subsistence activities (e.g., animal drives and hunts, controlled burning) and in performing rituals. Founding lineages often owned the office of ceremonial leader, the ceremonial house, and a ceremonial bundle.

The Gabrielino had a more sophisticated political social structure. They, too, had a system of patrilineal lineages. Each lineage belonged to one of two “Coyote” or “Wildcat” moieties. Gabrielino lineages were capable of being split and reorganized into segmentary lineages, which served as mechanism for territorial expansion. Hunting and gathering territories were owned by the lineage; lineage membership gave individual families use rights. Unlike their Serrano, Cahuilla, and Luiseño neighbors, the Gabrielino had a hierarchically ordered social class of elite, middle class, and commoners. Class membership played a major role in determining individual lifestyles, as it depended upon both ancestry and wealth.

Subsistence and Domestic Resources

The Serrano, Cahuilla, Luiseño, and Gabrielino were, for the most part, hunting, collecting, and harvesting peoples. The Serrano, Cahuilla, and Luiseño clans were apt to own land in valley, foothill, and mountain areas, providing them with the resources of many different ecological niches. Individual lineages or families owned specific resource areas within the clan territory. As in most of California, acorns were a major staple, but the roots, leaves, seeds, and fruit of many other plants were also used. Fish, birds, insects, and large and small mammals were available. Mountain sheep (*Ovis canadensis*), deer, and antelope were some of the large mammals hunted. Now extinct in this part of California, antelope were once numerous in the area. As well, mountain lion, black bear, grizzly bear, deer, and wild boar were hunted. Similarly, the Gabrielino lineage ownership of land in valley, foothill, mountain, coastal, and estuary areas also offered a diverse array of food and other natural resources.

To gather food resources and to prepare them for eating, the Serrano, Cahuilla, Luiseño, and Gabrielino had an extensive inventory of equipment. The throwing stick and bow and arrow were

the most important hunting tools for killing game, but snares, traps, slings, decoys, disguises, and hunting blinds were also part of the hunting technology. For fishing, nets, traps, spears, hooks and lines, and fish poisons were used. Many inland villages had access to creeks and rivers and to ancient Lake Cahuilla until its last desiccation about 400 to 450 years ago, and during subsequent brief stands during the mid-1800s. Gathering required few tools: poles for shaking down pine nuts and acorns, cactus pickers, chia hooks, seed beaters, digging sticks and weights for digging sticks, and pry bars. Material culture items associated with transportation were mainly used to move food and included burden baskets, carrying nets, game bags, and saddle pads.

Food was usually stored in large storage baskets. Pottery ollas and baskets treated with asphaltum were also used to store and carry water and seeds. Wood, clay, and steatite were used to make jars, bowls, and trays. Skin and woven grass were used to make bags. Food processing required hammers and anvils for cracking nuts; mortars and pestles for grinding acorns and other hard nuts and berries; manos and metates and manos and bedrock milling slicks for grinding seeds and berries; winnowing shells and baskets; strainers; leaching baskets and bowls; knives made of stone, bone, wood, and carrizo cane; bone saws; and drying racks made of wooden poles to dry fish. Basket mortars, with asphaltum used to attach an open-bottomed basket to a mortar, were important for food processing. Food was served in wooden and gourd dishes and cups and in basket bowls that were sometimes tarred. Wood, shell, and horn were used for spoons.

In addition to gathering and hunting, the mainland Gabrielino were involved in an extensive trade network that extended as far east as the Colorado River and as far west as San Nicolas Island. With the Serrano, the Gabrielino traded shell beads, fish, sea otter skins, and soapstone vessels for deerskin and seeds; the Cahuilla received beads, soapstone, and asphaltum from the Gabrielino in exchange for food, furs, hides, obsidian, and salt. In addition to forging alliances with neighboring groups, trade and exchange was also a means of offsetting food shortages during winter months and in times of resource stress (e.g., drought).

Shelter and Community Structures

In prehistoric times, Serrano, Cahuilla, Luiseño, and Gabrielino shelters are believed to have been dome shaped; during post-contact times they tended to be rectangular. The entryway into the shelter was usually covered with hides or woven mats, and a smoke hole with a removable cover was present at the apex of the dome for smoke to escape. Serrano, Cahuilla, and Luiseño shelters were made of brush, although some were wattled and plastered with adobe mud; Gabrielino shelters were made of reed. Most of the Serrano, Cahuilla, and Luiseño domestic activities were performed outside the shelters within the shade of large, expansive ramadas; windbreaks, made of vertical poles covered with rush mats, provided open air food preparation and cooking areas at Gabrielino settlements.

Within Serrano, Cahuilla, and Luiseño villages, the chief's house was the largest and was usually next to the ceremonial house. Each village also had a men’s sweat house and several granaries. At a typical Gabrielino settlement, a yovaar, an unroofed religious structure, was built in the center

and surrounded first by the houses of the chief and elite members of society and then by the smaller houses of other community members; poor members occupied simple lean-to style structures along the outskirts of the settlement. Sweathuts and granaries were also present in Gabrielino settlements.

Religion, World View, and the Sacred

The Serrano, Cahuilla, Luiseño, and Gabrielino, like other California Indians, understand the universe in terms of power, and power, believed to be sentient and to have will, was assumed to be the principal causative agent for all phenomena. Unusual natural phenomena are viewed as especially sacred, being the repositories of concentrations of power. Mountain tops, and especially particular mountain tops, are held sacred, as are unusual rock formations, springs, and streams. Rock art sites are sacred, having been the sites of ceremonies. Burial and cremation sites are also sacred, as are many other places of residual power. In addition, various birds, but especially eagles, condors, hawks, and other birds of prey and their symbolic representations, are revered as sacred beings of great power and were sometimes ritually killed and mourned in mortuary ceremonies similar to those for human elites. For this reason, bird cremation sites are sacred.

Because of these strong beliefs, rituals were a constant factor in the life of every Native American individual. Some rituals were scheduled and routine (e.g., birth, puberty, death, mourning, and the eagle ritual and first fruits rites), whereas others were sporadic and situationally performed (e.g., deer ceremony, bird dance, enemy songs, and the rain ritual).

Historical Setting

The history of the Project area provides a context for understanding local settlement from mission lands to the development of the modern urban landscape. It is the basis for the identification of the historic property types constructed during this settlement, and the evaluation of their significance as historical resources.

California History

Exploration of the California coast in the sixteenth and seventeenth centuries was the basis for the Spanish claim to the region. In the eighteenth century, Spain recognized that to strengthen its claim, it would have to settle Alta California to preclude encroachment by the Russians and British. Therefore, in the latter half of the eighteenth-century Spain and the Franciscan Order of the Catholic Church founded a series of presidios, or military camps, and missions along the California coast, beginning at San Diego in 1769.

In 1821, Mexico opened the ports of San Diego and Monterey to foreign trade. American ships docked at California ports to purchase tallow and hides, which were known as California banknotes. Americans also settled in California, some of them becoming citizens and owners of large ranchos.

Conflicts between the Californios and the central government in Mexico City led to a series of uprisings culminating in the Bear Flag Revolt of June 1846. However, Mexican control of

California had effectively ended the year before when the Californios expelled Manuel Micheltorena, the last Mexican governor.

With the signing of the Treaty of Guadalupe-Hidalgo on February 2, 1848, California formally became an American territory, and two years later, on 9 September 1850, California became the thirty-first state in the Union. Between those two years came a large influx of Americans seeking their fortunes; the catalyst for this influx was James Marshall's 1848 discovery of gold at Sutter's Mill. The population and wealth in the early statehood years were concentrated in the northern part of the state. Ranching was the main occupation in the southern counties; the flood and drought of the 1860s brought that era to a close, and the completion of the transcontinental railroad in 1869 opened California to agricultural settlement.

Southern California was promoted as an ideal agricultural area, with fertile soil and a mild climate. Books on California painted beautiful pictures that appealed to both Americans and Europeans. There were three land booms tied to railroad construction: (1) after the transcontinental railroad was completed, enabling easy travel to California; (2) late 1870s after the Southern Pacific was completed; and, (3) 1886–1888, when the Santa Fe transcontinental line was completed. Competition between the lines incited a rate war, and both tourists and potential settlers took advantage of the low fares to come to California.

History of the City of Riverside

The Project area lies within the eastern limits of the City of Riverside. The development of Riverside, California and the growth of the citrus industry go hand in hand. Riverside was founded as a town in San Bernardino County in the 1870s and incorporated in 1883. It was located on the south bank of the Santa Ana River, its source of water. Advertised as a "Colony for California" the area was settled as an agricultural area by immigrants coming to the state to partake of the wonders listed in promotional literature. Riverside became a center of the citrus industry, and famous for its Washington navel orange. Competition with the neighboring city of San Bernardino resulted in the formation of the County of Riverside in 1893, with Riverside the seat of the newly established county.

Orange trees were first planted in Riverside in 1871, but the citrus industry for which Riverside is famous began three years later. In 1874, Eliza Tibbets received three Brazilian navel orange trees from a personal friend, William Saunders, who was a horticulturist at the USDA. The trees came from Bahia, Brazil. The Bahia Orange did not do well in Florida, but its success in southern California was phenomenal.

Tibbets planted the trees and one of them died after it was trampled by a cow during the first year. After that unfortunate incident, the other two trees were transplanted to land owned by Sam McCoy. The trees were later transplanted again; one at the Mission Inn property in 1903 by President Theodore Roosevelt, (this tree died in 1922); the other was placed at the intersection of Magnolia and Arlington avenues. Eliza Tibbets was honored with a stone marker placed with the tree. That tree is reported to still stand to this day inside a protective fence. The trees thrived in the southern California climate and the navel orange industry grew rapidly.

Citrus became the primary agricultural product of the Riverside colony. Many growers purchased bud wood and then grafted the cuttings to root stock. Within a few years, the successful cultivation of many thousands of the newly discovered Brazilian navel orange led to a California Gold Rush of a different kind: the establishment of the citrus industry, which is commemorated in the landscapes and exhibits of the California Citrus State Historic Park in Riverside and the restored packing houses in Downtown Riverside's Marketplace district. To cultivate large orchards, growers required the construction of major water conveyance systems. Beginning in the 1870s with the construction of the Southern California Colony Association's "Upper Canal" (established 1870) and the "Lower Canal" (established circa 1874), water arrived into the Riverside area from the Santa Ana River. By 1882, there were more than half a million citrus trees in California, almost half of which were in Riverside.

As orchards began to dominate Riverside area agriculture, the need for larger water transport systems grew proportionately. To help meet the demand, the Gage Canal was built, tapping the waters of the Santa Ana River and bringing much needed irrigation into the region. Chinese laborers, credited with building the railroad grade for the California Southern Railway at Box Springs Canyon (approximately 2.5 miles north of the Project) and Temecula Canyon, hand dug the canal, along with an expansive network of irrigation ditches, helping Riverside become famous for its citrus industry. Many towns had Chinese neighborhoods or "Chinatowns" and Riverside was no exception.

By 1886, water flowed from the head gates at Tequesquite Arroyo through the upper, 12-milelong portion of the canal. By 1889, water flowed through the entire 20.13-mile-long canal. Lands could now be irrigated with ease from the Santa Ana River 20 miles away to the district of Arlington Heights in the City of Riverside. By the turn of the twentieth century, a significant cultural landscape evolved that consisted of more than 12,000 acres of orange groves (the largest situated in Arlington Heights [approximately 6 miles west of the Project] and the district of Highgrove [approximately 7 miles north of the Project]).

To facilitate the transportation of citrus crops from the grower to the consumer, the railroad industry routed several main and branch lines straight into the heart of the region. The Atchison Topeka & Santa Fe, the Union Pacific, and the Southern Pacific railroads laid track in and around Riverside and built or leased large networks of packing houses, icing plants, and storage. The development of refrigerated railroad cars and innovative irrigation systems established Riverside as the state's wealthiest city per capita by 1895.

By 1940, the Riverside citrus industry had evolved into a major economic force. The 1943 U.S. Army map reveals that the Riverside/Arlington area was still a major citrus producer in the 1940s, with thousands of acres of citrus trees planted in the valley filling large tracts of land along Victoria Avenue, Dufferin Avenue, and Indiana Avenue. The post-World War II era ushered in a boom in commercial, industrial, and residential development in and near the region's urban centers, followed by the construction of several freeways linking urban areas to one another. U.S. Highway 395, which was once a two-lane road through Riverside, was expanded during the 1960s and became Interstate 15E by 1972. Now signed as Interstate 215 through the Perris Valley, this route has expanded to a four-lane divided highway. The late 1990s and early 2000s marked another

boom period in the growth of the region, in which more residential and commercial development rapidly consumed agricultural lands.

Cultural Resources Investigation and Known Historical Resources

To determine whether the Project would affect historic properties or historical resources, AE conducted a cultural resource assessment in the Project's approximately 48-acre Area of Potential Effects (APE[1]). The cultural resource assessment consisted of an archaeological literature and records search at the Eastern Information Center at the University of California, Riverside, for recorded cultural resources within a one-mile radius of the APE (Study Area); a request for a Sacred Lands Files search from the Native American Heritage Commission (NAHC); and an intensive cultural resources pedestrian survey of the Project site. (AE 2020b)

Records indicate 21 previous cultural resource studies have been previously conducted within a 1-mile radius of the APE (the Study Area[2]). One hundred percent of the APE has been surveyed previously as a result of these studies. The previous cultural resource investigations identified 179 previously recorded cultural resources within the Study Area, including 169 prehistoric archaeological sites, four (4) historical archaeological sites, four (4) isolated prehistoric artifacts, and one (1) built-environment resource (railroad grade).

All of the prehistoric archaeological resources documented in the Study Area are bedrock milling sites (some with ground stone, such as manos, and other lithics), including four within the APE (AE 2020b) as indicated in Table 5.4-1 – Cultural Resources Occurring on the Project Site.

Table 5.4-1 – Cultural Resources Occurring on the Project Site

Primary No.	Trinomial	Description
33-002486	CA-RIV-2486	Bedrock milling site
33-002487	CA-RIV-2487	Bedrock milling site
33-002488	CA-RIV-2488	Bedrock milling site
33-002489	CA-RIV-2489	Bedrock milling site

Additional sources consulted during the archaeological literature and records search include the NRHP, the Office of Historic Preservation (OHP) Archaeological Determinations of Eligibility File, the OHP Directory of Properties in the Historic Property Data File, and the City's Historic Landmark List. No historic properties or landmarks are recorded or listed within, or immediately adjacent to, the Project site.

On September 19, 2018, AE archaeologists completed an intensive pedestrian surface survey for cultural resources in the 48.64-acre Project site. The two-fold purpose of the survey was (1) to identify any new cultural resources within the Project site and (2) to examine the conditions of

[1] The APE is the approximate 48-acre Project site
[2] The Study Area includes the APE/Project site and the area within a 1-mile radius of the Project site

previously recorded resources. The survey was conducted by a two-person crew walking parallel transects spaced at 20-meter (66-foot) intervals.

The survey of the Project site resulted in the identification of three additional bedrock milling sites (CA-RIV-11772, -11770, and -11769). The four previously recorded (CA-RIV-2486, -2487, -2488, and -2489) and three newly identified resources are all distributed across the western extension of the Project site. These seven archaeological sites are generally described below.

CA-RIV-2486 (33-002486)

AE found CA-RIV-2486 to be a 58 by 35-meter bedrock milling site consisting of two granitic boulder outcrops with a total of 10 milling slicks. The two outcrops are located approximately 30 meters north-south from each other. At the time of the original 1982 recordation, CA-RIV-2486 included two granitic boulders with seven grinding slicks. When the site was revisited in 2008 for an archaeological site relocation survey for the City's Burn Training Project, a total of eight slicks on three granitic boulders was recorded. This current update identified a total of eight milling slicks on one of the granitic boulder outcrops (the 6 original slicks and 2 new slicks) and two on the other granitic boulder outcrop. The west side of the site is situated flush with the ground surface and the location of milling slicks 6 and 7 appear to have been exposed by rain. Weed abatement activities in the area surrounding the bedrock milling outcrops have removed the native plant communities that would have been found prehistorically. Further, the site's integrity has been further impaired by recreational hiking/biking trail use which has disturbed the native sediments in the immediate area south of the bedrock milling features.

CA-RIV-2487 (33-002487)

AE documented another three milling slicks, for a total of eight milling slicks, across three granitic boulder outcrops approximately 24 meters southwest of the presumed southern boundary of CA-RIV-2486. The three rock outcrops are approximately 19 and 22 meters apart from north to south. At the time of its 1982 recordation, CA-RIV-2487 included a single granitic boulder with five grinding slicks. AE's current update identified that five milling slicks are on one granitic boulder outcrop, two of the milling slicks are on the second granitic boulder outcrop, and one of the milling slicks is on the third granitic boulder outcrop at this 75 by 31-meter bedrock milling site. To the east and north the terrain is relatively unaltered. Moreover, weed abatement activities in the area surrounding the bedrock milling outcrops have removed the native plant communities that would have been found prehistorically.

CA-RIV-2488 (33-002488)

CA-RIV-2488 is a 73 by 63-meter bedrock milling site consisting of four granitic boulder outcrops with a total of 17 milling slicks. This site is approximately 33 meters southeast of the presumed south boundary of CA-RIV-2486 and approximately 48 meters east-northeast of the presumed east boundary of CA-RIV-2487. As originally recorded (McCarthy 1982c), the milling slicks are distributed in clusters across at CA-RIV-2488. Although the site retains integrity of location, the integrity of setting, feeling, and association has been impaired by industrial development to the west and south. To the east and north the terrain is relatively unaltered. Furthermore, weed

abatement activities have removed the native plant communities and disturbed the ground surface of the area surrounding the bedrock milling feature.

CA-RIV-2489 (33-002489)

CA-RIV-2489 is a is a 21 by 17-meter bedrock milling site approximately 59 meters east-southeast of the presumed east boundary of CA-RIV-2488. As originally recorded (McCarthy 1982d), this site consists of one granitic boulder outcrop with a total of three milling slicks. Although the site retains integrity of location, the integrity of setting, feeling, and association has been impaired by industrial development to the west and south. To the east and north the terrain is relatively unaltered. Furthermore, weed abatement activities have removed the native plant communities and disturbed the ground surface of the area surrounding the bedrock milling feature.

CA-RIV-11772 (33-028956)

CA-RIV-11772 is a is an 18 by 25-meter bedrock milling site approximately 80 meters southeast of the south tip of CA-RIV-2487. This site consists of two granitic boulder outcrops six meters apart with a total of four milling slicks (3 on one granitic boulder outcrop and 1 on the second granitic boulder outcrop). The two rock outcrops are aligned east-west from each other. Although the site retains integrity of location, the integrity of setting, feeling, and association has been impaired by industrial development to the west and south. To the east and north, the terrain is relatively unaltered. Further, weed abatement activities have removed the native plant communities and disturbed the ground surface of the area surrounding the bedrock milling feature.

CA-RIV-11770 (33-028955)

CA-RIV-11770 is a 19 by 16.5-meter bedrock milling site consisting of one granitic boulder outcrop with a total of two milling slicks. CA-RIV-11770 is approximately 28 meters southwest of the presumed west boundary of CA-RIV-11769 and approximately 99 meters west of the presumed west boundary of CA-RIV-2487. Some previous disturbance is evident and modern refuse is present in the area. In addition, soils around the boulder appeared somewhat loose and the boulder may not be in its original location. The integrity of setting, feeling, and association has been impaired by industrial development to the west and south. To the east and north the terrain is relatively unaltered. In addition, weed abatement activities have removed the native plant communities and disturbed the ground surface of the area surrounding the bedrock milling feature. Further, the site's integrity has been further impaired by use of the recreational hiking/biking trail to the south and a dirt road to the west, which has disturbed the native sediments in the immediate area of the site.

CA-RIV-11769 (33-028954)

CA-RIV-11769 is another bedrock milling site approximately 28 meters northeast of the presumed south boundary of CA-RIV-11770, approximately 75 meters northwest of the presumed north boundary of CA-RIV-2487, and approximately 79 meters southwest of the presumed west boundary of CA-RIV-2486. This site is 21 by 21 meters in size and consists of one granitic boulder

outcrop with one milling slick. Although the site retains integrity of location, the integrity of setting, feeling, and association has been impaired by industrial development to the west and south. To the east and north, the terrain is relatively unaltered. In addition, weed abatement activities have removed the native plant communities and disturbed the ground surface area surrounding the bedrock milling feature.

As previously mentioned, AE survey personnel attempted to re-identify any cultural resources within the Project's APE, which included the entire approximately 48 acres of land constituting the Project site. All areas likely to contain or exhibit archaeologically or historically sensitive cultural resources were inspected carefully to ensure that visible, potentially significant cultural resources were discovered and documented (AE 2020b). AE evaluated each identified archaeological resource with the Project site for significance and eligibility for listing in the NRHP and/or CRHR and recommended that all seven sites are individually ineligible for listing in the NRHP, CRHR, or as a City of Riverside Cultural Resource. (AE 2020b).

Varying degrees of ground disturbance were observed within the Project site during the 2018 survey. The western portion of the Project's APE is moderately disturbed by recreational trails and vegetation removal activities. The eastern portion of the Project's APE appeared intact with little to no disturbance noted. Ground-surface visibility through the Project's APE was moderate (approximately 30 – 60 percent), with the majority of the APE covered in dry bunch grass. Vegetation in the area consists of black sage, willow, sycamore, buckwheat, and seasonal grasses. Riparian scrub obscured visibility in the drainage areas within the central and southern portion of the APE.

NAHC Sacred Lands File Search and Native American Coordination Efforts

The NAHC Sacred Lands File search indicated the presence of Native American cultural sites within the immediate Project area. The NAHC recommended that other sources of cultural resources be contacted for information on Native American cultural resources and provided a list of regional Native American tribal representatives who may have knowledge of cultural resources within the Project area. Tribal communities listed on the NAHC list included the Agua Caliente Band of Cahuilla Indians, Augustine Band of Cahuilla Mission Indians, Cabazon Band of Cahuilla Mission Indians, Cahuilla Band of Indians, Los Coyotes Band of Cahuilla and Cupeño Indians, Morongo Band of Mission Indians, Ramona Band of Cahuilla, Santa Rosa Band of Cahuilla Indians, Soboba Band of Luiseño Indians, and the Torres-Martinez Desert Cahuilla Indians. All of these tribes were contacted by AE on October 2, 2018 (AE 2020b).

A second round of correspondence was sent by AE on October 16, 2018; by this date, four responses had been received. The Cahuilla Band of Indians noted Tribal concerns that cultural resources may be unearthed during construction and requested the presence of cultural monitors during all Project-related ground-disturbing activities. The Morongo Band of Mission Indians indicated the Project is within a sensitive area for tribal cultural resources associated with the Tribe and similarly requested the presence of a cultural monitor during all Project-related ground-disturbing activities. The Cabazon Band of Mission Indians indicated the Project is located outside of the Tribe's current reservation boundaries, and that the tribe has no specific archival

information on the site indicating it may be a sacred/religious site or site of Native American traditional cultural value. The Santa Rosa Band of Cahuilla Indians stated the Tribe will defer further consultation and monitoring for the Project to the Soboba Band of Luiseño Indians.

In addition to AE's communication with local Native American tribes and individuals, the City initiated formal government-to-government Assembly Bill 52 (AB 52) consultation with various Native American tribes who have interests in the Project area. The City's consultation efforts with Native American tribes are further discussed in Section 5.13 Tribal Cultural Resources.

5.4.2 Related Regulations

The Project is subject to the full authority of federal historic preservation laws and regulations, namely Section 106 of the NHPA and its implementing regulations (36 CFR Part 800). Several state and local laws also guide actions that concern cultural resources. These include CEQA (Public Resources Code 21000 et seq.), Public Health and Safety Code (HSC), Public Resources Code (PRC), the GP 2025, and the City of Riverside Municipal Code.

5.4.2.1 Federal Regulations

National Historic Preservation Act

Federally issued permits may require a project to be considered an "undertaking" per 36 CFR Section 800.16(y), subject to compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended. The NHPA established a national policy for historic preservation and instituted a multifaceted program, administered by the Secretary of the Interior, to encourage the achievement of preservation goals at the federal, state, and local levels. The NHPA authorized the expansion and maintenance of the National Register of Historic Places (NRHP), established the position of State Historic Preservation Officer, provided for the designation of State Review Boards, set up a mechanism to certify local governments to carry out the purposes of the NHPA, assisted Native American tribes in preserving their cultural heritage, and created the Advisory Council on Historic Preservation (ACHP).

The NHPA established the NRHP as "an authoritative guide to be used by federal, state, and local governments, private groups, and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment" (36 CFR Section 60.2). The NRHP recognizes properties that are significant at the national, state, and local levels. If a cultural resource is determined to be an eligible historic property under 36 CFR Section 60.4, then Section 106 requires that the effects of the proposed undertaking be assessed and considered in planning the undertaking. Ordinarily, cemeteries, birthplaces, or graves of historic figures; properties owned by religious institutions or used for religious purposes; structures that have been moved from their original locations; reconstructed historic buildings; and properties that are primarily commemorative in nature are not considered eligible for the NRHP, unless they satisfy certain conditions.

NRHP Criteria

Determination of NRHP eligibility for cultural resources prior to making a finding of effect is made according to the following criteria of evaluation (36 CFR 60.4):

> The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling and association, and:
>
> A. that are associated with events that have made a significant contribution to the broad patterns of our history;
>
> B. that are associated with the lives of persons significant in our past;
>
> C. that embody the distinctive characteristics of a type, period, method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack distinction; or
>
> D. that has yielded, or is likely to yield, information important to prehistory or history.

A property must meet one or more of these specific criteria to qualify as a good representative of a significant historical theme or pattern. It must be associated with important historical events or persons (Criteria A and B); convey important technical, aesthetic, or environmental values (Criterion C); or have potential to provide important scientific or scholarly information (Criterion D). Unless a site is of exceptional importance, it is not eligible for listing in the NRHP until it is 50 years of age. (AE(a), pp. 27-28)

Associative values are identified within the context of local, regional, and national history. Historical research is required to evaluate significant historical associations under Criteria A, B, and C. Criterion D, which is most often applied to archaeological sites, requires specification in terms of an archaeological context and research design. In addition to archaeological research potentials, sites may possess public and ethnic values which should be considered when evaluating significance. Moreover, archaeological sites may have broader public significance insofar as they can serve to educate the public about important aspects of national, state, and local history. These criteria, by which the NRHP eligibility of a resource is judged, are essential because they “indicate what properties should be considered for protection from destruction or impairment” (36 CFR 60.2). Any action, as part of an undertaking, which could affect a significant cultural resource is subject to review and comment under Section 106 of the NHPA. (AE 2020b)

5.4.2.2 State Regulations

California Register of Historical Resources

State law (Public Resources Code Section 5024.10 et seq.) adds a level of protection for cultural resources by requiring evaluations of the significance of historical resources in CEQA documents. A cultural resource is an important historical resource if it meets any of the criteria found in Section 15064.5(a) of the State *CEQA Guidelines*. These criteria are similar to those used in federal law.

The California Register of Historic Resources (CRHR) is maintained by the State Office of Historic Preservation (OHP). Properties listed, or formally designated eligible for listing, on the NRHP are automatically listed on the CRHR, as are state historical landmarks and points of interest. The OHP also administers the California Historical Resources Information System (CHRIS), which includes properties designated under local ordinances or identified through local historical resource surveys.

CRHR Criteria

For purposes of CEQA, a historical resource is any object, building, structure, site, area, place, record, or manuscript listed or eligible for listing in the CRHR (California Public Resources Code [PRC] Section 21084.1). A resource is eligible for listing in the CRHR if it meets any of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. Is associated with the lives of persons important in our past.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history.

The California Code of Regulations (CCR) further provides that cultural resources of local significance are CRHR-eligible (Title 14 CCR, Section 4852).

California Environmental Quality Act

CEQA requires the lead agency to determine whether the proposed development project will have a significant effect on the environment. According to State *CEQA Guidelines* Section 15064.5(b), only those resources determined to be "historical resources," that is, listed or eligible for listing in the CRHR or determined a historical resource by the lead agency, are considered subject to potential significant adverse impacts. CEQA recognizes that historical resources are part of the environment, and that a project "that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment" (PRC Section 21084.1). The State *CEQA Guidelines* state, "A project with an effect that may cause a substantial adverse change in significance of an historical resource is a project that may have a significant effect on the environment" (State *CEQA Guidelines* Section 15064.5(b)). A "substantial adverse change" is defined as "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (State *CEQA Guidelines* Section 15064.5(b)(1)). The significance of a historical resource is materially impaired when a project affects "those physical characteristics of an historical resource that convey its historical significance" (State *CEQA Guidelines* Section 15064.5(b)(2)(a)).

Sections 21083.2 and 21084.1 of the State *CEQA Statute* deal with the definitions of unique and non-unique archaeological resources and historical resources respectively. Section 21083.2 directs the lead agency to determine whether the project may have a significant effect on unique archaeological resources. If the lead agency determines that the project may have a significant effect on unique archaeological resources, the environmental impact report shall address the issue of those resources. Section 21084.1 directs the lead agency to determine whether the project may have a significant effect on historical resources, irrespective of the fact that these historical resources may not be listed or determined to be eligible for listing in the CRHR, a local register of historical resources, or they are not deemed significant pursuant to criteria set forth in PRC Section 5024.1(g).

Unique Archaeological Resources Criteria

CEQA requires the lead agency to consider whether a project will have a significant effect on unique archaeological resources and to avoid unique archaeological resources when feasible or mitigate any effects to less-than-significant levels per PRC Section 21083.2. The State *CEQA Statutes* (PRC Section 21083.2(g)) define a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important or prehistoric or historic event or person.

Human Remains

According to Section 15064.5 of the State *CEQA Guidelines*, all human remains are a significant resource. This section also assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are discussed within PRC Section 5097.

California Public Resources Code 5097.98

California Senate Bill 297 (1982) addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the NAHC to resolve disputes regarding the disposition of such remains. It has been incorporated into Section 15064.5(e) of the State *CEQA Guidelines*.

California Health and Safety Code Section 7052 and 7050.5

Section 7052 of the California Health and Safety Code states that disturbance of Native American cemeteries is a felony. Section 7050.5 of the California Health and Safety Code requires that

construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If the remains are found to be Native American, the coroner must contact NAHC.

5.4.2.3 Local Regulations

Riverside General Plan 2025

The City of Riverside General Plan 2025 (GP 2025) was adopted in 2007 and addresses the seven state-mandated elements of general plans (land use, housing, circulation, open space, conservation, noise, and safety) (City of Riverside 2007). The General Plan is intended to achieve the land use, circulation, and other goals of the City in order to reflect the community's current values for growth over the long term.

With regard to cultural resources, the Historic Preservation Element of the City of Riverside General Plan contains seven objectives with associated policies to protect the City's historical and archaeological resources. These include:

Objective HP-1: To use historic preservation principles as an equal component in the planning and development process.

> **Policy HP-1.3:** The City shall protect sites of archaeological and paleontological significance and ensure compliance with all applicable state and federal cultural resources protection and management laws in its planning and project review process.

Objective HP-2: To continue an active program to identify, interpret and designate the City's cultural resources.

Objective HP-3: To promote the City's cultural resources as a means to enhance the City's identity as an important center of Southern California history.

Objective HP-4: To fully integrate the consideration of cultural resources as a major aspect of the City's planning, permitting, and development activities.

Objective HP-5: To ensure compatibility between new development and existing cultural resources.

Objective HP-6: To actively pursue funding for a first-class historic preservation program, including money needed for educational materials, studies, surveys, staffing, and incentives for preservation by private property owners.

Objective HP-7: To encourage both public and private stewardship of the City's cultural resources.

Riverside Municipal Code

Title 20 of the Riverside Municipal Code (RMC) is the primary body of local historic preservation laws. The purpose of Title 20 is to promote the public health, safety, and general welfare by providing for the identification, protection, enhancement, perpetuation and use of improvements, buildings, structures, signs, objects, features, sites, places, areas, districts, neighborhoods,

streets, works of art, natural features, and significant permanent landscaping having special historical, archaeological, cultural, architectural, community, aesthetic, or artistic value in the City. Title 20 of the Riverside Municipal Code established procedures for preserving, protecting, and designating significant cultural resources should the resource be considered a historic/cultural resource (RMC).

Chapter 20.50 defines eligible cultural resources as:

> *A cultural resource or historic district which has been determined by the Historic Preservation Officer or Qualified Designee, Board, or City Council to meet the City's designation criteria pursuant to a survey prepared by a professional meeting the Secretary of the Interior's standards which either documents the resource, records the resource on the State Department of Parks and Recreation survey forms, or has been so designated by the California State Historic Preservation Officer.*

Applications for eligible cultural resources are reviewed by the City's Cultural Heritage Board and ultimately approved by City Council. Further, in accordance with Title 20, a Certificate of Appropriateness is required to alter, demolish or relocate properties that are designated or determined eligible for designation as a City Cultural Resource. A Certificate of Appropriateness is also required for new construction within historic districts and neighborhood conservation areas. The Project does not meet these criteria, and as such, a Certificate of Appropriateness is not required for this Project.

Chapter 20.50 defines a landmark as:

> *Any Improvement or Natural Feature that is an exceptional example of a historical, archaeological, cultural, architectural, community, aesthetic or artistic heritage of the City, retains a high degree of integrity, and meets one or more of the following criteria:*
>
> 1. *Exemplifies or reflects special elements of the City's cultural, social, economic, political, aesthetic, engineering, architectural, or natural history;*
> 2. *Is identified with persons or events significant in local, state, or national history;*
> 3. *Embodies distinctive characteristics of a style, type, period, or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship;*
> 4. *Represents the work of a notable builder, designer, or architect, or important creative individual;*
> 5. *Embodies elements that possess high artistic values or represents a significant structural or architectural achievement or innovation;*
> 6. *Reflects significant geographical patterns, including those associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of park or community planning, or cultural landscape;*

7. *Is one of the last remaining examples in the City, region, state, or nation possessing distinguishing characteristics of an architectural or historical type or specimen; or*
8. *Has yielded or may be likely to yield, information important in history or prehistory.*

An Improvement or Natural Feature meeting one or more of the above criteria, yet not having the high degree of integrity to qualify as a Landmark, may qualify as a Structure or Resource of Merit (see subsection below).

An Improvement or Natural Feature meeting one or more of the above criteria, yet not formally designated as a Landmark by the City Council, may be an eligible Landmark.

Chapter 20.50 defines a Structure or Resource of Merit as:

Any Improvement or Natural Feature which contributes to the broader understanding of the historical, archaeological, cultural, architectural, community, aesthetic, or artistic heritage of the City, retains sufficient integrity, and:

1. *Has a unique location or singular physical characteristics or is a view or vista representing an established and familiar visual feature of a neighborhood community or of the City;*
2. *Is an example of a type of building which was once common but is now rare in its neighborhood, community or area;*
3. *Is connected with a business or use which was once common but is now rare;*
4. *A Cultural Resource that could be eligible under Landmark Criteria no longer exhibiting a high level of integrity, however, retaining sufficient integrity to convey significance under one or more of the Landmark Criteria;*
5. *Has yielded or may be likely to yield, information important in history or prehistory, or*
6. *An improvement or resource that no longer exhibits the high degree of integrity sufficient for Landmark designation, yet still retains sufficient integrity under one or more of the Landmark criteria to convey cultural resource significance as a Structure or Resource of Merit (Ord. 7248 §5, 2014; Ord. 7206 §24, 2013; Ord. 7108 §1, 2010).*

Historic Districts

The City of Riverside defines a Historic District as:

1. *A concentration, linkage, or continuity of cultural resources, where at least fifty percent of the structures or elements retain significant historic integrity (a 'geographic Historic District'), or*
2. *A thematically-related grouping of cultural resources which contributes to each other and are unified aesthetically by plan or physical development, and which have been*

designated or determined eligible for designation as a historic district by the Historic Preservation Officer, Board, or City Council, or is listed in the National Register of Historic Places or the California Register of Historic Resources, or is a California Historical Landmark or a California Point of Historical Interest (a 'thematic Historic District').

In addition to either 1 or 2 above, the area also:

3. *Exemplifies or reflects special elements of the City's cultural, social, economic, political, aesthetic, engineering, architectural, or natural history;*
4. *Is identified with persons or events significant in local, State, or national history;*
5. *Embodies distinctive characteristics of a style, type, period, or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship;*
6. *Represents the work of notable builders, designers, or architects;*
7. *Embodies a collection of elements of architectural design, detail, materials or craftsmanship that represent a significant structural or architectural achievement or innovation;*
8. *Reflects significant geographical patterns, including those associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of park or community planning;*
9. *Conveys a sense of historic and architectural cohesiveness through its design, setting, materials, workmanship or association; or*
10. *Has yielded or may be likely to yield, information important in history or prehistory.*

Riverside County Municipal Code

Historic Preservation Districts

Per Section 15.72.010 of the Riverside County Municipal Code, the Board of Supervisors finds that the protection, preservation, enhancement, perpetuation, and use of resources of historic, architectural, archaeological, engineering, and cultural merit within Riverside County is necessary and required in the interest of health, safety, social and cultural enrichment, and general welfare to the public. As used in Chapter 15.72 – Historic Preservation Districts, Section 15.72.040 defines the following:

H. "Contributing resource." Any historic resource that significantly contributes to the historical nature of a historic preservation district.

Q. "Historic resource." Any building, structure, façade, landmark, site, area, place, feature, sign, landscape accessory, or other object which are significant in historic, archaeological, engineering, scientific, cultural, architectural, social, political, or military value to the citizens of the County, the Southern California region, the State of California, or the nation which may be determined eligible for designation pursuant to the provisions of this ordinance or which may be eligible for listing or designation on any current or future state or federal register of historic resources.

Riverside County General Plan

Multipurpose Open Space Element

Cultural Resources

Per the Riverside County General Plan (Riverside County 2015), cultural resources are evidence of past human activity that become important for scientific, historic, and/or religious reasons to communities, descendant groups, and individuals. They may include objects, buildings, structures, sites (particularly archaeological sites), areas, places, records, or manuscripts associated with history. Some examples of cultural resources are pioneer homes, buildings, or old wagon roads; structures with unique architecture or designed by a notable architect; prehistoric Native American village sites; pioneering ethnic settlements; historic or prehistoric artifacts or objects; rock inscriptions; human burial sites; battlefields; railroad water towers, railways and bridges; prehistoric trails; early mines or important historic industrial sites.

Cultural resources may also include places that have historic or traditional associations or that are important for their natural resources like places where Native Americans have gathered plants for the purpose of making baskets or medicines, places where religious or ceremonial activities have occurred, or places where a significant historic event has occurred. Some of these places may not have physical evidence of their use, but rather may only be recognized through oral history or archival documentation. Other such places may include numerous artifacts and/or ruins above or below ground.

Cultural resources are nonrenewable resources and often yield unique information about past societies and environments, and provide answers for modern day social, scientific, and heritage concerns. The consideration and preservation of important examples of history within Riverside County benefits the public by maintaining historic identity and a sense of place and tradition.

Sycamore Canyon Business Park Specific Plan

The Project site is located within the Sycamore Canon Business Park Specific Plan (SCBPSP) area. Originally adopted in 1984, the SCBPSP stipulates the development of a planned industrial park consisting of approximately 920 acres of industrial and commercial uses within a 1,400-acre Specific Plan area. The SCBPSP calls for a multipurpose use of the area that includes industrial, industrial support, retail business and offices, and open space. Since its approval, the Specific Plan has been subject to a number of amendments.

5.4.3 Project Design Considerations

Project design considerations have been made in efforts to minimize and/or avoid potential impacts to the cultural resources identified on site. Figure 3.0-8 Tentative Parcel Map and Figure 3.0-9 Site Plan, in Section 3.0 Project Description, provide visual references for the locations of Project parcels and Project features (i.e., the proposed warehouse buildings) described below. The Project, as described below, has been designed in order to be least impactful to cultural resources.

Project design considerations have been made in efforts to minimize and/or avoid potential impacts to the tribal cultural resources identified on site. The Project, as described below, has been designed in order to be least impactful to tribal cultural resources.

There are 14 bedrock outcrops with milling features located on Parcel 2 and Parcel C. The Project has been designed to minimize the removal of these resources to the greatest extent possible, while accommodating the construction of Building B and associated parking, and the trailhead parking lot. No bedrock outcrops with milling features, or other cultural resources, were identified that would require removal for the construction of Building A or associated parking.

These Project design considerations include the following:

- Car and vanpool parking spaces along the west side of Building B has been designed to avoid and preserve the single bedrock outcrop and a total of two milling slicks that comprise feature CA-RIV-11770.
- The detention basin area at the southeast side of Building B has been designed to avoid and preserve a total of two bedrock outcrops with a total of three milling slicks that comprise CA-RIV-11772.
- The northeast side of Building B is angled and the parking along the northeast portion of Building B has been designed to avoid two of four bedrock outcrops and three of 17 milling slicks that comprise feature CA-RIV-2488.
- The proposed trailhead parking lot (Parcel C) has been designed with a curved drive aisle and parking along the northern portion of Building B has been designed to avoid and preserve two bedrock outcrops and 10 milling slicks that comprise feature CA-RIV-2486.
- The bedrock outcrop and total of three milling slicks that comprise feature CA-RIV-2489 within the conservation area (Parcel A), will be avoided and preserved.

In summary, a total of eight out of fourteen bedrock outcrops, 22 of 36 milling slicks, and four of seven complete milling sites will be avoided and preserved.

5.4.4 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. Therefore, significance thresholds in Appendix G (“Environmental Checklist”) of the State CEQA Guidelines are utilized. The Environmental Checklist prepared by the City for the Project (see Appendix A of this document) indicates that impacts related to the Sycamore Hills Distribution Center Project may be considered potentially significant if the proposed Project would:

- (Threshold A) cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5;
- (Threshold B) cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5;

- (Threshold C) disturb any human remains, including those interred outside of formal cemeteries.

5.4.5 Environmental Impacts

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

Four previously recorded archaeological sites were re-identified and three newly identified resources were documented during the 2018 survey. As discussed, all of the prehistoric archaeological resources documented within a one-mile radius of the Project's APE are bedrock milling sites (some with ground stone, such as manos, and other lithics), including the four previously recorded sites and the three additional sites within the Project's APE. As will be discussed in further detail under Threshold B below, there are four criteria that a resource must meet to be eligible for listing on the NRHP and CRHR. As will be further discussed under Threshold B, the seven sites were not found to be eligible for listing under NRHP Criterion A-D or CRHR criterion 1-4 and do not constitute a significant historic resource. Additionally, the site does not contain any built structures nor remnants of built structures that could be evaluated as potential historic resources. Moreover, a review of the EIC archaeological literature and records, NRHP, OHP Archaeological Determinations of Eligibility File, OHP Directory of Properties in the Historic Property Data File, and the City's Historic Landmark List indicated that no historic properties or landmarks are recorded or listed within, or immediately adjacent to, the Project's APE. Therefore, as no significant historical resources are within, or immediately adjacent to, the Project site, the Project will not result in a substantial adverse change in the significance of a historical resource and impacts would be **less than significant without mitigation**.

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

As discussed in Section 5.3.1, the intensive pedestrian survey conducted in October 2018 resulted in the re-identification of four archaeological resources that had previously been recorded within the Project site: CA-RIV-2486, -2487, -2488, and -2489. Three newly identified resources were also documented during the survey: CA-RIV-11772, -11770, and 11769. The 2018 report that evaluated these seven resources found that none of the resources appeared to meet eligibility requirements for listing on the CRHR, NRHP, or as a City Cultural Resource, as discussed in the following paragraphs. As outlined in 5.4.4 above, a total of eight out of fourteen bedrock outcrops within Parcels 2 (Building B), A, and C will be avoided and remain intact. Based on feedback from the consulting tribes appropriate design features to avoid indirect impacts to these resources have also been incorporated into the design, including setbacks, retaining walls, fencing, re-directed runoff, etc.

CA-RIV-2486 (33-002486)

Archaeological data from the earlier work at CA-RIV-2486, along with archaeological information obtained during the recent cultural resource survey and testing, indicate that the site does not

individually meet any of the criteria for listing on the NRHP or CRHR. While Native American groups were contacted for this Project, none provided any information in regard to local named places or direct site usage. Therefore, it is assumed CA-RIV-2486 is not associated with events that have made a significant contribution to the broad patterns of history and therefore is not recommended as eligible for listing under Criterion A/1. The site does not appear to be associated with the lives of persons significant in the past and therefore is not recommended as eligible for listing under Criterion B/2. The site also does not appear to embody the distinctive characteristics of a type, period, or method of construction, and thus is not recommended eligible under Criterion C/3. The absence of surface artifacts and subsurface cultural deposits suggests that the site has not yielded or is not likely to yield any additional information that can address research issues related to chronology, technology, settlement organization and land use, and subsistence behavior. Finally, protein residue analysis conducted on bedrock milling sites approximately 1.4 miles to the northeast yielded inconclusive results regarding chronology (AE 2020b). As such, CA-RIV-2486 is not considered eligible for listing under Criterion D/4. CA-RIV-2486 also does not appear to meet the criteria as a City Designated Cultural Resource. It is not considered a City Landmark as it is not an “exceptional example” of an archaeological resource. Furthermore, the site appears to also lack the data potential to individually contribute important information to the “broader understanding” of the archaeological heritage of the City. While CA-RIV-2486 does not meet any of the aforementioned eligibility criteria, as discussed in Section 5.4.4 Project Design Considerations above, in response to discussion and feedback from City staff and consulting Tribes, the Project’s conceptual site plan has been revised to avoid, both directly and indirectly, the two boulder outcrops with milling features that compose CA-RIV-2486.

CA-RIV-2487 (33-002487)

Archaeological data from the earlier work at CA-RIV-2487, along with archaeological information obtained during the recent cultural resource survey and testing, indicate that the site does not individually meet any of the four criteria for listing on the NRHP or the CRHR. While Native American groups were contacted for this Project, none provided any information in regard to local named places or direct site usage. Therefore, it is assumed CA-RIV-2487 is not associated with events that have made a significant contribution to the broad patterns of history and therefore is not recommended as eligible for listing under Criterion A/1. The site does not appear to be associated with the lives of persons significant in the past and therefore is not recommended as eligible for listing under Criterion B/2. The site also does not appear to embody the distinctive characteristics of a type, period, or method of construction, and thus is not recommended eligible under Criterion C/3. The absence of surface artifacts and subsurface cultural deposits suggests that the site has not yielded or is not likely to yield any additional information that can address research issues related to chronology, technology, settlement organization and land use, and subsistence behavior. Finally, protein residue analysis conducted on bedrock milling sites approximately 1.4 miles to the northeast yielded inconclusive results regarding chronology (AE 2020b). As such, CA-RIV-2487 is not recommended as eligible for listing under Criterion D/4. CA-RIV-2487 also does not appear to meet the criteria as a City Designated Cultural Resource. It is not considered a City Landmark as it is not an “exceptional example” of an archaeological

resource. Furthermore, the site appears to also lack the data potential to individually contribute important information to the "broader understanding" of the archaeological heritage of the City.

CA-RIV-2488 (33-002488)

Archaeological data from the earlier work at CA-RIV-2488, along with archaeological information obtained during the recent cultural resource survey and testing, indicate that the site does not individually meet any of the four criteria for listing on the NRHP or the CRHR. While Native American groups were contacted for this Project, none provided any information in regard to local named places or direct site usage. Therefore, it is assumed CA-RIV-2488 is not associated with events that have made a significant contribution to the broad patterns of history and therefore is not recommended as eligible for listing under Criterion A/1. The site does not appear to be associated with the lives of persons significant in the past and therefore is not recommended as eligible for listing under Criterion B/2. The site also does not appear to embody the distinctive characteristics of a type, period, or method of construction, and thus is not recommended eligible under Criterion C/3. The absence of surface artifacts and subsurface cultural deposits suggests that the site has not yielded or is not likely to yield any additional information that can address research issues related to chronology, technology, settlement organization and land use, and subsistence behavior. Finally, protein residue analysis conducted on bedrock milling sites approximately 1.4 miles to the northeast yielded inconclusive results regarding chronology (AE 2020b). As such, CA-RIV-2488, with four bedrock outcrops and 17 milling slicks, is not recommended as eligible for listing under Criterion D/4. CA-RIV-2488 also does not appear to meet the criteria as a City Designated Cultural Resource. It is not considered a City Landmark as it is not an "exceptional example" of an archaeological resource. Furthermore, the site appears to also lack the data potential to individually contribute important information to the "broader understanding" of the archaeological heritage of the City. Though CA-RIV-2488 does not meet any of the aforementioned eligibility criteria, as discussed in Section 5.4.4 Project Design Considerations above, in response to feedback from City staff and consulting Tribes, the Project's conceptual site plan has been revised to avoid, both directly and indirectly, two of the four bedrock outcrops with milling features that compose CA-RIV-2488.

CA-RIV-2489 (33-002489)

Archaeological data from the earlier work at CA-RIV-2489, along with archaeological information obtained during the recent cultural resource survey and testing, indicate that the site does not individually meet any of the four criteria for listing on the NRHP or the CRHR. While Native American groups were contacted for this Project, none provided any information in regard to local named places or direct site usage. Therefore, it is assumed CA-RIV-2489 is not associated with events that have made a significant contribution to the broad patterns of history and therefore is not recommended as eligible for listing under Criterion A/1. The site does not appear to be associated with the lives of persons significant in the past and therefore is not recommended as eligible for listing under Criterion B/2. The site also does not appear to embody the distinctive characteristics of a type, period, or method of construction, and thus is not recommended eligible under Criterion C/3. The absence of surface artifacts and subsurface cultural deposits suggests

that the site has not yielded or is not likely to yield any additional information that can address research issues related to chronology, technology, settlement organization and land use, and subsistence behavior. Finally, protein residue analysis conducted on bedrock milling sites approximately 1.4 miles to the northeast yielded inconclusive results regarding chronology (AE 2020b). As such, CA-RIV-2489 is not recommended as eligible for listing under Criterion D/4. CA-RIV-2489 also does not appear to meet the criteria as a City Designated Cultural Resource. It is not considered a City Landmark as it is not an "exceptional example" of an archaeological resource. Furthermore, the site appears to also lack the data potential to individually contribute important information to the "broader understanding" of the archaeological heritage of the City. Although CA-RIV-2489 does not meet any of the aforementioned eligibility criteria, as discussed in Section 5.4.4 Project Design Considerations above, in response to discussion and feedback from City staff and consulting Tribes, the Project's conceptual site plan has been revised in order to avoid, both directly and indirectly, the bedrock outcrop with milling features composing CA-RIV-2489.

CA-RIV-11772 (33-028956)

Archaeological information obtained during the current cultural resource survey and testing indicate that CA-RIV-11772 does not individually meet any of the four criteria for listing on the NRHP or the CRHR. While Native American groups were contacted for this Project, none provided any information in regard to local named places or direct site usage. Therefore, it is assumed CA RIV-11772 is not associated with events that have made a significant contribution to the broad patterns of history and therefore is not recommended as eligible for listing under Criterion A/1. The site does not appear to be associated with the lives of persons significant in the past; therefore, it is not recommended as eligible for listing under Criterion B/2. The site also does not appear to embody the distinctive characteristics of a type, period, or method of construction, and thus is not recommended eligible under Criterion C/3. The absence of surface artifacts and subsurface cultural deposits suggests that the site has not yielded or is not likely to yield any additional information that can address research issues related to chronology, technology, settlement organization and land use, and subsistence behavior. Finally, protein residue analysis conducted on bedrock milling sites approximately 1.4 miles to the northeast yielded inconclusive results regarding chronology (AE 2020b). As such, CA-RIV-11772 is not recommended as eligible for listing under Criterion D/4. CA-RIV-11772 also does not appear to meet the criteria as a City Cultural Resource. It is not considered a Cultural Heritage Landmark as it is not an "exceptional example" of an archaeological resource. Furthermore, the site appears to also lack the data potential to individually contribute important information to the "broader understanding" of the archaeological heritage of the City. Though CA-RIV-11772 does not meet any of the aforementioned eligibility criteria, as discussed in Section 5.4.4 Project Design Considerations above, in response to discussion and feedback from City staff and consulting Tribes, the Project's conceptual site plan has been revised in order to avoid, directly and indirectly, the two bedrock outcrops with milling features composing CA-RIV-11772.

CA-RIV-11770 (33-028955)

Archaeological information obtained during the current cultural resource survey and testing indicate that CA-RIV-11770 does not individually meet any of the four criteria for listing on the NRHP or the CRHR. While Native American groups were contacted for this Project, none provided any information in regard to local named places or direct site usage. Therefore, it is assumed CA-RIV-11770 is not associated with events that have made a significant contribution to the broad patterns of history and therefore is not recommended as eligible for listing under Criterion A/1. The site does not appear to be associated with the lives of persons significant in the past; therefore, it is not recommended as eligible for listing under Criterion B/2. The site also does not appear to embody the distinctive characteristics of a type, period, or method of construction, and thus is not recommended eligible under Criterion C/3. The absence of surface artifacts and subsurface cultural deposits suggest that the site has not yielded or is not likely to yield any additional information that can address research issues related to chronology, technology, settlement organization and land use, and subsistence behavior. Finally, protein residue analysis conducted on bedrock milling sites approximately 1.4 miles to the northeast yielded inconclusive results regarding chronology (AE 2020b). As such, CA-RIV-11770 is not recommended as eligible for listing under Criterion D/4. CA-RIV-11770 also does not appear to meet the criteria as a City Designated Cultural Resource. It is not considered a City Landmark as it is not an “exceptional example” of an archaeological resource. Furthermore, the site appears to also lack the data potential to individually contribute important information to the “broader understanding” of the archaeological heritage of the City. While CA-RIV-11770 does not meet any of the aforementioned eligibility criteria, as discussed in Section 5.4.4 Project Design Considerations above, in response to discussion and feedback from City staff and consulting Tribes, the Project’s conceptual site plan has been revised in order to avoid, directly and indirectly, the bedrock outcrop with milling features composing CA-RIV-11770.

CA-RIV-11769 (33-028954)

Archaeological information obtained during the current cultural resource survey and testing indicate that CA-RIV-11769 does not individually meet any of the four criteria for listing on the NRHP or the CRHR. While Native American groups were contacted for this Project, none provided any information in regard to local named places or direct site usage. Therefore, it is assumed CA RIV-11769 is not associated with events that have made a significant contribution to the broad patterns of history and therefore is not recommended as eligible for listing under Criterion A/1. The site does not appear to be associated with the lives of persons significant in the past; therefore, it is not recommended as eligible for listing under Criterion B/2. The site also does not appear to embody the distinctive characteristics of a type, period, or method of construction, and thus is not recommended eligible under Criterion C/3. The absence of surface artifacts and subsurface cultural deposits suggests that the site has not yielded or is not likely to yield any additional information that can address research issues related to chronology, technology, settlement organization and land use, and subsistence behavior. Finally, protein residue analysis conducted on bedrock milling sites approximately 1.4 miles to the northeast yielded inconclusive

results regarding chronology (AE 2020b). As such, CA-RIV-11769 is not recommended as eligible for listing under Criterion D/4. CA-RIV-11769 also does not appear to meet the criteria as a City Designated Cultural Resource. It is not considered a City Landmark as it is not an "exceptional example" of an archaeological resource. Furthermore, the site appears to also lack the data potential to individually contribute important information to the "broader understanding" of the archaeological heritage of the City.

Historic Resource Eligibility

Federal and State Regulations

As discussed in Sections 5.4.2.1 and 5.4.2.2, there are four criteria that a resource must meet to be eligible for listing on the NRHP and CRHR. As the preceding paragraphs discuss, the seven sites were not found to be eligible for listing under NRHP Criterion A-D or CRHR criterion 1-4 and do not constitute a significant historic resource. However, the findings of the current study indicate that the sites may be considered contributing elements to a subsistence-based procurement and processing cultural landscape or historic district for their historical associations with broad patterns of national, local, or regional history (Criterion A/1); for possible associations with the lives of significant persons in the past who are important to local, California or national history (Criterion B/2); and for the potential to yield, information important to the prehistory or history of the local area, California, or the nation (Criterion D/4). Through AB 52 and Section 106 consultation between the City, USACE, and interested Tribes, Soboba and Pechanga have identified the Project area as a tribal cultural place. Soboba has requested a Tribal Cultural Landscape (TCL) study be prepared for the Project and Pechanga has requested a Tribal Cultural Resource/Traditional Cultural Property (TCR/TCP) study be prepared for the Project. AE was contracted to prepare a TCL study to explore these findings with Soboba and to coordinate with Pechanga to prepare a TCR/TCP study for the Project. A more detailed discussion of these studies and the City's consultation with Native American tribes, as well as analysis of potential impacts to tribal cultural resources, is contained in Section 5.13 Tribal Cultural Resources.

Local Regulations

The resources located at the Project site do not constitute eligible cultural resources as outlined in Title 20 of the City's Municipal Code. They cannot be considered a Cultural Heritage Landmark as they are not an "exceptional example" of an archaeological resource. Furthermore, the sites also lack the data potential to contribute important information to the "broader understanding" of the archaeological heritage of the City (AE 2020b).

Conclusion

As discussed, the above described archaeological sites were determined ineligible for listing on the NRHP, CRHR, or as a City Designated Cultural Resource. While impacts to these sites would thus be less than significant due to their ineligibility, to minimize and/or avoid possible impacts to potentially undiscovered/unknown archaeological resources, the Project would implement the mitigation measures MM CUL-1 through MM CUL-9 outlined in Section 5.4.7 below.

Further, as discussed in Sections 5.4.4 and in the preceding paragraphs above, the Project includes design considerations in response to City staff and Tribe feedback that would avoid a total of eight (8) bedrock outcrops with milling features within Parcels 2, A, and C. As discussed, the archeological sites these bedrock outcrops with milling features compose have been determined ineligible for listing; thus, instances in which bedrock outcrops are not able to be avoided in order to develop the Project would not result in a substantial adverse change in the sites' significance.

Therefore, as none of the sites are eligible for listing, with the avoidance of bedrock outcrops where possible, and with the implementation of mitigation measures MM CUL-1 through MM CUL-9, the Project would not result in a substantial adverse change in the significance of an archaeological resource and impacts would be **less than significant with mitigation**.

Threshold C: *Would the Project disturb any human remains, including those interred outside of formal cemeteries?*

As indicated in the Archaeological Site Records included in the 2020 report, no human remains were observed at any of the aforementioned seven archaeological sites within the Project's APE during the 2018 field surveys. In the unlikely event of an accidental discovery of human remains in a location other than a formal cemetery, the process under Health and Safety Code Section 7050.5, CEQA Guidelines Section 15064.5(e), and Public Resources Code Section 5097.98 would be followed. As no human remains were observed during the 2018 study and it is unlikely human remains would be discovered, implementation of the Project would not disturb any human remains, including those interred outside of formal cemeteries and potential impacts would be **less than significant without mitigation**.

5.4.6 Proposed Mitigation Measures

MM CUL-1: Prior to grading permit issuance, if there are any changes to project site design and/or proposed grades, the Applicant and the City shall contact consulting tribes to provide an electronic copy of the revised plans for review. Additional consultation shall occur between the City, developer/applicant, and consulting tribes to discuss any proposed changes and review any new impacts and/or potential avoidance/preservation of the cultural resources on the project site. The City and the developer/applicant shall make all attempts to avoid and/or preserve in place as many cultural resources and paleontological resources as possible that are located on the project site if the site design and/or proposed grades should be revised. In the event of inadvertent discoveries of archaeological resources, work shall temporarily halt until agreements are executed with consulting tribe, to provide tribal monitoring for ground disturbing activities.

MM CUL-2 Archaeological Monitoring: At least 30 days prior to application for a grading permit and before any grading, excavation and/or ground disturbing activities take place, the developer/applicant shall retain a Secretary of Interior Standards qualified archaeological monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources.

1. The project archaeologist, in consultation with consulting tribes, the Developer, and the City, shall develop an Archaeological Monitoring Plan to address the details, timing, and responsibility of all archaeological and cultural activities that will occur on the project site. Details in the plan shall include:
    a. Project grading and development scheduling;
    b. The development of a schedule in coordination with the developer/applicant, the project archaeologist, and for designated Native American Tribal Monitors from the consulting tribes for grading, excavation, and ground-disturbing activities on the site, including the scheduling, safety requirements, duties, scope of work, and project archeologist and Native American Tribal Monitors' authority to stop and redirect grading activities;
    c. The protocols and stipulations that the Applicant, tribes, and project archaeologist/paleontologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits, or nonrenewable paleontological resources that shall be subject to a cultural resources evaluation;
    d. In conjunction with the Archeological Monitor(s), the Native American Monitor(s) shall have the authority to temporarily divert, redirect or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources.
    e. Treatment and final disposition of any archeological and cultural and paleontological resources, sacred sites, if discovered on the project site; and
    f. The scheduling and timing of the Cultural Sensitivity Training noted in mitigation measure MM-CUL-5.

MM CUL-3: Native American Monitor: Prior to issuance of grading permit, the developer/permit applicant shall engage each of the consulting tribe(s) regarding Native American Monitoring. The developer/permit applicant shall provide evidence to the City that they have reached an agreement with each of the consulting tribe(s) regarding the following:

a. The treatment of known cultural resources;
b. The treatment and final disposition of any tribal cultural resources, sacred sites, human remains or archaeological and cultural resources inadvertently discovered on the Project site;
c. Project grading, ground disturbance (including but not limited to excavation, trenching, cleaning, grubbing, tree removals, grading and trenching) and development scheduling; and
d. The designation, responsibilities, and participation of professional Tribal Monitor(s) during grading, excavation and ground disturbing activities.

If the developer/permit applicant and the consulting tribe(s) are unable to reach an agreement, the mitigation measure shall be considered satisfied if the developer/permit applicant provides sufficient documented evidence that they have made a reasonable good faith effort to reach an agreement, as determined by the City, with the consulting tribes with regards to items a-d, as listed above).

MM CUL-4 Treatment and Disposition of Cultural Resources: In the event that Native American cultural resources are inadvertently discovered during the course of grading for this project, the following procedures will be carried out for treatment and disposition of the discoveries:

1. Consulting Tribes Notified: within 24 hours of discovery, the consulting tribe(s) shall be notified via email and phone. Consulting tribe(s) will be allowed access to the discovery, in order to assist with the significance evaluation.
2. Temporary Curation and Storage: During the course of construction, all discovered resources shall be temporarily curated in a secure location on site. The removal of any artifacts from the project site shall require the approval of the Consulting Tribes and all resources subject to such removal must be thoroughly inventoried with a tribal monitor from each consulting tribe to oversee the process; and
3. Treatment and Final Disposition: The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The Applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Riverside Community and Economic Development Department with evidence of same:
    a. Preservation-In-Place of the cultural resources, if feasible as determined through coordination between the project archeologist, developer/applicant, and consulting tribal monitor(s). Preservation in place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resources in perpetuity.
    b. Accommodate the process for on-site reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed, with an exception that sacred items, burial goods and Native American human remains are excluded. No cataloguing, analysis, or other studies may occur on sacred items, human remains, and grave goods. Any reburial process shall be culturally appropriate. List of contents and location of the reburial shall be included in the confidential Phase IV Report. The Phase IV report shall be prepared by the project archeologist and shall be filed with the City under a confidential cover and not subject to a Public Records Request. The Tribe(s) should be able to access these areas in the future through enforceable agreement;
    c. If reburial is not feasible, a curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79 and therefore will be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation;
    d. At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60

days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City of Riverside, Eastern Information Center, and consulting tribes.

MM CUL-5 Cultural Sensitivity Training: The Secretary of Interior Standards County certified archaeologist and Native American monitors shall attend the pre-grading meeting with the developer/permit holder's contractors to provide Cultural Sensitivity Training for all construction personnel. This shall include the procedures to be followed during ground disturbance in sensitive areas and protocols that apply in the event that unanticipated resources are discovered. Only construction personnel who have received this training can conduct construction and disturbance activities in sensitive areas. A sign-in sheet for attendees of this training shall be included in the Phase IV Monitoring Report.

MM CUL-6 Fencing of the Avoided Sites: Prior to any earthmoving activities, the current boundaries of the avoided sites (CA-RIV-11770, CA-RIV-11772, CA-RIV-2486, two milling slicks within CA-RIV-2488, and CA-RIV-2489) will be fenced and identified as an Environmental Sensitive Area (ESA). The project applicant will ensure that appropriate temporary fencing is installed i.e., orange fabric/barrier fencing) to prevent any unintentional disturbances to CA-RIV-11770, CA-RIV-11772, CA-RIV-2486, two milling slicks within CA-RIV-2488, and CA-RIV-2489 during any earthmoving activities on the project site. The fencing will be installed before clearing and grubbing and will not be removed until all earthmoving activities have been completed and the wall in Parcel 4 has been constructed. The project archaeologist and Tribal Monitor(s) will be on site to monitor the fence installation and removal and will conduct daily inspections of the fencing to make sure that it is intact and has not been breached.

If the project archaeologist and/or Tribal Monitor(s) identify a breach of the fence, i.e., removal, cut, depressed, driven over or intentionally breached in any way, all work within a 25-foot buffer shall cease and the Project Applicant, City, project archaeologist and the Monitoring Tribe(s) shall meet and confer as to the best method to repair the fencing. The person(s) responsible for the breach and the Construction Supervisor (or appropriate supervisory personnel) shall be required to retake the sensitivity training provided at the beginning of construction, in addition to any other remedies considered appropriate.

MM CUL-7 Relocation of Impacted Sites: Prior to any grading in the associated areas, the Project Applicant shall meet with the Project Archaeologist and the Consulting Tribe(s) in order to assess CA-RIV-11769, CA-RIV-2487, and two milling slicks within CA-RIV-2488 to determine the suitability for relocation to a permanent open space area. The Consulting Tribe(s) shall work with the Project Archaeologist, Project Applicant, and the grading contractor or appropriate personnel to ensure that every effort is made to relocate the Features safely and to discuss the most appropriate methods for relocation. Using professional archaeological methods, the milling slicks associated with Sites CA-RIV-11769, CA-RIV-2487, and CA-RIV-2488 shall be relocated to the planned open space area in the northern portion of the Project site. The Tribe(s) should be able to access these areas in the future through enforceable agreement. Before construction activities may resume in the affected area, any visible artifacts shall be recovered and recorded, and the features recorded using professional archaeological methods. The current Department of Parks

and Recreation forms for the sites shall be updated, detailing which features were relocated, the process taken, and updated maps using sub meter GIS technology to document the new location of each feature. The relocation information shall be included in a Phase IV Monitoring Report. The site record should clearly indicate that the Features are not in their original location and why they were relocated.

MM CUL-8 Long-Term Preservation Plan: Prior to occupancy, a Long-Term Preservation Plan (LTPP) shall be prepared among the City, Land Owner, and Consulting Tribe(s). The LTPP should include the following:

a. Description of archaeological resources
b. Documentation of resources of concern, such as high-resolution photographs or similar
c. Listing of Preservation Actions to Date
d. The determination of responsibility for care, maintenance, and guidance in the event preserved resources [CA-RIV-11770, CA-RIV-11772, CA-RIV-2486, two milling slicks within CA-RIV-2488, and CA-RIV-2489] should be vandalized or damaged. This section should also address responsibility for regular site condition assessments to determine if resources are being affected by project construction and later operations.

MM CUL-9 Controlled Grade: Sites CA-RIV-11769, CA-RIV-11770, CA-RIV-11772, CA-RIV-2486, CA-RIV-2487, CA-RIV-2488, and CA-RIV-2489 will be impacted during grading and construction activities and the soils surrounding them will be disturbed. Prior to any grading in the associated areas, the Project Applicant, the Consulting Tribes, and the City will formalize a written agreement to identify the area that will be subject to “Controlled Grading” during construction of the Project. The Pechanga Tribe, the Project Applicant, and the City will develop an exhibit that outlines the area subject to controlled grading, and that area will be highlighted on the rough grading plans, precise grading plans or other off-site improvement plans that may impact this site. “Controlled Grading” shall include, without limitation, the slow and deliberate excavation and removal of soils employing the smallest reasonable cuts in certain areas using light scrapers (for example Caterpillar 623 or 627), dozers (for example D6- D8), front end loaders, excavators, skip loaders, dump trucks, and motor graders. A controlled grading plan will be monitored by the Project Archeologist and Tribal Monitor(s) to ensure the systematic removal of the ground surface surrounding these features are monitored to allow for the identification of resources. Results of all controlled grading activities shall be included in the Phase IV monitoring report.

A STANDARD CONDITION OF APPROVAL WILL INCLUDE THE FOLLOWING – CONSISTENT WITH STATE LAW:

Discovery of Human Remains: In the event that human remains (or remains that may be human) are discovered at the Project site during grading or earthmoving, the construction contractors, Project Archaeologist, and/or designated Native American Monitor shall immediately stop all activities within 100 feet of the find. The Project proponent shall then inform the Riverside County Coroner and the City of Riverside Community & Economic Development Department immediately, and the coroner shall be permitted to examine the remains as required by California Health and Safety Code Section 7050.5(b) unless more current State law requirements are in effect at the

time of the discovery. Section 7050.5 requires that excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If human remains are determined as those of Native American origin, the Native American Heritage Commission shall be contacted within the period specified by law (24 hours). The coroner shall contact the NAHC to determine the most likely descendant(s). The MLD shall complete his or her inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The Disposition of the remains shall be overseen by the most likely descendant(s) to determine the most appropriate means of treating the human remains and any associated grave artifacts.

The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. The County Coroner will notify the Native American Heritage Commission in accordance with California Public Resources Code 5097.98.

According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). The disposition of the remains shall be determined in consultation between the Project proponent and the MLD. In the event that the Project proponent and the MLD are in disagreement regarding the disposition of the remains, State law will apply and the median and decision process will occur with the NAHC (see Public Resources Code Section 5097.98(e) and 5097.94(k)).

5.4.7 Cumulative Environmental Effects

The geographic scope for cumulative impacts to cultural resources is defined by the cultural setting and territory of the prehistoric and historic people who occupied the area of southern California in which the City is located. Western Riverside County was part of the territory of the Cahuilla and perhaps Luiseno people. Cumulative projects in the Project area and other development in western Riverside County could result in the progressive loss of as-yet unrecorded archaeological resources. This loss, without proper mitigation, would be an adverse cumulative impact.

Cumulative projects within the City have the potential to impact cultural resources; however, to reduce impacts to significant historical and archeological resources, the City's General Plan and General Plan EIR incorporate policies and programs to protect and/or document these resources as part of the City's development review process and mitigation measures that require preparation of technical studies, coordination with native American tribes, and the presence of monitors if necessary. Therefore, the General Plan EIR concluded that with adherence to and implementation of General Plan policies, mitigation measures, and standard Federal, State, and City regulations, cumulative impacts to historical resources, archaeological resources, and paleontological resources will be less than significant with mitigation.

No historical resources, or archaeological resources eligible for listing, were found within the Project site. Should any resources be discovered during construction activities, potential impacts to resources will be minimized or avoided with the implementation of recommended mitigation

measures. With implementation of the mitigation measures MM CUL-1 through MM CUL-9, the Project will have a less than significant impacts on cultural resources. Although the bedrock outcrops with milling sites are not archaeological resources deemed eligible for listing, the Project was designed to avoid, and allow to remain intact, eight out of fourteen bedrock outcrops within Parcels 2, A, and C. Based on feedback from the consulting tribes appropriate design features to avoid indirect impacts to these resources have also been incorporated into the design, including set-backs, retaining walls, fencing, re-directed runoff, etc. As Project specific impacts to six archaeological resources not eligible for listing are less than significant and eight resources are being avoided and left in place, the Project will have a less than significant cumulative impact on cultural resources. Likewise, as discussed in the City's General Plan EIR, cumulative development projects within the City (and the project is consistent with the General Plan) will have a less than significant impact on cultural resources. Therefore, cumulative impacts will be **less than significant with mitigation incorporated.**

5.4.8 References

The following references were used in the preparation of this section of the DEIR:

AE 2020a	Applied EarthWorks, *Paleontological Resource Assessment for the Sycamore Hills Distribution Center Project*, January 2020.
AE 2020b	Applied EarthWorks, *Phase I and Phase II Cultural Resource Investigations for the Sycamore Hills Distribution Center Project*, September 2020.
GP 2025 FPEIR	City of Riverside, *General Plan 2025 Program Environmental Impact Report* (SCH# 2004021108), certified November 2007. (Available at https://www.riversideca.gov/planning/gp2025program/)
RMC	City of Riverside, *Municipal Code*, Title 20. (Available at https://library.municode.com/ca/riverside/codes/code_of_ordinances?nodeId=PTIICOOR_TIT20CURE)
SCBP	City of Riverside, *Sycamore Canyon Business Park Specific Plan*, adopted April 10, 1984, as amended through Amendment No. 14, January 23, 2007. (Available at https://www.riversideca.gov/planning/cityplans-csp-sycanbp.asp)

5.5 Energy

This section analyzes the effects of the Project related to energy based upon Appendix G of the *State CEQA Guidelines*, the analysis in the IS/NOP prepared for the Project (Appendix A), and comments received during the NOP public review period. The analysis herein is additionally based on the *Energy Analysis (EA)* prepared by Urban Crossroads in September 2020 (Appendix F).

5.5.1 Setting

This section provides an overview of the existing energy conditions in the Project area and region.

Existing Energy Setting

Energy use can affect air quality and other natural resources adversely. Energy is primarily categorized in three areas: electricity, used in buildings and cities for lighting and other services; natural gas used for building heating, cooking, and other industrial processes; and fuels used for transportation. Fossil fuels used for any of these types of energy must be burned to create electricity that powers homes and commercial/industrial buildings, to create heat, and to power vehicles. The burning or combusting of fuels releases pollutants and greenhouse gas (GHG) emissions. Many factors affect the level of impact from fuels. When used in transportation, the impact from energy is corresponds to the fuel efficiency of cars, trucks, and public transportation; the mode of travel, such as auto, carpool, and public transit; and miles traveled by these modes as well as the type of fuel. Construction and routine operation and maintenance of transportation infrastructure also consume energy as do residential, commercial, and industrial land uses. This typically occurs through the use of natural gas for heating, cooking, and industrial processes along with the use of electricity.

California Energy Use Overview

As outlined in the EA, the most recent data for the State for estimated total energy consumption is from 2017, and 2018 for natural gas consumption. This data was released by the U.S. Energy Information Administration's (EIA's) California State Profile and Energy Estimates in 2020. The EIA uses British Thermal Units (BTU) as a unit of energy content. A BTU is a measure of the heat content of fuels or energy sources. It is the quantity of heat required to raise the temperature of one pound of liquid water by one degree (1°) at the temperature that water has its greatest density. The State Profile Energy Estimates included:

- Approximately 7,881 trillion BTU of energy was consumed; and
- Approximately 2,137 billion cubic feet of natural gas 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 the State's future transportation energy demand. The projected inputs consider expected variable

changes in fuel prices, income, population, and other variables. Predictions regarding fuel demand included:

- 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; and
- 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.

The most recent data provided by the EIA for energy use in the State by demand sector is from 2017 and is reported as follows:

- Approximately 40.2 percent transportation;
- Approximately 23.1 percent industrial;
- Approximately 18.0 percent residential; and
- Approximately 18.7 percent commercial.

In 2018, total system electric generation for the State was 285,488 gigawatt hours (GWh). The State's massive electricity in-state generation system generated approximately 194,842 GWh which accounted for approximately 68 percent of the electricity it uses; the rest was imported from the Pacific Northwest (14 percent) and the U.S. Southwest (18 percent). Natural gas is the main source for electricity generation, at 47 percent of the total in-state electric generation system power as shown in Table 5.5-1. (EA p. 4)

Table 5.5-1– Total Electricity System Power (California 2018)

Fuel Type	California In-State Generation (GWh)	Percent of California In-State Generation	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%**

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:

- The State 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.
- The State 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.
- The State'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, the State 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 photo voltaic PV and solar thermal installations provided 19 percent of the State's net electricity generation.

As indicated above, the State is one of the nation's leading energy-producing states, and the State'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. (EA pp. 5-6)

Electricity

Electricity will be provided to the Project by Riverside Public Utilities (RPU). RPU provides electric power to more than 109,000 metered electric customers throughout Riverside. Per the IEPC, as of December 2017, RPU served 97,400 residential, 11,000 small and medium commercial, and 850 industrial customers. RPU's overhead distribution network consists of 513 miles of distribution circuits (feeders) of 4 and 12 kV circuits. RPU's underground network consists of 817 miles of 15 and 5 kV class cables. Based on the Power Content Label (PCL), RPU derives electricity from varied energy resources including geothermal, solar, wind, coal-fired, hydro-powered, and nuclear resources. Internal generation is provided by the Riverside Energy Resource Center power plant which provides 192-megawatt (MW) gas-fired power used to offset power shortages. (EA p. 6) RPU's energy portfolio is continuing to be shaped by the new regulatory mandates especially in regard to greenhouse gases. More renewable energy in the form of wind and solar has been added to RPU's portfolio. To accommodate energy demands, a future contract with CalEnergy for more geothermal energy has been established. In 2017, RPU met its procurement targets as mandated by SB X1-2 for compliance period 1. Compliance periods 2 and 3 have also been met, however no notices have been released. It is projected that with the increase in renewable energy in RPU's energy portfolio, there will be excess renewable energy available for purchase. In 2020, RPU sold 157.5 GWh in excess sales.

Table 5.5-2 – RPU 2019 Power Content Mix identifies RPU's specific proportional shares of electricity sources in 2019. As indicated in Table 5.5-2, the 2019 RPU Power Mix has renewable energy at 37.6 percent of the overall energy resources.

Table 5.5-2 – RPU 2019 Power Content Mix

Energy Resources	2019 RPU Power Mix
Eligible Renewable	37.6%
Biomass & waste	0.1%
Geothermal	22.5%
Eligible Hydroelectric	0.0%
Solar	11.8%
Wind	3.2%
Coal	29.2%
Large Hydroelectric	1.3%
Natural Gas	4.1%
Nuclear	4.9%
Other	0.0%
Unspecified Sources of power*	22.9%
Total	100%

* "*"Unspecified sources of power" refers to electricity from transactions that are not traceable to specific generation sources.

Natural Gas

The usage associated with natural gas use was calculated using the CalEEMod version 2016.3.2 model. 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).

> *"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.*
>
> *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 percent 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 percent of the natural gas delivered by California utilities in 2012.*

The [C]PUC regulates the California's 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, State customers received 35 percent of their natural gas supply from basins located in the Southwest, 16 percent from Canada, 40 percent from the Rocky Mountains, and 9 percent from basins located within the California. California gas utilities may soon also begin receiving biogas into their pipeline systems.

Natural gas from out-of-state production basins is delivered into the California via the interstate natural gas pipeline system. The major interstate pipelines that deliver out-of-state natural gas to State 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 CPUC often participates in FERC regulatory proceedings to represent the interests of California natural gas consumers.

Most of the natural gas transported via the interstate pipelines, as well as some of the State-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 CPUC has regulatory jurisdiction over 150,000 miles of utility-owned natural gas pipelines, which transported 82 percent of the total amount of natural gas delivered to California's gas consumers in 2012.

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.

Some of the natural gas delivered to California's 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.

PG&E 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's natural gas customers to secure natural gas supplies more efficiently. (A portion of the Gill Ranch facility is owned by PG&E).

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."

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. Biogas is produced from biomass, which is organic material from plants and animals and is a renewable source of energy. 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. (EA pp. 7-9)

The Southern California Gas Company (SoCalGas) provides natural gas service to the City, including the Project site (GP 2025, p. OS-52). As a public utility, SCG is under the jurisdiction of California Public Utilities Commission (CPUC). SoCalGas receives gas supplies from several sedimentary basins in the Western U.S and Canada. Supplies for Southern California are primarily received from the El Paso Natural Gas pipeline and some volumes also on Transwestern pipeline. Due to energy efficiency programs and statewide efforts to reduce greenhouse gas emissions there are declines in the demand of natural gas by an average of 1.7 percent per year. In March 2019, SCG announced a plan to replace 20 percent of its traditional natural gas with renewable natural gas by 2030.

Transportation Fuel

In March 2018, the Department of Motor Vehicles (DMV) identified 35 million registered vehicles in the State, and those vehicles (as noted previously) consume an estimated 19 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.

California's on-road transportation system includes 170,000 miles of highways and major roadways, more than 27 million passenger vehicles and light trucks, and almost 8 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 92 percent of all transportation energy use, excluding fuel consumed for aviation and most marine vessels. Nearly 19 billion gallons of on-highway fuel are burned each year, including 15.1 billion gallons of gasoline (including ethanol) and 3.9 billion gallons of diesel fuel (including biodiesel and renewable diesel). In 2019, Californians also used 253 million therms of natural gas as a transportation fuel, or the equivalent of 202 million gallons of gasoline. (EA p. 9)

5.5.2 Related Regulations

Programs and policies at the federal, state, and local levels have emerged to enhance the previous trend towards energy efficiency; these are discussed in the following section.

5.5.2.1 Federal Regulations

Energy Policy and Conservation Act

Enacted in 1975, this legislation established fuel economy standards for new light-duty vehicles (autos, pickups, vans, and sport-utility vehicles). The law placed responsibility on the National Highway Traffic and Safety Administration, a part of the U.S. Department of Transportation, for establishing and regularly updating vehicle standards. The United States Environmental Protection Agency (USEPA) administers the Corporate Average Fuel Economy program, which determines vehicle manufacturers' compliance with existing fuel economy standards. Since the inception of the program, the average fuel economy for new light-duty vehicles steadily increased from 13.1 miles per gallon (mpg) for the 1975 model year to 30.7 mpg for the 2014 model year and can increase to 54.5 by 2025.

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) promoted the development of inter-modal transportation systems to maximize mobility and 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 Transportation Equity Act for the 21st Century (TEA-21)

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

Energy Policy and Conservation Act

Enacted in 1975, this legislation established fuel economy standards for new light-duty vehicles (autos, pickups, vans, and sport-utility vehicles). The law placed responsibility on the National Highway Traffic and Safety Administration, a part of the U.S. Department of Transportation, for establishing and regularly updating vehicle standards. The United States Environmental Protection Agency (USEPA) administers the Corporate Average Fuel Economy program, which

determines vehicle manufacturers' compliance with existing fuel economy standards. Since the inception of the program, the average fuel economy for new light-duty vehicles steadily increased from 13.1 miles per gallon (mpg) for the 1975 model year to 30.7 mpg for the 2014 model year and can increase to 54.5 by 2025.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 was designed to improve vehicle fuel economy and help reduce nationwide dependence on foreign oil. It expands the production of renewable fuels, reducing dependence on oil, and confronting global climate change. Specifically, it increases the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard by requiring fuel producers to use at least 36 billion gallons of biofuel in 2022 and reduces U.S. demand for oil by setting a national fuel economy standard of 35 miles per gallon by 2020.

5.5.2.2 State Regulations

At the state level, the CEC and CPUC are two agencies with authority over different aspects of energy. CPUC regulates privately-owned utilities in the energy, rail, telecommunications, and water sectors. CEC collects and analyzes energy-related data, prepares statewide energy policy recommendations and plans, promotes and funds energy efficiency programs, and adopts and enforces appliance and building energy efficiency standards. California is exempt under federal law from setting State fuel economy standards for new on-road motor vehicles. Major State energy-related laws and plans are discussed below.

California Energy Commission (CEC)

The CEC was formed by Assembly Bill (AB) 1575 and is the State's primary energy policy and planning agency. AB 1875, which was adopted in 1975 in response to the oil crisis of the 1970s, also requires EIRs to consider wasteful, inefficient, and unnecessary consumption of energy and was the driving force behind the creation of Appendix F to the *CEQA Guidelines*. CEC was established to address the State's energy challenges and is responsible for the creation of the State Energy Plan. The State Energy Plan identifies the emerging trends related to energy supply, demand, conservation, public health and safety and the maintenance of a healthy economy. The State Energy Plan recommends that the State assist in the transformation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the fewest environmental and energy costs. The State Energy Plan also identifies a number of strategies, including providing assistance to public agencies and fleet operators, encouraging urban designs that reduce vehicle miles traveled, and accommodating pedestrian and bicycle access.

California Public Utilities Commission (CPUC)

CPUC regulates investor-owned electric and natural gas utilities operating in the State, including SoCalGas. The CPUC regulates natural gas rates and natural gas services, including in-State transportation over the utilities' transmission and distribution pipeline systems, storage, procurement, metering, and billing. CPUC policy on natural gas infrastructure and capacity is to: 1) allow gas utilities to gain better access to new sources of supply, develop a diverse supply

portfolio, and have adequate storage capacity for core procurement requirements; 2) ensure adequate, diverse utility natural gas pipeline and storage infrastructure for utilities and consumers; 3)assure delivery of supplies with a high degree of certainty, especially for core customers; 4) minimize transmission constraints; 5) provide access to a diverse portfolio of supplies; 6) reduce the likelihood of price spikes; 7) allow more gas to be stored when prices are low; 8) allow customers to match supplies with requirements; and 9) obtain fair access to utility transmission systems for suppliers and pipelines.

State of California Energy Plan

The State Energy Plan identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The State Energy Plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the Plan identifies a number of strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

California Energy Code

The California Energy Code (Title 24, Part 6 of the California Code of Regulations (CCR)) adopted Building Energy Efficiency Standards were first adopted in 1978 and have been updated periodically since then. 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. The goal is to reduce energy costs for owners, increase reliability and availability of electricity for the State, improve building occupant comfort, and reduce environmental impact.

Assembly Bill 2076: Reducing Dependence on Petroleum

Pursuant to AB 2076 (Chapter 936, Statutes of 2000), the CEC and CARB prepared and adopted a joint-agency report, *Reducing California's Petroleum Dependence*. Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita VMT. One performance-based goal for AB 2076 is to reduce petroleum demand to 15 percent below 2003 demand. Furthermore, in response to the CEC's 2003 and 2005 Integrated Energy Policy Reports, the Governor directed the CEC to take the lead in developing a long-term plan to increase alternative fuel use.

Integrated Energy Policy Report

Senate Bill 1389 requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the State'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 in alternate years, as part of the Integrated Energy Policy Report.

The 2018 IEPR was adopted February 20, 2019, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in the State. The 2018 IEPR focuses on a variety of topics such as including the environmental performance of the electricity generation system, landscape-scale planning, the response to the gas leak at the Aliso Canyon natural gas storage facility, transportation fuel supply reliability issues, updates on Southern California electricity reliability, methane leakage, climate adaptation activities for the energy sector, climate and sea level rise scenarios, and the California Energy Demand Forecast.

Senate Bill X1-2: California Renewable Energy Resources Act

In 2011, the Governor signed SB X1-2, which requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 33 percent of their electricity supply from renewable sources by 2020. The CPUC and CEC implement the statewide RPS program through rulemakings and monitoring the activities of electric energy utilities in the State.

Senate Bill 1078: California Renewables Portfolio Standard Program

SB 1078 (Chapter 516, Statutes of 2002), and as expanded under SB X1-2, establishes an RPS for electricity supply. The initial RPS program only required electrical corporations to provide 20 percent of their supply from renewable sources by increasing its total procurement at least one percent each year to reach the 20 percent goal. SB X1-2 expanded this law by making it applicable to all retail sellers of electricity and required procurement from eligible renewable energy resources to 33 percent by 2020.

Senate Bill 350: Clean Energy and Pollution Reduction Act of 2015

The Clean Energy and Pollution Reduction Act of 2015 (SB 350) requires the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources to be increased to 50 percent by December 31, 2030. This act also requires doubling of the energy efficiency savings in electricity and natural gas for retail customers through energy efficiency and conservation by December 31, 2030.

Assembly Bill 1493: Reduction of Greenhouse Gas Emissions

AB 1493 (Chapter 200, Statutes of 2002), known as the Pavley Bill, amended Health and Safety Code sections 42823 and added 43018.5 requiring CARB to develop and adopt regulations that achieve maximum feasible and cost-effective reduction of GHG emissions from passenger vehicles, light-duty trucks, and other vehicles used for noncommercial personal transportation in California.

Assembly Bill 1007: State Alternative Fuels Plan

AB 1007 (Chapter 371, Statutes of 2005) required the CEC to prepare a state plan to increase the use of alternative fuels in California. The CEC prepared the State Alternative Fuels Plan (SAF Plan) in partnership with CARB and in consultation with other federal, state, and local agencies.

The SAF Plan presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-state production. The SAF Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Bioenergy Action Plan, Executive Order S-06-06

Executive Order (EO) S-06-06, April 25, 2006, establishes targets for the use and production of biofuels and biopower, and directs State agencies to work together to advance biomass programs in California, while providing environmental protection and mitigation. The EO establishes the following target to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: produce a minimum of 20 percent of its biofuels in California by 2010, 40 percent by 2020, and 75 percent by 2050. EO S-06-06 also calls for the state to meet a target for use of biomass electricity. The 2011 Bioenergy Action Plan identifies those barriers and recommends actions to address them so that the State can meet its clean energy, waste reduction, and climate protection goals. The 2012 Bioenergy Action Plan updates the 2011 Plan and provides a more detailed action plan to achieve the following goals:

- Increase environmentally and economically sustainable energy production from organic waste;
- Encourage development of diverse bioenergy technologies that increase local electricity generation, combined heat and power facilities, renewable natural gas, and renewable liquid fuels for transportation and fuel cell applications;
- Create jobs and stimulate economic development, especially in rural regions of the State; and
- Reduce fire danger, improve air and water quality, and reduce waste.

California Code Title 24, Part 6, Energy Efficiency Standards

California Code of Regulations, Title 24, Part 6, is the State's Energy Efficiency Standards for Residential and Non-residential Buildings. The CEC established Title 24 in 1978 in response to a legislative mandate to create uniform building codes to reduce the State's energy consumption and provide energy efficiency standards for residential and non-residential buildings. The standards are updated on an approximately three-year cycle to allow consideration and possible incorporation of new efficient technologies and methods.

In July 2019, the CEC updated Title 24 standards with more stringent requirements effective 180 days from publication. The 2019 Building Energy Efficiency Standards improve upon the 2016 Energy Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. Buildings whose permit applications are dated on or after January 1, 2020, must comply with the 2019 Standards. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG

emissions. The building efficiency standards are enforced through the local plan check and building permit process. Local government agencies may adopt and enforce additional energy standards for new buildings as reasonably necessary due to local climatologic, geologic, or topographic conditions, provided these standards exceed those provided in Title 24.

California Green Building Standards Code (2019), California Code of Regulations Title 24, Part 11

The State's green building code, referred to as CalGreen, was developed to reduce GHG emissions from buildings, promote environmentally responsible, cost-effective, healthier places to live and work, reduce energy and water consumption, and respond to the environmental directives of the administration. The most recent version of CalGreen (July 2019) lays out the minimum requirements for newly constructed residential and non-residential buildings to reduce GHG emissions through improved efficiency and process improvements. It also includes voluntary tiers to encourage building practices that improve public health, safety, and general welfare by promoting a more sustainable design. "Only those standards approved by the California Building Standards Commission that are effective at the time an application for building permit is submitted shall apply to the plans and specifications for, and to the construction performed under, that permit". (CalGreen Standards Code Title 24 Part 11 Chapter 1 Section 101.11).

California Air Resources Board

CARB has a number of regulations and standards that seek to limit emissions from mobile sources and pollution from specific types of operation or source pollution. These policies indirectly impact energy consumption. These include:

- In-Use Off-Road Diesel Rule: Imposes limits on idling, restricts the addition of older vehicles, and requires the retirement or replacement of older engines depending on their fleet size category.
- Phase 1 Medium- and Heavy-Duty Engine and Vehicle GHG Emission Standards: establishes standards for new medium- and heavy-duty engines and vehicles sold in the State.
- Advanced Clean Cars Plan: Coordinates regulating smog-causing pollutants and GHG emissions through developing more stringent emissions standards for vehicles and improving the number of zero-emission vehicles on the roadways

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (AB 939) made all California cities, counties, and approved regional solid waste management agencies responsible for enacting plans and implementing programs to divert 25 percent of their solid waste by 1995 and 50 percent by 2000. Additional legislation mandates 50 percent diversion requirements be achieved every year. (CalRecycle, 2018). The bill also repealed the California Waste Management Board consisting of 9 members and replaced it with the California Integrated Waste Management Board consisting of 6 full time members.

5.5.2.3 Local Regulations

City of Riverside General Plan 2025

The City's General Plan 2025 contains objectives and policies that seek to reduce energy use in the City and to provide renewable energy sources. The Open Space and Conservation Element and Public Facilities Element contain energy conservation items. Objectives and policies that relate to the Project include:

Open Space and Conservation Element

Objective OS-8: Encourage the efficient use of energy resources by residential and commercial users.

Policy OS-8.1: Support the development and use of non-polluting, renewable energy sources.

Policy OS-8.2: Require incorporation of energy conservation features in the design of all new construction and substantial rehabilitation projects pursuant to Title 24 and encourage the installation of conservation devices in existing developments.

Policy OS-8.3: Encourage private energy conservation programs that minimize high energy demand and that use alternative energy sources.

Policy OS-8.4: Incorporate solar considerations into development regulations that allow existing and proposed buildings to use solar facilities.

Policy OS-8.5: Develop landscaping guidelines that support the use of vegetation for shading and wind reduction and otherwise help reduce energy consumption in new development for compatibility with renewable energy sources (i.e., solar pools).

Policy OS-8.6: Require all new development to incorporate energy efficient lighting, heating and cooling systems pursuant to the Uniform Building Code and Title 24.

Policy OS-8.9: Encourage construction and subdivision design that allows the use of solar energy systems.

Policy OS-8.10: Support the use of public transportation, bicycling and other alternative transportation modes in order to reduce the consumption of nonrenewable energy supplies.

Policy OS-8.11: Support public education programs for City residents and businesses to provide information on energy conservation and on alternative to nonrenewable energy resources.

Policy OS-8.12: Require bicycle parking in new non-residential development.

Public Facilities and Infrastructure Element (PF)

Objective PF-6: Provide affordable, reliable, and, to the extent practical, environmentally sensitive energy resources to residents and businesses.

Policy PF-6.1: Continue to support the development of green power and expand the use of green power in the City's energy portfolio.

Policy PF-6.3: Promote and encourage energy conservation.

Policy PF-6.4: Encourage energy-efficient development through its site plan and building design standard guidelines.

Policy PF-6.5: Promote green building design.

City of Riverside Economic Prosperity Action Plan and Climate Action Plan

The City's Restorative Growthprint- Climate Action Plan (RRG-CAP), adopted in 2016, identifies strategies for reducing GHG emissions in the City in order to comply with State regulations as detailed in Section 4.7, *Greenhouse Gas Emissions.* Many of the measures and strategies in the Restorative Growthprint-Climate Action Plan seek to reduce energy consumption, which subsequently reduces GHG emissions. The CAP contains GHG reduction measures organized into four primary sectors:

- Energy: Promote energy efficiency and renewable energy for municipal operations and the community
- Transportation and Land Use: Measures to reduce single-occupancy travel, increase non-motorized travel, improve transit access, encourage alternative fuels, and promote sustainable growth patterns
- Water: Measures to reduce water demand by community and municipal operations and to conserve potable water
- Solid Waste: Measures to reduce solid waste during construction and operational activities

Green Action Plan

The 2012 Green Action Plan (GAP 2012) is a product of the City's Clean & Green Task Force, which was created to: build upon the policies of the City's General Plan 2025; ensure that the green design guidelines would be developed and followed; provide a framework for sustainability pilot projects; and initiate partnerships among regional agencies and nearby cities. The Task Force first created the Sustainability Policy Statement (SPS), a document featuring eight main categories: Save Water, Keep it Clean, Make it Solar, Make it Shady, Clean the Air, Save Fuel, Make it Smart and Build Green. Once the SPS was adopted, the Green Action Plan was created to serve as a guidebook that would tie specific tasks to the policies of the SPS. The Green Action Plan focuses on seven key areas of city life: Energy, GHG Emissions, Waste, Urban Design, Urban Nature, Transportation and Water.

The City formed a Green Accountability Performance (GAP) Committee to carry out the tasks and within just two years nearly each of the plan's 38 tasks had been accomplished. The GAP Committee was reimagined to focus on healthy communities, and Riverside was awarded its designation by the Unites States Center for Disease Control and Prevention (CDC) as an Emerald City, an honor that has gained the City national acclaim. Healthy Communities is the GAP's eighth

focus area, with 19 goals and over 50 additional tasks. The Heathy Communities strategies strengthen the Green Action Plan as setting a clear path to sustainability and serving as a living document that reflects the growth of the green movement, the progression of renewable energy, and the fresh ideas of the GAP Committee (GAP 2012).

The Green Action Plan's goals related to energy are aimed at focusing the City's power resources mix at reliable renewable energy or using less energy and include the following:

Goal 1: Increase the use of non-greenhouse gas (GHG) emitting energy by 2020 to 50% with at least 33% coming from renewable sources.

Goal 2: Save 1% of communities load annually based on a 2004 baseline and reduce the City's peak electrical load demand by 10% overall.

Goal 3: Install at least 20MW of photovoltaic (PV) systems by 2020.

5.5.3 Project Design Considerations

The Project includes a number of features that would reduce Project-related energy use both during construction and operation.

Sustainability Features

As described in DEIR Section 3.2.5 (Sustainability Features), the Project would meet or exceed all applicable standards under the State's Green Building Code Title 24 standards. This will be accomplished by incorporating, at minimum, the following sustainability features or other features that are equally efficient:

Energy Efficiency

- Design building shells and components, such as electrical systems, windows, and roof systems to comply with the provisions of the Title 24 standards for nonresidential buildings. The Project would be constructed in accordance with energy efficiency standards effective at the time building permits are issued. The effective date of the 2019 Building Energy Efficiency Standards was January 1, 2020, and it is anticipated that nonresidential buildings will use approximately 30 percent less energy due to lighting upgrades under the revised standards.
- Use of Energy Star products such as appliances, building products, heating and cooling equipment, appliances, and other energy-efficient equipment will be utilized.
- Install efficient lighting and lighting control systems. Light-emitting diodes (LEDs) will be installed for outdoor lighting, which will incorporate motion sensors that turn lighting off when not in use.
- Install skylights on the rooftops, 2.5% of roof area of both buildings and incorporate the use of natural lighting.
- Achieve construction energy efficiencies and energy conservation through bulk purchase, transport, and use of construction materials. Use of materials in bulk reduces energy

demands associated with preparation and transport of construction materials as well as transport and disposal of construction waste.

- The Project proposes conventional industrial uses that are not inherently energy intensive and reflect contemporary energy efficient/energy conserving designs and operational programs.

Renewable Energy

- Design buildings to have "solar ready" roofs that will structurally accommodate later installation of rooftop solar panels. Building operators providing rooftop solar panels will submit plans for solar panels prior to occupancy.

Water Conservation and Efficiency

- Create water-efficient landscapes in compliance with the City's Water Efficient Landscape and Irrigation Ordinance in 19.570.
- Surface parking lots will be landscaped in accordance with City standards to reduce heat island effect.
- Install water-efficient irrigation systems and devices according to the City's Water Efficient Landscape and Irrigation Ordinance 19.570, which complies with the California Department of Water Resources Model Efficient Landscape Ordinance.
- Design buildings to be water-efficient; install water-efficient fixtures and appliances.
- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff.
- Provide education about water conservation and available programs and incentives to the building operators to distribute to employees.

Solid Waste Measures

- Sort, recycle, and divert from landfills Project-related construction and demolition waste in accordance with mandatory regulatory requirements.
- Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas.
- The property operator will provide readily available information provided by the City for employee education about reducing waste and available recycling services.

Transportation and Motor Vehicles

- Limit idling times of construction vehicles to no more than five minutes in accordance with CCR, Title 13, Motor Vehicles, section 2449(d)(3) Idling.
- Implement sidewalks to facilitate and encourage pedestrian and access, which would reduce vehicle miles traveled (VMT) and associated energy consumption.

- Provide a total of 39 electric vehicle (EV) parking stalls (24 within Parcel 1 for Building A and 15 within Parcel 2 for Building B) to encourage the use of low or zero-emission vehicles.
- Provide a total of 13 clean air/van pool parking stalls (8 within Parcel 1 for Building A and 5 within Parcel 2 for Building B) to support and encourage ridesharing.
- Promote the use of bicycles as an alternative means of transportation by providing short-term and/or long-term bicycle parking accommodations in accordance with the California Green Buildings Standards Code Sections 5.710.6.2.1 and 5.710.6.2.2.
- The building operator will support and encourage ridesharing and transit for the construction crew.

On-Site Equipment and Loading Docks

- The Project will require building operators (by contract specifications) to turn off equipment, including heavy-duty equipment, motor vehicles, and portable equipment when not in use for more than 5 minutes. Truck idling shall not exceed 5 minutes in duration. All facilities will post signs requiring that trucks shall not be left idling for more than 5 minutes pursuant to Title 13 of the California Code of Regulations.

Construction

- Require construction equipment to turn off when not in use.
- Use “green” building materials where feasible, such as those materials that are resource-efficient and recycled and manufactured in an environmentally conscious way.
- During grading, heavy-duty construction equipment (i.e., excavators, graders, scrapers, dozers, tractor/loader/backhoes, etc.) shall be CARB/U.S. Environmental Protection Agency Tier 3 certified. All construction equipment is subject to the CARB In-Use Off-Road Diesel-Fueled Fleets Regulation. This regulation, which applies to all off-road diesel vehicles 25 horsepower or greater, limits unnecessary idling to 5 minutes, requires all construction fleets to be labeled and reported to CARB, bans Tier 0 equipment and phases out Tier 1 and 2 equipment (thereby replacing fleets with cleaner equipment), and requires that fleets comply with Best Available Control Technology requirements.[1]

5.5.4 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the *State CEQA Guidelines*. The City generally utilizes the CEQA significance thresholds in Appendix G (“Environmental Checklist”) of the *State CEQA Guidelines*. The Environmental Checklist prepared by the City for the Project (Appendix A) indicates that impacts related to the Project may be considered potentially significant if the Project would:

[1] Air Quality Analysis for the Sycamore Hills Distribution Project, page 34, contained in Appendix C of this EIR.

- (Threshold A) Result in potentially significant environmental impact due to wasteful, inefficient, unnecessary consumption of energy resources, during project construction or operation (Threshold A);
- (Threshold B) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency (Threshold B).

In addition, Appendix F of the *State CEQA Guidelines* (22), states that the means of achieving the goal of energy conservation includes the following:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas and oil; and
- Increasing reliance on renewable energy sources.

5.5.5 Environmental Impacts

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

Construction Energy Demand

The Project would require site preparation, grading, building construction, paving, and architectural coating. All construction would be typical for the region and building types. 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 5.5-3; eight-hour daily use of all equipment is assumed. Per the Project's Energy Analysis (Appendix F), fuel consumption calculations are based on all construction equipment being diesel-powered, which is standard practice consistent with industry standards. Additionally, Table 5.5-4 provides estimated fuel consumption generated by construction worker trips from light duty autos (LDAs), with the aggregated fuel economy of LDA models as generated by EMFAC2017 for LDA model years ranging from 1974 to 2022. Further, Tables 5.5-5 and 5.5-6 provide construction vendor fuel consumption estimates from Medium-Heavy-Duty-Trucks (MHDTs) and Heavy-Heavy-Duty-Trucks, respectively. It is assumed 50 percent of all vendor trips would be from MHDTs and 50 percent from HHTDs. MHDT and Heavy-Heavy-Duty Trucks (HHDT) vehicle fuel efficiencies for model years 1974 to 2022 were estimated utilizing information generated within EMFAC2017. (EA pp. 15-19)

As shown in Tables 5.5-3 through 5.5-6, estimated Project fuel consumption for construction equipment, worker trips, and vendor trips totals approximately 110,704 gallons of fuel over the course of the Project's construction period. Project construction equipment would consume an estimated 51,839 gallons of diesel fuel (Table 5.5-3), which represents a "single-event" diesel fuel demand that would not require an ongoing or permanent commitment of diesel fuel resources for construction equipment purposes. Moreover, Project construction worker trips during construction

would consume approximately 36,442 gallons of fuel (Table 5.5-4), which would similarly represent a "single-event" gasoline fuel demand that would not require an ongoing or permanent commitment of fuel resources for construction worker trips purposes. Further, MHDT vendor trips would consume an estimated 9,280 gallons of diesel fuel (Table 5.5-5) and HHDT vendor trips would consume an estimated 13,143 gallons of diesel fuel (Table 5.5-6), totaling 22,423 gallons of vendor trip fuel consumption during construction. In similar fashion, Project construction vendor trips would represent a "single-event" diesel fuel demand that would not require an ongoing or permanent commitment of diesel fuel resources for vendor trips purposes. (EA pp. 15-19)

Table 5.5-3 – Construction Equipment Fuel Consumption Estimates

Activity/Duration	Equipment	Horsepower Rating	Quantity	Usage Hours	Load Factor	hp-hrs/day	Total Fuel Consumption (gal. diesel fuel)
Site Preparation (18 days)	Rubber Tired Dozers	247	3	8	0.40	2,371	2,307
	Tractors/Loaders/ Backhoes	97	4	8	0.37	1,148	1,117
Grading (47 days)	Excavators	158	2	8	0.38	961	2,441
	Graders	187	1	8	0.41	613	1,558
	Rubber Tired Dozers	247	1	8	0.40	790	2,008
	Scrapers	367	2	8	0.48	2,819	7,161
	Tractors/Loaders/ Backhoes	97	2	8	0.37	574	931
Building Construction (243 days)	Cranes	231	1	7	0.29	469	4,512
	Forklifts	89	3	8	0.20	427	4,110
	Generator Sets	84	1	8	0.74	497	4,785
	Tractors/Loaders/ Backhoes	97	3	7	0.37	754	7,252
	Welders	46	1	8	0.45	166	1,593
Paving (18 days)	Pavers	130	2	8	0.42	874	1,039
	Paving Equipment	132	2	8	0.36	760	904
	Rollers	80	2	8	0.38	486	578
Architectural Coating (111 days)	Air Compressors	78	1	6	0.48	225	668
Construction Fuel Demand (Gallons Diesel Fuel)							***51,839***

Table 5.5-4 – Construction Worker Fuel Consumption Estimates

Construction Activity	Worker Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2021					
Site Preparation (18 days)	18	14.7	4,763	30.64	155
Grading (47 days)	20	14.7	13,818	30.64	451
Building Construction (132 days)	253	14.7	490,921	30.64	16,020
2022					
Building Construction (111 days)	253	14.7	412,820	31.57	13,075
Architectural Coating (55 days)	15	14.7	3,969	31.57	126
Paving (22 days)	128	14.7	208,858	31.57	6,615
Construction Worker Fuel Consumption					36,442

Table 5.5-5 – Construction Vendor Fuel Consumption Estimates – MHDT

Construction Activity	Vendor Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Vendor					
2021					
Building Construction (132 days)	50	6.9	45,540	8.88	5,127
2022					
Building Construction (111 days)	50	6.9	38,295	9.22	4,153
Total Fuel Consumption – Vendor (MHDT)					9,280

Table 5.5-6 – Construction Vendor Fuel Consumption Estimates – HHDT

Construction Activity	Vendor Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Vendor					
2021					
Building Construction (132 days)	50	6.9	45,540	6.30	7,224
2022					
Building Construction (111 days)	50	6.9	38,295	6.47	5,920
Total Fuel Consumption – Vendor (HHDT)					13,143

Equipment utilized for Project construction would conform to CARB regulations and California emissions standards, and the Project would utilize construction contractors which practice compliance with applicable CARB regulations regarding retrofitting, repowering, or replacement of diesel off-road equipment. 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. Additionally, California Code of Regulations (CCR) Title 13, Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. 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. Moreover, idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption during construction. (EA pp. 15-19)

Further, construction energy efficiencies and energy conservation would be achieved indirectly through energy efficiencies realized from bulk purchase, transport, and use of construction materials. Use of materials in bulk reduces energy demands associated with preparation and transport of construction materials as well as transport and disposal of construction waste. (EA pp. 15-19)

Thus, the Project would not involve the inefficient, wasteful, unnecessary use of energy during construction, and accordingly, the construction-phase impact related to energy consumption would be less than significant.

Operational Energy Demand

Project operations energy consumption 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).

Transportation Energy Demands

Energy that would be consumed by Project-generated traffic is a function of total VMT and estimated vehicle fuel economies of vehicles accessing the Project site. Per the Project's Energy Analysis (Appendix F), EMFAC2017 was run for LDA, Light-Heavy-Duty-Trucks (LHDT1 and LHDT2), MHDT, and HHDT vehicle classes within the California sub-area for the 2023 operational year. Tables 5.5-7 through 5.5-11 provide estimated Project-generated vehicle traffic annual fuel consumption for each vehicle class analyzed for the Project, and Table 5.5-12 provides the total estimated Project-generated traffic annual fuel consumption for all vehicles. (EA pp. 20-22)

Table 5.5-7 – Project-Generated LDA Vehicle Traffic Annual Fuel Consumption

Annual VMT	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
4,706,914	32.59	144,438

Table 5.5-8 – Project-Generated LHDT1 Traffic Annual Fuel Consumption

Annual VMT	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
641,896	13.81	46,497

Table 5.5-9 – Project-Generated LHDT2 Traffic Annual Fuel Consumption

Annual VMT	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
795,202	14.18	56,075

Table 5.5-10 – Project-Generated MHDT Traffic Annual Fuel Consumption

Annual VMT	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
973,358	9.59	101,532

Table 5.5-11 – Project-Generated HHDT Traffic Annual Fuel Consumption

Annual VMT	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
1,412,631	6.84	206,523

Table 5.5-12 – Total Project-Generated Traffic Annual Fuel Consumption (All Vehicles)

Vehicle Type	Annual VMT	Estimated Annual Fuel Consumption (gallons)
LDA	4,706,914	144,438
LHDT1	641,896	46,497
LHDT2	795,202	56,075
MHDT	973,358	101,532
HHDT	1,412,631	206,523
Total (All Vehicles)	8,530,001	555,065

As summarized in Table 5.5-12, the total estimated annual fuel consumption from Project-generated VMT would be 555,065 gallons of fuel, which would be provided by current and future commercial vendors. Project trip generation and VMT generated by the Project are consistent with industrial uses of similar scale and configuration, as reflected in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition, 2017, and CalEEMod. As such, the Project does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips and VMT, nor associated excess and wasteful vehicle energy consumption. Moreover, the Project would be subject to any Federal and State regulatory actions regarding enhanced fuel economies and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells), which would likely decrease future gasoline fuel demands per VMT. (EA pp. 20-22)

Additionally, the location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, which would act to reduce regional vehicle energy demands.

Further, the Project would implement sidewalks and promote the use of bicycles as an alternative means of transportation, which would facilitate pedestrian and bicycle access and, accordingly, would reduce VMT and associated energy consumption. Thus, Project transportation energy demands as they relate to operational demands would not result in the inefficient, wasteful, or unnecessary consumption of energy, and potential impacts would be less than significant. (EA pp. 20-22)

Facility Energy Demands

Energy use in buildings is divided into energy consumed by the built environment, and energy consumed by uses that are independent of the construction of the building, such as plug-in appliances. In the State, CALGreen; CCR, Title 24, Part 11 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting. Non-building energy use, or "plug-in" energy use can be further subdivided by specific end-use (refrigeration, cooking, appliances, etc.). (EA pp. 22-23)

Project building operations and Project site maintenance activities would result in the consumption of natural gas and electricity. The annual natural gas and electricity demands of the Project are summarized in Tables 5.5-13 and 5.5-14. The Project facility operational energy demands are estimated at 1,224,290 kBTU/year of natural gas and 1,423,320 kWh/year of electricity. (EA pp. 22-23)

Table 5.5-13 – Project Annual Operational Natural Gas Demand Summary

Natural Gas Demand	kBTU/year
High-Cube Transload Short-Term Warehouse	1,224,290
Total Project Natural Gas Demand	1,224,290
kBTU/yr = kilo-British thermal units per year	

Table 5.5-14 – Project Annual Operational Electricity Demand Summary

Electricity Demand	kWh/year
Parking lot	76,230
High-Cube Transload Short-Term Warehouse	1,423,320
Total Project Electricity Demand	1,499,550

Uses proposed by the Project are not inherently energy intensive, and the Project's energy demands in total would be comparable to, or less than, other industrial projects of similar scale and configuration. Moreover, the Project proposes conventional industrial uses reflecting contemporary energy efficient/energy conserving designs and operational programs, and would comply with the 2019 Title 24 Standards, which include incorporating contemporary design features. Further, the Project's energy demands can be accommodated within the context of available resources and energy systems and would therefore not cause or result in the need for additional energy producing or transmission facilities. (EA pp. 22-23) Thus, the Project's facility energy demands as they relate to Project operational energy demands would not result in the inefficient, wasteful, or unnecessary consumption of energy, and any potential impacts would be **less than significant**.

Threshold B: *Would the Project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?*

As listed in Section 5.5.2.2, Project's plans for renewable energy or energy efficiency are consistent with the State of California Energy Plan, California Code of Regulations, Title 24, Part 6, the State's Energy Efficiency Standards for Residential and Non-residential Buildings, and the California Integrated Waste Management Act of 1989 (AB 939). Section 5.2.2.3 Regional Regulations, Project-applicable energy plans are also consistent with the objectives and policies of the GP 2025's Open Space and Conservation and Public Facilities and Infrastructure Elements, and the City's RRG-CAP and Green Action Plan. Discussions of the Project's consistency with the General Plan 2025, RRG-CAP and Green Action Plan is provided below.

Consistency with State of California Energy 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 takes advantage of existing infrastructure systems and promotes land use compatibilities through the introduction of industrial uses on a business/office park-designated site. The Project therefore supports urban design and planning processes identified under the State of California Energy Plan, is consistent with, and would not otherwise interfere with, nor obstruct implementation of the State of California Energy Plan. (EA pp. 27-28)

As conditioned, the Project will be required to comply with both California Building Code Title 24 Part 6 (Building Energy Efficiency Standards) and Part 11 (CALGreen Code). The Project's features include reusing and recycling construction and demolition waste, interior and exterior storage areas for recyclables and green waste, recycling containers in public areas, and education materials about reducing waste and available recycling services. As such the Project will not conflict with or obstruct implementation of California Integrated Waste Management Act of 1989 (AB 939).

General Plan 2025

The Project is consistent with the objectives and policies in the Open Space and Open Space Element, including those that encourage efficient use of energy resources. The Project is consistent with the objectives and policies in the Public Facilities and Infrastructure Element, including those with the purpose of providing superior water service to customers, maintaining sufficient levels of wastewater and storm drainage service, and provide to the extent practical, environmentally sensitive energy resources. Refer to Appendix B for the analysis of the Project's consistency with applicable General Plan 2025 Open Space and Conservation and Public Facilities and Infrastructure Element policies.

Consistency with the Riverside Restorative Growthprint and Climate Action Plan (RRG-CAP)

In addition to meeting the SCAQMD screening thresholds, the Project was evaluated for consistency with the strategies and actions contained in the RRG-CAP (see Section 5.4.2.4). To achieve the City's GHG emission reductions, the City's RRG-CAP includes reduction measures

for each category of GHG emissions: transportation, energy, water, and solid waste. The RRG-CAP reduction measures further support the goals of SB 32 and the measures in the 2017 Scoping Plan. Table 5.7-8 summarizes the Project's consistency with RRG-CAP measures.

Table 5.5-15 – Project Consistency with RRG-CAP GHG Reduction Measures

Number	Strategy/Goal	Project Consistency
State and Regional Energy Measures		
The following are state and regional measures that are expected to reduce GHG emissions associated with the energy sector.		
SR-1	**Renewable Portfolio Standard (RPS)** Utilities must secure 33 percent of their power from renewable sources by 2020.	The Project would be served by Riverside Public Utilities, which has achieved 36 percent renewables as of 2017. The Project's energy related GHG emissions would decrease as Riverside Public Utilities increases its renewables procurement beyond 2020 towards the 2030 goal of 50 percent. The Project would not conflict or interfere with RPS.
SR-2	**2013 California Building Energy Efficiency Standards (Title 24, Part 6)** Mandatory energy efficiency standards for buildings.	The Project would be constructed in accordance with energy efficiency standards effective at the time building permits are issued. The current 2019 Energy Code is estimated to decrease energy consumption by 30 percent for non-residential buildings when compared to the 2016 Title 24 Energy Code.
SR-3	**HERO Residential Program** Financing for homeowners to make energy efficient, renewable energy, and water conservation improvements.	The Project is not a residential Project, and therefore, this measure does not apply to the Project.
SR-4	**HERO Commercial Program** Financing for business owners to make energy efficient, renewable energy, and water conservation improvements.	The HERO Commercial program is a public-private partnership administered by Western Riverside Council of Governments (WRCOG) and provides financing for energy and water improvements to business owners. As the Project is a new warehouse construction, this measure does not apply to the Project. The Project would not conflict with WRCOG's implementation of the HERO program.
State and Regional Transportation Measures		
The following are state and regional measures that are expected to reduce GHG emissions associated with the transportation sector.		
SR-6	**Pavley and Low Carbon Fuel Standard** Requirements for vehicles to use cleaner fuels.	This measure is implemented at the state level. Project mobile-source GHG emissions would be reduced through implementation of these measures. The Project would not conflict with implementation.
SR-7	**Metrolink Expansion** Additional Metrolink transit service provided to Western Riverside County.	Identified in SCAG's 2012 RTP/SCS, the Metrolink Perris Valley Line will be extended from Riverside to Perris in Western Riverside County. The General Plan identifies that the alignment would include a station east of the Project site at I-215 and Alessandro Boulevard. The Project would not interfere with Metrolink

Number	Strategy/Goal	Project Consistency
		expansion. Future employees could use the expansion to commute to the Project site.
SR-8	**Express Lanes** Additional express lanes added along major freeways in western Riverside County.	The Project would not interfere with construction of additional freeway express lanes. Project vehicle traffic would benefit from decreased freeway congestion.
SR-9	**Congestion Pricing** Expansion of the toll lanes along SR-91.	This measure does not apply directly to the Project. The Project would not interfere with the expansion of SR-91 toll lanes.
SR-10	**Telecommuting** Work arrangement in which employees do not commute to a central place to work.	The Project is a high-cube warehouse which would require employees to physically fulfill and transport goods. This measure does not apply to the Project.
SR-11	**Goods Movement** Efficiency movement of goods through inland southern California.	The Project would support the region's role as a major hub for importing and exporting goods. To implement this measure, at the state level more standards are being implemented to increase vehicle efficiencies and the 2020 RTP/SCS and SCAQMD are supporting greater penetration of low-emission trucks in the region. The estimated GHG reductions associated with this measure account for the region's "share" of SCAG and SCAQMD's anticipated investments. The Project would benefit from reductions associated with regional investments. Further, by providing additional warehouse space in the region, the Project could reduce truck VMT by providing a hub closer to the region than further warehouses.
SR-12	**Electric Vehicle Plan and Infrastructure** Facilitate electric vehicle use by providing necessary infrastructure.	For the City of Riverside, this measure would be implemented by providing both public and private charging facilities, and by updating development codes to encourage or facilitate charging stations. The Project would install conduits for vehicle charging stations. The Project would not interfere with implementation of this measure and would be constructed in accordance with development codes in place at the time building permits are issued.
State Solid Waste Measures		
The following state measure is expected to reduce GHG emissions associated with the solid waste sector.		
SR-13	**Construction & Demolition Waste Diversion** Meet mandatory requirement to divert 50 percent of construction & demolition (C&D) waste from landfills by 2020 and exceed requirement by diverting 90 percent of C&D waste from landfills by 2035.	Project-related C&D waste would be sorted, recycled, and diverted from landfills in accordance with mandatory regulatory requirements.
Local Energy Measures		

Number	Strategy/Goal	Project Consistency
The following are local measures that can be implemented to reduce GHG emissions associated with the energy sector.		
E-1	**Traffic and Street Lights** Replace traffic and streetlights with high-efficiency bulbs.	The Project would not interfere with implementation of this measure.
E-2	**Shade Trees** Strategically plant trees at new residential developments to reduce the urban heat island effect.	This measure applies to residential development and does not apply to the Project.
E-3	**Local Utility Programs – Electricity** Financing and incentives for business and homeowners to make energy efficient, renewable energy, and water conservation improvements.	To implement this measure, Riverside Public Utilities offers a selection of rebates and other incentives to assist property owners (residential and commercial) with the installation of energy- and water-saving products. This measure does not directly apply to the Project. However, the Project would be constructed in accordance with the Energy Code in place at the time building permits are issued, which would require the Project to be more energy efficient than existing development. The Project would also reduce water consumption in accordance with CalGreen.
E-4	**Renewable Energy Production on Public Property** Large-scale renewable energy installation on publicly owned property and in public rights-of-way.	This measure encourages the City to seek opportunities to install renewable energy projects on public property, public facilities and in public rights of way. This measure does not apply to the Project.
E-5	**UC Riverside Carbon Neutral Program** Collaborate with UC Riverside to achieve a carbon neutral campus.	The Project is not associated with UC Riverside. This measure does not apply to the Project.
E-6	**Riverside Public Utilities Technology Grants** Riverside Public Utilities grant programs to foster research, development and demonstration of innovative solutions to energy problems.	Riverside Public Utilities offers energy technology grant programs to help foster the development of innovative solutions to energy problems. This measure does not apply to the Project.
Local Transportation Measures		
The following are local measures that can be implemented to reduce GHG emissions associated with the transportation sector.		
T-1	**Bicycle Infrastructure Improvements** Expand on-street and off-street bicycle infrastructure, including bicycle lanes and bicycle trails.	Adjacent to the project site, Alessandro Boulevard is a Class 2 bicycle facility. The Project driveway would connect to Alessandro Boulevard and the existing bicycle lanes to provide access to the Project site. Additionally, the project would include the construction of a new parking lot to provide access to the Sycamore Canyon Wilderness Park trails with bicycle racks. Additionally, the project would include secure bicycle parking at each building.
T-2	**Bicycle Parking**	The Project would include secure bicycle parking at each building (at the northwest

Number	Strategy/Goal	Project Consistency
	Provide additional options for bicycle parking.	corner and entrance of Building B and at the southeast corner and entrance of Building A).
T-3	**End of Trip Facilities** Encourage use of non-motorized transportation modes by providing appropriate facilities and amenities for commuters.	The Project would include secure bicycle parking at each building (at the northwest corner and entrance of Building B and at the southeast corner and entrance of Building A). Additionally, Building A would have eight (8) clean air/van pool parking spaces and 24 electric vehicle parking stalls, and Building B would have five (5) clean air/van pool parking spaces and 15 electric vehicle parking stalls. The charging stations for the electric vehicle parking stalls would be provided by the future tenant.
T-4	**Promotional Transportation Demand Management** Encourage Transportation Demand Management strategies.	The Project site is served by two existing bus routes and is also required to construct sidewalk capable of accommodating an ADA-compliant bench and pole bus stop as a condition of approval. Route 20 runs along Alessandro Boulevard adjacent to the Project site, providing service from Magnolia Center to Moreno Valley. Route 208 is a CommuterLink Express Route providing service from Temecula to the Riverside Metrolink. Consistent with Transportation Demand Management strategies, future employees would be encouraged to use these routes as an alternative form of transportation. The Project would also provide secure bicycle parking.
T-5	**Traffic Signal Coordination** Incorporate technology to synchronize and coordinate traffic signals along local arterials.	This measure is the responsibility of the Public Works Department and is currently in progress. The measure does not apply to the Project. The Project would not interfere with implementation of this measure.
T-6	**Density** Improve jobs-housing balance and reduce vehicle miles traveled by increasing household and employment densities.	Single and multi-family residential neighborhoods are located south and west of the Project site. The Project would create new employment opportunities for nearby residents. In Riverside County, the 2014 jobs-housing balance was 1.28 jobs to household, which exceeds the 2040 projection of 1.10 jobs to household.
T-7	**Mixed-Use Development** Provide for a variety of development types and uses.	The Project is not a mixed-use development. Nonetheless, the Project would not conflict with this strategy/goal and would create new employment opportunities for near-by residents, and future employees could utilize near-by commercial and retail business, in support of this measure.
T-8	**Pedestrian Only Areas**	This measure refers to urban, nonmotorized pedestrian use areas within central business

Number	Strategy/Goal	Project Consistency
	Encourage walking by providing pedestrian-only community areas.	districts and major activity centers. Nonetheless, the Project would include a donation of land for a trailhead parking lot with improvements such as a shade structure with benches, bike rack, and drinking fountain. Trail fencing, gates, and signage would also be installed to direct access, circulation, and connection to existing trails. Thus, the Project would encourage walking/pedestrian use and would support this measure.
T-9	**Limited Parking Requirements for New Development** Reduce requirements for vehicle parking in new development projects.	Limiting parking requirements would encourage modes of transportation other than single-occupancy vehicles, thereby reducing VMT and GHG emissions. The City's current Zoning Code authorizes a reduction in the number of required parking spaces for mixed-use development and/or stand-alone uses in mixed-use zones subject to the approval of a shared parking arrangement. The Project is not a mixed-use development; however, the applicant is requesting a variance to reduce the number of parking spaces based on the operational characteristics of the uses.
T-10	**Bus Rapid Transit Service** Implement bus rapid transit service in the subregion to provide alternative transportation options.	The Project site is served by two existing bus routes. Route 20 runs along Alessandro Boulevard adjacent to the Project site, providing service from Magnolia Center to Moreno Valley. Two Route 20 bus stops are located immediately adjacent to the Project site along the southern boundary on Alessandro Boulevard. Route 208 is a CommuterLink Express Route providing service from Temecula to the Riverside Metrolink. Additionally, the Project would be required to construct a sidewalk capable of accommodating an ADA-compliant bench and pole bus stop as a condition of approval. Future employees could use the above-described routes as an alternative form of transportation. The Project would not interfere with the City's efforts to implement additional bus rapid transit.
T-11	**Voluntary Transportation Demand Management (TDM)** Encourage employers to create TDM programs for their employers.	Future employees would be encouraged to use existing public transit routes as an alternative form of transportation.
T-12	**Accelerated Bike Plan Implementation** Accelerate the implementation of all or specified components of a jurisdiction's adopted bike plan.	The City adopted a Bicycle Master Plan in 2007. Alessandro Boulevard is a Class 2 bicycle facility. The project driveway would connect to Alessandro Boulevard and the existing bicycle lanes to provide access to the Project site. Additionally, the northerly

Number	Strategy/Goal	Project Consistency
		terminus of Barton Street that is identified as a "minor trailhead" would be developed with a trailhead parking lot, and improvements would include a bike rack. Thus, the Project would provide secure bicycle parking and would not interfere with implementation of the City's Bicycle Master Plan.
T-13	**Fixed Guideway Transit** By 2020, complete feasibility study and by 2025 Introduce a fixed route transit service in the jurisdiction.	This measure applies specifically to the City's efforts on the "Riverside Reconnects" Streetcar feasibility study. The measure does not apply to the Project.
T-14	**Neighborhood Electric Vehicle Programs** Implement development requirements to accommodate Neighborhood Electric Vehicles and supporting infrastructure.	This measure does not apply to the Project. However, the Project would install conduits for vehicle charging stations.
T-15	**Subsidized Transit** Increase access to transit by providing free or reduced passes.	The tenants are unknown at this stage of Project design and, therefore, a commitment cannot be made that the future tenants would provide free or reduced transit passes to their employees. However, the Project would not interfere with the ability for future tenants to provide transit passes.
T-16	**Bike Share Program** Create nodes offering bike sharing at key locations throughout the City.	This measure encourages bike sharing implemented by third-party vendors The measure does not apply to the Project. However, the Project would include secure bicycle parking, and would not interfere with bike sharing in the region.
T-17	**Car Share Program** Offer Riverside residents the opportunity to use car sharing to satisfy short-term mobility needs.	Similar to bike sharing, car sharing is offered by third-party vendors. This measure does not apply to the Project, and the Project would not interfere with car sharing programs in the region.
T-18	**SB 743 as Alternative to LOS** Use SB 743 to incentivize development in the downtown and other areas served by transit.	The Project is not located in the downtown; therefore, this measure does not apply to the Project. The Project would be served by RTA Routes 20 and 26 currently operating along Alessandro Boulevard as the Project would be required to construct a sidewalk capable of accommodating an ADA-compliant bench and pole bus stop as a condition of approval. Therefore, the Project would be consistent with this strategy/goal.
T-19	**Alternative Fuel and Vehicle Technology Infrastructure** Promote the use of alternative fueled vehicles such as those powered by electric, natural gas, biodiesel, and fuel cells by Riverside residents and workers.	The Project would install conduits for vehicle charging stations.
T-20	**Eco-Corridor**	The Project is not located in a potential Eco-Corridor as identified in the RRG-CAP

Number	Strategy/Goal	Project Consistency
	Create a geographically defined area(s) featuring best practices in sustainable urban design and green building focused on supporting both clean-tech and green businesses.	Measure T-20: Eco-Corridor/Green Enterprise Zone section. This measure does not apply to the Project.
Local Water Measures		
The following local measure is expected to reduce GHG emissions associated with the water sector.		
W-1	**Water Conservation and Efficiency** Reduce per capita water use by 20 percent by 2020.	As discussed in previous sections, the project would be required to reduce indoor water consumption by 20 percent in accordance with CalGreen.
Local Solid Waste Measures		
The following are local measures that can be implemented to reduce GHG emissions associated with the solid waste sector.		
SW-1	**Yard Waste Collection** Provide green waste collection bins community-wide.	This measure applies to residential uses; therefore, the measure does not apply to the Project.
SW-2	**Food Scrap and Paper Diversion** Divert food and paper waste from landfills by implementing commercial and residential collection program.	This measure applies to residential and commercial uses; therefore, the measure does not apply to the Project. However, the Project would include recycling storage and would divert waste from landfills in accordance with AB 341.
Local Agriculture Measures		
The following are local measures that can be implemented to reduce GHG emissions associated with the urban forest and the local food and agricultural sectors.		
A-1	**Local Food and Agriculture** Promote local food and agricultural programs.	The Project is not associated with food or agricultural uses; therefore, this measure does not apply to the Project.

As discussed in Table 5.7-8 above, the Project would be consistent with applicable RRG-CAP measures. The City's Green Action Plan goals related to energy are aimed at focusing the City's power resources mix at reliable renewable energy or using less energy. The Project is not responsible for and cannot change the City's power resources mix; however, as outlined in 5.5.3 Project Design Considerations, it includes many features to reduce energy use. Thus, the Project would not conflict with or obstruct applicable existing energy standards and regulations, and any potential impacts would be **less than significant without mitigation**.

Appendix F (22) CEQA Guidelines

- *Decreasing overall per capita energy consumption;*
- *Decreasing reliance on fossil fuels such as coal, natural gas and oil; and*
- *Increasing reliance on renewable energy sources.*

Energy efficient/energy conserving design features and operational programs that would be implemented under the Project are summarized below. As noted in the following discussions, 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., Title24, California Green Building Standards Code). The Project incorporates a series of measures that generally reduce energy demand associated with the Project. The Project will comply with the 2019 Title 24 Standards.

The Project would also not result in a substantial increase in demand for transmission service, resulting in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure (other than site-adjacent and on-site connects to local utilities).

Additionally, the Project annual fuel consumption estimates analyzed herein represents the likely potential maximums that would occur for the proposed 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 also be expected to decrease 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.

On this basis, the Project would decrease overall per capital energy consumption, reliance on fossil fuels such as coal, natural gas, and oil, and increases reliance on renewable energy sources.

In addition to consistency with State and Local Plan for renewable energy or energy efficiency, the Project is also consistent with the following federal regulations:

Consistency with 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. (EA p. 27)

Consistency with TEA-21

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 takes advantage of existing infrastructure systems, and systems and promotes land use compatibilities through collocation of similar uses. The Project supports the strong planning processes emphasized under TEA-21. The Project is therefore consistent with, and would not otherwise interfere with, nor obstruct implementation of TEA-21. (EA p. 27)

Consistency with IEPR

Electricity would be provided to the Project by RPU and natural gas is provided by SoCalGas. RPU's Strategic Plan: 2017-2021 and SoCalGas 2018 Corporate Sustainability Report builds on existing state programs and policies. As such, the Project is consistent with, and would not otherwise interfere with, nor obstruct implementation the goals presented in the 2018 IEPR. Additionally, the Project will 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 2018 IEPR. (EA p. 27)

5.5.6 Proposed Mitigation Measures

As the Project does not exceed any of the energy significance thresholds and any potential impacts are expected to be **less than significant, without implementation of mitigation measures**.

5.5.7 Cumulative Environmental Effects

The planned and pending cumulative development projects near the Project site include residential development, warehouses, commercial, office, and public facilities. Each of the proposed developments would increase the consumption of energy and energy demand in the region. Energy consumption by the cumulative projects would be regulated by Energy Efficiency Standards embodied in Title 24 of the California Building Code, which apply to new construction of both residential and non-residential buildings, and indirect energy reduction measures from GHG reduction policies. Thus, because the Project and the cumulative development are required to comply with Title 24 of the California Building Code, they would not result in the wasteful use of energy. Therefore, cumulative impacts are **less than significant**.

5.5.8 References

The following references were used in the preparation of this section of the DEIR:

California Gas and Electric Utilities 2018	California Gas and Electric Utilities, *California Gas Report Decision D.95.01-039*, 2018. (Available at https://www.socalgas.com/regulatory/documents/cgr/2018_California_Gas_Report.pdf)
CEC 2018a	California Energy Commission, "Electricity Consumption by Entity." Accessed February 2020. (Available at https://ecdms.energy.ca.gov/elecbyutil.aspx)
CEC 2018b	California Energy Commission, "Gas Consumption by Entity." Accessed February 2020. (Available at https://ecdms.energy.ca.gov/gasbyutil.aspx)
City of Riverside 2007	City of Riverside, *General Plan 2025*, Riverside, CA. November 2007. (Available at https://www.riversideca.gov/planning/gp2025program/general-plan.asp)
GAP 2012	City of Riverside, *Green Action Plan*. 2012. (Available at http://greenriverside.com/pdf/Green_Action_Plan%202012.pdf)

IERP 2019	California Energy Commission, *Adopted 2019 Integrated Energy Policy Report* (Available online at https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2019-integrated-energy-policy-report, accessed December 2020)
RPU 2015	Riverside Public Utilities, *RPU 101*, Riverside, CA. August 2015. (Available at https://www.riversideca.gov/utilities/PDF/RPU_101_Web_2015.pdf)
RPU 2018	Riverside Public Utilities, *2018 Integrated Resource Plan* Available at https://www.riversideca.gov/utilities/about-rpu/pdf/RPU_Full_IRP_2018_Final.pdf, accessed December 2020)
RRG-CAP	Riverside Restorative Growthprint, Economic Prosperity Action Plan and Climate Action Plan, January 2016. (Available at https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/other-plans/2016%20Riverside%20Restorative%20Growthprint%20Economic%20Proposerity%20Action%20Plan%20and%20Climate%20Action%20Plan.pdf)
TEDF 2017	California Energy Commission, Transportation Energy Demand Forecast, 2018-2030 (Available at https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=17-IEPR-05, accessed December 2020)
Urban Crossroads 2020	Urban Crossroads, *Sycamore Hills Distribution Center Energy Analysis*, September 9, 2020.

5.6 Geology and Soils

Based on Appendix G of the *State CEQA Guidelines*, the analysis in the Initial Study (IS/NOP) prepared for this Project (Appendix A), and comments received during the NOP public comment period, this section will evaluate the potential impacts related to geology and soils.

The analysis in this section is based, in part, on the *Geotechnical Engineering Investigation* prepared by NorCal Engineering Soils and Geotechnical Consultants prepared on March 29, 2019, and updated July 2020 (Appendix G), the *Report of Preliminary Deep Percolation Testing, APN 263-060-022, Riverside, California* prepared by GeoMat Testing Laboratories, Inc., July 2019 (Appendix G) and the *Paleontological Resource Assessment* prepared by Applied EarthWorks (AE), Inc., September 2020 (Appendix G).

5.6.1 Setting

The Project site is located in the eastern portion of the City of Riverside, east of Barton Street, west of Sycamore Canyon Boulevard, and north of Alessandro Boulevard, within the Sycamore Canyon Business Park Specific Plan. (Figure 3.0-3 – Project Location Map). The Project site is within the southwestern quarter of Section 9, Township 3 South, Range 4 West, as shown on the Riverside East, California, United States Geological Survey (USGS) 7.5-minute quadrangle (see Figure 3.0-2 – Vicinity Map). The Project site is currently undeveloped and vacant, but has been used historically as open space. The topography consists of natural rolling terrain descending gradually from a west to east direction. Numerous outcrops of granitic rock are located throughout the property. The Project site is covered with a low to moderate growth of vegetation consisting of natural grasses and weeds (NorCal Engineering, p.2). Disturbed non-native grassland dominates the site with a few ephemeral drainages, some with riparian vegetation, transecting the site. The Project site includes two drainages considered Waters of the U.S. (WUS) (AE, p. 1) (see Figure 5.3-5 – Drainages).

The Project site contains an existing area of approximately 11.6 acres legally designated as “Restricted Property” (see Figure 3.0-3). The Restricted Property area supports a jurisdictional drainage and associated riparian habitat and was required as a condition of the Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers for construction of the Grove Community Church at an off site location, approximately one mile southwest.

Site Geology

The City lies within the northern end of the Peninsular Ranges, approximately 12 miles south of the intersection with the Transverse Range. The Santa Ana Mountains are approximately 15 miles south and southwest of the City, while the San Jacinto Mountains are approximately 10 miles east and northeast of the City. The San Bernardino Mountains are about 20 miles north of the City.

Exploratory trenches were conducted by a backhoe during the geotechnical engineering investigation (Appendix F). Results from the investigation demonstrated that the bedrock is beneath the upper soils at a depth of 1 to 5 feet below ground surface. The bedrock was noted to be massive and observed to be slightly to highly weathered and dense to very dense. The overall engineering characteristics of the earth material were relatively uniform with each excavation.

Site Soils

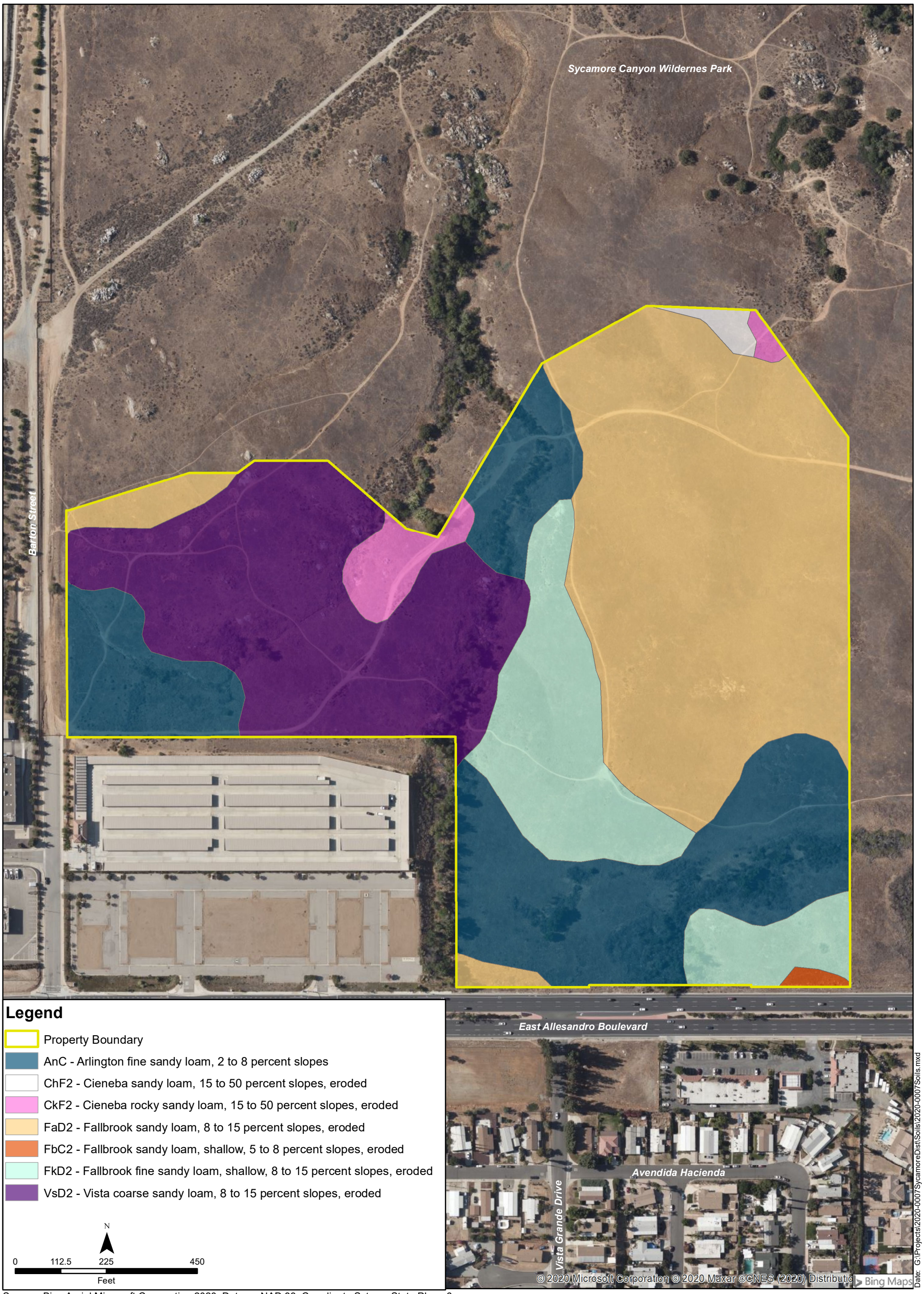
Data acquired during the geotechnical engineering investigation consisted of the placement of 21 subsurface exploratory trenches by a backhoe to depths ranging between 5 to 15 feet below current ground elevations. The exploratory trenches revealed the existing raw materials containing fill and soil. The soils encountered are described as follows:

- **Fill soil:** is classified as a brown, fine to coarse grained earthy material used to fill in a depression or hole in the ground to artificially change the grade or elevation. Silty sand is classified as a soil mixture with coarse grains and fine grains. Silty sand was encountered across the site to depths ranging from 1 to 1.5 feet below ground surface. Silty sand was noted to be loose and moist.
- **Natural:** materials are classified as a natural undisturbed soil usually brown, fine to coarse grained. Silty sand was encountered beneath the upper fill soils. The native soils as encountered were observed to be a medium dense to dense and moist.
- **Bedrock:** A granitic bedrock classifying as a grey brown, fine to coarse grained, silty sand (decomposed granite) was encountered beneath the upper soils at a depth of 1 to 5 feet below ground surface. The bedrock was noted to be massive and observed to be slightly to highly weathered and dense to very dense.

The United States Department of Agriculture (USDA) online Web Soil Survey 9 (based on the 1971 *Soil Survey of Western Riverside Area, California*) was reviewed to determine the soil types mapped occurring within the study area. Soil types mapped by USDA within the study area showed no overlap with soils found on the National List of Hydric Soils. The National List of Hydric Soils was developed by the National Technical Committee for Hydric Soils to develop a database (USDA). The study area crosses seven different soil series 9 as shown in Figure 5.6-1 – Soils Map including (Wood, p. 14):

- Arlington fine sandy loam (AnC)- This well-drained soil occurs on alluvial fans and terraces with 2 to 8 percent slopes. It is composed of fine sandy loam and the parent material is composed of alluvium dominantly from granitic rocks.
- Cieneba sandy loam, eroded (ChF2)-This somewhat excessively drained soil occurs on uplands with 15 to 50 percent slopes. It is composed of sandy loam on the surface and the parent material is composed of coarse grained igneous rock.
- Cieneba rocky sandy loam, eroded (CkF2)-This somewhat excessively drained soil occurs on uplands with 15 to 50 percent slopes. It is composed of rocky sandy loam on the surface and the parent material is composed of coarse grained igneous rock.
- Fallbrook sandy loam, eroded (FaD2) – This well-drained soil occurs on uplands with 8 to 15 percent slopes. It is composed of sandy loam and developed on granodiorite and tonalite.

- Fallbrook sandy loam, shallow, eroded (FbC2) – This well-drained soil occurs on uplands with 5 to 8 percent slopes. It is composed of sandy loam and developed on granodiorite and tonalite.
- Fallbrook fine sandy loam, shallow, eroded (FkD2) – This well-drained soil occurs on uplands with 8 to 15 percent slopes. It is composed of fine sandy loam and developed on granodiorite and tonalite.
- Vista coarse sandy loam, eroded (VsD2) – This well-drained soil occurs on uplands with 8 to 15 percent slopes. It is composed of coarse sandy loam and developed on weathered granite and granodiorite.



Source: Bing Aerial Microsoft Corporation 2020, Datum: NAD 83, Coordinate Sytem: State Plane 6

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Soils Map

Figure 5.6-1

Groundwater

The overall engineering characteristics of the earth material were relatively uniform with each excavation. Groundwater was not encountered to the depth of the trenches ranging between 5 to 15 feet below current ground elevations and no caving occurred. (NorCal Engineering, p. 3) The depth of trenches was limited due to the shallow depth of very dense bedrock. Per the City of Riverside General Plan Public Safety Element Figure PS-2 – Liquefaction Zones, the site is not situated in an area on generalized liquefaction susceptibility and therefore, the historical groundwater depth is greater than 50 feet.[1]

Seismicity and Faulting

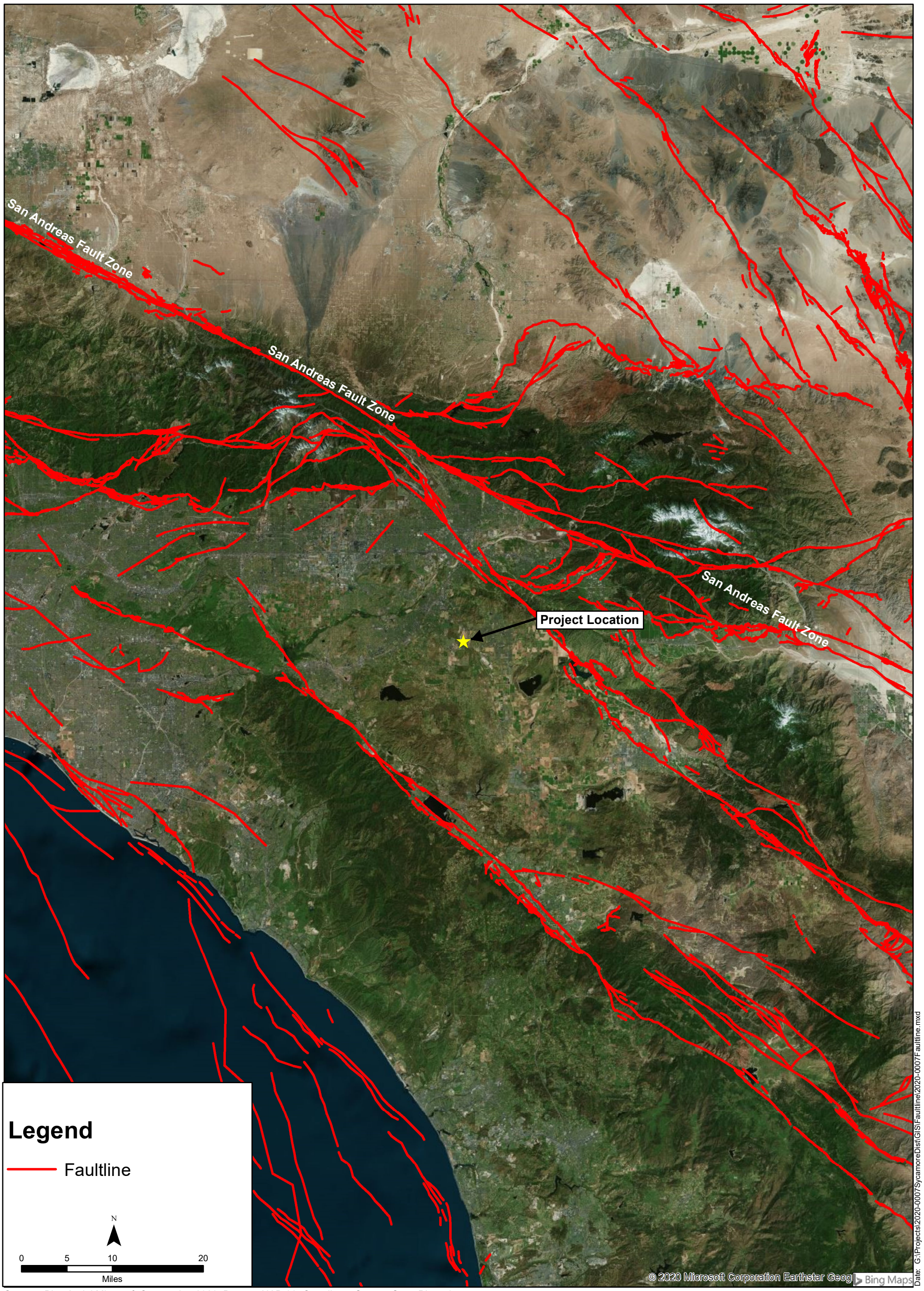
The proposed development lies outside of any Alquist-Priolo Earthquake Fault Zone. The Alquist-Priolo Earthquake Fault Zone specifies types of faults and specific faults that are considered sufficiently active and well defined as to constitute a potential hazard to structures from surface faulting or fault creep. Since the Project is outside of the Alquist-Priolo Earthquake Fault Zone, the potential for damage due to direct fault rupture is considered unlikely (NorCal Engineering, p. 5). While no known active or potentially active faults traverse the City and its Sphere of Influence, several faults in the region have the potential to produce seismic impacts within the City. Three significant faults pass within 20 miles of the City as shown on Figure 5.6-2 – Faultline Map (GP 2025).

- The San Jacinto Fault, which runs as close as 8.7miles from the Project site., is capable of producing up to a 7.0 magnitude earthquake. This fault runs more than 125 miles, from northwest of El Centro in Imperial County to northwest of San Bernardino, passing through the intersection of Interstates 10 and 215, the City of Loma Linda, and the Box Springs Mountains (GP 2025, p. PS-3).
- The San Andreas Fault runs along the southwest margin of the San Bernardino Mountains and is approximately 17 miles from the Project site The San Andreas Fault extends 600 miles, from Eureka in Northern California's Humboldt County to the Mexican border. The San Andreas Fault is estimated to be capable of producing up to an 8.3 magnitude earthquake. One of the more direct impacts that an earthquake of this magnitude could have on the City is the disruption of potable water supplies to the City. The City's primary water supplies come from a series of wells located north of the City, with the water lines from these sources running directly across segments of the San Andreas Fault (GP 2025, p. PS-3).
- The Elsinore Fault is approximately 15 miles from the Project Site. The fault begins approximately 4 miles west of Lake Mathews and the City of Corona, extending south into the City of Lake Elsinore. This northwest-southwest trending fault is capable of producing up to a 6.0 magnitude earthquake. Northwest of the City of Corona, the Elsinore Fault splits into two segments and forms the two upper strands of the Elsinore Fault. The two

[1] Email correspondence from Scott Spensiero, NorCal Engineering, on January 5, 2021

segments are known as the Whittier Fault and the Chino Fault. The 25 mile Whittier fault runs in the southwestern direction and is capable of producing up to a 7.2 magnitude earthquake. The 13 mile Chino Fault runs in the northeastern direction and is capableof producing up to a 7.0 magnitude earthquake (GP 2025, p. PS-3).

Although no Alquist-Priolo fault or active or potentially active fault has been mapped at the surface within the City, one northwest-southeast trending unnamed fault (identified as County Fault on GP 2025 Figure PS-1) approximately 12 miles from the Project site is projected towards the southwest corner of the City's Sphere of Influence boundary, south of Lake Mathews (GP 2025, p. PS-4). Ground shaking originating from earthquakes along other active faults in the region is expected to induce lower horizontal accelerations due to smaller anticipated earthquakes and/or greater distances to other faults (NorCal Engineering, p. 5).



Source: Bing Aerial Microsoft Corporation 2020, Datum: NAD 83, Coordinate Sytem: State Plane 6

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Faultline Map

Figure 5.6-2

Earthquake Intensity

It is important to note that magnitude and intensity measure different characteristics of earthquakes. Magnitude measures the energy released at the source or epicenter of the earthquake with the use of a seismograph. Intensity measures the strength of shaking produced by the earthquake at a certain location and is determined from effects on people, human structures and the natural environment. The estimated maximum earthquake event would generate site intensities in the range of moderate to strong in the City with a magnitude of 5.0 to 6.9. (GP 2025, p. PS-4, PS-6) Factors of primary importance in ground shaking severity include the size of the earthquake, its distance, the paths the seismic waves take as they travel through the earth, the type of rock or soils underlying the site, and topography. The amount of resulting damage also depends on the size, shape, age, and engineering characteristics of affected structures. Interactions between ground motion and man-made structures are complex. Governing factors include a structure's height, construction and stiffness, a soil's strength and resonant period, and the period of high-amplitude seismic waves. Waves come in different lengths and thus repeat their motions with varying frequency. Short waves are short-period or high-frequency. In general, long-period seismic waves, which are characteristic of large earthquakes, are most likely to damage long-period structures such as high-rise buildings and bridges. Shorter period seismic waves, which tend to die out quickly, will most often cause damage near the earthquake epicenter, damaging structures such as one-story and two-story buildings. Very short period waves are expected to cause structural damage, such as to equipment. Wave periods of 0.3 second and 1.0 second are the lengths of seismic waves that commonly damage structures (GPA 960 DEIR, p. 4.12-3).

The USGS has developed an Instrumental Intensity scale which maps peak ground acceleration and peak ground velocity on an intensity scale which can be used to determine potential damage associated with earthquakes of given sizes. This scale is included as Table 5.6-1-Instrumental Intensity Scale.

Table 5.6-1-Instrumental Intensity Scale

Instrumental Intensity	Acceleration (g)	Velocity (cm/s)	Perceived Shaking	Potential Damage
I	<0.0017	<0.1	Not Felt	None
II-III	0.0017-0.014	0.1-1.1	Weak	None
IV	0.014-0.039	1.1-3.4	Light	None
V	0.039-0.092	3.4-8.1	Moderate	Very Light
VI	0.092-0.18	8.1-16	Strong	Light
VII	0.18-0.34	16-31	Very Strong	Moderate
VIII	0.34-0.65	31-60	Severe	Moderate to Heavy
IX	0.65-1.24	60-116	Violent	Heavy
X+	>1.24	>116	Extreme	Very Heavy

Liquefaction

The major geologic hazards associated with ground shaking include liquefaction and ground failure. Liquefaction occurs when ground shaking causes water-saturated soils to become fluid and lose strength. Liquefaction historically has been responsible for significant damage, creating problems with bridges, buildings, buried pipes and underground storage tanks. The City is underlain by areas susceptible to varying degrees of liquefaction, ranging from moderate to very high. Liquefaction hazards are particularly significant along watercourses. The primary liquefaction areas are within the City limits including the area along the Santa Ana River, a broad area south and west of the Riverside Municipal Airport, a portion in western Riverside spanning La Sierra Avenue and a smaller area along the City's southern boundary. (GP 2025, FPEIR, p. 5.6-5- 5.6-6)

Liquefaction occurs when three general conditions exist: 1) shallow groundwater, 2) low-density silty or fine sandy soils, and 3) high intensity ground motion. As mentioned above, no groundwater was encountered during the exploratory trenching, which achieved a maximum depth of 15 feet. The Project site is expected to experience ground shaking and earthquake activity that is typical of the Southern California area. Based on review of the *City of Riverside Public Safety Element - Liquefaction Zones (2006)*, the Project site is not situated in an area of generalized liquefaction susceptibility.

Erosion and Slope Stability/Landslides

Soil erosion is the process by which soil particles are removed from a land surface by wind, water, or gravity. Most natural erosion occurs at slow rates; however, the rate or erosion increases when land is cleared or altered and left in a disturbed condition. The primary factors that influence erosion include soil characteristics, vegetative cover, topography, and climate. Soils with a high proportion of silt and very fine clays are generally the most erodible. Additionally, there is a higher likelihood for erosion the less permeable the soil. Vegetative cover assists in erosion control by shielding the soil surface from the impact of falling rain or blowing wind. Vegetation slows the velocity of runoff, permits greater infiltration, maintains the soil's capacity to absorb water, and holds soil particles in place. (GP 2025 FPEIR, pp. 5.6-11-5.6-12) The soils encountered within the Project site consist of fill and natural soil that are unlikely to cause erosion by wind and water (NorCal Engineering, p. 2).

The term "landslide" refers to deep-seated slope failures at least 15 feet deep. Landslides are typically related to the underlying structure of the parent material. Surficial failures refer to shallow failures that affect the upper weathered horizon of the parent material. The Project site is located in an area with slopes ranging between 0-10% (GP PEIR, pp. 5.6-3). No evidence of landsliding was identified in the geotechnical investigation report by NorCal Engineering.

Lateral Spreading

Seismically-induced lateral spreading involves primarily lateral movement of earth materials due to ground shaking. Lateral spreading is not the same as slope failure in that complete ground failure with ground movement does not occur due to the relatively smaller gradient of the initial

ground surface. Lateral spreading is demonstrated by near vertical cracks with predominately horizontal movement of the soil mass involved.

Paleontological Setting

Paleontology is the study of the developing history of life on Earth of ancient plants and animals based on the fossil record (evidence of their existence preserved in rocks). This field includes the study of body fossils, tracks, burrows, cast-off parts, fossilized feces, and chemical residues. Modern paleontology sets ancient life in its context, by studying how long-term physical changes of global geography and climate have affected the evolution of life and how ecosystems have responded to these changes and have changed the planetary environment in turn, and how these mutual responses have affected today's patterns of biodiversity (GP 2025 FPEIR).

The Project area is located within the northeastern part of the geologically complex Peninsular Ranges geomorphic province. The Peninsular Ranges are a northwest-southeast oriented complex of blocks that extend 125 miles from the Transverse Ranges and Los Angeles Basin to the tip of Baja California. The Peninsular Ranges are bounded to the east by the Colorado Desert and range in width from 30 to 100 miles. The Project area is approximately 3.5 miles northeast of Lake Mathews and 1.5 miles southwest of Box Springs Mountain, within the central part of the Perris Block, a relatively stable rectangular structural unit positioned between the Elsinore and San Jacinto fault zones. The geology in the vicinity of the Project area consists largely of Cretaceous plutonic rocks that are part of the composite Peninsular Ranges batholith. Surface exposures of Cretaceous rocks intermixed with older, possibly Paleozoic metamorphic and plutonic rocks are distributed across the Project area (see Figure 5.6-3). (AE 2020a).

Much of the Project area consists of biotite-hornblende tonalite, the principal plutonic rock type of the Val Verde pluton (Val Verde tonalite, Kvt). The tonalite is a relatively weathered, homogeneous, gray granitic rock that is mostly massive and occasionally foliated. Fossils are not found in plutonic rocks, which formed from cooled magma within Earth's mantle. The Val Verde tonalite intrudes an elongate northwest-southeast oriented mass of older, possibly Paleozoic schist, gneiss, and granitic rocks (mostly tonalite and granodiorite). A portion of this intermixed mass occurs in the northeast region of the Project area. Although certain low-grade metamorphic rocks such as slate can occasionally preserve fossils, schist and gneiss are medium- to high-grade metamorphic rocks that have undergone extreme heat and pressure during formation. As such, most fossils originally preserved in their precursor rocks would have been destroyed or rendered unrecognizable. Medium- to high-grade metamorphic rocks therefore do not typically yield fossils, although some rare discoveries have been reported (e.g., brachiopod fossils from schist and quartzite. (AE 2020a)

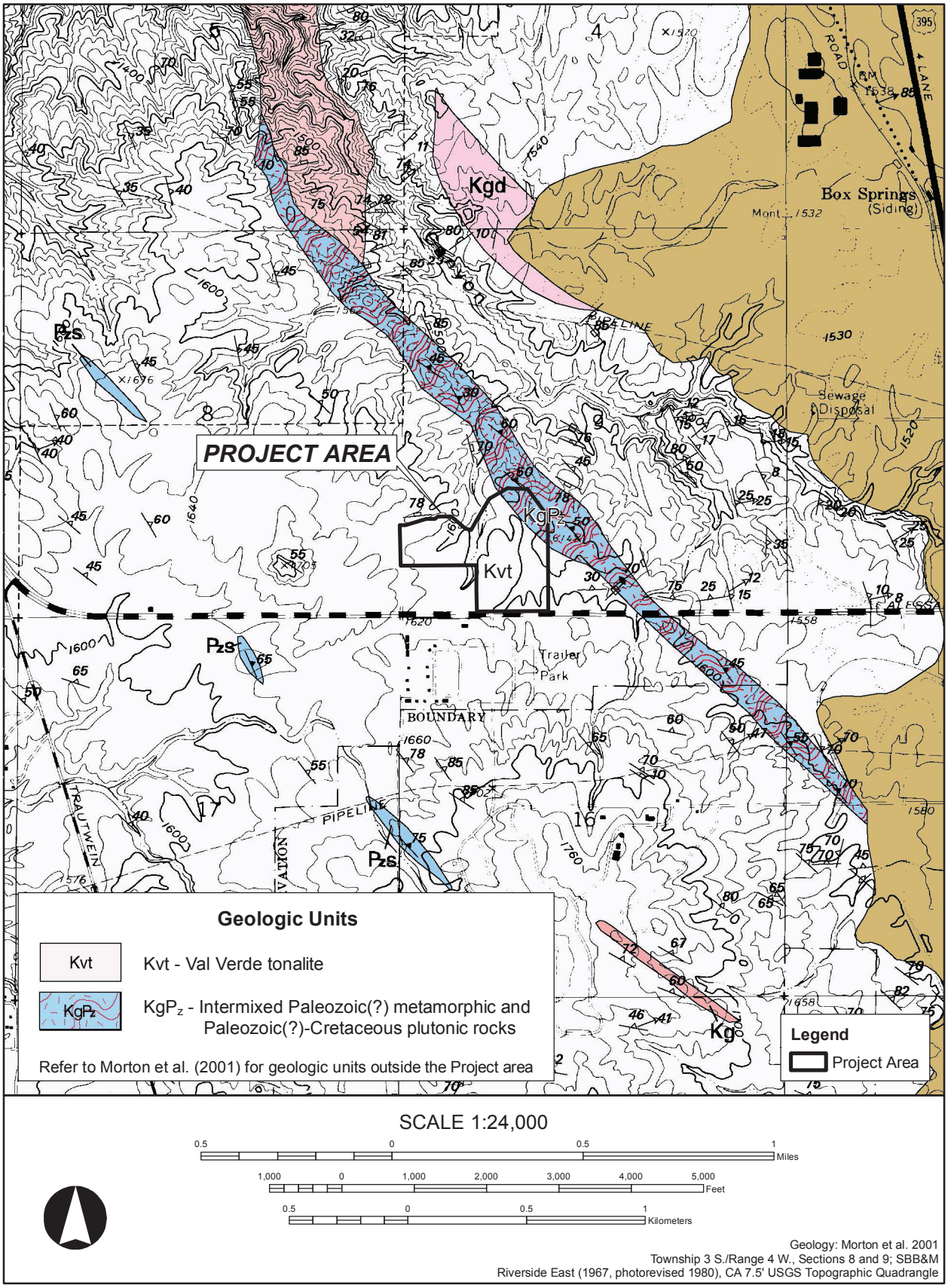
Paleontological Resource Assessment

A paleontological resource assessment was conducted to identify the geologic units exposed within the Project area and those likely buried beneath the Project area at unknown depths, assess the paleontological sensitivity of the geologic units, evaluate whether the Project has the potential to adversely impact scientifically significant paleontological resources, and provide Project-specific mitigation measures to be implanted during Project construction. (AE 2020a)

In order to determine whether fossil localities have been discovered previously within a project area or a particular rock unit, a desktop study is completed. AEs' study involved examination of readily available geologic maps and professional publications as well as a search of pertinent museum repositories for fossil localities within and near the Project area. As the region is known for its abundant vertebrate fossil discoveries, a museum records search for vertebrate fossil localities was conducted at the Natural History Museum of Los Angeles County (NHMLAC). Additionally, AE personnel completed a pedestrian reconnaissance survey of the Project area in September 2018. (AE 2020a)

The NHMLAC search yielded no records for previously identified vertebrae localities within the Project area or within similar geologic units; moreover, the desktop study indicated that the igneous and metamorphic rock types present in the Project area would not contain any recognizable fossils. (AE 2020a)

During the field survey, AE did not encounter any paleontological resources or sedimentary deposits conducive to fossil preservation in any parts of the Project area. Moreover, the Project area consists of geologic units with Low paleontological resource potential. Project area ground visibility was found to be poor, with much of it obscured by vegetation consisting of non-native grasses and native riparian scrub. A majority of the outcrops consist of gray, homogeneous, massive granitic rocks characteristic of the Val Verde tonalite; additionally, small outcrops of weathered schist from the intermixed metamorphic and plutonic rocks were observed near the northeast portion of the Project area. Both the Val Verde tonalite and the intermixed metamorphic and plutonic rocks in the Project area are very unlikely to preserve recognizable fossils, and a robust depositional environment in which fossils could be preserved appears unlikely within the Project area. (AE 2020a)



Geology: Morton et al. 2001
Township 3 S./Range 4 W., Sections 8 and 9; SBB&M
Riverside East (1967, photorevised 1980), CA 7.5' USGS Topographic Quadrangle

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Geologic Units in Project Area

Figure 5.6-3

5.6.2 Related Regulations

The following discuss applicable Federal, State, and regional regulations as they relate to geology and soils.

5.6.2.1 Federal Regulations

There are no Federal regulations applicable to geology and soils with regard to the Project.

5.6.2.2 State Regulations

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was signed into state law in 1972. The primary purpose is to mitigate the hazard of fault rupture by prohibiting the location of structures for human occupancy across the trace of an active fault. The Act requires the State Geologist to delineate "Earthquake Fault Zones" along faults that are "sufficiently active" and "well defined." The Act also requires that cities and counties withhold development permits for sites within an Earthquake Fault Zone until geologic investigations demonstrate that the sites are not threatened by surface displacement from future faulting. Pursuant to this Act, structures for human occupancy are not allowed within 50 feet of the trace of an active fault. Therefore, if a project site is located in an Earthquake Fault Zone, the City must withhold development permits for sites within the fault zones until geologic investigations demonstrate that the sites are not threatened by surface displacement from future faulting.

Seismic Hazard Mapping Act

California Geological Survey (CGS) provides guidance with regard to seismic hazards. Under CGS Seismic Hazards Mapping Act, seismic hazard zones are identified and mapped to assist local governments in land use planning. The intent of this Act is to protect the public from the effects of strong ground shaking, liquefaction, landslides, ground failure, or other hazards caused by earthquakes. In addition, CGS Special Publication 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California, provides guidance for the evaluation and mitigation of earthquake-related hazards for projects within designated zones of required investigations.

Uniform Building Code

The Uniform Building Code (UBC) is published by the International Conference of Building Officials. It forms the basis of about half the state building codes in the United States, including California's, and has been adopted by the state legislature together with additions, amendments, and repeals to address the specific building conditions and structural requirements in California.

California Building Code

California Code of Regulations (CCR), Title 24, Part 2, the CBC, provides minimum standards for building design in the state, consistent with or more stringent than UBC requirements. Local codes are permitted to be more restrictive than Title 24 but are required to be no less restrictive. Chapter 16 of the CBC deals with General Design Requirements, including regulations governing seismically resistant construction (Chapter 16, Division IV) and construction to protect people and property from hazards associated with excavation cave-ins and falling debris or construction

materials. Chapter 18 and Appendix Chapter 33 deal with site demolition, excavations, foundations, retaining walls, and grading, including requirements for seismically resistant design, foundation investigations, stable cut and fill slopes, and drainage and erosion control.

Natural Hazards Disclosure Act

The Natural Hazards Disclosure Act 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. If a property is in a Seismic Hazard Zone, as shown on a map issued by the State Geologist, the seller or the seller's agent must disclose this fact to potential buyers. California law also requires that when houses built before 1960 are sold, the seller must give the buyer a completed earthquake hazards disclosure report and a booklet titled, "The Homeowners Guide to Earthquake Safety." This publication was written and adopted by the California Seismic Safety Commission.

California Civil Code Section 1103-1103.4

California Civil Code Section 1103-1103.4 applies to the transfers of real property between private parties, as defined therein, and requires notification upon transfer if the property is affected by one or more natural hazards. The following potential hazards must be disclosed, if known: FEMA flood hazard areas, dam failure inundation areas, very high fire hazard severity zone, wildland area with forest fire risks, earthquake fault zone, and seismic hazard zones including landslide and liquefaction on a standardized "Natural Hazard Disclosure Statement" (Section 1103.2).

National Pollutant Discharge Elimination System

A Stormwater Pollution Prevention Plan (SWPPP) prepared in compliance with a National Pollutant Discharge Elimination System (NPDES) Phase I Permit describes the Project area, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of post construction sediment and erosion control measures and maintenance responsibilities, and non-stormwater management controls. Dischargers are also required to inspect construction sites before and after storms to identify stormwater discharge from construction activity, and to identify and implement controls where necessary.

In 2010, the Santa Ana Regional Water Quality Control Board issued municipal separate storm sewer system (MS4) permits (Permit R8-2010-0033 and NPDES No. CAS 618033) to the Riverside County Permittees. This incorporates programs developed since 1993. These are the fourth MS4 permits issued by each Regional Board and are referred to as the "Fourth-term" MS4 Permits. In this region, the City of Riverside is a permittee under the Fourth-term MS4 Permits. Under this Permit, the City is required to enforce and comply with storm water discharge requirements.

CEQA Paleontological Resources

Paleontological resources cannot be replaced once they are destroyed. Therefore, paleontological resources are considered non-renewable scientific resources and are protected under CEQA. According to Appendix G of the *State CEQA Guidelines*, a project could have a

significant effect if it would directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. In order to determine the uniqueness of a given paleontological resource, it must first be identified or recovered, i.e., salvaged. Therefore, mitigation of adverse impacts to paleontological resources is mandated by CEQA.

5.6.2.3 Local Regulations

Riverside General Plan 2025

The GP 2025 contains objectives and policies related to erosion, grading, and changes in topography as well as seismic hazards relevant to the Project in its Land Use and Urban Design Element, Public Safety Element, and Open Space and Conservation Element. The Project would be subject to the following objectives and policies:

Objective PS-1: Minimize the potential damage to existing and new structures and loss of life that may result from geologic and seismic hazards.

> **Policy PS-1.1:** Ensure that all new development in the city abides by the most recently adopted city and State seismic and geotechnical requirements.

Objective PS-9: Minimize the effects from natural and urban disasters by providing adequate levels of emergency response services to all residents in Riverside.

> **Policy PS-9.8**: Reduce the risk to the community from hazards related to geologic conditions, seismic activity, flooding and structural and wildland fires by requiring feasible mitigation of such impacts on discretionary projects.

Riverside Municipal Code Title 17 of the RMC contains the Grading Code, which sets forth rules and regulations placed on grading to control erosion, grading, and earthwork construction, including fills and embankments. One of the purposes of this code is to regulate grading in a manner that minimizes the adverse effects of grading on natural landforms, soil erosion, dust control, water runoff, and construction equipment emissions. The following goals of the Grading Code are set forth in Section 17.04.010:

- Ensure that significant natural characteristics such as landform, vegetation, wildlife communities, scenic qualities, and open space can substantially be maintained; to preserve unique and significant geologic; biologic and hydrologic features of public value; to encourage alternative approaches to conventional hillside construction practices by achieving land use patterns and intensities that are consistent with the natural characteristics of hill areas such as slope, landform vegetation, and scenic quality.
- Maintain the identity, image, and environmental quality of the City; and to achieve land use densities that are in keeping with the General Plan.
- Minimize the visual impact of grading.
- Minimize grading which relates to the natural contour of the land, and which will round off, in a natural manner, sharp angles at the top and ends of cut and fill slopes, and which does not result in a staircase or padding affect.

- Stabilize steep hillsides, retain moisture, prevent erosion, and enhance the natural scenic beauty and, where necessary, require additional landscaping to enhance the scenic and safety qualities of the hillsides. This could include the retention of trees or replacement of trees and other vegetation.
- Encourage a variety of building types and design, when appropriate, to materially reduce grading and disturbance of the natural character of the area.
- Preserve and enhance existing community character, as defined by such factors as visual appearance, density, road widths and vegetation.
- Preserve prominent landforms within the community, including, but not limited to ridgelines, knolls, valleys, creeks, rock outcroppings or other unique topographic features or viewscapes.
- Preserve major hillsides viewscapes visible from points within the City so that they are not detrimentally altered by the intrusion of highly visible cut and/or fill slopes, building lines and/or road surfaces.
- Scrutinize development in areas of exposure to high fire risk and develop reasonable mitigation measures to reduce such risk.

City Paleontological Objectives

Objective HP-1: To use historic preservation principles as an equal component in the planning and development process.

> **Policy HP-1.3:** The City shall protect sites of archaeological and paleontological significance and ensure compliance with all applicable state and federal cultural resources protection and management laws in its planning and project review process.

Objective HP-2: To continue an active program to identify, interpret and designate the City's cultural resources.

Objective HP-3: To promote the City's cultural resources as a means to enhance the City's identity as an important center of Southern California history.

Objective HP-4: To fully integrate the consideration of cultural resources as a major aspect of the City's planning, permitting, and development activities.

Objective HP-5: To ensure compatibility between new development and existing cultural resources.

Objective HP-6: To actively pursue funding for a first-class historic preservation program, including money needed for educational materials, studies, surveys, staffing, and incentives for preservation by private property owners.

Objective HP-7: To encourage both public and private stewardship of the City's cultural resources.

5.6.3 Project Design Considerations

The Project's design features regarding geology and soils include an on-site Restricted Property/ Conservation Area for biological resources, culverts under the access road to Building A to provide a hydrological connection to riparian habitat on the other side and a corridor for small wildlife species. The Project also proposes native landscaping materials and groundcovers to reduce erosion potential while maintaining the native riparian habitat in the drainage within the Restricted Property/Conservation Area.

Grading

The Project will involve grading and earthwork within the site in order to accommodate the proposed structures, associated parking lots, drive lanes, water quality basins and landscaped areas. Prior to grading operations, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared in accordance with requirements of the statewide general National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for stormwater discharges from construction sites. The SWPPP will include Project-specific best management practices (BMPs) to reduce erosion and sedimentation and is subject to review and comment by the City Public Works Department and approval by the Santa Ana Regional Water Quality Control Board. BMPs may include, but not be limited to, soil stabilization controls, perimeter silt fences, placement of hay bales, and use of sediment basins. All erosion and sediment controls will be in accordance with the currently adopted state general permit. The developer and construction contractor will be responsible for implementing the BMPs in accordance with the SWPPP.

It is anticipated that excavation of decomposed granite may be performed utilizing conventional earthmoving equipment. Blasting will not be required and is not proposed as part of the Project site preparation activities. Grading for Parcel 1/Building A, Parcel C and Parcel 2/Building B is described below:

- Parcel 1 and Parcel C will be graded within the same grading construction activities for the Project. Parcels 1 and C total approximately 25.35 acres with undulating topography with elevations varying from approximately 1,570 to 1,615 feet above mean sea level (AMSL). Grading will result in cut areas up to 15 feet and fill areas as much as 12 feet. Over-excavation may be required to provide necessary structural support but is not expected to exceed 3 feet in depth. Total earthwork volumes, exclusive of any over-excavation are approximately 145,000 cubic yards of cut and 105,000 cubic yards of fill. The estimated 40,000 cubic yards of excess material will be moved from Parcel 1 to Parcel 2. This excess material will be transported via the existing dirt road between the parcels (crossing through Parcel A), which will be utilized temporarily during construction and restored post-construction.
- Parcel 2 is approximately 10.32 acres with undulating topography with elevations varying from approximately 1,580 to 1,618 feet AMSL. Grading will result in cut areas up to 16 feet and fill areas up to 8 feet. Over-excavation may be required but is not expected to exceed 3 feet in depth. Total earthwork volumes, exclusive of any over-excavation, are approximately 25,000 cubic yards of cut and 65,000 cubic yards of fill (with 40,000 cubic

yards from Parcel 1 to balance). During the grading phase, soil quantities within the overall site will balance and no export or import of fill from the site will be needed.

Per the engineering notes in the Project's site plans, no grading will occur within the Sycamore Canyon Wilderness Park or in the existing Restricted Property, with the exception of the new access road to Parcel 1. The trailhead parking lot in Parcel C will also be graded to create the parking lot, sidewalk and other amenities (shade structure, drinking fountain, etc.). The extent of grading will tie into the existing topography within the property boundary and will not extend into the Sycamore Canyon Wilderness Park for all Project parcels. Drainage A enters the site near the northern portion of the western boundary of Parcel 2 and flows for approximately 1,183 feet before exiting the site as it flows into the Sycamore Canyon Wilderness Park, near the middle of the northern boundary of Parcel 1. During grading activities, 0.08 acre, or 1,083 linear feet, of Drainage A would be permanently impacted. A retaining wall and storm drain outlet at the northeast corner of Parcel 2 will be constructed and Drainage A storm water runoff will continue to flow through the site via an underground 48-inch pipe that will cross through the Project along the northern parking lot of Parcel 2 and will continue to convey the discharge flows to the Sycamore Canyon Wilderness Park. There is limited grading that will extend into the additional (newly proposed) Restricted Property, required for the construction of the retaining wall and stormdrain outlet at the northeast corner of Building B/Parcel 2. This grading is needed to avoid the 100 linear feet of drainage course and associated riparian vegetation. An existing trail will be used temporarily during construction between Parcel 1 and Parcel 2 to transport fill from Parcel 1 to Parcel 2.

Retaining wall

A Variance is requested for Parcel 1 to allow the installation of two combination retaining/ freestanding walls wherein the retaining portion exceeds the City of Riverside Municipal Code (RMC's) maximum allowable height of 4 feet and to allow combination retaining/ freestanding walls wherein the overall height exceeds the RMC's maximum allowable height of 10 feet (Chapter 19.550 – Fences, Walls and Landscape Materials). These walls are located along the eastern property line of Parcel 1, as shown on Figure 3.0-10 – Grading Exception-Wall Variance. Following is a summary of the requested Variances:

- To allow 132 linear feet of retaining/freestanding wall with the retaining portion height up to 6.4 feet in height and combined height of up to 14.4 feet.
- To allow 205 linear feet of combination retaining/freestanding wall with the retaining portion height up to 7.6 feet.

A Grading Exception is needed for Building B on Parcel 2 to allow installation of three retaining walls to exceed 6 feet in vertical height, in accordance with Chapter 17.28 of Title 17 - Grading. The three retaining walls, ranging in height from 4.7 feet to 11.5 feet, are required at the northeast and southeast corners of Parcel 2 due to existing topography relief and to avoid sensitive resources as shown on Figure 3.0-10 – Grading Exception & Wall Variance Exhibit. Following is a summary of the requested Grading Exception:

- To allow a 6.5 to 11.5-foot retaining wall in the northeast corner of Parcel 2
- To allow a 4.7 to 8.2-foot high retaining wall and a 6 to 10 foot high retaining wall in the southeast corner of Parcel 2.

The granular backfill to be utilized immediately adjacent to the retaining walls shall consist of an approved select granular soil with a sand equivalency greater than 30. The backfill zone of free draining material shall consist of a wedge beginning a minimum of one horizontal foot from the base of the wall extending upwards at an inclination of no less than ¾ to 1 (horizontal to vertical). Per the geotechnical investigation, no trenching is proposed.

Project design and construction will incorporate the geotechnical recommendations provided by NorCal Engineering. These recommendations, as outlined in Section 8.0 Conclusions and Recommendations, of the *Geotechnical Engineering Investigation* prepared by NorCal Engineering Soils and Geotechnical Consultants prepared on March 29, 2019, and updated July 2020 (Appendix G), is outlined below:

Site Grading Recommendations

Any vegetation and/or demolition debris shall be removed and hauled from proposed grading areas prior to the start of grading operations. Existing vegetation shall not be mixed or disced into the soils. Any removed soils may be reutilized as compacted fill once any deleterious material or oversized materials (in excess of eight inches) is removed. Grading operations shall be performed in accordance with the attached *Specifications for Placement of Compacted Fill*.

Removal and Recompaction Recommendations

All disturbed soils and/or fill (about 1 to 1½ feet below ground surface) shall be removed to competent native material, the exposed surface scarified to a depth of 12 inches, brought to within 2% of optimum moisture content and compacted to a minimum of 90% of the laboratory standard (ASTM: D 1557) prior to placement of any additional compacted fill soils, foundations, slabs-on-grade and pavement. Grading shall extend a minimum of five horizontal feet outside the edges of foundations or equidistant to the depth of fill placed, whichever is greater.

It is possible that isolated areas of undiscovered fill not described in this report are present on site; if found, these areas should be removed to competent native material prior to placement of compacted fill. A diligent search shall also be conducted during grading operations in an effort to uncover any underground structures, irrigation or utility lines. If encountered, these structures and lines shall be either removed or properly abandoned prior to the proposed construction.

Based on the current preliminary grading plan, the project development plan does not plan any proposed import or export of soil. Any imported fill material should be preferably soil similar to the upper soils encountered at the subject site. All soils shall be approved by this firm prior to importing at the site and will be subjected to additional laboratory testing to assure concurrence with the recommendations stated in this report.

If placement of slabs-on-grade and pavement is not completed immediately upon completion of grading operations, additional testing and grading of the areas may be necessary prior to continuation of construction operations. Likewise, if adverse weather conditions occur which may

damage the subgrade soils, additional assessment by the soils engineer as to the suitability of the supporting soils may be needed.

It is recommended the slope face shall be compacted and should be completely covered with deep rooted slope plantings classified as drought resistant to prevent any future erosion. Care should be taken to provide or maintain adequate lateral support for all adjacent improvements and structures at all times during the grading operations and construction phase. Adequate drainage away from the structures, pavement and slopes must be provided at all times.

Fill Blanket Recommendations

Due to the potential for differential settlement of foundations placed on engineered fill and the underlying bedrock, it is recommended that all foundations including floor slab areas be underlain by a uniform compacted fill blanket at least two feet in thickness. This fill blanket shall extend a minimum of five horizontal feet outside the edges of foundations or equidistant to the depth of fill placed, whichever is greater. Otherwise all foundations for each individual building or site wall shall be embedded into bedrock.

Shrinkage/Bulking and Subsidence

Results of our in-place density tests reveal that the soil shrinkage will be on the order of 5 to 15% due to excavation and recompaction, based upon the assumption that the fill is compacted to 92% of the maximum dry density per ASTM standards. The bulking of the bedrock shall be between 3 to 7%. Subsidence should be 0.2 feet die to earthwork operations.

The volume change does not include any allowance for vegetation or organic stripping, removal of subsurface improvements, or topographic approximations. Although these values are only approximate, they represent our best estimate of lost yardage, which will likely occur during grading. If more accurate shrinkage and subsidence factors are needed, it is recommended that field testing the actual equipment and grading techniques should be conducted.

Temporary Excavations

Temporary unsurcharged excavations in the existing site materials may be made at vertical inclinations up to 4 feet in height unless cohesionless soils are encountered. In areas where soils with little or no binder are encountered, where adverse geological conditions are exposed, or where excavations are adjacent to existing structures, shoring or flatter excavations may be required. The temporary cut slope gradients given above do not preclude local raveling and sloughing. All excavations shall be made in accordance with the requirements of the soils engineer, CAL-OSHA and other public agencies having jurisdiction. Care should be taken to provide or maintain adequate lateral support for all adjacent improvements and structures at all times during the grading operations and construction phase.

Foundation Design

All foundations may be designed utilizing the following allowable bearing capacities for an embedded depth of 18 inches into approved engineered fill or bedrock with the corresponding widths:

Allowable Bearing Capacity (psf)		
Width (feet)	Continuous Foundation	Isolated Foundation
1.5	2000	2500
2.0	2075	2575
4.0	2375	2875
6.0	2500	3000

The bearing value may be increased by 500 psf for each additional foot of depth in excess of the 18-inch minimum depth, up to a maximum of 4,000 psf. A one-third increase may be used when considering short-term loading and seismic forces. A representative of this firm shall inspect all foundation excavations prior to pouring concrete.

Settlement Analysis

Resultant pressure curves for the consolidation tests are shown on Plates D to G. Computations utilizing these curves and the recommended allowable soil bearing capacities reveal that the foundations will experience settlements on the order of ¾ inch and differential settlements of less than ¼ inch.

Lateral Resistance

The following values may be utilized in resisting lateral loads imposed on the structure. Requirements of the California Building Code should be adhered to when the coefficient of friction and passive pressures are combined.

Coefficient of Friction - 0.40

Equivalent Passive Fluid Pressure = 250 lbs./cu.ft.

Maximum Passive Pressure = 2,500 lbs./cu.ft.

The passive pressure recommendations are valid only for approved compacted fill soils or competent native materials.

Retaining Wall Design Parameters

Active earth pressures against retaining walls will be equal to the pressures developed by the following fluid densities. These values are for **select imported granular backfill material** placed behind the walls at various ground slopes above the walls.

Surface Slope of Retained Materials (Horizontal to Vertical)	Equivalent Fluid Density (lb./cu.ft.)
Level	30
5 to 1	35
4 to 1	38
3 to 1	40
2 to 1	45

Any applicable short-term construction surcharges and seismic forces should be added to the above lateral pressure values. An equivalent fluid pressure of 45 pcf may be utilized for the restrained wall condition with a level grade behind the wall.

The seismic-induced lateral soil pressure for walls greater than 6 feet may be computed using a triangular pressure distribution with the maximum value at the top of the wall. The maximum lateral pressure of (20 pcf) H where H is the height of the retained soils above the wall footing should be used in final design of retaining walls. Sliding resistance values and passive fluid pressure values may be increased by 1/3 during short-term wind and seismic loading conditions.

All walls shall be waterproofed as needed and protected from hydrostatic pressure by a reliable permanent subdrain system. The granular backfill to be utilized immediately adjacent to retaining walls shall consist of an approved select granular soil with a sand equivalency greater than 30. This backfill zone of free draining material shall consist of a wedge beginning a minimum of one horizontal foot from the base of the wall extending upward at an inclination of no less than ¾ to 1 (horizontal to vertical). A Subdrain detail is attached.

Slab Design

All concrete slabs shall be a minimum of six inches in thickness in the proposed warehouse areas and four inches in office and hardscape and placed on approved subgrade soils. Additional reinforcement requirements and an increase in thickness of the slabs-on-grade may be necessary based upon soils expansion potential and proposed loading conditions in the structures and should be evaluated further by the project engineers and/or architect.

A vapor retarder (10-mil minimum thickness) should be utilized in areas which would be sensitive to the infiltration of moisture. This retarder shall meet requirements of ASTM E 96, *Water Vapor Transmission of Materials* and ASTM E 1745, *Standard Specification for Water Vapor Retarders used in Contact with Soil or Granular Fill Under Concrete Slabs.* The vapor retarder shall be installed in accordance with procedures stated in ASTM E 1643, *Standard practice for Installation of Water Vapor Retarders used in Contact with Earth or Granular Fill Under Concrete Slabs*.

The moisture retarder may be placed directly upon compacted subgrade soils conditioned to near optimum moisture levels, although one to two inches of sand beneath the membrane is desirable. The subgrade upon which the retarder is placed shall be smooth and free of rocks, gravel or other protrusions which may damage the retarder. Use of sand above the retarder is under the purview of the structural engineer; if sand is used over the retarder, it should be placed in a dry condition.

Pavement Section Design

The table below provides a preliminary pavement design based upon an R-Value of 50 and 54 for the subgrade soils for the proposed pavement areas. Final pavement design may need to be based on R-Value testing of the subgrade soils near the conclusion of site grading to assure that these soils are consistent with those assumed in this preliminary design. The recommendations are based upon estimated traffic loads. Client should submit any other anticipated traffic loadings to the geotechnical engineer, if necessary, so that pavement sections may be reviewed to determine adequacy to support the proposed loadings.

Type of Traffic	Traffic Index	Asphalt (in.)	Base Material (in.)
Automobile Parking Stalls	4.0	3.0	3.0
Light Vehicle Circulation Areas	5.5	3.5	4.5
Heavy Truck Access Areas	7.0	4.0	8.0

Any concrete slab-on-grade in pavement areas shall be a minimum of six inches in thickness and may be placed on approved subgrade soils. All pavement areas shall have positive drainage toward an approved outlet from the site. Drain lines behind curbs and/or adjacent to landscape areas should be considered by client and the appropriate design engineers to prevent water from infiltrating beneath pavement. If such infiltration occurs, damage to pavement, curbs and flow lines, especially on sites with expansive soils, may occur during the life of the project.

Any approved base material shall consist of a Class II aggregate or equivalent and should be compacted to a minimum of 95% relative compaction. All pavement materials shall conform to the requirements set forth by the City of Riverside. The base material; and asphaltic concrete should be tested prior to delivery to the site and during placement to determine conformance with the project specifications. A pavement engineer shall designate the specific asphalt mix design to meet the required project specifications.

Utility Trench and Excavation Backfill

Trenches from installation of utility lines and other excavations may be backfilled with on-site soils or approved imported soils compacted to a minimum of 90% relative compaction. All utility lines shall be properly bedded with clean sand having a sand equivalency rating of 30 or more. This bedding material shall be thoroughly water jetted around the pipe structure prior to placement of compacted backfill soils.

Corrosion Design Criteria

Representative samples of the surficial soils, typical of the subgrade soils expected to be encountered within foundation excavations and underground utilities were tested for corrosion potential. The minimum resistivity value obtained for the samples tested is representative of an environment that may be severely corrosive to metals. The soil pH value was considered mildly alkaline and may not have a significant effect on soil corrosivity. Consideration should be given to corrosion protection systems for buried metal such as protective coatings, wrappings or the use of PVC where permitted by local building codes.

According to Table 4.3.1 of ACI 318 Building Code and Commentary, these contents revealed negligible sulfate concentrations. Therefore, a Type II cement according to latest CBC specifications may be utilized for building foundations at this time. It is recommended that additional sulfate tests be performed at the completion of site grading to assure that the as graded conditions are consistent with the recommendations stated in this design. Corrosion test results may be found on the attached Table IV.

Expansive Soil

If expansive soils are encountered, special attention should be given to the project design and maintenance. The attached *Expansive Soil Guidelines* should be reviewed by the engineers,

architects, owner, maintenance personnel and other interested parties and considered during the design of the project and future property maintenance.

5.6.4 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance thresholds in Appendix G ("Environmental Checklist") of the State CEQA Guidelines. The Environmental Checklist prepared by the City for the Project (see Appendix A of this document) indicates that impacts related the Project may be considered potentially significant if the proposed project would:

- (Threshold A) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (Refer to Division of Mines and Geology Special Publication 42); ii) strong seismic ground shaking; iii) seismic-related ground failure, including liquefaction; iv) Landslides;
- (Threshold B) Result in substantial soil erosion or the loss of topsoil;
- (Threshold C) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- (Threshold D) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property;
- (Threshold E) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water;
- (Threshold F) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

5.6.5 Environmental Impacts

Threshold A: *Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42; ii) strong seismic ground shaking; iii) seismic-related ground failure, including liquefaction?*

I. Fault Rupture

Unlike damage from ground shaking, which can occur at great distances from the fault, impacts from fault rupture are limited to the immediate area of the fault zone where the fault breaks along the surface. The Project site does not lie within or adjacent to an Alquist-Priolo Earthquake Fault Zone. The nearest known active or potentially active fault, San Jacinto Fault, is approximately 8.7

miles northeast of the Project site. The other known active or potentially active faults as described in Section 5.6.1 are further away from the Project site. Thus, the potential for damage due to fault rupture is considered remote. Nonetheless, the Project is required to comply with the building design standards of the CBC related to seismicity for construction of new buildings. Therefore, the potential hazards associated with fault rupture are considered **less than significant.**

II. Strong Seismic Ground Shaking

The Project site is located within the seismically active region of Southern California and may be subject to ground-shaking events. While no known active faults traverse the City, several faults in the region have the potential to produce seismic impacts within the City. The three significant faults that pass within 20 miles of the City include the San Andreas Fault (approximately 17 miles of the Project site), the San Jacinto Fault (approximately 8.7 miles of the Project site), and Elsinore Fault (approximately 15 miles of the Project site).

The expected ground motion characteristics of future earthquakes in the region would depend on the characteristics of the generating fault, the distance to the epicenter, the magnitude of the earthquake, and the site-specific geologic conditions. The San Jacinto Fault is capable of producing a 7.0 earthquake, which is the maximum magnitude assigned to a rupture of this fault (GP 2025, p. PS-3). As shown in Table 5.6-1 this severity may generally result in moderate structural damage. However, ground shaking originating from earthquakes along other active faults in the region is expected to induce lower horizontal accelerations due to smaller anticipated earthquakes and/or greater distances to other faults.

Additionally, the Project will be designed to resist seismic impacts in accordance with the applicable RMC Title 16 – Buildings and Construction standards. Title 16 of the RMC incorporates the California Building Code. As stated in Section 16.08.020, “The California Building Code, 2019 Edition, consisting of two volumes, including appendices and any related errata, and any amendments thereto by the State of California in the 2019 Edition of Title 24 of the California Code of Regulations, promulgated by the International Code Council, which regulates the erection, construction, enlargement, alteration, repair, moving, removal, conversion, demolition, occupancy, equipment, use, height, area and maintenance of buildings and other structures, is adopted and by this reference is made a part of this Code with the force and effect as though set out herein in full, with the exception of those parts expressly excepted and deleted or as amended by this chapter.” Such building code compliance is required for development of all structures in the City. Project plans will be reviewed during the plan check process to confirm seismic safety measures are incorporated. Moreover, there is nothing unique about the Project site that would require additional measures beyond compliance with the adopted building code. Therefore, potential impacts associated with seismic ground shaking will be **less than significant.**

III. Seismic-Related Ground Failure, Including Liquefaction

The site is not situated in an area of generalized liquefaction susceptibility. Moreover, the GP 2025 identifies the Project site and its immediate surrounding area with a very low susceptibility to liquefaction (GP 2025, Figure PS-2). The Project will be designed to resist seismic impacts in accordance with RMC Title 16 – Buildings and Construction standards. Such building code compliance is required for development of all structures in the City. Project plans will be reviewed

during the plan check process, which will ensure that these seismic safety measures are incorporated. These measures take into account ground shaking hazards that are typical to Southern California. Therefore, potential impacts associated with seismic ground failure, including liquefaction, will be **less than significant.**

IV. Landslides

Seismically induced landslides and other slope failures are common occurrences during or soon after earthquakes. The susceptibility of a geologic unit to landslides is dependent upon various factors, primarily: 1) the presence and orientation of weak structures, such as fractures, faults, and joints; 2) the height and steepness of the pertinent natural or cut slope; 3) the presence and quantity of groundwater; and 4) the occurrence of strong seismic shaking.

Strong ground shaking can also worsen existing unstable slope conditions. The Project site is located near northeastern Riverside which has areas with low to locally moderate susceptibility to landslides and rock falls. However, the Project site does not contain steep slopes in excess of 30 percent, which would be areas of high susceptibility to seismically induced landslides (GP 2025 FPEIR, p. 5.6-6). As discussed in Threshold A ii) above, there are no active faults within the City and the strength of seismic shaking at the site will be lessened due to the site's distance to faults that may produce an earthquake. Compliance with the standards in the current CBC would require an assessment of hazards related to landslides and liquefaction and the incorporation of design measures into structures to mitigate this hazard if development were considered feasible.

The RMC requires provisions to grading and development on or near hillsides. The subject property is approximately 48 acres of generally undisturbed land with undulating topography. The Sycamore Canyon Wilderness Park is immediately to the north along an irregularly shaped property line. A privately-owned, undeveloped parcel lies to the east. The property is bounded, in part, by Barton Street to the west and Alessandro Boulevard to the south. Public street frontage is limited due to a separately owned, 13.6-acre development at the northeasterly corner of Barton and Alessandro. No grading or other land disturbing activities are allowed within the wilderness park. Additionally, grading on the subject property is further restricted due to the unique presence of the existing Restricted Property. As a result of the boundary and internal grading restrictions, significant portions of the remaining site must be encumbered for matchup grading.

These restrictions have resulted in difficulty conducting perimeter grading required to transition from developed pad to significantly varied elevation changes. The Sycamore Canyon Business Park Specific Plan (SCBPSP), as part of the design criteria, also includes setback standards including front yard 50 foot building setback, side yard 20 foot building setback and rear yard 20 foot setback with landscaping for lots adjacent to the Sycamore Canyon Wilderness Park. These setback requirements also influence the orientation and the location of the buildings within the site.

Grading exceptions are needed for the Project site to allow installation of retaining walls to exceed 6 feet in vertical height, in accordance with provisions specified in the RMC 17.028.010.C.1. As a result, a grading exception is needed for Areas 1 and 2. Area 3 consists of a combination freestanding/retaining wall subject to the provisions of Title 19. Therefore, no grading exception

is needed. These areas are illustrated on the Grading Exception & Wall Variance Exhibit under Figure 3.0-8. Some retaining walls will exceed 6 feet in height and any reduction in the wall heights would directly reduce the net area for the proposed development. Areas 1 and 2 are discussed in greater detail below.

Area 1 – This area consists of approximately 95 linear feet of retaining wall that varies in height from 6.5-11.5 feet. The primary purpose of this wall is to serve as a headwall and wing walls for a 48" diameter storm drain outlet that conveys offsite flow from the Metropolitan Water District Mills Filtration Plant, through the subject property and discharges directly into the deed restricted area. The storm drain outlet is located per the direction of US Army Corp of Engineers. The storm drain outlet cannot be relocated horizontally or vertically and sufficient cover over the pipe is necessary to protect it from traffic loading. The proposed pipe connects at Barton Street and runs within the drive aisle along the northerly side of Building 2. Strict application of the Code would require narrowing the drive aisle and eliminating 1-2 parking spaces at the northeasterly corner of the building to provide approximately 8-10 feet of separation between the screen wall and the U-shaped retaining wall to accommodate a 2:1 slope. Approval of the grading exception to allow retaining walls varying from 6.5-11.5 feet in height in this area would be consistent with the general purpose and intent of Title 17 of the Riverside Municipal Code to minimize the adverse effects of grading on natural landforms, particularly in regard to water runoff.

Area 2 – This area is located near the southeasterly corner of Building 2. The walls vary in height from 5-10 feet. The sole purpose of the walls in this area is to accommodate two water quality basins. Such water quality measures for new development is a requirement of the Federal Clean Water Act, State Porter-Cologne Water Quality Control Act and the Santa Ana Region National Pollutant Discharge Elimination System (NPDES) Permit. Due to insufficient infiltration rates of the underlying soils, the basins, including the size and location, are required pursuant to design criteria specified in the Water Quality Management Plan (WQMP) guidance documents. Strict application of the Code would result in insufficient basin capacity, causing the project to fail in meeting the requirements of the MS4 Permit and WQMP. Moreover, approval of the grading exception for Area 2 is consistent with Title 17 regulations to preserve hydrologic features of public value as set forth in RMC 17.04.010(A).Therefore, the granting of the grading exception will allow reasonable development of the properties in accordance with the Specific Plan and development standards.

The topography of the Project site consists of natural rolling terrain descending gradually from a west to east direction. The Project site is not located in an area with high susceptibility for landslides and rock falls. The grading exceptions needed for the Project site to allow installation of retaining walls to exceed 6 feet in vertical height would not substantially increase the risk of landslides. The grading exceptions and retaining walls were designed to follow the overall proposed grading plans and will contribute to the Project's land stabilization. The grading exception for Area 1 would be consistent with the general purpose and intent of Title 17 of the RMC to minimize the adverse effects of grading upon natural landforms, particularly in regard to water runoff. The grading exception in Area 2 would be consistent with the general purpose and intent of Title 17 of the RMC to preserve hydrologic features of public value. In addition, RMC 17.04.010(E), which requires the stabilization of steep hillsides and the prevention of erosion,

would be enforced on all other portions of the site that do not require the grading exceptions. The City has included policies in its Public Safety Element to achieve the goal of minimizing the risk of injury, loss of life, and property damage caused by earthquake hazards or geologic disturbances (Policies PS-1.1-1.5 & Policy PS-9.8). With compliance of applicable regulations as well as policies identified in the General Plan, impacts resulting in risk of loss, injury, or death due to landslides are considered **less than significant.**

Threshold B: *Would the Project result in substantial soil erosion or the loss of topsoil?*

Construction activities such as grading may have the potential to cause soil erosion or the loss of topsoil. Short-term erosion effects during the construction phase of the Project will be prevented through the required implementation of a Stormwater Pollution Prevention Plan (SWPPP) in compliance with the National Pollutant Discharge Elimination System (NPDES) program as well as the incorporation of best management practices (BMPs) intended to reduce soil erosion. BMPs can be found in the Hydrology and Water Quality section of this DEIR, Section 5.9.3 – Project Design Considerations.

As mentioned in section 5.6.4, landscaped areas and groundcovers will be provided to help reduce erosion potential. With implementation of an approved SWPPP as well as the Project's design considerations, potential impacts from erosion during construction or operation will be **less than significant.**

Threshold C: *Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

As discussed in threshold A, the nearest active or potentially active fault is San Jacinto and is approximately 8.7 miles from the Project site. However, the Project site in not susceptible to liquefaction or landslides (GP 2025, Figure 5.6-3). The Project site is not within an area with soils identified as having a high shrink-swell potential (GP 2025, Figure PS-3), and the Project's geological investigation testing on-site soils and determined that the soils have a "very low" expansion potential (NorCal Engineering, p. 18); thus, collapse is unlikely. Additionally, the potential for lateral spreading at the Project site is considered low because the site is underlain by dense subsurface soil and bedrock. The Project site is also not within an area susceptible to subsidence (RCMMC). Thus, the Project site is not considered to be susceptible or located on a site or unit that is unstable. Nevertheless, the Project will incorporate the Project-specific geotechnical recommendations provided by NorCal Engineering and will conform to the adopted building code. These recommendations include; special attention to provide or maintain adequate lateral support for all adjacent improvements and structures at all times during the grading operations and construction phase and field testing the actual equipment and grading techniques for a more accurate shrinkage and subsidence factor. The shrinkage factor is the percentage estimate to shrink or bulk due to excavation and recompaction which is 5 to 15% for the Project. The subsidence factor refers to the number of feet of gradual settling of land which in this case is only 0.2 feet due to earthwork operations.All recommendations made in the geotechnical report prepared by NorCal Engineering have been incorporated into the Project Design Considerations (Section 5.6.3 above). With the implementation of Project-specific geotechnical recommendations

(as Project Design Considerations) and the adopted building code; potential impacts associated with seismically induced landslides will be **less than significant.**

Threshold D: *Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

Expansive soils are soils with a significant amount of clay particles that have the ability to give up water (shrink) or take on water (swell). Fine-grained soils, such as silts and clays, may contain variable amounts of expansive clay minerals. When these soils swell, the change in volume exerts significant pressures on loads that are placed on them. This shrink/swell movement can adversely affect building foundations, often causing them to crack or shift, with resulting damage to the buildings they support. The Project's geological investigation testing on-site soils determined that the soils have a "very low" expansion potential. Based on Table 5.6-2 – Expansion Test, an expansion index value between 0-20 is considered "very low" potential. (NorCal Engineering, Appendix B-Laboratory Tests) The expansion index for the Project site was 3 and 4 demonstrating that the soils have a classification of "very low". Expansion soils at this site would require an index of 21 or higher. The Project will incorporate the Project-specific geotechnical recommendations provided during the geotechnical engineering investigation, which have been incorporated into the Project Design Considerations (Section 5.6.3 above), such as the review of the Expansive Soil Guidelines and will conform to the adopted building code; thus, impacts will be **less than significant.**

Table 5.6-2 – Expansion Test

Sample	Classification	Expansion Index
T-4 @ 2'	Silty SAND	3
T-13 @ 2'	Silty SAND	4

Threshold E: *Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

Potable and non-potable water will be provided by Western Municipal Water District (Western). A potable water line connection for Building A would be constructed within the driveway from Alessandro Blvd to Building A. A potable water line connection for Building B would be constructed within the driveway from Barton Street to Building B. Potable water would be used to serve the office, kitchen, and restrooms in Buildings A and B.

Building A will be connected to the City's wastewater (sewer) collection system. Wastewater from Building A will be conveyed via pipeline from the building within the access road alignment to Alessandro Boulevard where there is an existing City wastewater line. Wastewater from Building A will have to be pumped up to a gravity flow lateral to be constructed across Alessandro Boulevard, as the elevation of Building A is lower than the existing wastewater line in Alessandro Boulevard.

There is no existing City wastewater line in Barton Street to serve Building B. This is because Barton Road slopes down in elevation to the north and therefore a gravity fed wastewater line to

serve Building B would not work to connect to Alessandro Boulevard at a higher elevation to the south. Due to this constraint, a seepage pit septic system is proposed for Building B. To determine septic feasibility for Building B, Deep Percolation Testing (Appendix G) was conducted by GeoMat Testing Laboratories, Inc. Generally, septic tanks are to be located where the water table is deep, and the soil has favorable percolation rates. Two deep percolation tests were conducted for the proposed septic system, as shown in Figure 5.6-4 - Exploratory Borehole and Percolation Test Location Map.

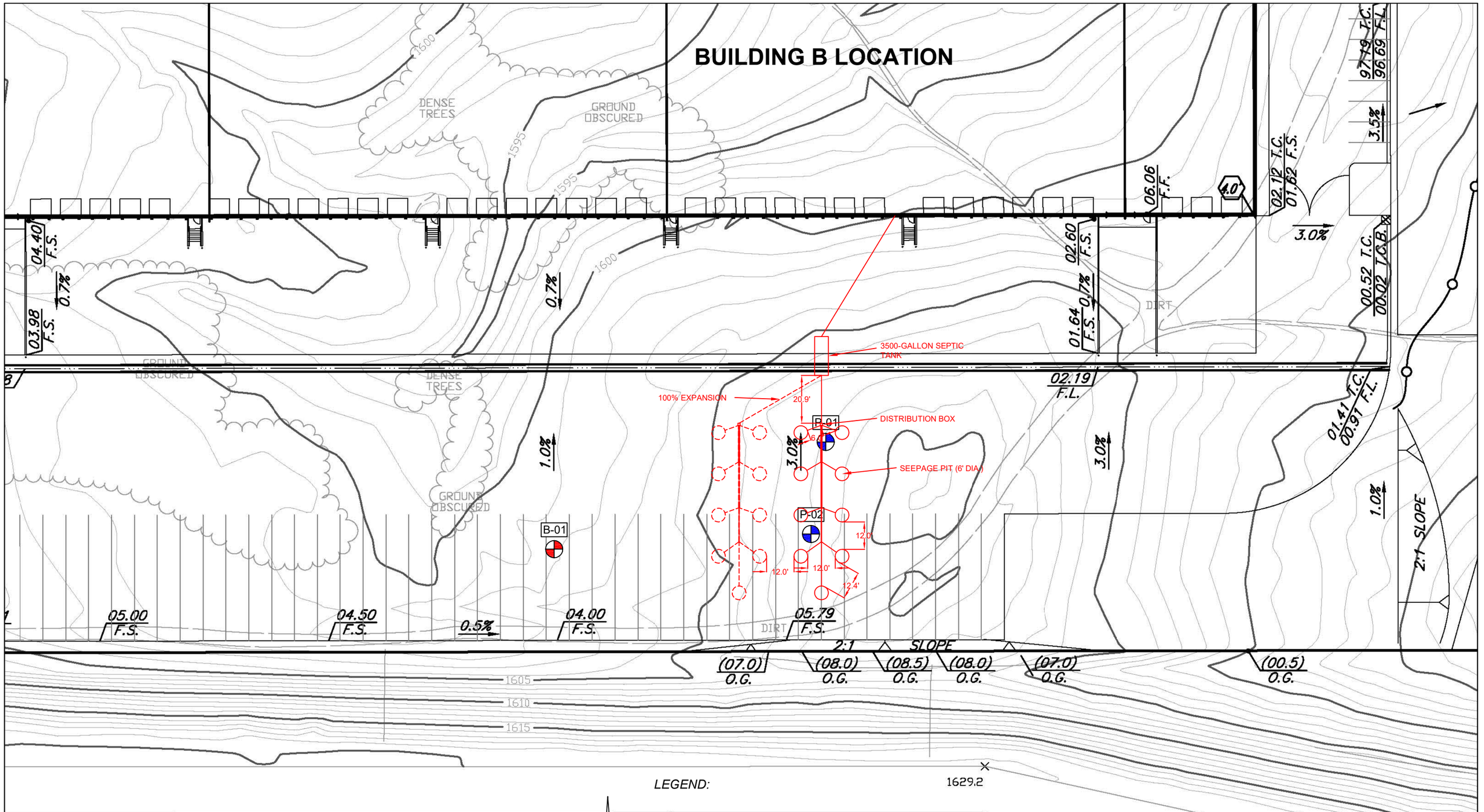
Boreholes were tested at 20 feet and 15 feet below existing ground surface for test holes P-1 and P-2, respectively. The following table presents the actual and recommended percolation rates in gallons per square feet per day for the test hole. The recommended percolation rate was utilized in the system design. Based on percolation test results, the onsite soils have favorable percolation rates. Test results are appropriate to soil classification.

Table 5.6-3 Actual and Recommended Percolation Rates

Test No.	Actual Percolation Rate (gallons/square feet/day)	Recommended Percolation Rate (gallons/square feet/day)
P-1	4.4	2.2
P-2	2.2	2.2

Based on the data presented in the Deep Percolation Report, there is sufficient area on the Project site to support a primary and expansion of the onsite wastewater system that will meet the current standards of the Department of Environmental Health, County of Riverside and Regional Quality Control Board (RWQCB). According to the test elevations (elevation 1608) and minimum ten feet seepage pits (bottom of pit at 1597), the inlet should be no deeper than one foot below grade to maintain 5 feet separation between groundwater (elevation 1592) and the bottom of the seepage pit. Based on the data in the Deep Percolation Report and the testing information accumulated, it is the judgment of GeoMat Testing Laboratories, Inc. that the groundwater table will not encroach within the current allowable limit of 5 feet set forth by County requirements. Since the Project was determined to have the capability of having a sewer connection for Building A and soils capable of supporting septic for Building B, impacts with regard to soil capability will be reduced to **less than significant**.

BUILDING B LOCATION



LEGEND:

B-01 EXPLORATORY BORING

P-04 PERCOLATION TEST

SCALE: 1" = 40'

ALL LOCATIONS ARE APPROXIMATE

SYCAMORE HILLS DISTRIBUTION CENTER

RVA geomat

BASEMAP BY: SDH & ASSOCIATES "PRELIMINARY GRDING PLAN, SYCAMORE HILLS BUSINESS CENTER," SHEET 2 OF 5, PLAN NOT DATED

Percolation Test Map

Figure 5.6-4

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

According to the Paleontological Resource Assessment conducted by AE, published geologic maps indicate the ground surface of the Project area consists of plutonic and medium- to high-grade metamorphic bedrock, both of which do not normally yield fossils. Museum records indicate no previously recorded vertebrate fossil localities within the Project area or from the types of rocks mapped within its boundaries. As a result, the County assigned a Low level of paleontological sensitivity to the entire Project area. Since no paleontological resources were found in or nearby the Project area during the field survey, the assessment concurs with the County's Low paleontological sensitivity ranking. Project related ground disturbance is not likely to impact significant paleontological resources in the Project area. Mitigation is not recommended unless a fossil is encountered during grading and other construction activities. If an unanticipated on-site fossil is discovered during construction, implementation of mitigation measure **MM GEO-1** is required to ensure potential impacts will be **less than significant with mitigation.**

5.6.6 Proposed Mitigation Measures

A DEIR is required to describe feasible mitigation measures, which could minimize significant adverse impacts (CEQA Guidelines, Section 15126.4). Mitigation measures were evaluated for their ability to eliminate the potential significant adverse impacts upon geology/soils or to reduce impacts to below the level of significance.

No significant impact with respect to people or structures due to seismic activity, seismic hazards, soil erosion, and unstable and unsuitable soils are anticipated as a result of the Project. For impacts related to paleontological resources, mitigation measure **MM GEO-1** is required in order to ensure no potential fossils are destroyed.

The following mitigation measure is needed to reduce the significance of potential geologic impacts.

MM GEO-1: If one or more fossils are discovered during construction, all ground disturbing activities within 50 feet of the area of the find shall be ceased and the applicant shall retain a paleontologist who meets the Society of Vertebrate Paleontology (SVP) qualifications standards for Project Paleontologist to oversee the documentation of the extent and potential significance of the finds as well as recovery efforts. Ground-disturbing activities may resume in the area of the finds at the discretion of the Project Paleontologist. If the fossils are significant per the SVP's 2010 criteria, then paleontological monitoring shall be conducted on an as-needed basis for further ground-disturbing activities in the Project Area.

Excluding **MM GEO-1**, no additional mitigation is required as General Plan policies PS-1.1 through 1.5 & Policy PS-9.9 would require that development not be located on unstable soils or geologically hazardous areas; Subdivision Code Sections 18.090.050, 18.200.010 & 020 require all developments to have geological studies identify and avoid/mitigate hazards and comply with erosion control standards; California Building Code Chapters, 15, 16, 18, and 33 require development to comply with the general design requirements; and the National Pollution

Discharge Elimination System (NPDES) which requires new development to prepare a Storm Water Pollution Prevention Plan (SWPPP), to help control runoff and erosion.

5.6.7 Cumulative Environmental Effects

The planned and pending projects near the Project site include residential development, warehouses, commercial, office, and public facilities. These planned and pending projects would increase structural development near the Project site, and in turn exposing new residents, employees, customers and property to potential risks from seismic hazards or soil instability in the area. Like the Project, all new planned and pending development in the City and adjacent jurisdictions would be subject to current seismic and erosion control standards. Although new development would be exposed to existing geologic and seismic hazards, it would not increase the potential for such hazards to occur. Geologic hazards are site-specific, and individual developments would not create additive impacts that would affect geologic conditions on another site. Therefore, because the Project and cumulative development projects will comply with current seismic and erosion control standards, cumulative impacts are **less than significant**.

Cumulative projects within the City have the potential to impact paleontological resources, the City's General Plan and General Plan EIR incorporate policies and programs to protect and/or document these resources as part of the City's development review process and mitigation measures that require preparation of technical studies, and the presence of monitors if necessary. Therefore, the General Plan EIR concluded that with adherence to and implementation of General Plan policies, mitigation measures, and standard Federal, State, and City regulations, cumulative impacts to historical resources, archaeological resources, and paleontological resources will be less than significant with mitigation. With implementation of mitigation measure **MM GEO-1** the potential for the Project to contribute to a cumulative impact is reduced to **less than significant levels.**

5.6.8 References

The following references were used in the preparation of this section of the DEIR:

AE 2020a	Applied EarthWorks, *Paleontological Resource Assessment for the Sycamore Hills Distribution Center Project, City of Riverside, Riverside County, California*. September 2020 (Appendix G)
GeoMat	GeoMat Testing Laboratories, Inc., Report of Preliminary Dep Percolation Testing, Proposed Commercial Building, APN 263-060-022, Riverside, California. July 2019 (Appendix G)
GP 2025	City of Riverside, General Plan 2025, certified November 2007 with subsequent amendments to various elements. (Available at https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/general-plan/18_Public_Safety_Element_with%20maps.pdf, accessed August 2020.)

GP 2025 FPEIR	City of Riverside, General Plan 2025 Program Environment Impact Report (SCH# 2004021108), certified November 2007. (Available at https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/general-plan/vol2/5-6_Geology_and_Soils.pdf, accessed August 2020.)
GPA 960 DEIR	County of Riverside, *County of Riverside Draft Environmental Impact Report No.521*, February 2015. (Available at https://planning.rctlma.org/Portals/14/genplan/general_plan_2015/DEIR%20521/04-12_GeologyAndSoils.pdf, accessed August 2020.)
NorCal Engineering	NorCal Engineering Soils and Geotechnical Consultants, *Geotechnical Engineering Investigation,* prepared March 29, 2019 and updated September 2020 (Appendix G)
Riverside County Mapping Portal	Riverside County Mapping Portal, Faults, Gis.countyofriverside.us, (Available at https://gisopendata-countyofriverside.opendata.arcgis.com/datasets/faults, accessed December 14, 2020.)
RCMMC	Riverside County Information Technology, Geographic Information Services, Map My County, online GIS database (Available at https://gis.countyofriverside.us/Html5Viewer/?viewer=MMC_Public, accessed February 19, 2020.)
RMC	City of Riverside, Municipal Code. (Available at http://www.riversideca.gov/municode/, accessed February 3, 2020.)
Soil Survey Staff	Soil Survey Staff, Natural Resource Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov/. Accessed December 2019.
USDA	United States Department of Agriculture, List of Hydric Soils. 2018. Available online at: http://www.nrcs.usda.gov/wps/PA_NRCSConsumption/download?cid=stelprdb1248596&ext=xlsx.
Wood	Wood Environmental & Infrastructure, Inc., *Jurisdictional Delineation Report, Sycamore Hills Distribution Center, City of Riverside, Riverside County, California,* December 2020 (Appendix D)

5.7 Greenhouse Gas Emissions

Based upon Appendix G of the *State CEQA Guidelines*, the analysis in the IS/NOP prepared for this Project (Appendix A), and comments received during the NOP public review period (Appendix A), this section evaluates the Project's impacts on Greenhouse Gas GHG emissions.

The analysis in this section is based on the *Greenhouse Gas Analysis for the Sycamore Hills Distribution Project* prepared by RECON (Appendix H, October 2020). The *Greenhouse Gas Analysis* evaluates the significance of the Project's GHG emissions based on screening levels recommended by the SCAQMD's Interim CEQA GHG Significance Thresholds. The California Emissions Estimator Model (CalEEMod) Version 2016.3.2 was used to calculate the Project's GHG emissions. An individual project cannot generate enough GHG emissions to effect a discernable change in global climate change. However, the Project may participate in this potential impact by its incremental contribution combined with the cumulative increase of all other sources of GHGs which, when taken together, may influence global climate change. Because these changes may have serious environmental consequences, this section will evaluate the potential for the Project to have a significant effect upon California's environment as a result of its potential contribution to the enhanced greenhouse effect.

5.7.1 Setting

Greenhouse Effect

The earth's natural warming process is known as the "greenhouse effect." Certain atmospheric gases act as an insulating blanket for solar energy to keep the global average temperature in a suitable range. These gases are called "greenhouse gases" (GHGs) because they trap heat like the glass walls of a greenhouse. The greenhouse effect raises the temperature of the earth's surface by about 60°F. With the natural greenhouse effect, the average temperature of the earth is about 45°F; without it, the earth would be about minus 15°F. It is normal for the earth's temperature to fluctuate over extended periods of time. Over the past 100 years, however, the earth's average global temperature has generally increased by one (1) °F. In some regions of the world, the increase has been as much as four (4) °F.

Scientists studying the particularly rapid rise in global temperatures during the late twentieth century believe that natural variability alone does not account for that rise. Rather, human activity spawned by the industrial revolution has resulted in increased emissions of CO_2 and other forms of GHGs, primarily from the burning of fossil fuels (during motorized transport, electricity generation, consumption of natural gas, industrial activity, manufacturing, etc.) and deforestation, as well as agricultural activity and the decomposition of solid waste. The most common GHG is CO_2, which constitutes approximately 84 percent of all GHG emissions in California. Worldwide, the State of California ranks as the 12th to 16th largest emitter of CO_2 and is responsible for approximately two percent of the world's CO_2 emissions. Scientists refer to the global warming context of the past century as the "enhanced greenhouse effect" to distinguish it from the natural greenhouse effect. While the increase in temperature is known as "global warming," the resulting change in weather patterns is known as "global climate change." Global climate change is evidenced in changes to wind patterns, storms, precipitation, and air temperature.

Global climate change is by definition a global issue and California's efforts to reduce GHG emissions will not alone change the impact of global climate change. Global concentrations of GHGs rather than locational GHG emissions result in adverse climate change impacts that differentially occur throughout the world. However, though global climate change ultimately calls for both national and international responses, states play a key role in addressing the issue. 23 U.S. states, including California, and the District of Columbia have adopted state-specific GHG emissions targets. Specifically, with the implementation of GHG policies, California's GHG emissions have decreased even while the State's population and economy have grown. In 2015, California's GHG emissions were 10 percent lower than when levels peaked in 2004, and the State's 2016 emissions decreased below 1990 levels for the first time since the 2004 peak.

Global Warming Potentials

There are numerous GHGs, both naturally occurring and manmade. Each GHG has a variable atmospheric lifetime and global warming potential (GWP). The atmospheric lifetime of the gas is the average time a molecule stays stable in the atmosphere. Most GHGs have long atmospheric lifetimes, remaining in the atmosphere for hundreds or thousands of years. GWP is a measure of the potential for a gas to trap heat and warm the atmosphere. Although GWP is related to its atmospheric lifetime, many other factors including chemical reactivity of the gas also influence GWP. GWP is reported as a unitless factor representing the potential for the gas to affect global climate relative to the potential of CO_2. Because CO_2 is the reference gas for establishing GWP, by definition, its GWP is one (1). While methane (CH_4) has a shorter atmospheric lifetime than CO_2, it has a 100-year GWP of 25, signifying that CH_4 has 25 times more of an effect on global warming than CO_2 on a molecule-by-molecule basis.

GHG emissions estimates are typically represented in terms of equivalent metric tons of CO_2 (MT CO_2E). CO_2E emissions are the product of the amount of each gas by its GWP. The effects of several GHGs may be discussed in terms of million metric tons of CO_2 equivalent (MMT CO_2E) and can be summed to represent the total potential of these gases to warm the global climate. Table 5.7-1 – Global Warming Potentials and Atmospheric Lifetimes summarizes some of the most common GHGs.

It should be noted that the USEPA and other organizations occasionally update the GWP values they use. This change can be due to updated scientific estimates of the energy absorption or lifetime of the gases or to changing atmospheric concentrations of GHGs that result in a change in the energy absorption of one additional ton of a gas relative to another. The GWPs shown in Table 5.7-1 are the most current. However, it should be noted that in the CalEEMod, CH_4 has a GWP of 21 and nitrous oxide (N_2O) has a GWP of 310, and these values were those used in the Project's GHG analysis.

All of the gases in Table 5.7-1 are produced by both biogenic (natural) and anthropogenic (human) sources. These gases are those of primary concern in the Project's GHG analysis. CO_2 would be emitted by the Project due to the combustion of fossil fuels in vehicles (including construction), from electricity generation and natural gas consumption, water use, and from solid waste disposal. Smaller amounts of CH_4 and N_2O would be emitted from the same Project operations.

Table 5.7-1 – Global Warming Potentials and Atmospheric Lifetimes

Gas	Atmospheric Lifetime (years)	100-year Gap	20-year GWP
CO_2	50-200	1	1
CH_4*	12.4	25/28*	84
N_2O	121	298/265*	264
HFC-23	222	12,400	10,800
HFC-32	5.2	677	2,430
HFC-125	28.2	3,170	6,090
HFC-134a	13.4	1,300	3,710
HFC-143a	47.1	4,800	6,940
HFC-152a	1.5	138	506
HFC-227ea	38.9	3,350	5,360
HFC-236fa	242	8,060	6,940
HFC-43-10mee	16.1	1,650	4,310
CF_4	50,000	6,630	4,880
C_2F_6	10,000	11,100	8,210
C_3F_8	2,600	8,900	6,640
C_4F_{10}	2,600	9,200	6,870
c-C_4F_8	3,200	9,540	7,110
C_5F_{12}	4,100	8,550	6,350
C_6F_{14}	3,100	7,910	5,890
SF_6	3,200	23,500	17,500

Source: Intergovernmental Panel on Climate Change (IPCC) 2007, 2014
*The CH_4 and N_2O 100-year GWPs included in CalEEMod are 25 and 298, respectively, from the IPCC Fourth Assessment Report. All other values are from the current Fifth Assessment Report.

Environmental Setting

State and Regional GHG Inventories

The California Air Resources Board (CARB) performs statewide GHG inventories. The inventory is divided into nine broad sectors of economic activity: agriculture, commercial, electricity generation, forestry, high GWP emitters, industrial, recycling and waste, residential, and transportation. Emissions are quantified in MMT CO_2E. Table 5.7-2 – California GHG Emissions by Sector shows the estimated statewide GHG emissions for the years 1990, 2010, and 2017. Although annual GHG inventory data is available for years 2000 through 2017, the years 1990, 2010, and 2017 are highlighted in Table 5.7-2 because 1990 is the baseline year for established reduction targets, 2010 corresponds to the same years for which inventory data for the City is available, and 2017 is the most recent data available.

Table 5.7-2 – California GHG Emissions by Sector in 1990, 2010, and 2017[1]

Sector	1990 Emissions in MMT CO_2E (% total)[2]	2010 Emissions in MMT CO_2E (% total)[2]	2017[3] Emissions in MMT CO_2E (% total)[2]
Electricity Generation	110.5 (25.7%)	90.6 (20.2%)	62.6 (14.8%)
Transportation	150.6 (35.0%)	170.2 (38.0%)	174.3 (41.1%)
Industrial	105.3 (24.4%)	101.8 (22.7%)	101.1 (23.8%)
Commercial	14.4 (3.4%)	20.1 (4.5%)	23.3 (5.5%)
Residential	29.7 (6.9%)	32.1 (7.2%)	30.4 (7.2%)
Agriculture & Forestry	18.9 (4.4%)	33.7 (7.5%)	32.4 (7.6%)
Not Specified	1.3 (0.3%)	--	--
Total[4]	**430.7**	**448.5**	**424.1**

Source: CARB 2007 and 2019.
[1]1990 data was obtained from the CARB 2007 source and are based on IPCC fourth assessment report GWPs.
[2]Percentages may not total 100 due to rounding.
[3]2010 and 2017 data was retrieved from the **CARB 2019** source and are based on IPCC fourth assessment report GWPs.
[4]Totals may vary due to independent rounding.

As shown in Table 5.7-2, statewide GHG source emissions totaled approximately 431 MMT CO_2E in 1990, 449 MMT CO_2E in 2010, and 424 MMT CO_2E in 2017. Many factors affect year-to-year changes in GHG emissions, including economic activity, demographic influences, environmental conditions such as drought, and the impact of regulatory efforts to control GHG emissions. As shown, transportation-related emissions consistently contribute to the most GHG emissions.

A City of Riverside emissions inventory was prepared for baseline year 2010 as a part of the City's CAP. The total community-wide GHG emissions in 2010 were 2,617,540 MT CO_2E. Table 5.7-3 – City of Riverside GHG Emissions in 2010 (below) summarizes the sources and quantities of community emissions. The largest source of emissions is transportation.

Table 5.7-3 – City of Riverside GHG Emissions in 2010

Sector	2010 GHG Emissions (MT CO_2E)
Residential Energy Use	481,903 (18.4%)
Commercial/Industrial Energy Use	722.321 (27.6%)
Transportation	1,358,647 (51.9%)
Solid Waste	54,669 (2.1%)
Total	**2,617,540**
Source: City of Riverside 2016	

5.7.2 Related Regulations

In response to rising concern associated with increasing GHG emissions and global climate change impacts, several plans and regulations have been adopted at the international, national, and state levels with the aim of reducing GHG emissions. The following is a discussion of the federal, state, and regional plans and regulations most applicable to the Project.

5.7.2.1 International Regulations

Climate change is a global issue involving GHG emissions from all around the world; therefore, countries such as the ones discussed below have made an effort to reduce GHGs.

Intergovernmental Panel on Climate Change

In 1988, the United Nations and the World Meteorological Organization established the IPCC to assess the scientific, technical and socioeconomic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

United Nations' Framework Convention on Climate Change ('Convention')

On March 21, 1994, the U.S. joined a number of countries around the world in signing the Convention. Under the Convention, governments gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

International Climate Change Treaties

The Kyoto Protocol is an international agreement linked to the Convention. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing GHG emissions at an average of five percent against 1990 levels over the five-year period 2008–2012. The Convention (as discussed above) encouraged industrialized countries to stabilize emissions; however, the Protocol commits them to do so. Developed countries have contributed more emissions over the last 150 years; therefore, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities."

In 2001, President George W. Bush indicated that he would not submit the treaty to the U.S. Senate for ratification, which effectively ended American involvement in the Kyoto Protocol. In December 2009, international leaders met in Copenhagen to address the future of international climate change commitments post-Kyoto. No binding agreement was reached in Copenhagen; however, the Committee identified the long-term goal of limiting the maximum global average temperature increase to no more than 2° Celsius above pre-industrial levels, subject to a review in 2015. The UN Climate Change Committee held additional meetings in Durban, South Africa in November 2011; Doha, Qatar in November 2012; and Warsaw, Poland in November 2013. The meetings are gradually gaining consensus among participants on individual climate change issues.

On September 23, 2014 more than 100 Heads of State and Government and leaders from the private sector and civil society met at the Climate Summit in New York hosted by the United Nations. At the Summit, heads of government, business and civil society announced actions in areas that would have the greatest impact on reducing emissions, including climate finance, energy, transport, industry, agriculture, cities, forests, and building resilience.

Parties to the United Nations' Framework Convention on Climate Change (UNFCCC) reached a landmark agreement on December 12, 2015 in Paris, charting a fundamentally new course in the two-decade-old global climate effort. Culminating a four-year negotiating round, the new treaty ends the strict differentiation between developed and developing countries that characterized earlier efforts, replacing it with a common framework that commits all countries to put forward their best efforts and to strengthen them in the years ahead. This includes, for the first time, requirements that all parties report regularly on their emissions and implementation efforts and undergo international review.

The agreement and a companion decision by parties were the key outcomes of the conference, known as the 21st session of the UNFCCC Conference of the Parties (COP) 21. Together, the Paris Agreement and the accompanying COP decision:

- Reaffirm the goal of limiting global temperature increase well below 2 degrees Celsius, while urging efforts to limit the increase to 1.5 degrees;
- Establish binding commitments by all parties to make "nationally determined contributions" (NDCs), and to pursue domestic measures aimed at achieving them;
- Commit all countries to report regularly on their emissions and "progress made in implementing and achieving" their NDCs, and to undergo international review;
- Commit all countries to submit new NDCs every five years, with the clear expectation that they will "represent a progression" beyond previous ones;
- Reaffirm the binding obligations of developed countries under the UNFCCC to support the efforts of developing countries, while for the first time encouraging voluntary contributions by developing countries too;
- Extend the current goal of mobilizing $100 billion a year in support by 2020 through 2025, with a new, higher goal to be set for the period after 2025;
- Extend a mechanism to address "loss and damage" resulting from climate change, which explicitly will not "involve or provide a basis for any liability or compensation;"
- Require parties engaging in international emissions trading to avoid "double counting;" and
- Call for a new mechanism, similar to the Clean Development Mechanism under the Kyoto Protocol, enabling emission reductions in one country to be counted toward another country's NDC.

5.7.2.2 Federal Regulations

Council on Environmental Quality

The federal government, USEPA, and other federal agencies have many federal level programs and projects to reduce GHG emissions. In June 2012, the Council on Environmental Quality (CEQ) revised the Federal Greenhouse Gas Accounting and Reporting Guidance originally issued in October 2010. The CEQ guidance identifies ways in which federal agencies can improve

consideration of GHG emissions and climate change for federal actions. The guidance states that NEPA documents should provide decision makers with relevant and timely information and should consider (1) GHG emissions of a Proposed Action and alternative actions and (2) the relationship of climate change effects to a Proposed Action or alternatives. Specifically, if a Proposed Action would be reasonably anticipated to cause direct emissions of 25,000 MT CO_2E GHG emissions on an annual basis, agencies should consider this as an indicator that a quantitative assessment may be meaningful to decision makers and the public.

USEPA

In 2009, the USEPA issued its science-based finding that the buildup of heat-trapping GHGs in the atmosphere endangers public health and welfare. The "Endangerment Finding" reflects the overwhelming scientific evidence on the causes and impacts of climate change. It was made after a thorough rulemaking process considering thousands of public comments and was upheld by the federal courts.

The USEPA has many federal level programs and projects to reduce GHG emissions, provides technical expertise, and encourages voluntary reductions from the private sector. The U.S. EPA also collaborates with the public sector, including states, tribes, localities and resource managers, to encourage smart growth, sustainability preparation, and renewable energy and climate change preparation. These initiatives include the Clean Energy – Environment State Partnership Program, the Climate Ready Water Utilities Initiative, the Climate Ready Estuaries Program, and the Sustainable Communities Partnership.

Additionally, in 2004, the U.S. EPA introduced the SmartWay program, which is a partnership between the USEPA and the freight industry to reduce fuel consumption and emissions. The program provides a system for tracking and documenting information about fuel use and freight emissions across supply chains; helps companies identify more efficient carriers, transportation modes, equipment, and operations to improve sustainability and lower costs from goods movement, supports global energy security and offsets environmental risk; and reduces freight transportation-related emissions by accelerating the use of advanced fuel-saving technologies. SmartWay is supported by major transportation industry associations, environmental groups, state and local governments, international agencies, and the corporate community.

Corporate Average Fuel Economy Standards

Project-generated vehicle trips would require the consumption of fuel and result in GHG emissions. The federal Corporate Average Fuel Economy (CAFE) standards determine the fuel efficiency of certain vehicle classes in the U.S. The first phase of the program applied to passenger cars, new light-duty trucks, and medium-duty passenger cars with model years 2012 through 2016 and required these vehicles to achieve a standard equivalent to 35.5 miles per gallon (mpg). The second phase of the program applies to model years 2017 through 2025 and increased the standards to 54.5 mpg. Separate standards were also established for medium- and heavy-duty vehicles. The first phase applied to model years 2014 through 2018 and the second phase applies to model years 2018 through 2027. With improved gas mileage, fewer gallons of

transportation fuel would be combusted to travel the same distance, thereby reducing nationwide GHG emissions associated with vehicle travel.

Safer Affordable Fuel-Efficient Vehicle Rule

The National Highway Traffic Safety Administration (NHTSA) is required by federal law to set fuel economy standards at the maximum feasible level for both passenger cars and light trucks for every model year. If the NHTSA determines that previously set standards are no longer maximum feasible, the NHTSA may amend the standards.

On April 2, 2018, the EPA issued the Mid-Term Evaluation Final Determination that found that the model years 2022-2025 CO_2 emissions standards were not appropriate and should be revised. In August 2018, the USEPA and NHTSA jointly proposed the rulemaking titled, "The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks." With this, the agencies proposed new and amended GHG and CAFE standards for model year 2021 to 2026 light-duty vehicles. On March 31, 2020, the NHTSA and USEPA issued the SAFE Vehicle Rule. The SAFE Vehicle Rule sets firm but feasible fuel economy and CO_2 standards that increase 1.5 percent in stringency each year from model years 2021 through 2026. The standards apply to both passenger cars and light trucks.

One National Program Rule on Federal Preemption of State Fuel Economy Standards

On September 19, 2019, the NHTSA and the USEPA issued a final action titled the "One National Program Rule" to enable the federal government to provide nationwide uniform fuel economy and GHG emission standards for automobiles and light duty trucks. The action finalized critical parts of the SAFE Vehicle Rule first proposed in August 2018. The action made clear that federal law preempts state and local tailpipe GHG emissions standards as well as zero emission vehicle (ZEV) mandates.

5.7.2.3 State Regulations

The State of California has adopted a number of plans and regulations aimed at identifying statewide and regional GHG emissions caps, GHG emissions reduction targets, and actions and timelines to achieve the target GHG reductions.

Executive Orders and Statewide GHG Emission Targets

Executive Order S-3-05

This State Executive Order (EO) established the following GHG emission reduction targets for the State of California:

- by 2010, reduce GHG emissions to 2000 levels;
- by 2020, reduce GHG emissions to 1990 levels;
- by 2050, reduce GHG emissions to 80 percent below 1990 levels.

This EO also directs the secretary of the California Environmental Protection Agency to oversee the efforts made to reach these targets and to prepare biannual reports on the progress made

toward meeting the targets and on the impacts to California related to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. With regard to impacts, the report shall also prepare and report on mitigation and adaptation plans to combat the impacts. The first Climate Action Team Assessment Report was produced in March 2006 and has been updated every two years.

EO B-30-15

This EO, issued on April 29, 2015, establishes an interim GHG emission reduction goal for the State of California by 2030 of 40 percent below 1990 levels. This EO also directed all state agencies with jurisdiction over GHG emitting sources to implement measures designed to achieve the new interim 2030 goal, as well as the pre-existing, long-term 2050 goal identified in EO S-3-05. Additionally, this EO directed CARB to update its Climate Change Scoping Plan to address the 2030 goal.

California Global Warming Solutions Act

In response to EO S-3-05, the California Legislature passed AB 32, the California Global Warming Solutions Act of 2006, and thereby enacted Sections 38500–38599 of the California Health and Safety Code. The heart of AB 32 is its requirement that CARB establish an emissions cap and adopt rules and regulations that would reduce GHG emissions to 1990 levels by 2020. AB 32 also required CARB to adopt a plan by January 1, 2009 indicating how emission reductions would be achieved from significant GHG sources via regulations, market mechanisms, and other actions.

In 2008, CARB estimated that annual statewide GHG emissions were 427 MMT CO_2E in 1990 and would reach 596 MMT CO_2E by 2020 under a business as usual (BAU) condition (CARB 2008). To achieve the mandate of AB 32, CARB determined that a 169 MMT CO_2E (or approximate 28.5 percent) reduction in BAU emissions was needed by 2020. In 2010, CARB prepared an updated 2020 forecast to account for the recession and slower forecasted growth. CARB determined that the economic downturn reduced the 2020 BAU by 55 MMT CO_2E; as a result, achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 21.7 (not 28.5) percent from the 2020 BAU. California has been on track to achieve 1990 levels and based on the GHG inventories shown in Table 5.7-2, achieved the goal by 2017.

Approved in September 2016, Senate Bill (SB) 32 updates the California Global Warming Solutions Act of 2006 and enacts EO B-30-15. Under SB 32, the state would reduce its GHG emissions to 40 percent below 1990 levels by 2030. This is equivalent to an emissions level of approximately 260 MMT CO_2E for 2030. In implementing the 40 percent reduction goal, CARB is required to prioritize emissions reductions to consider the social costs of the emissions of GHGs; where “social costs” is defined as “an estimate of the economic damages, including, but not limited to, changes in net agricultural productivity; impacts to public health; climate adaptation impacts, such as property damages from increased flood risk; and changes in energy system costs, per metric ton of GHG emission per year.”

Climate Change Scoping Plan

As directed by the California Global Warming Solutions Act of 2006, in 2008, CARB adopted the *Climate Change Scoping Plan: A Framework for Change* (*Scoping Plan*), which identifies the main strategies California will implement to achieve the GHG reductions necessary to reduce forecasted business as usual (BAU) emissions in 2020 to the state's historic 1990 emissions level. In November 2017, CARB released the 2017 Climate Change Scoping Plan Update, the Strategy for Achieving California's 2030 Greenhouse Gas. The 2017 Scoping Plan identifies state strategies for achieving the state's 2030 interim GHG emissions reduction target codified by SB 32. Measures under the 2017 Scoping Plan Scenario build on existing programs such as the Low Carbon Fuel Standard, Advanced Clean Cars Program, Renewables Portfolio Standard (RPS), Sustainable Communities Strategy, Short-Lived Climate Pollutant Reduction Strategy, and the Cap-and-Trade Program. Additionally, the 2017 Scoping Plan proposes new policies to address GHG emissions from natural and working lands.

Regional Emissions Targets – Senate Bill 375

SB 375, the 2008 Sustainable Communities and Climate Protection Act, was signed into law in September 2008 and requires CARB to set regional targets for reducing passenger vehicle GHG emissions in accordance with the Scoping Plan. The purpose of SB 375 is to align regional transportation planning efforts, regional GHG reduction targets, and fair-share housing allocations under state housing law. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy or Alternative Planning Strategy to address GHG reduction targets from cars and light-duty trucks in the context of that MPO's Regional Transportation Plan. Southern California Association of Governments (SCAG) is the region's MPO. In 2018, CARB set targets for the SCAG region of an 8 percent reduction in GHG emissions per capita from automobiles and light-duty trucks compared to 2005 levels by 2020 and a 19 percent reduction by 2035. These targets are periodically reviewed and updated.

Renewables Portfolio Standards

The Renewables Portfolio Standards (RPS) promotes diversification of the state's electricity supply and decreased reliance on fossil fuel energy sources. Originally adopted in 2002 with a goal to achieve a 20 percent renewable energy mix by 2020 (referred to as the "Initial RPS"), the goal has been accelerated and increased by EOs S-14-08 and S-21-09 to a goal of 33 percent by 2020. In April 2011, SB 2 (1X) codified California's 33 percent RPS goal. In September 2015, the California Legislature passed SB 350, which increases California's renewable energy mix goal to 50 percent by year 2030. Renewable energy includes (but is not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas.

Solid Waste Diversion

The Commercial Recycling Requirements mandate that businesses (including public entities) that generate 4 cubic yards or more of commercial solid waste per week and multi-family residential with five units or more arrange for recycling services. Additionally, Assembly Bill (AB) 341 mandates that 75 percent of the solid waste generated be reduced, recycled, or composted by

2020.Businesses can take one or any combination of the following in order to reuse, recycle, compost, or otherwise divert solid waste from disposal:

- Donate, sell, and/or make other arrangements for pick-up of recyclable materials. This includes self-hauling the materials to recycling facilities.
- Arrange for recycling services directly through Waste Management.

California Code of Regulations, Title 34 – California Building Code

The California Code of Regulations, Title 24, is referred to as the California Building Code, or CBC. It consists of a compilation of several distinct standards and codes related to building construction, including plumbing, electrical, interior acoustics, energy efficiency, handicap accessibility, and so on. Of particular relevance to GHG reductions are the CBC's energy efficiency and green building standards as outlined below.

Title 24, Part 6 – Energy Efficiency Standards

The California Code of Regulations, Title 24, Part 6 is the California Energy Efficiency Standards for Residential and Nonresidential Buildings (also known as the California Energy Code). This code, originally enacted in 1978, establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy consumption. The Energy Code is updated periodically to incorporate and consider new energy-efficient technologies and methodologies as they become available, and incentives in the form of rebates and tax breaks are provided on a sliding scale for buildings achieving energy efficiency above the minimum standards.

The current version of the Energy Code, known as 2019 Title 24, or the 2019 Energy Code, became effective January 1, 2020. The Energy Code provides mandatory energy-efficiency measures as well as voluntary tiers for increased energy efficiency. The California Energy Commission (CEC), in conjunction with the California Public Utilities Commission, has adopted a goal that all new residential and commercial construction achieve zero net energy by 2020 and 2030, respectively. It is expected that achievement of the zero net energy goal will occur via revisions to the Title 24 standards.

New construction and major renovations must demonstrate their compliance with the current Energy Code through submission and approval of a Title 24 Compliance Report to the local building permit review authority and the CEC. The compliance reports must demonstrate a building's energy performance through use of CEC approved energy performance software that shows iterative increases in energy efficiency given the selection of various heating, ventilation, and air conditioning; sealing; glazing; insulation; and other components related to the building envelope.

Title 24, Part 11 – California Green Building Standards

The California Green Building Standards Code, referred to as CALGreen, was added to Title 24 as Part 11 first in 2009 as a voluntary code, which then became mandatory effective January 1, 2011 (as part of the 2010 CBC). The most recent 2019 CALGreen institutes mandatory minimum

environmental performance standards for all ground-up new construction of non-residential and residential structures. Local jurisdictions must enforce the minimum mandatory Green Building Standards and may adopt additional amendments for stricter requirements.

The mandatory standards require:

- Outdoor water use requirements as outlined in local water efficient landscaping ordinances or current Model Water Efficient Landscape Ordinance standards, whichever is more stringent;
- Requirements for water conserving plumbing fixtures and fittings;
- 65 percent construction/demolition waste diverted from landfills;
- Infrastructure requirements for electric vehicle charging stations;
- Mandatory inspections of energy systems to ensure optimal working efficiency; and
- Requirements for low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particleboards.

Similar to the reporting procedure for demonstrating Energy Code compliance in new buildings and major renovations, compliance with the CALGreen mandatory requirements must be demonstrated through completion of compliance forms and worksheets.

Heavy-Duty Truck Regulations

Tractor-Trailer GHG Regulation

CARB approved the Tractor-Trailer GHG Regulation to significantly reduce GHG emissions produced by certain heavy-duty tractor-trailers. The tractors and trailers subject to this regulation must either use EPA SmartWay certified tractors and trailers or retrofit their existing fleet with SmartWay verified technologies. The regulation applies primarily to owners of 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and owners of the heavy-duty tractors that pull them on California highways. These owners are responsible for replacing or retrofitting their affected vehicles with compliant aerodynamic technologies and low rolling resistance tires. Sleeper cab tractors model year 2011 and later must be SmartWay certified. All other tractors must use SmartWay verified low-rolling resistance tires. There are also requirements for trailers to have low rolling resistance tires and aerodynamic devices.

Phase 1 and 2 Heavy-Duty Vehicle Standards

CARB has adopted heavy-duty vehicle standards for GHG emissions from heavy-duty trucks and engines sold in California. It establishes GHG emission limits on truck and engine manufacturers and harmonizes with the USEPA rule for new trucks and engines nationally. Existing heavy-duty vehicle regulations in California include engine criteria emission standards, tractor-trailer GHG requirements to implement SmartWay strategies (i.e., the Heavy-Duty Tractor-Trailer Greenhouse Gas Regulation), and in-use fleet retrofit requirements such as the Truck and Bus Regulation. In September 2011, the USEPA adopted their new rule for heavy-duty trucks and engines. The U.S. EPA rule has compliance requirements for new compression and spark ignition

engines, as well as trucks from Class 2b through Class 8. Compliance requirements begin with model year 2014 with stringency levels increasing through model year 2018. The rule organizes truck compliance into three groupings, which include (a) heavy-duty pickups and vans; (b) vocational vehicles; and (c) combination tractors. The USEPA rule does not regulate trailers.

CARB staff has worked jointly with the U.S. EPA and the National Highway Traffic Safety Administration on the next phase of federal GHG emission standards for medium- and heavy-duty vehicles, called federal Phase 2. The federal Phase 2 standards were built on the improvements in engine and vehicle efficiency required by the Phase 1 emission standards and represent a significant opportunity to achieve further GHG reductions for 2018 and later model year heavy-duty vehicles, including trailers.

5.7.2.4 Regional Regulations

SCAQMD

SCAQMD is the agency responsible for air quality planning and regulation in the South Coast Air Basin. The SCAQMD addresses the impacts to climate change of projects subject to SCAQMD permit as a lead agency if they are the only agency having discretionary approval for the project and acts as a responsible agency when a land use agency must also approve discretionary permits for the project. The SCAQMD acts as an expert commenting agency for impacts to air quality. This expertise carries over to GHG emissions, so the agency helps local land use agencies through the development of models and emission thresholds that can be used to address GHG emissions.

In 2008, SCAQMD formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the South Coast Air Basin. The Working Group developed several different options that are contained in the SCAQMD Draft Guidance Document – *Interim CEQA GHG Significance Thresholds for Stationary Sources, Rules, and Plans*, that could be applied by lead agencies. The working group met again in 2010 to review the guidance. The SCAQMD Board has not approved the thresholds; however, the Guidance Document provides substantial evidence supporting the approaches to significance of GHG emissions that can be considered by the lead agency in adopting its own threshold. The current interim thresholds consist of the following tiered approach (SCAQMD 2008, 2010):

- Tier 1 – The project is exempt from the California Environmental Quality Act (CEQA).
- Tier 2 – The project is consistent with an applicable regional GHG emissions reduction plan. If a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions.
- Tier 3 – Project GHG emissions represent an incremental increase below or mitigated to less than Significance Screening Levels, where
    - Residential/Commercial Screening Level
        - Option 1: 3,000 MT CO_2E screening level for all residential/commercial land uses

        - Option 2: Screening level thresholds for land use type acceptable if used consistently by a lead agency:
            - Residential: 3,500 MT CO_2E
            - Commercial: 1,400 MT CO_2E
            - Mixed-Use: 3,000 MT CO_2E
    - 10,000 MT CO_2E is the Permitted Industrial Screening Level

- Tier 4 – The project achieves performance standards, where performance standards may include:
    - Option 1: Percent emission reduction target. SCAQMD has no recommendation regarding this approach at this time.
    - Option 2: The project would implement substantial early implementation of measures identified in the CARB's Scoping Plan. This option has been folded into Option 3.
    - Option 3: SCAQMD Efficiency Targets.
        - 2020 Targets: 4.8 MT CO_2E per service population (SP) for project-level analyses or 6.6 MT CO_2E per SP for plan level analyses where service population includes residential and employment populations provided by a project.
        - 2035 Targets: 3.0 MT CO_2E per SP for project-level analyses or 4.1 MT CO_2E per SP for plan level analyses.
- Tier 5 – Offsets along or in combination with the above target Significance Screening Level. Offsets must be provided for a 30-year project life, unless the project life is limited by permit, lease, or other legally binding condition.

If a project complies with any one of these tiers, its impacts related to GHG emissions would be considered less than significant.

The SCAQMD's interim thresholds used the EO S-3-05 year 2050 goal as the basis for the Tier 3 screening level. Achieving the EO's objective would contribute to worldwide efforts to cap CO_2 concentrations at 450 parts per million, thus stabilizing global climate.

SCAQMD only has authority over GHG emissions from development projects that include air quality permits. At this time, it is unknown if the project would include stationary sources of emissions subject to SCAQMD permits. Notwithstanding, if the project requires a stationary permit, it would be subject to the applicable SCAQMD regulations.

SCAQMD Regulation XXVII, adopted in 2009 includes the following rules:

- Rule 2700 defines terms and post global warming potentials.
- Rule 2701, SoCal Climate Solutions Exchange, establishes a voluntary program to encourage, quantify, and certify voluntary, high quality certified GHG emission reductions in the SCAQMD.

- Rule 2702, GHG Reduction Program created a program to produce GHG emission reductions within the SCAQMD. The SCAQMD will fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

5.7.2.5 Local Regulations

Riverside GP 2025

The GP 2025 includes an Air Quality Element that details provisions and programs to reduce current pollution emissions, to require new development to include measures to comply with air quality standards, and to address new air quality requirements. These programs also serve to reduce GHG emissions. The Air Quality Element contains objectives and policies related to land use strategies, transportation, stationary sources, energy conservation, public education, multi-jurisdictional cooperation, and sustainability. Policies that may be applicable to the Project include:

Objective AQ-5: Increase energy efficiency and conservation in an effort to reduce air pollution.

> **Policy AQ-5.1:** Utilize source reduction, recycling, and other appropriate measures to reduce the amount of solid waste disposed of in landfills.
>
> **Policy AQ-5.3:** Continue and expand use of renewable energy sources such as wind, solar, water, landfill gas, and geothermal sources.
>
> **Policy AQ-5.6:** Support the use of automated equipment for conditional facilities to control heating and air conditioning.
>
> **Policy AQ-5.7:** Require residential building construction to meet or exceed energy use guidelines in Title 24 of the California Administrative Code.

Objective AQ-8: Make sustainability and global warming education a priority for the City's effort to protect public health and achieve State and Federal clean air standards

> **Policy AQ 8.17:** Develop measures that a minimum of 40 percent of the waste from all construction sites throughout Riverside be recycled by the end of 2008.

Riverside Good Neighbor Guidelines

The City adopted Good Neighbor Guidelines for Siting New and/or Modified Warehouse/Distribution Facilities (GNG) in October 2008 to focus on the relationship between land use, permitting, and air quality. They also highlight strategies that can help minimize the impacts of diesel emissions associated with warehouse/distribution centers. Specifically, the Guidelines help to minimize the impacts of diesel particulate matter from on-road trucks associated with warehouses and distribution centers on existing communities and sensitive receptors.

The Good Neighbor Guidelines goals and strategies, adopted by the City in 2008, applicable to the Project include:

Goal 1: Minimize exposure to diesel emissions to neighbors that are situated in close proximity to the warehouse/distribution center.

Strategy 1a: Design facilities to allow for the queuing of the trucks on-site and away from sensitive receptors. Conversely, prevent the queuing of the trucks on streets or elsewhere outside of the facility in compliance with Title 10-Vehicles and Traffic-Chapter 10.44-Stopping, Standing and Parking.

Strategy 1b: To the extent possible, locate driveways, loading docks, and internal circulation routes away from residential uses or any other sensitive receptors.

Strategy 1c: In compliance with CEQA, conduct SCAQMD URBEMIS and EMFAC computer models, as appropriate, to initially evaluate warehouse and distribution projects on a case by case basis to determine the significance of air quality impacts and whether air quality thresholds would be exceeded as a result of the project. Where thresholds are exceeded, a more detailed air quality analysis/health risk assessment prepared by an air quality specialist is required to be prepared and submitted by the project applicant. As a general rule, the following guidelines can be used to determine whether a proposed project will be required to prepare additional technical analyses:

i. An air quality study for an industrial project is required when the proposed project has the potential to exceed established thresholds as noted by URBEMIS and EMFAC computer models provided by SCAQMD. If these models indicate the project will exceed thresholds due to existing or proposed site conditions, intensity of development, location of nearest sensitive receptor, or any other exceptional circumstance warranting the need for additional review the preparation of an air quality study will be required.

ii. A health risk assessment is required when the truck traffic areas of an industrial project are located within 1,000 feet of sensitive receptors, in accordance with SCAQMD guidelines and/or practices.

Goal 4: Reduce and/or eliminate diesel idling within the warehouse/distribution center.

On November 10, 2020, The Riverside City Council adopted updates to the GNGs, in addition to associated amendments to Title 19 – Zoning Code of the Riverside Municipal Code (RMC), the Hunter Business Park Specific Plan, and the Sycamore Canyon Business Park Specific Plan related to siting industrial uses in the City when located adjacent to sensitive receptors, including residential neighborhoods, schools, parks, playgrounds, day care centers, nursing homes, hospitals, and other public spaces. City Council action also allowed any project achieving substantial completion within 90 days of the effective date of the implementing ordinance to continue to be subject to the 2008 GNG. As this Project was deemed complete prior to adoption of the updated GNG (discussed further in Sections 5.2.5 and 5.7.5), it does not need to comply with the updated GNG.

Green Action Plan

The 2012 Green Action Plan is a product of the City's Clean & Green Task Force, which was created to: build upon the policies of the City's General Plan 2025; ensure that the green design guidelines would be developed and followed; provide a framework for sustainability pilot projects; and initiate partnerships among regional agencies and nearby cities. The Task Force first created the Sustainability Policy Statement (SPS), a document featuring eight main categories: Save Water, Keep it Clean, Make it Solar, Make it Shady, Clean the Air, Save Fuel, Make it Smart, and Build Green. Once the SPS was adopted, the Green Action Plan was created to serve as a guidebook that would tie specific tasks to the policies of the SPS. The Green Action Plan focuses on seven key areas of city life: Energy, GHG Emissions, Waste, Urban Design, Urban Nature, Transportation and Water.

The City formed a Green Accountability Performance (GAP) Committee to carry out the tasks and within just two years nearly each of the plan's 38 tasks had been accomplished. The GAP Committee was reimagined to focus on healthy communities, and Riverside was awarded its designation by the Unites States Center for Disease Control and Prevention (CDC) as an Emerald City, an honor that has gained the City national acclaim. Healthy Communities is the GAP's eighth focus area, with 19 goals and over 50 additional tasks. The Heathy Communities strategies strengthen the Green Action Plan as setting a clear path to sustainability and serving as a living document that reflects the growth of the green movement, the progression of renewable energy, and the fresh ideas of the GAP Committee.

Riverside Restorative Growthprint

The Riverside Restorative Growthprint (RRG), adopted in January 2016, combines two plans: The Economic Prosperity Action Plan (RRG-EPAP) and the Climate Action Plan (RRG-CAP). The RRG-CAP provides a roadmap for the City to achieve GHG emission reductions through 2035, and establishes policies and priorities enabling the City to implement strategies that fulfill the requirements of state initiatives AB 32 and SB 375. The RRG-CAP is thus a qualifying local GHG plan under Tier 2 of the SCAQMD tiered thresholds described above as the RRG-CAP's objectives include a reduction in GHG emissions. The RRG-CAP includes a baseline GHG inventory (for year 2007 and updated in 2010) for local government operations and for the community as a whole and establishes emission reduction targets consistent with state law. In 2007, the City's total community-wide emissions were estimated at 3,024,066 MT CO_2E, while emissions resulting from municipal operations were responsible for approximately 122,525 MT CO_2E. In 2010, the community-wide and municipal operations emissions had decreased by approximately 13.4 percent, mainly due to City actions to reduce the carbon intensity of its electric portfolio. The RRG-CAP aims to reduce GHG emissions to 26.4 percent below year 2007 baseline emissions (15 percent below year 2010 baseline emissions) by 2020 for an emissions target of 2,224,908 MT CO_2E; and 49 percent below year 2007 baseline emissions by 2035 for an emissions target of 1,542,274 MT CO_2E.

The RRG-EPAP identifies opportunities where the community can reduce GHG emissions in a way that also advances economic growth and provide meaningful benefit to the residents,

employees, investors, and visitors to the City. While the RRG-CAP identifies GHG reduction measures and strategies, the RRG-EPAP identifies those measures and strategies that have the most potential to spur economic development.

5.7.3 Project Design Considerations

The Project would incorporate a number of Project design features that would reduce GHG emissions, many of which are consistent with GHG reduction strategies developed by groups and public agencies, such as CARB, CAPCOA, and the California Attorney General's Office. To ensure that the latest, most advanced technology can be used, the Project may substitute design features if they are proven to be equally effective or more effective at reducing GHG emissions.

Sustainability Features

As described in DEIR Section 3.2.4 (Sustainability Features), the Project would meet or exceed all applicable standards under California's Green Building Code Title 24 standards. This will be accomplished by incorporating, at minimum, the following sustainability features or other features that are equally efficient:

Energy Efficiency

- Design building shells and components, such as electrical systems, windows, and roof systems to comply with the provisions of the Title 24 standards for nonresidential buildings. The Project would be constructed in accordance with energy efficiency standards effective at the time building permits are issued. The effective date of the 2019 Building Energy Efficiency Standards was January 1, 2020, and it is anticipated that nonresidential buildings will use approximately 30 percent less energy due to lighting upgrades under the revised standards.
- Install efficient lighting and lighting control systems. Light-emitting diodes (LEDs) will be installed for outdoor lighting, which will incorporate motion sensors that turn lighting off when not in use.
- Install skylights on the rooftops, 2.5% of roof area of both buildings, and incorporate the use of natural lighting.
- Achieve construction energy efficiencies and energy conservation through bulk purchase, transport, and use of construction materials. Use of materials in bulk reduces energy demands associated with preparation and transport of construction materials as well as transport and disposal of construction waste.
- The Project proposes conventional industrial uses that are not inherently energy intensive and reflect contemporary energy efficient/energy conserving designs and operational programs.

Renewable Energy

- Design buildings to have "solar ready" roofs that will structurally accommodate later installation of rooftop solar panels. Building operators providing rooftop solar panels will submit plans for solar panels prior to occupancy.

Water Conservation and Efficiency

- Create water-efficient landscapes in compliance with the City's Water Efficient Landscape and Irrigation Ordinance in 19.570.
- Include landscaping in areas of parking lots to reduce the heat island effect.
- Install water-efficient irrigation systems and devices according to the City's Water Efficient Landscape and Irrigation Ordinance 19.570, which complies with the California Department of Water Resources Model Efficient Landscape Ordinance.
- Design buildings to be water-efficient; install water-efficient fixtures and appliances.
- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff.
- Provide education about water conservation and available programs and incentives to the building operators to distribute to employees.

Solid Waste Measures

- Sort, recycle, and divert from landfills Project-related construction and demolition waste in accordance with mandatory regulatory requirements.
- Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas.
- The property operator will provide readily available information provided by the City for employee education about reducing waste and available recycling services.

Transportation and Motor Vehicles

- Limit idling times of construction vehicles to no more than 5 minutes in accordance with CCR, Title 13, Motor Vehicles, section 2449(d)(3) Idling.
- Implement sidewalks to facilitate and encourage pedestrian access, which would reduce vehicle miles traveled (VMT) and associated energy consumption.
- Provide a total of 39 electric vehicle (EV) parking stalls (24 within Parcel 1 for Building A and 15 within Parcel 2 for Building B) to encourage the use of low or zero-emission vehicles.
- Provide a total of 13 clean air/van pool parking stalls (8 within Parcel 1 for Building A and 5 within Parcel 2 for Building B) to support and encourage ridesharing.

- Promote the use of bicycles as an alternative means of transportation by providing short-term and/or long-term bicycle parking accommodations in accordance with the California Green Buildings Standards Code Sections 5.710.6.2.1 and 5.710.6.2.2.
- The building operator will support and encourage ridesharing and transit for the construction crew.

On-Site Equipment and Loading Docks

- The Project will require building operators (by contract specifications) to turn off equipment, including heavy-duty equipment, motor vehicles, and portable equipment when not in use for more than 5 minutes. Truck idling shall not exceed 5 minutes in time. All facilities will post signs requiring that trucks shall not be left idling for more than 5 minutes pursuant to Title 13 of the California Code of Regulations, Section 2485, which limits idle times to no more than 5 minutes.

Construction

- Require construction equipment to turn off when not in use.
- Use locally produced and/or manufactured building materials for at least 10 percent of the construction materials used for the Project.
- Use "green" building materials where feasible, such as those materials that are resource-efficient and recycled and manufactured in an environmentally conscious way.
- During grading, heavy-duty construction equipment (i.e., excavators, graders, scrapers, dozers, tractor/loader/backhoes, etc.) shall be CARB/U.S. Environmental Protection Agency Tier 3 certified. All construction equipment is subject to the CARB In-Use Off-Road Diesel-Fueled Fleets Regulation. This regulation, which applies to all off-road diesel vehicles 25 horsepower or greater, limits unnecessary idling to 5 minutes, requires all construction fleets to be labeled and reported to CARB, bans Tier 0 equipment and phases out Tier 1 and 2 equipment (thereby replacing fleets with cleaner equipment), and requires that fleets comply with Best Available Control Technology requirements.[1]

5.7.4 Thresholds of Significance

The CEQA Guidelines allow lead agencies to establish significance thresholds for their respective jurisdictions. These significance thresholds may be adopted after considering thresholds of significance adopted or recommended by other public agencies or experts. The City of Riverside has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City of Riverside generally utilizes the CEQA significance thresholds in Appendix G ("Environmental Checklist") of the State CEQA Guidelines. The Environmental Checklist prepared by the City for the Project (see Appendix A of this document) indicates that

[1] Air Quality Analysis for the Sycamore Hills Distribution Project, page 34, contained in Appendix C of this EIR.

impacts related to the Sycamore Hills Distribution Center Project may be considered potentially significant if the proposed project would:

- (Threshold A) generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- (Threshold B) conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The SCAQMD published its *Interim CEQA GHG Significance Thresholds for Stationary Sources, Rules, and Plans* in 2008 (SCAQMD 2008). The interim thresholds are a tiered approach; projects may be determined to be less than significant under each tier or require further analysis under subsequent tiers. The five tiers are discussed in Section 5.7.2.3 above.

Consistent with the SCAQMD guidance, the recommended tiered approach for land use development projects in SCAQMD jurisdiction is assessment against the applicable screening levels. As the project is not exempt from CEQA and is not part of an approved local plan, Project emissions are assessed against the industrial 10,000 MT CO_2E screening level. This screening level is intended to exempt projects that are too small to have significant impacts from further analysis.

5.7.5 Environmental Impacts

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

The Project's GHG emissions were calculated using the CalEEMod Version 2016.3.2 (California Air Pollution Control Officers Association [CAPCOA] 2017). The CalEEMod program is a tool used to estimate air emissions resulting from land development projects based on California-specific emission factors. CalEEMod can be used to calculate emissions from mobile (on-road vehicles), area (fireplaces, consumer products [cleansers, aerosols, and solvents], landscape maintenance equipment, architectural coatings), water and wastewater, and solid waste sources. GHG emissions are estimated in terms of total MT CO_2E.

The analysis methodology and input data are described in the following sections. Where Project-specific data was not available, model inputs were based on information provided in the CalEEMod User's Guide. Operational emissions were calculated for the projected soonest project operational year of 2023.

Construction Emissions

Construction activities emit GHGs primarily through combustion of fuels (mostly diesel) in the engines of off-road construction equipment and through combustion of diesel and gasoline in on-road construction vehicles and the commute vehicles of the construction workers. Smaller amounts of GHGs are also emitted through the energy use embodied in water use for fugitive dust control.

Every phase of the construction process, including demolition, grading, paving, and building, emits GHGs in volumes directly related to the quantity and type of construction equipment used when building the project. GHG emissions associated with each phase of project construction are calculated by multiplying the total fuel consumed by the construction equipment and worker trips by applicable emission factors. The number and pieces of construction equipment are calculated based on the project-specific design. In the absence of project-specific construction information, equipment for all phases of construction is estimated based on the project size.

Construction emissions were modeled assuming site preparation/grading would last three months, and the remaining construction activities (building, paving, landscaping, architectural coatings) would last approximately one year for a total construction duration of 15 months. During the grading phase, soil quantities would be balanced on site between the two building areas with no net import or export. Table 5.7-4 summarizes the anticipated construction phases, duration, and equipment.

Table 5.7-4 – Construction Phases and Equipment

Equipment	Quantity	Daily Operation Time (Hours)
Site Preparation (18 Days)		
Rubber-Tired Dozers	3	8
Tractors/Loaders/Backhoes	4	8
Grading (47 Days)		
Excavators	2	8
Graders	1	8
Rubber-Tired Dozers	1	8
Scrapers	2	8
Tractors/Loaders/Backhoes	2	8
Building Construction (243 Days)		
Cranes	1	7
Forklifts	3	8
Generator Sets	1	8
Tractors/Loaders/Backhoes	3	7
Welders	1	8
Architectural Coatings (111 Days)		
Air Compressor	1	6
Paving (18 Days)		
Pavers	2	8
Paving Equipment	2	8
Rollers	2	8
NOTE: Each phase would also include vehicles associated with work commutes, dump trucks for hauling, and trucks for deliveries.		

Based on guidance from the SCAQMD, the total construction GHG emissions resulting from a project should be amortized over 30 years and added to operational GHG emissions to account for their contribution to GHG emissions over the lifetime of a project.

Operational Emissions

Mobile Emissions

Operational emissions were calculated for the projected soonest Project operational year of 2023.

GHG emissions from vehicles come from the combustion of fossil fuels in vehicle engines. The vehicle emissions are calculated based on the vehicle type and the trip rate for each land use. The vehicle emission factors and fleet mix used in the current version of CalEEMod are derived from CARB's 2014 Emission Factors model. The U.S. EPA recently approved the use of CARB's 2017 Emission Factor model (EMFAC2017). However, this had not yet been incorporated into CalEEMod, and there is no standardized approach to modifying the emission factors included in CalEEMod. Generally, vehicles have become cleaner over time; therefore, the mobile emissions would not be higher if CalEEMod were adjusted using EMFAC2017 emission factors.

Mobile source operational emissions are based on the trip rate, trip length, and vehicle mix. Total passenger vehicle and truck trip generation was obtained from the traffic report prepared for the project. The trip lengths for passenger vehicles and trucks were obtained from the trip length analysis prepared for the project. Riverside County Transportation Analysis Model (RivTAM) was utilized to conduct a select zone model run for the Project. The Vehicle Miles Traveled (VMT) from/to the Project Traffic Analysis Zone (TAZ) by vehicle type was calculated based on select zone model skims. The average trip length was calculated based on model VMT and daily traffic flow by vehicle type. (Urban Crossroads 2019; Appendix H)[2] The project-specific trip generation and trip length data is summarized in Table 5.7-5.

Table 5.7-5 – Project Trip Generation and Trip Length

Vehicle Type	Daily Trip Generation (ADT)	Trip Length (miles)
Passenger Cars	573	24.2
Trucks	274	38.7
2-axle	46	38.7
3-axle	57	38.7
4+-axle	171	38.7
Total	**847**	--

SOURCE: Urban Crossroads' 2019 **Vehicle Miles Traveled (VMT)/Trip Length Analysis (Appendix H)**
ADT = average daily traffic

Although the proposed Project is for high cube transload short-term warehouse use, which is the use analyzed in the *Greenhouse Gas Analysis for the Sycamore Hills Distribution Project* prepared by RECON (Appendix H, October 2020), manufacturing is a permitted use in the

[2] The 2020 VMT Analysis contained in Appendix L and used to support the VMT analysis in Section 5.12 Transportation was prepared in accordance with the City of Riverside Public Works Department Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment, July 2020 and evaluates project generated VMT per employee and compares that to the City of Riverside VMT per employee. However, the 2020 VMT analysis did not include Project generated truck trips, therefore the 2019 VMT analysis which included VMT for both passenger cars and trucks and is more conservative was used for the GHG analysis contained herein.

SCBPSP and the Zone. As outlined in the Project Description, the Project is a speculative development, and the tenants are unknown at this time. Therefore, in order to ensure future use of the site is consistent with high cube transload short-term warehouse use, and the analysis contained herein, Mitigation Measure **MM AIR-1** is required, which requires the applicant record a covenant on the property (Parcels 1 and 2) that prohibit manufacturing use and provide proof of recording the covenant to the City prior to issuance of Occupancy Permits.

Energy Use Emissions

GHGs are emitted as a result of activities in buildings for which electricity and natural gas are used as energy sources. GHGs are emitted during the generation of electricity from fossil fuels off-site in power plants. These emissions are considered indirect but are calculated in association with a building's overall operation. Electric power generation accounts for the second largest sector contributing to both inventoried and projected statewide GHG emissions. Combustion of fossil fuel emits criteria pollutants and GHGs directly into the atmosphere. When this occurs in a building, it is considered a direct emissions source associated with the building. CalEEMod estimates emissions from the direct combustion of natural gas for space and water heating.

CalEEMod estimates GHG emissions from energy use by multiplying average rates of residential and non-residential energy consumption by the quantities of residential units and non-residential square footage entered in the land use module to obtain total projected energy use. This value is then multiplied by electricity and natural gas GHG emission factors applicable to the project location and utility provider.

Energy consumption values are based on the CEC sponsored California Commercial End Use Survey and Residential Appliance Saturation Survey studies, which identify energy use by building type and climate zone. Because these studies are based on older buildings, adjustments have been made in CalEEMod to account for changes to Title 24 Building Codes. CalEEMod 2016.3.2 is based on the 2016 Title 24 energy code (Part 6 of the Building Code). The next version of the energy code, 2019 Title 24, went into effect on January 1, 2020. For non-residential buildings, it is estimated that the 2019 standards will decrease energy consumption by 30 percent. The project would be subject to the 2019 Title 24 energy code standards. However, as a conservative analysis, GHG emissions were calculated assuming the default 2016 Title 24 energy code standards.

The Project would be served by Riverside Public Utilities for electricity. Therefore, Riverside Public Utilities' specific energy-intensity factors (i.e., the amount of CO_2, CH_4, and NO_X per kilowatt hour) are used in the calculations of GHG emissions. As discussed, the state mandate for renewable energy is 33 percent by 2020. However, the energy-intensity factors included in CalEEMod by default only represent an 18.4 percent procurement of renewable energy. To account for the continuing effects of RPS, the energy-intensity factors included in CalEEMod were adjusted to reflect the current procurement of 33 percent renewable energy. Riverside Public Utilities energy intensity factors are shown in Table 5.7-6.

Table 5.7-6 – Riverside Public Utilities Intensity Factors

GHG	2009 (lbs/MWh)	2020 (lbs/MWh)
Carbon Dioxide (CO_2)	1,325.65	1,051.61
Methane (CH_4)	0.029	0.023
Nitrous Oxide (N_2O)	0.006	0.004
SOURCE: CPUC 2017 lbs = pound; MWh = megawatt hour		

Area Source Emissions

Area sources include GHG emissions that would occur from the use of landscaping equipment. The use of landscape equipment emits GHGs associated with the equipment's fuel combustion. The landscaping equipment emission values were derived from the 2011 In-Use Off-Road Equipment Inventory Model.

Water and Wastewater Emissions

The amount of water used, and wastewater generated by a project has indirect GHG emissions associated with it. These emissions are a result of the energy used to supply, distribute, and treat the water and wastewater. In addition to the indirect GHG emissions associated with energy use, wastewater treatment can directly emit both CH_4 and N_2O. The indoor and outdoor water use consumption data for each land use subtype comes from the Pacific Institute's Waste Not, Want Not: The Potential for Urban Water Conservation in California 2003 (as cited in CAPCOA 2017). Based on that report, a percentage of total water consumption was dedicated to landscape irrigation, which is used to determine outdoor water use. Wastewater generation was similarly based on a reported percentage of total indoor water use.

The Project would be subject to CalGreen, which requires a 20 percent increase in indoor water use efficiency. Thus, in order to demonstrate compliance with CalGreen, a 20 percent reduction in indoor water use was included in the water consumption calculations for the Project.

In addition to water reductions under CalGreen, the GHG emissions from the energy used to transport the water are affected by RPS. As discussed previously, to account for the effects of RPS through 2020, the energy-intensity factors included in CalEEMod were adjusted to reflect 33 percent renewable energy (see Table 5.7-6).

Solid Waste Emissions

The disposal of solid waste produces GHG emissions from anaerobic decomposition in landfills, incineration, and transportation of waste. To calculate the GHG emissions generated by disposing of solid waste for the Project, the total volume of solid waste was calculated using waste disposal rates identified by California Department of Resources Recycling and Recovery (CalRecycle). The methods for quantifying GHG emissions from solid waste are based on the Intergovernmental Panel on Climate Change method, using the degradable organic content of waste. GHG emissions associated with the Project's waste disposal were calculated using these parameters. According to a CalRecyle report to the Legislature, as of 2013 California has achieved a statewide 50 percent diversion of solid waste from landfills through "reduce/recycle/compost" programs.

However, AB 341 mandates that 75 percent of the solid waste generated be reduced, recycled, or composted by 2020. Therefore, to account for the continuing actions of recycling requirements under state law (i.e., AB 341), a 25 percent solid waste diversion rate was included in the model. Table 5.7-7 below provides a summary of Project GHG emissions, including those resulting from solid waste emissions.

Summary of GHG Emission Calculations

Based on the methodology summarized in the sections above, the primary sources of direct and indirect GHG emissions have been calculated. Table 5.7-7 summarizes the estimated emissions of the above discussed Project construction, mobile, energy use, area source, water and wastewater, and solid waste emissions.

Table 5.7-7 – Summary of Project GHG Emissions (metric tons per year)

Source	MT CO_2	MT CH_4	MT N_2O	MT CO_2E
Mobile – Passenger Cars	1,204	<1	0	1,204
Mobile – Trucks	4,316	<1	0	4,320
Energy Source	781	<1	<1	782
Area Sources	<1	<1	0	<1
Water/Wastewater Sources	728	4	<1	846
Solid Waste Sources	86	5	1	214
Construction (Amortized over 30 years)	37	<1	0	38
Total	**7,152**	**9**	**<1**	**7,405***
SCAQMD Significance Threshold for Industrial Sources				*10,000*

MT CO_2E = metric tons of carbon dioxide equivalent
MT CH_4 = metric tons of methane
MT N_2O = metric tons of nitrous oxide
*The GWPs included in CalEEMod are from the IPCC Fourth Assessment Report. For informational purposes, total emissions calculated by CalEEMod were adjusted to account for the updated IPCC Fifth Assessment Report GWPs. Using the current GWPs, total annual project emissions would be 7,428 MT CO2, and would also be less than the screening threshold. Note that the IPCC updates the GWPs periodically, and the next anticipated update will occur in 2022.

As shown in Table 5.7-7, the Project would result in a net increase of 7,405 MT CO_2E per year. As discussed previously, the SCAQMD's 10,000 MT CO_2E screening level is appropriate for exempting industrial projects that are too small to have significant impacts from further analysis.

Conclusion

As discussed, the Project's GHG analysis utilizes the SCAQMD's *Interim CEQA GHG Significance Thresholds for Stationary Sources, Rules, and Plans*. The interim thresholds are a tiered approach; project impacts may be determined to be less than significant under each tier or require further analysis under subsequent tiers. Because the Project is subject to CEQA and is not subject to a regional GHG emissions reduction plan, the Project does not fall under Tiers 1 or 2. As shown in Table 5.7-7 – Summary of Project GHG Emissions, construction and operation of the Project would result in the annual equivalent emission of 7,405 MT CO_2E in 2023. Project GHG emissions would be less than the applicable SCAQMD screening level of 10,000 MT CO_2E for industrial uses. As Project emissions would be less than the 10,000 MT CO_2E screening level, GHG emissions impacts would be **less than significant with Mitigation Measure MM AIR-1**.

In addition, **Mitigation Measure MM BIO-6** includes enhancement of a total of 1.58 acres of riparian habitat and creation (establishment) of 0.61 acre of in-kind riparian woodland in Area C and restoration of 0.02 acre of riparian habitat in Drainage B, all within the Restricted Property/Conservation Area that will be managed in perpetuity. By preserving and enhancing on-site natural vegetation this mitigation measure would also reduce the Project's overall GHG impact as vegetation absorbs carbon dioxide and releases oxygen.

MM BIO-6 states that prior to issuance of occupancy permit, in order to reduce impacts to on-site Riparian/Riverine areas and suitable habitat for least Bell's vireo (an endangered bird), on-site mitigation shall include:

1. Enhancement of a total of 1.58 acres of riparian habitat: 0.01 acres in Drainage A, 1.34 acres in Drainage B, and 0.23 acre in Area C.
2. Create (establish) 0.61 acre of in-kind riparian woodland in Area C.
3. Restoration of 0.02 acre of riparian habitat in Drainage B.
4. The non-jurisdictional, non-riparian/riverine upland areas of slopes associated with the access road will be restored/replanted with native seed mix.
5. The roadway/access to Parcel1/Building A shall include culverts to provide a hydrological connection to the riparian habitat on the east side of the roadway and a corridor for small wildlife species.
6. Record lettered parcels A and B for portions of the site that will not be developed, but includes the revised restricted property and is designed as conservation area. Parcel A 7.19 acres and Parcel B 5.04 acres, with a combined total of 12.23 acres, shall be managed in perpetuity by a 3rd party, anticipated to be the Rivers and Lands Conservancy (RLC) or other CDFW approved entity, with an endowment funded by the developer.

MM BIO-6 further reduces GHG impacts that are already less than significant.

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 listed in Section 5.7.2 Related Regulations, Project-applicable plans, policies, and/or regulations adopted for the purpose of reducing GHG emissions include objectives and policies of the GP 2025 Air Quality Element, the City's Good Neighbor Guidelines, the Climate Change Scoping Plan, and the RRG-CAP. Discussions of the Project's consistency with each of these other plans/policies/regulations is provided below.

General Plan 2025

The Project is consistent with the objectives and policies in the Open Space and Conservation Element, including those that encourage efficient use of energy resources. The Project is consistent with the objectives and policies in the Air Quality Element, including those to improve job-housing balance, reduce vehicle miles traveled and length of work trips, improve flow of traffic, reduce air pollution by reducing emissions from mobile sources, reduce pollution from stationary

sources, reduce particulate matter, and increase energy efficiency and conservation. Refer to Appendix B for the analysis of the Project's consistency with applicable General Plan 2025 Air Quality Element policies.

Good Neighbor Guidelines

The Project was evaluated for consistency with the City's *Good Neighbor Guidelines for Siting New and/or Modified Warehouse Distribution Facilities* (Good Neighbor Guidelines; City of Riverside 2008).

- The Good Neighbor Guidelines were designed to help minimize the impacts of diesel particulate matter from on-road trucks associated with warehouses and distribution centers on existing communities and sensitive receptors located in the region. Although the Good Neighbor Guidelines specifically address air quality issues, the recommended strategies also serve to reduce GHG emissions. The Good Neighbor Guidelines goals and strategies, adopted by the City in 2008, applicable to the Project include:Minimize exposure to diesel emissions to neighbors that are situated in close proximity to the warehouse/distribution center;
    - Recommended strategy: Design facilities to allow for the queuing of truck on-site and away from sensitive receptors. Conversely, prevent the queuing of trucks on streets or elsewhere outside of facility in compliance with Title 10 – Vehicles and Traffic – Chapter 10.44 – Stopping, Standing and Parking.

      Project consistency: Based on the Project location and design, no truck queuing would occur next to sensitive receptors, which are located south of Alessandro Boulevard. Truck queuing would not occur outside the facility.
    - Recommended strategy: To the extent possible, locate driveways, loading docks and internal circulation route away from residential uses or any other sensitive receptors.

      Project consistency: Driveways, loading docks, and internal circulation routes are not adjacent to sensitive receptors. Further, as calculated in this analysis, emissions due to on-site operations would not expose sensitive receptors to substantial pollutant concentrations.
    - Recommended strategy: Conduct SCAQMD URBEMIS and EMFAC computer models as appropriate, to initially evaluate warehouse and distribution projects on a case by case basis to determine the significance of air quality impacts and whether air quality thresholds would be exceeded as a result of the project. Where thresholds are exceeded, a more detailed air quality analysis/ health risk assessment by an air quality specialist is required to be prepared and submitted by the project applicant.

      Project consistency: As calculated and concluded in the Project's Air Quality Analysis (Appendix C), the Project would not result in significant air quality impacts. Moreover, as discussed in the Project's GHG Analysis (Appendix H) and

summarized in this section, the Project would not result in significant GHG emissions impacts.

- Recommended strategy: Enforce compliance with Riverside Municipal Code Section 19.880 – "Transportation Demand Management Regulations". This section of the Code requires trip reduction plans to be submitted for all businesses, including warehouses, with over one hundred employees to reduce work-related vehicles trips by six and one half percent from the number of trips related to the project.

  Project consistency: The Project would include transportation demand management measures that would reduce emissions associated with employee trips. These include access to public transit (Routes 20 and 208), bicycle parking, clean air/van pool parking spaces, and electric vehicle parking.

- Eliminate diesel trucks from unnecessarily traversing through residential neighborhoods;
  - Recommended strategy: Require warehouse/distribution centers to establish a specific truck route between the warehouse/distribution center and the State Route 60 and Interstate 215 freeways for City approval as part of the Design Review process. In addition, a haul route plan for construction activities should also be provided as part of the Design Review process.

    Project consistency: The Project site is located one mile west of Interstate 215, with direct access via Alessandro Boulevard which is an existing truck route for operations as well as transporting construction equipment to and from the site. As identified on the site plans, an existing 20-foot wide dirt road located between proposed Parcels 1 and 2 will be used temporarily as a haul route during grading activities to move excess earthen material from Parcel 1 to Parcel 2.

  - Recommended strategy: Require warehouse/distribution centers to clearly specify all entrance and exit points on the site plan submitted for City review and approval.

    Project consistency: The Project site plans indicate all entrance and exit points.

  - Recommended strategy: Require warehouse/distribution centers to provide on-site signage for directional guidance to trucks entering and exiting the facility.

    Project consistency: On-site signage for directional guidance will be provided.

  - Recommended strategy: Require warehouse/distribution centers to provide signage or flyers that advise truck drivers of the closest restaurants, fueling stations, truck repair facilities, lodging and entertainment.

    Project consistency: The future tenants are unknown at this time; however, this information is readily available to truck drivers.

- Eliminate trucks from using residential areas and repairing vehicles on the streets;
    - Recommended strategy: Enforce compliance with Riverside Municipal Code Section 10.44.155 – "Parking of certain commercial vehicles, trailers and semi-trailers prohibited; exceptions", Section 10.44.160 – "Parking of certain commercial vehicles prohibited in residential districts" and Section 10.44.040 "Parking for certain purposes prohibited".

      Project consistency: The Project would comply with all Municipal Code requirements. No trucks would be parked off-site or drive through residential communities.
- Reduce and/or eliminate diesel idling within the warehouse/distribution center;
    - Recommended strategy: Promote the installation of on-site electric hook-ups to eliminate the idling of main and auxiliary engines during loading and unloading of cargo and when trucks are not in use – especially where Transportation Refrigeration Units are proposed to be used.

      Project consistency: The project would not include Transportation Refrigeration Units. All trucks would be required to comply with the CARB idling limit of 5 minutes.
    - Recommended strategy: Implement General Plan 2025 Program Final Program Environmental Impact Report, Mitigation Measure MM Air 12. This Mitigation Measure requires that all new truck terminals, warehouses and other shipping facilities requiring the use of refrigerated trucks and with more than 50 truck trips per day shall provide electrical hookups for the refrigerated units to reduce idling and its associated air quality pollutants. Additionally, future tenant improvements involving conversion of a warehouse for refrigeration storage shall include electrical hookups for refrigerated units.

      Project consistency: The Project would not include Transportation Refrigeration Units or refrigeration storage.
    - Recommended strategy: Require signage (posted inside and outside of the warehouse facility) to inform truck drivers of CARB regulations, idling limits, authorized truck route, and designated truck parking locations. Post signs requesting truck drivers to turn off engines when not in use and restrict idling within facilities to less than 5 minutes.

      Project consistency: The Project would include signage regarding idling limits, truck routes, and parking.

Additionally, the City's Guidelines recommend the enforcement of the Riverside Municipal Code.

As discussed in Section 5.7.2.5 above, on November 10, 2020, the Riverside City Council adopted updates to the Good Neighbor Guidelines, in addition to associated amendments to Title 19 – Zoning Code of the Riverside Municipal Code (RMC), the Hunter Business Park Specific

Plan, and the Sycamore Canyon Business Park Specific Plan related to siting industrial uses in the City when located adjacent to sensitive receptors, including residential neighborhoods, schools, parks, playgrounds, day care centers, nursing homes, hospitals, and other public spaces. City Council action also allowed any project achieving substantial completion within 90 days of the effective date of the implementing ordinance to continue to be subject to the 2008 GNG. As this Project was deemed complete prior to adoption of the updated GNG, it does not need to comply with the updated GNG. Nevertheless, the Project is consistent with the updated GNG.

The updated 2020 Good Neighbor Guidelines include new requirements for technical studies and new guidelines related to noise and neighborhood character. The following is a short summary of the applicable updates:

- **Technical Studies:** The 2020 GNGs require the preparation of an Air Quality Analysis, and Health Risk Assessments for industrial uses within 1,000 feet of sensitive receptors.

  Project Consistency: The Project has completed an Air Quality Analysis (Appendix C) and Health Risk Assessments (Appendix C) as part of the EIR process.

- **Noise:** The updated guidelines include measures related to minimizing noise from construction activities and ensuring compliance with Title 7 – Noise of the Riverside Municipal Code as it relates to noise in residential neighborhoods.

  Project Consistency: As outlined in Section 5.11 Noise, **Mitigation Measure MM NOI-1** is required to minimize construction noise and operational noise generated by the Project will comply with the noise standards in Title 7 of the RMC.

- **Neighborhood Character:** The new guidelines incorporate tiered development standards in Title 19 – Zoning Code related to building setbacks, height, and size, based on proximity to residential uses. The guidelines also require screening of industrial uses from Sensitive Receptors, and landscaping to soften visual impacts.

  Project Consistency: The tiered development standards of Title 19 do not apply to the Project, as the proposed buildings are located more than 800 feet from residential uses. As outlined in Section 5.1 Aesthetics, extensive design considerations are included in the Project, as well as Mitigation Measure MM AES-2, to minimize visual impacts from the Project on nearby sensitive receptors.

Although the Project is not required to comply with the updated Title 19 development standards or the updated GNGs, the project is consistent with all new requirements related to warehouse uses.

Thus, as outlined above, the Project is consistent with and would not conflict with the implementation of the applicable 2008 Good Neighbor Guidelines and recommended strategies; potential impacts would be **less than significant with implementation of Mitigation Measure MM AIR-1,** as outlined below.

MM AIR-1: The project applicant is required to record a covenant on the property (Parcels 1 and 2) that prohibit manufacturing use. Proof of the record of covenant shall be submitted to the City of Riverside Planning Department prior to issuance of Building Permits.

Climate Change Scoping Plan

As discussed in Section 5.7.2.2, State Climate Change Regulations, EO S-3-05 established GHG emission reduction targets for the State, and AB 32 launched the CARB Climate Change Scoping Plan that outlined the reduction measures needed to reach the 2020 target.

As discussed above, the Project emissions would be below the screening level of 10,000 MT CO_2E for industrial uses. This threshold is based on the concept of establishing a 90 percent GHG emission capture rate. A 90 percent emission capture rate means that 90 percent of total emissions from all new or modified stationary source projects would be subject to a CEQA analysis, which includes analyzing feasible alternatives and imposing feasible mitigation measures. The market capture rate is based on guidance from the California Air Pollution Control Officers Association (CAPCOA) report CEQA & Climate Change, dated January 2008, which identifies several potential approaches for assessing a project's GHG emissions.

Following the market capture rate approach, a lead agency defines an acceptable capture rate and identifies the corresponding emissions level. Following rationale presented in the CAPCOA Guidance, the aggregate emissions from all projects with individual annual emissions that are equal to or less than the identified market capture rate would not impede achievement of the state GHG emissions reduction targets codified by AB 32 (2006) and SB 32 (2016) and impacts under CEQA would therefore be less than cumulatively considerable. A 90 percent emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions.

Project GHG emissions would be less than the applicable SCAQMD screening level of 10,000 MT CO_2E for industrial uses. Further, Project emissions would decline beyond the buildout year of the Project, 2023, as a result of continued implementation of federal, state, and local reduction measures such as increased federal and state vehicle efficiency standards, and Riverside Public Utilities' increased renewable sources of energy in accordance with RPS goals. Based on currently available models and regulatory forecasting, Project emissions would continue to decline through at least 2050. Given the reasonably anticipated decline in Project emissions, once fully constructed and operational, the Project is in line with the GHG reductions needed to achieve the 2050 GHG emission reduction targets identified by EO S-3-05.

As noted in Section 3.2.2.3, the 2017 Scoping Plan identifies state strategies for achieving the state's 2030 interim GHG emissions reduction target codified by SB 32. Measures under the 2017 Scoping Plan scenario build on existing programs such as the Low Carbon Fuel Standard, Advanced Clean Cars Program, RPS, Sustainable Communities Strategy, Short-Lived Climate Pollutant Reduction Strategy, and the Cap-and-Trade Program. The project would comply with all

applicable provisions contained in the 2017 Scoping Plan since the adopted regulations would apply to new development or the emission sectors associated with new development.

- **Transportation** – State regulations and 2017 Scoping Plan measures that would reduce the project's mobile source emissions include the California Light-Duty Vehicle GHG Standards (AB 1493/Pavley I and II), the Low Carbon Fuel Standard, and the heavy-duty truck regulations discussed in Section 3.2.2.8. These measures are implemented at the state level and would result in reducing project-related mobile source GHG emissions.
- **Energy** – State regulations and 2017 Scoping Plan measures that would reduce the project's energy-related GHG emissions include RPS (see Section 3.2.2.5), Title 24 Energy Efficiency Standards (see Section 3.2.2.7a), and CALGreen (see Section 3.2.2.7b). The project would be served by Riverside Public Utilities, which has achieved 36 percent renewables as of 2017. The project's energy related GHG emissions would decrease as Riverside Public Utilities increases its renewables procurement beyond 2020 towards the 2030 goal of 50 percent. Additionally, the project would be constructed in accordance with energy efficiency standards effective at the time building permits are issued. The current 2019 Energy Code is estimated to decrease energy consumption by 30 percent for non-residential buildings when compared to the 2016 Title 24 Energy Code.
- **Water** – State regulations and 2017 Scoping Plan measures that would reduce the project's electricity consumption associated with water supply, treatment, and distribution, and wastewater treatment include RPS, CALGreen, and the Model Water Efficient Landscape Ordinance. The project would be required to reduce indoor water consumption by 20 percent in accordance with CALGreen. Additionally, the project would be subject to all City landscaping ordinance requirements.
- **Waste** – State regulations and 2017 Scoping Plan measures that would reduce the project's solid waste-related GHG emissions are related to landfill methane control, increases in efficiency of landfill methane capture, and high recycling/zero waste. The project would be subject to CALGreen, which requires a diversion of construction and demolition waste from landfills. Additionally, the project would include recycling storage and would divert waste from landfills in accordance with AB 341.

Riverside Restorative Growthprint and Climate Action Plan (RRG-CAP)

In addition to meeting the SCAQMD screening thresholds, the Project was evaluated for consistency with the strategies and actions contained in the RRG-CAP (see Section 5.4.2.4). To achieve the City's GHG emission reductions, the City's RRG-CAP includes reduction measures for each category of GHG emissions: transportation, energy, water, and solid waste. The RRG-CAP reduction measures further support the goals of SB 32 and the measures in the 2017 Scoping Plan. Table 5.7-8 summarizes the Project's consistency with RRG-CAP measures.

Table 5.7-8 – Project Consistency with RRG-CAP GHG Reduction Measures

Number	Strategy/Goal	Project Consistency
State and Regional Energy Measures		
The following are state and regional measures that are expected to reduce GHG emissions associated with the energy sector.		
SR-1	**Renewable Portfolio Standard (RPS)** Utilities must secure 33 percent of their power from renewable sources by 2020.	The Project would be served by Riverside Public Utilities, which has achieved 36 percent renewables as of 2017. The Project's energy-related GHG emissions would decrease as Riverside Public Utilities increases its renewables procurement beyond 2020 towards the 2030 goal of 50 percent. The Project would not conflict or interfere with RPS.
SR-2	**2013 California Building Energy Efficiency Standards (Title 24, Part 6)** Mandatory energy efficiency standards for buildings.	The Project would be constructed in accordance with energy efficiency standards effective at the time building permits are issued. The current 2019 Energy Code is estimated to decrease energy consumption by 30 percent for non-residential buildings when compared to the 2016 Title 24 Energy Code.
SR-3	**HERO Residential Program** Financing for homeowners to make energy efficient, renewable energy, and water conservation improvements.	The Project is not a residential Project, and therefore, this measure does not apply to the Project.
SR-4	**HERO Commercial Program** Financing for business owners to make energy efficient, renewable energy, and water conservation improvements.	The HERO Commercial program is a public-private partnership administered by Western Riverside Council of Governments (WRCOG) and provides financing for energy and water improvements to business owners. As the Project is a new warehouse construction, this measure does not apply to the Project. The Project would not conflict with WRCOG's implementation of the HERO program.
State and Regional Transportation Measures		
The following are state and regional measures that are expected to reduce GHG emissions associated with the transportation sector.		
SR-6	**Pavley and Low Carbon Fuel Standard** Requirements for vehicles to use cleaner fuels.	This measure is implemented at the state level. Project mobile-source GHG emissions would be reduced through implementation of these measures. The Project would not conflict with implementation.
SR-7	**Metrolink Expansion** Additional Metrolink transit service provided to Western Riverside County.	Identified in SCAG's 2012 RTP/SCS, the Metrolink Perris Valley Line will be extended from Riverside to Perris in Western Riverside County. The General Plan identifies that the alignment would include a station east of the Project site at I-215 and Alessandro Boulevard. The Project would not interfere with Metrolink expansion. Future employees could use the expansion to commute to the Project site.
SR-8	**Express Lanes**	The Project would not interfere with construction of additional freeway express

Number	Strategy/Goal	Project Consistency
	Additional express lanes added along major freeways in western Riverside County.	lanes. Project vehicle traffic would benefit from decreased freeway congestion.
SR-9	**Congestion Pricing** Expansion of the toll lanes along SR-91.	This measure does not apply directly to the Project. The Project would not interfere with the expansion of SR-91 toll lanes.
SR-10	**Telecommuting** Work arrangement in which employees do not commute to a central place to work.	The Project is a high-cube warehouse which would require employees to physically fulfill and transport goods. This measure does not apply to the Project.
SR-11	**Goods Movement** Efficiency movement of goods through inland southern California.	The Project would support the region's role as a major hub for importing and exporting goods. To implement this measure, at the state level more standards are being implemented to increase vehicle efficiencies and the 2020 RTP/SCS and SCAQMD are supporting greater penetration of low-emission trucks in the region. The estimated GHG reductions associated with this measure account for the region's "share" of SCAG and SCAQMD's anticipated investments. The Project would benefit from reductions associated with regional investments. Further, by providing additional warehouse space in the region, the Project could reduce truck VMT by providing a hub closer to the region than further warehouses.
SR-12	**Electric Vehicle Plan and Infrastructure** Facilitate electric vehicle use by providing necessary infrastructure.	For the City of Riverside, this measure would be implemented by providing both public and private charging facilities, and by updating development codes to encourage or facilitate charging stations. The Project would install conduits for vehicle charging stations. The Project would not interfere with implementation of this measure and would be constructed in accordance with development codes in place at the time building permits are issued.
State Solid Waste Measures		
The following state measure is expected to reduce GHG emissions associated with the solid waste sector.		
SR-13	**Construction & Demolition Waste Diversion** Meet mandatory requirement to divert 50 percent of construction & demolition (C&D) waste from landfills by 2020 and exceed requirement by diverting 90 percent of C&D waste from landfills by 2035.	Project-related C&D waste would be sorted, recycled, and diverted from landfills in accordance with mandatory regulatory requirements.
Local Energy Measures		
The following are local measures that can be implemented to reduce GHG emissions associated with the energy sector.		
E-1	**Traffic and Street Lights**	The Project would not interfere with implementation of this measure.

Number	Strategy/Goal	Project Consistency
	Replace traffic and streetlights with high-efficiency bulbs.	
E-2	**Shade Trees** Strategically plant trees at new residential developments to reduce the urban heat island effect.	This measure applies to residential development and does not apply to the Project.
E-3	**Local Utility Programs – Electricity** Financing and incentives for business and homeowners to make energy efficient, renewable energy, and water conservation improvements.	To implement this measure, Riverside Public Utilities offers a selection of rebates and other incentives to assist property owners (residential and commercial) with the installation of energy- and water-saving products. This measure does not directly apply to the Project. However, the Project would be constructed in accordance with the Energy Code in place at the time building permits are issued, which would require the Project to be more energy efficient than existing development. The Project would also reduce water consumption in accordance with CalGreen.
E-4	**Renewable Energy Production on Public Property** Large-scale renewable energy installation on publicly owned property and in public rights-of-way.	This measure encourages the City to seek opportunities to install renewable energy projects on public property, public facilities and in public rights of way. This measure does not apply to the Project.
E-5	**UC Riverside Carbon Neutral Program** Collaborate with UC Riverside to achieve a carbon neutral campus.	The Project is not associated with UC Riverside. This measure does not apply to the Project.
E-6	**Riverside Public Utilities Technology Grants** Riverside Public Utilities grant programs to foster research, development and demonstration of innovative solutions to energy problems.	Riverside Public Utilities offers energy technology grant programs to help foster the development of innovative solutions to energy problems. This measure does not apply to the Project.
Local Transportation Measures		
The following are local measures that can be implemented to reduce GHG emissions associated with the transportation sector.		
T-1	**Bicycle Infrastructure Improvements** Expand on-street and off-street bicycle infrastructure, including bicycle lanes and bicycle trails.	Adjacent to the project site, Alessandro Boulevard is a Class 2 bicycle facility. The Project driveway would connect to Alessandro Boulevard and the existing bicycle lanes to provide access to the Project site. Additionally, the project would include the construction of a new parking lot to provide access to the Sycamore Canyon Wilderness Park trails with bicycle racks. Additionally, the project would include secure bicycle parking at each building.
T-2	**Bicycle Parking** Provide additional options for bicycle parking.	The Project would include secure bicycle parking at each building (at the northwest corner and entrance of Building B and at the southeast corner and entrance of Building A).

Number	Strategy/Goal	Project Consistency
T-3	**End of Trip Facilities** Encourage use of non-motorized transportation modes by providing appropriate facilities and amenities for commuters.	The Project would include secure bicycle parking at each building (at the northwest corner and entrance of Building B and at the southeast corner and entrance of Building A). Additionally, Building A would have eight (8) clean air/van pool parking spaces and 24 electric vehicle parking stalls, and Building B would have five (5) clean air/van pool parking spaces and 15 electric vehicle parking stalls. The charging stations for the electric vehicle parking stalls would be provided by the future tenant.
T-4	**Promotional Transportation Demand Management** Encourage Transportation Demand Management strategies.	The Project site is served by two existing bus routes and is also required to construct sidewalk capable of accommodating an ADA-compliant bench and pole bus stop as a condition of approval. Route 20 runs along Alessandro Boulevard adjacent to the Project site, providing service from Magnolia Center to Moreno Valley. Route 208 is a CommuterLink Express Route providing service from Temecula to the Riverside Metrolink. Consistent with Transportation Demand Management strategies, future employees would be encouraged to use these routes as an alternative form of transportation. The Project would also provide secure bicycle parking.
T-5	**Traffic Signal Coordination** Incorporate technology to synchronize and coordinate traffic signals along local arterials.	This measure is the responsibility of the Public Works Department and is currently in progress. The measure does not apply to the Project. The Project would not interfere with implementation of this measure.
T-6	**Density** Improve jobs-housing balance and reduce vehicle miles traveled by increasing household and employment densities.	Single and multi-family residential neighborhoods are located south and west of the Project site. The Project would create new employment opportunities for nearby residents. In Riverside County, the 2014 jobs-housing balance was 1.28 jobs to household, which exceeds the 2040 projection of 1.10 jobs to household..
T-7	**Mixed-Use Development** Provide for a variety of development types and uses.	The Project is not a mixed-use development. Nonetheless, the Project would create new employment opportunities for near-by residents, and future employees could utilize near-by commercial and retail business, in support of this measure.
T-8	**Pedestrian Only Areas** Encourage walking by providing pedestrian-only community areas.	This measure refers to urban, nonmotorized pedestrian use areas within central business districts and major activity centers. Nonetheless, the Project would include a donation of land for a trailhead parking lot with

Number	Strategy/Goal	Project Consistency
		improvements such as a shade structure with benches, bike rack, and drinking fountain. Trail fencing, gates, and signage would also be installed to direct access, circulation, and connection to existing trails. Thus, the Project would encourage walking/pedestrian use and would support this measure.
T-9	**Limited Parking Requirements for New Development** Reduce requirements for vehicle parking in new development projects.	Limiting parking requirements would encourage modes of transportation other than single-occupancy vehicles, thereby reducing VMT and GHG emissions. The City's current Zoning Code authorizes a reduction in the number of required parking spaces for mixed-use development and/or stand-alone uses in mixed-use zones subject to the approval of a shared parking arrangement. The Project is not a mixed-use development; however, the applicant is requesting a variance to reduce the number of parking spaces based on the operational characteristics of the uses.
T-10	**Bus Rapid Transit Service** Implement bus rapid transit service in the subregion to provide alternative transportation options.	The Project site is served by two existing bus routes. Route 20 runs along Alessandro Boulevard adjacent to the Project site, providing service from Magnolia Center to Moreno Valley. Two Route 20 bus stops are located immediately adjacent to the Project site along the southern boundary on Alessandro Boulevard. Route 208 is a CommuterLink Express Route providing service from Temecula to the Riverside Metrolink. Additionally, the Project would be required to construct a sidewalk capable of accommodating an ADA-compliant bench and pole bus stop as a condition of approval. Future employees could use the above-described routes as an alternative form of transportation. The Project would not interfere with the City's efforts to implement additional bus rapid transit.
T-11	**Voluntary Transportation Demand Management (TDM)** Encourage employers to create TDM programs for their employers.	Future employees would be encouraged to use existing public transit routes as an alternative form of transportation.
T-12	**Accelerated Bike Plan Implementation** Accelerate the implementation of all or specified components of a jurisdiction's adopted bike plan.	The City adopted a Bicycle Master Plan in 2007. Alessandro Boulevard is a Class 2 bicycle facility. The project driveway would connect to Alessandro Boulevard and the existing bicycle lanes to provide access to the Project site. Additionally, the northerly terminus of Barton Street that is identified as a "minor trailhead" would be developed with a trailhead parking lot, and improvements would include a

Number	Strategy/Goal	Project Consistency
		bike rack. Thus, the Project would provide secure bicycle parking and would not interfere with implementation of the City's Bicycle Master Plan.
T-13	**Fixed Guideway Transit** By 2020, complete feasibility study and by 2025 Introduce a fixed route transit service in the jurisdiction.	This measure applies specifically to the City's efforts on the "Riverside Reconnects" Streetcar feasibility study. The measure does not apply to the Project.
T-14	**Neighborhood Electric Vehicle Programs** Implement development requirements to accommodate Neighborhood Electric Vehicles and supporting infrastructure.	This measure does not apply to the Project. However, the Project would install conduits for vehicle charging stations.
T-15	**Subsidized Transit** Increase access to transit by providing free or reduced passes.	The tenants are unknown at this stage of Project design and, therefore, a commitment cannot be made that the future tenants would provide free or reduced transit passes to their employees. However, the Project would not interfere with the ability for future tenants to provide transit passes.
T-16	**Bike Share Program** Create nodes offering bike sharing at key locations throughout the City.	This measure encourages bike sharing implemented by third-party vendors. The measure does not apply to the Project. However, the Project would include secure bicycle parking, and would not interfere with bike sharing in the region.
T-17	**Car Share Program** Offer Riverside residents the opportunity to use car sharing to satisfy short-term mobility needs.	Similar to bike sharing, car sharing is offered by third-party vendors. This measure does not apply to the Project, and the Project would not interfere with car sharing programs in the region.
T-18	**SB 743 as Alternative to LOS** Use SB 743 to incentivize development in the downtown and other areas served by transit.	The Project is not located in the downtown; therefore, this measure does not apply to the Project. The Project would be served by RTA Routes 20 and 26 currently operating along Alessandro Boulevard as the Project would be required to construct a sidewalk capable of accommodating an ADA-compliant bench and pole bus stop as a condition of approval. Therefore, the Project would be consistent with this strategy/ goal.
T-19	**Alternative Fuel and Vehicle Technology Infrastructure** Promote the use of alternative fueled vehicles such as those powered by electric, natural gas, biodiesel, and fuel cells by Riverside residents and workers.	The Project would install conduits for vehicle charging stations.
T-20	**Eco-Corridor** Create a geographically defined area(s) featuring best practices in sustainable urban design and green building focused	The Project is not located in a potential Eco-Corridor as identified in the RRG-CAP Measure T-20: Eco-Corridor/Green Enterprise Zone section. This measure does not apply to the Project.

Number	Strategy/Goal	Project Consistency
	on supporting both clean-tech and green businesses.	
Local Water Measures		
The following local measure is expected to reduce GHG emissions associated with the water sector.		
W-1	**Water Conservation and Efficiency** Reduce per capita water use by 20 percent by 2020.	As discussed, in previous sections, the project would be required to reduce indoor water consumption by 20 percent in accordance with CalGreen.
Local Solid Waste Measures		
The following are local measures that can be implemented to reduce GHG emissions associated with the solid waste sector.		
SW-1	**Yard Waste Collection** Provide green waste collection bins community-wide.	This measure applies to residential uses; therefore, the measure does not apply to the Project.
SW-2	**Food Scrap and Paper Diversion** Divert food and paper waste from landfills by implementing commercial and residential collection program.	This measure applies to residential and commercial uses; therefore, the measure does not apply to the Project. However, the Project would include recycling storage and would divert waste from landfills in accordance with AB 341.
Local Agriculture Measures		
The following are local measures that can be implemented to reduce GHG emissions associated with the urban forest and the local food and agricultural sectors.		
A-1	**Local Food and Agriculture** Promote local food and agricultural programs.	The Project is not associated with food or agricultural uses; therefore, this measure does not apply to the Project.

As discussed in Table 5.7-8 above, the Project would be consistent with applicable RRG-CAP measures. The Project would be required to comply with the regulations discussed above that have been adopted to implement the Scoping Plan and to achieve the SB 32 2030 target. As a result, the Project would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. Impacts would be **less than significant with Mitigation Measure MM AIR-1**. MM AIR-1 is as follows:

MM AIR-1: The project applicant is required to record a covenant on the property (Parcels 1 and 2) that prohibit manufacturing use. Proof of the record of covenant shall be submitted to the City of Riverside Planning Department prior to issuance of Building Permits.

5.7.6 Proposed Mitigation Measures

As the Project does not exceed any of the significance thresholds and potential impacts are expected to be less than significant, no mitigation measures are required to reduce potential impacts from the proposed Project as described in Section 3.0 Project Description. However, **Mitigation Measure MM AIR-1** is required to ensure that the actual use of the site is consistent with the use described in the Project Description and analyzed in the project specific greenhouse gas analysis.

MM AIR-1: The project applicant is required to record a covenant on the property (Parcels 1 and 2) that prohibit manufacturing use. Proof of the record of covenant shall be submitted to the City of Riverside Planning Department prior to issuance of Building Permits.

5.7.7 Cumulative Environmental Effects

GHG emissions would result from construction and operation of the Project. Construction activities emit GHGs primarily though the combustion of fuels in on- and off-road equipment and vehicles. Operational emissions include mobile, energy (electricity and natural gas), area (landscape maintenance equipment), water and wastewater, and solid waste sources.

GHG emission associated with construction and operation of the Project were calculated and compared to the SCAQMD annual screening threshold of 10,000 MT CO_2E for industrial uses. This threshold is based on the concept of establishing a GHG emission market capture rate. Following rationale presented in the CAPCOA Guidance, the aggregate emissions from all projects with individual annual emissions that are equal to or less than the identified market capture rate would not impede achievement of the state GHG emissions reduction targets codified by AB 32 (2006) and SB 32 (2016). Therefore, impacts under CEQA would be less than significant cumulatively **with Mitigation Measure MM AIR-1**.

As shown in Table 5.7-7, the Project would result in a net increase of 7,405 MT CO_2E per year, which would be less than the 10,000 MT CO_2E screening level. Additionally, the Project would be consistent with applicable RRG-CAP measures and is in line with the GHG reductions needed to achieve the 2050 GHG emission reduction targets identified by EO S-3-05. Therefore, the Project would not generate GHG emissions that would cause a significant impact on the environment and the impacts are **less than significant with Mitigation Measure MM AIR-1**.

Additional cumulative development projects will also be subject to consistency analysis with the City's CAP as well as state and sub-regional policies that restrict GHG production. As these buildings, roads, or other cumulative developments are updated or replaced over time, they will be subject to the then-existing requirements for GHG emissions reductions, including those set forth to ensure compliance with Executive Orders S-3-05 and B-30-15, as described in Section 5.4.2.3, as well as then-existing technologies employed to achieve deep reductions in GHG emissions. Therefore, cumulative impacts to GHG emissions will be **less than significant with Mitigation Measure MM AIR-1** from the Project and other cumulative development projects within the City of Riverside.

5.7.8 References

The following references were used in the preparation of this section of the DEIR:

GAP 2012	City of Riverside, *Green Action Plan* Accessed October 2020. (Available at http://greenriverside.com/pdf/Green_Action_Plan%202012.pdf)

RECON 2020	RECON, *Greenhouse Gas Analysis for the Sycamore Hills Distribution Project*, October 2020. (Appendix H)
RRG-CAP	Riverside Restorative Growthprint, Economic Prosperity Action Plan and Climate Action Plan, January 2016. (Available at https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/other-plans/2016%20Riverside%20Restorative%20Growthprint%20Economic%20Proposerity%20Action%20Plan%20and%20Climate%20Action%20Plan.pdf)
Urban Crossroads 2019	Urban Crossroads, Sycamore Hills Distribution Center Vehicles Miles Traveled (VMT)/ Trip Length Analysis

5.8 Hazards & Hazardous Materials

Based on Appendix G of the *State CEQA Guidelines,* the analysis in the Initial Study (IS/NOP) prepared for this Project (Appendix A), and comments received during the NOP public comment period, this section evaluates potential impacts related to hazards & hazardous materials.

The following discussion is based, in part, on the *Phase I Environmental Site Assessment* (ESA) was prepared by Environmental & Regulatory Specialists, Inc. (EARSI) in June 2020 (Appendix I). The purpose of the ESA was to identify, to the extent feasible, recognized environmental conditions (RECs) in connection with the Project site, via records review, site reconnaissance, interviews and through evaluation and report preparation.

5.8.1 Setting

The Project site is currently undeveloped and vacant but has been used historically as open space. The topography consists of natural rolling terrain descending gradually from a west to east direction. There are granitic rock outcroppings throughout the property. The Project site contains two drainages, Drainage A and Drainage B. Drainage A enters the site near the northern portion of the western boundary and flows for approximately 1,183 feet before exiting the site near the middle of the northern boundary. Drainage B enters the site near the middle of the southern boundary and flows for approximately 981 feet before exiting the site near the middle of the northern boundary. The Project site contains low to moderate vegetation primarily consisting of non-native grasslands and weeds as well as some riparian woodland.

Based on records searches, interviews, aerial photos and site reconnaissance, this assessment revealed no evidence of RECs on the surface or in the groundwater below the Project site, nor is vapor encroachment likely from off-site sources. There is no evidence that hazardous substances or petroleum products above *de minimus* quantities existed on the Project site.

Historical Use of Project Site

Historic aerial photos dated 1938 show the Project site as open space with dirt roads/paths crisscrossing the area. Aerial photos show the Project site initially as disturbed open space with the current uses of neighboring parcels gradually filling in with development. The dominant use of the general Project area was the former March AFB, located southeast of the Project site.

The objective of consulting historical sources is to develop a history of the previous uses of the Project site and surrounding area to help identify the likelihood of past uses that might have led to RECs in connection with the Project site. Changes observed from historic aerial photos are listed below. Appendix IV of the Project's ESA (Appendix I) contains the 13 Historic Aerial Photos used.

> **1938 -** Alessandro Boulevard is a dirt road that veers north off its future path as it moves east. The Project site is open space. The northwest, southwest and southeast corners of the future intersection of Alessandro Boulevard and Barton Street have been disked.
>
> **1953 -** The Project site appears disked. There is an oval dirt track near the center of the Project site. Alessandro Boulevard has been widened.

1967 - The Project site has many dirt paths. The street pattern for the first phase of the residential development on the southeast corner of Alessandro Boulevard and Barton Street is in place.

1978 - The first phase of the residential development on the southeast corner of Alessandro Boulevard and Barton Street has been built. Alessandro Boulevard now has four lanes.

1985 - No significant change.

1989 - No significant change. Two objects appear near the center of the Project site.

1994 - The grading for the "ponds" and the two buildings west of Barton Street and north of Alessandro Boulevard has occurred. The two objects on the Project site have disappeared. Grading for the building on the northeast corner of Alessandro Boulevard and Barton Street that will become Citywide Self Storage has been done.

2006 - The residential development west of Barton Street and south of Alessandro Boulevard, the "ponds" west of Barton Street and northwest of the Project site, and the two buildings west of Barton Street and southwest of the Project site are in place. More of the residential development south of the Project site across Alessandro Boulevard has filled in. The Citywide Self Storage building has been constructed.

2009 - No significant change.

2012 - No significant change.

2016 - No significant change.

Historical Use on Adjacent and Surrounding Properties

Beginning around World War II, March AFB (southeast area of the aerial photos) controlled the use of the area. Surrounding areas have been developed with residential uses to the south of the Project site across Alessandro Boulevard, first to the east of Barton Street, then to the west; the Metropolitan Water District Facility is located west of the Project site across Barton Street; a self-storage facility is located southwest from the Project site. The properties to the north and east of the Project site remain open space. Historic aerial photographs are included in the Phase I ESA Report's Appendix IV (pages 224-237 of the pdf file).

Records Review – Regulatory Agency Record Search

Overview

The purpose of the records review was to obtain and examine records to help identify RECs in connection with the Project site. A computer search of regulatory agency databases was performed by Environmental Data Resources (EDR) to locate properties reported as hazardous material generators, known sites with above or below ground storage tanks, sites having leaking storage tanks, sites where hazardous material spills have occurred or for other criteria in accord with American Society for Testing and Materials (ASTM) Standard Practices for Environmental Site Assessments, E-1527-13.

Regulatory records contain considerable information about various environmental concerns. In some instances, there may be no REC or impairment regarding the subject property arising from these listings because A) the flagged sites are sufficiently distant from the subject property, B) the flagged sites are down-gradient from the subject property so groundwater contamination below these locations would be carried away from the property given the direction of groundwater flow, C) the concern has been remediated to "case closed" status as determined by relevant governmental review agencies indicating minimal remaining contamination, or D) for other reasons.

Information such as depth and gradient of groundwater, direction and distance from a subject property, and current status of the listed property are considered when determining potential environmental impacts to a subject property.

Some potential environmentally impacted locations identified by the database search are counted on more than one list. Some databases searched are indexes into other databases, which inflates the number of reports flagged. In addition, some listed properties appear under different names or ownerships, or the addresses were specified differently such that the searching software is unable to determine that an entry was for an already found location. Moreover, the same location is often listed multiple times for the same concern. Thus, the actual number of distinct physical locations with potentially environmentally impacted soils or groundwater is less than initially indicated.

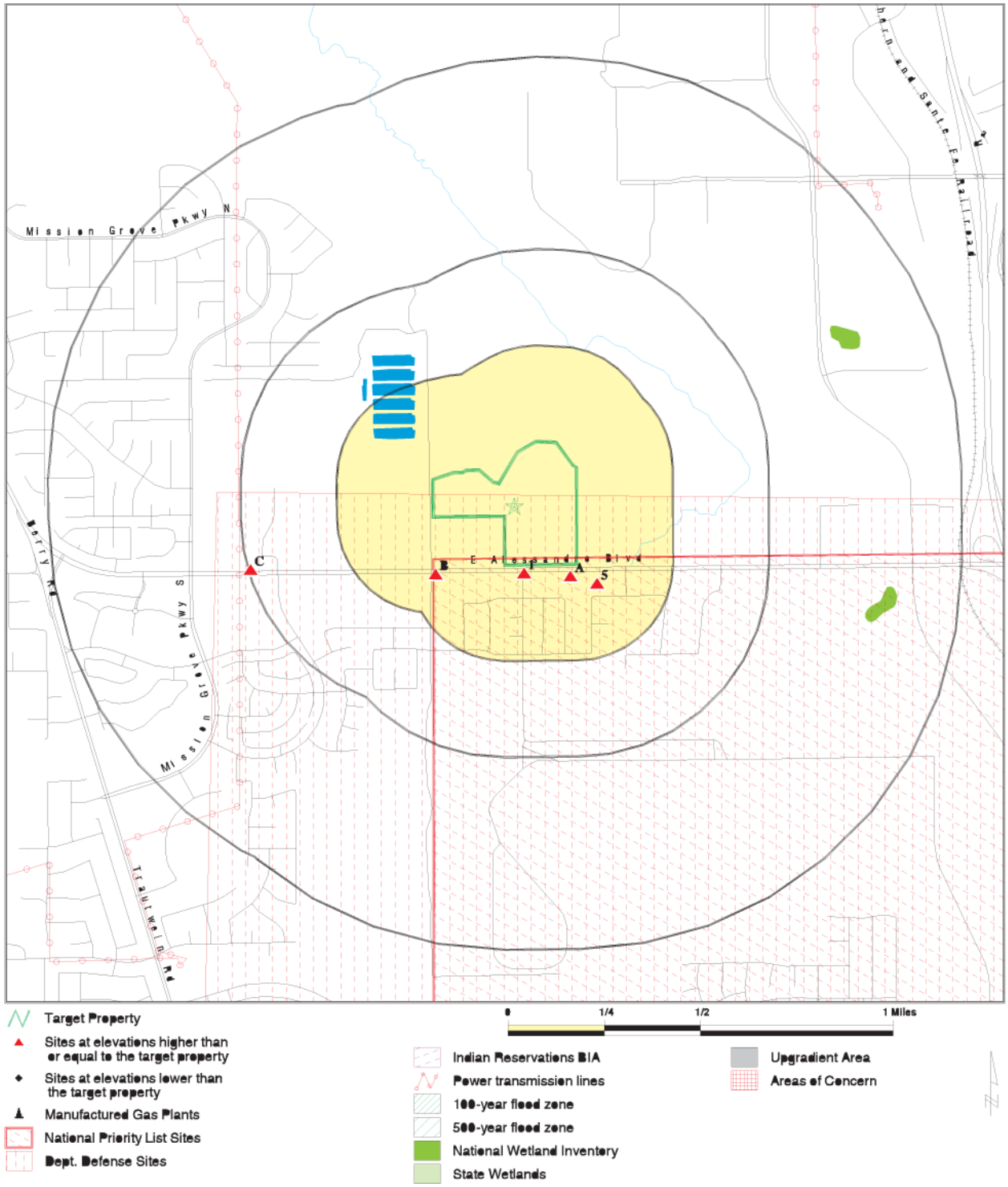
EDR Search Results

Figures 5.8-1 and 5.8-2 provide the One-Mile and 1/4-Mile Radius Maps, respectively, generated for the Project site during the regulatory database search. No reports were found by the EDR search for the Project site, while the EDR search found 23 reports for nearby sites. The EDR reports map to six (6) unique addresses, these sites are listed in Table 5.8-1 below and identified in Figures 5.8-1 and 5.8-2 provide the One-Mile and 1/4-Mile Radius Maps. The EDR report provides links to the California Water Boards GeoTracker website, which is the main repository for leaking underground storage tank (LUST) reports. Eight of the Geotracker reports are for registered storage tanks, and no indication of problems or violations were noted for these sites. Additionally, six reports were for LUSTs; all six of these LUST reports are listed as "Completed – Case Closed" indicating satisfactory cleanup of the spill. None of the reports found by the EDR or Geotracker searches raise an environmental concern for the Project site.

Table 5.8-1 – Surrounding Sites Search Results Locations

Site Name	Map ID	Database Site was Flagged
March AFB	Regional	NPL[1], CERCLIS (SEMS)[2], RCRA LQG[3], US ENG Control[4], DOD[5], ROD[6], PRP[7]
Eagle Gas, Adira Inc.	1, A	UST[8], SWEEPS UST[9], EDR Hist Auto[10], CA FID UST[11], HAZNET[12]
KJ Auto Trans Inc.	5	EDR Hist Auto
Victoria Cleaner, Flamingo Cleaner	B, B6	Dry Cleaners
Eastern Municipal, Mills Pumping Plant	C	LUST[13], SWEEPS UST, CA FID UST, EMI[14], HIST UST[15]
MWD Mills Filtration	C	LUST, CHMIRS[16], NPDES[17], HIST CHMIRS

[1]National Priority List (Superfund): identifies over 1,200 sites for priority cleanup under the Superfund Program.
[2]Compensation and Liability Information System: database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities; Superfund Enterprise Management System: tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of the Superfund Program.
[3]Resouce Conservation and Recovery Act – Large Quantity Generators: LQGs generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.
[4]Engineering Controls Sites List: a listing of sites with engineering controls in place; engineering controls involve various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or affect human health.
[5]Department of Defense Sites: data set consists of federally owned or administered lands, administered by the DOD, that have any area equal to or greater than 640 acres of the U.S., Puerto Rico, and the U.S. Virgin Islands.
[6]Records of Decision: ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.
[7]Potentially Responsible Parties: listing of potentially responsible parties.
[8]Underground Storage Tanks listing.
[9]Statewide Environmental Evaluation and Planning System: underground storage tank listing; no longer updated and maintained.
[10]EDR Exclusive Historical Auto Stations: listings of potential gas station/filling station sites available to EDR researchers.
[11]Facility Inventory Database: contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board.
[12]Facility Manifest Data: data extracted from copies of hazardous waste manifests received each year by the Department of Toxic Substances Controls (DTSC).
[13]Leaking Underground Storage Tank Sites included in GeoTracker, which is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with an emphasis on groundwater.
[14]Emissions Inventory Data: toxics and criteria pollutant emissions data collected by the Air Resources Board and local pollution agencies.
[15]Hazardous Substance Storage Container Database: a historical listing of underground storage tank sites.
[16]California Hazardous Materials Incident Report System: contains information on reported hazardous material incidents (accidental releases or spills).
[17]National Pollutant Discharge Elimination System.



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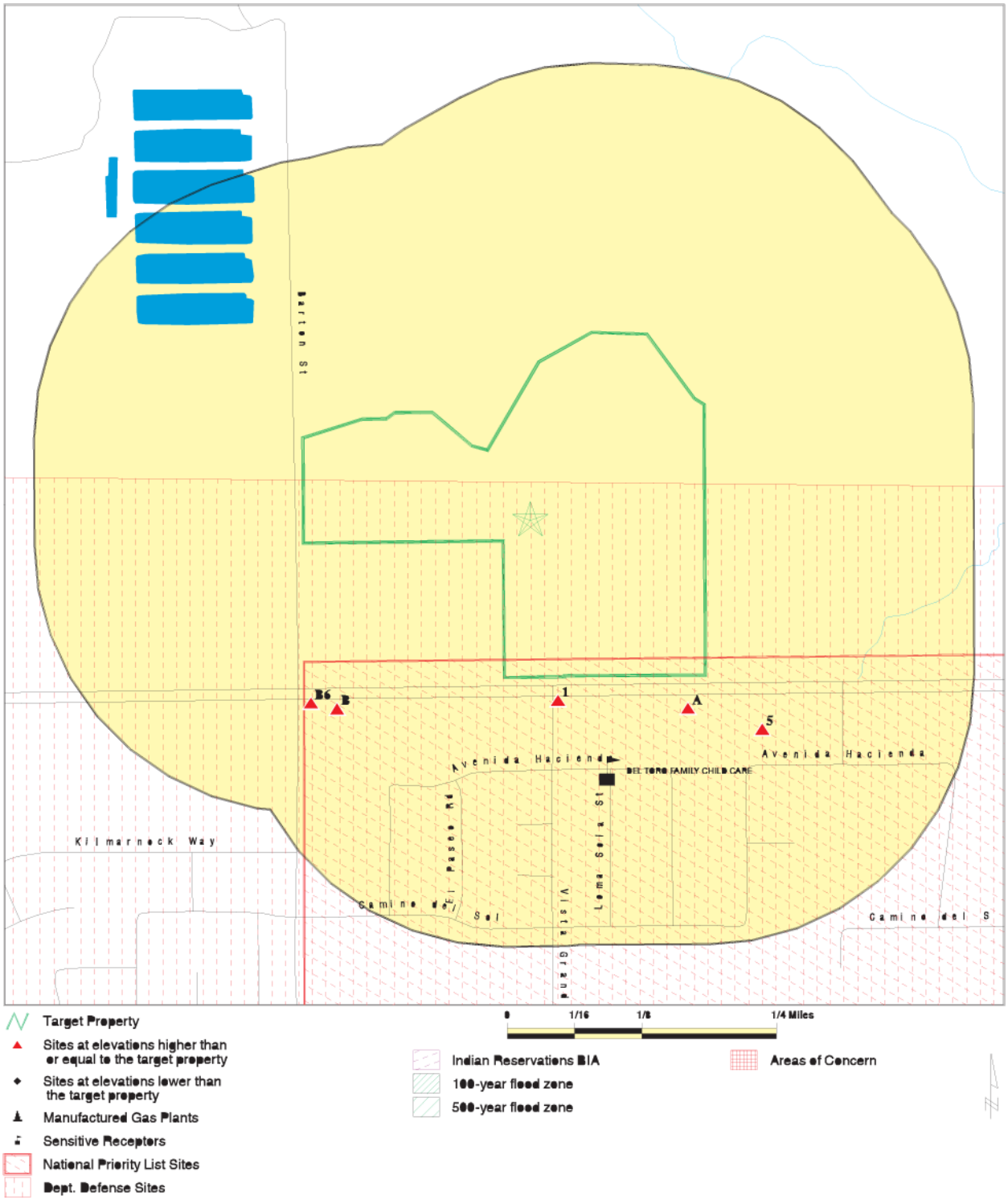
EDR 1 - Mile Radius From Project Site Map

Figure 5.8-1



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EDR 1/4 - Mile Radius From Project Site Map

Figure 5.8-2

Existing Environmental Conditions

EARSI conducted reconnaissance of the Project site and adjacent properties on October 4, 2018 with an update on June 29, 2020. The purpose of the site reconnaissance was to ascertain visual evidence used to identify RECs in connection with the Project site such as evidence of the use, storage, generation, release, or disposal of hazardous materials or petroleum products based on current conditions. The Project site was traversed on foot while searching for signs of RECs.

Storage Tanks: During the reconnaissance, there was no visual evidence of above or belowground tanks.

Odors: During the reconnaissance, no noxious odors were detected.

Hazardous Substances and Petroleum Products Containers: During the reconnaissance, there was no visual evidence of potentially hazardous substances or industrial hazardous waste impacts, electrical transformers, hazardous substances, or petroleum products.

Polychlorinated Biphenyls (PCBs): Records search indicates there is no evidence of PCBs present on or near the site.

Stained Soil or Pavements: During the reconnaissance, no signs of soil staining, grading, debris, or other indicators of REC were found.

Distressed Vegetation: During the reconnaissance, no distressed vegetation were found.

Wastewater: Records search indicates there is no evidence of wastewater pits.

Groundwater Wells: No groundwater wells were observed on property.

Oil and Gas Well Records

No oil wells were mapped by the EDR Search.

Soils

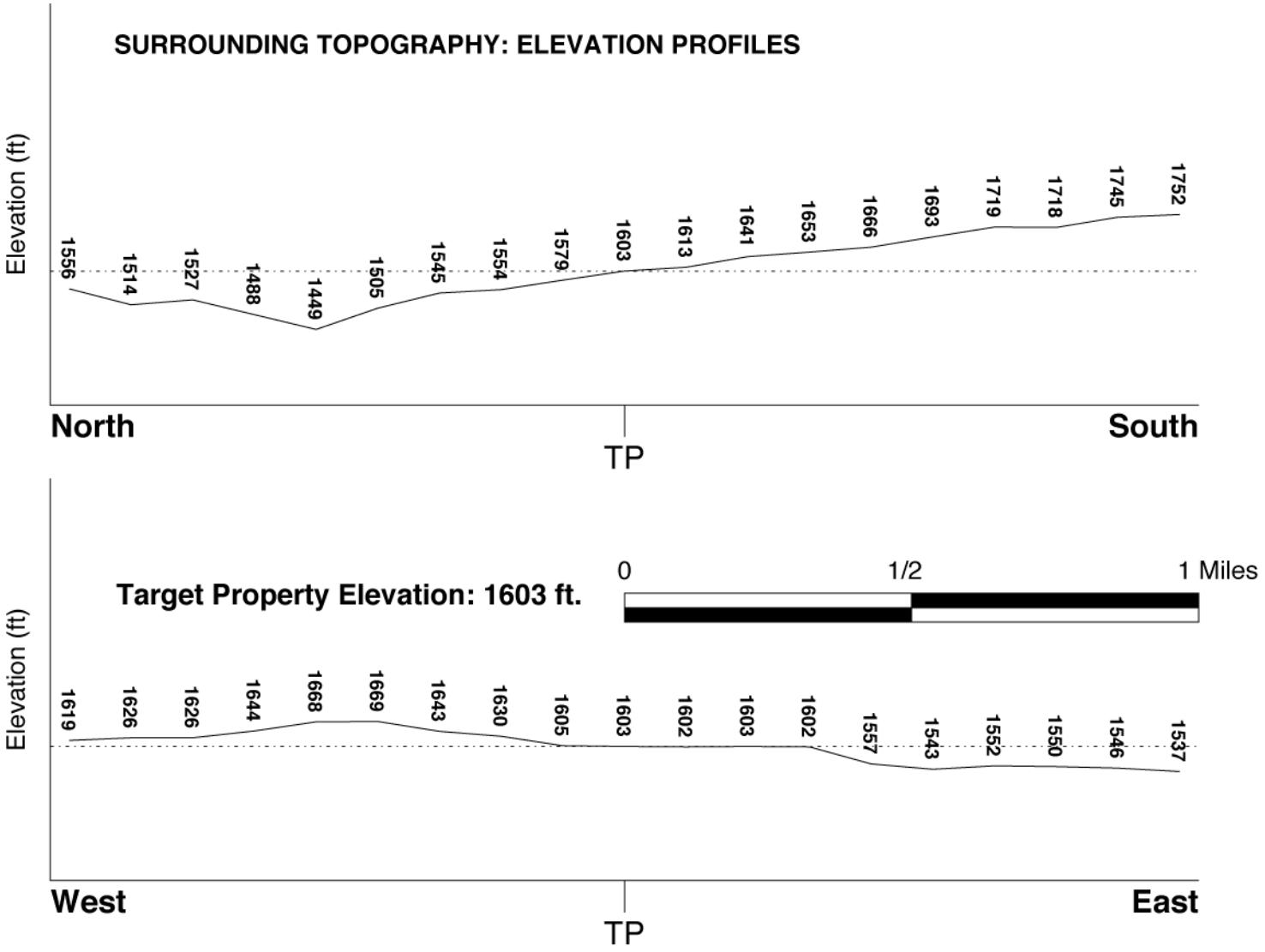
Ten soil types were mapped in the vicinity of the Project site with four mapped as likely present on the Project site. All are characterized as variants of well-drained sandy loam with slow infiltration rates. Detailed information on the area soil map and soil types appears in the EDR Radius Map report that is included in the ESA.

Radon Records

The EDR Report listed 22 Radon tests for the Project area in the California Radon database with only one test indicating more than 4 pCi/L. Federal Radon Information lists one site with results less than 4 pCi/L. The EPA maps Riverside County (County) as Zone 2 with indoor average level between 2 and 4 pCi/L.

Vapor Encroachment

There is no evidence that vapor encroachment is likely to impact the Project site. On the day of the site reconnaissance, no noticeable odor was reported.



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Surrounding Topography: Elevation Profiles

Figure 5.8-3

Emergency Response

Any potential hazard in the City resulting from a manmade or natural disaster may result in the need for evacuation of few or thousands of citizens in the City. Homeland Security has brought disaster awareness to the forefront of the minds of the community, safety officials, and City staff. The Emergency Management Office (EMO) within the Riverside Fire Department (RFD) coordinates emergency response, disaster preparedness and disaster recovery by activating the Standardized Emergency Management System (SEMS) and National Incident Management System (NIMS). The EMO prepares an Emergency Operations Plan, essential to the coordination of efforts in response to a major disaster, whatever its origin. The SEMS creates a system where City, County, and State emergency services work jointly to respond to any disaster in a coordinated approach. (GP 2025 FPEIR, pp. 5.7-12 – 5.7-13) Moreover, the Emergency Operations Center (EOC) is a secure facility where designated City personnel congregate to work in response to a disaster. The EOC, serving at the center of all City emergency operations, is located at 3085 Saint Lawrence Street in the City's corporation yard (RFD DP).

Critical components of the Emergency Operations Plan include the establishment of multiple evacuation routes and the ability to provide emergency services in the swiftest manner possible. Figure PS 8.1 in the GP 2025 identifies the City's evacuation routes and existing infrastructure that can influence response times during a major disaster. According to GP 2025 Figure PS 8.1, no roadways that serve the Project site or within the Sycamore Canyon Business Park Specific Plan are identified for an evacuation route; however, Interstate 215 (I-215), located approximately 1.5 miles east of the Project site, and State Route 60, located approximately 1.6 miles east of the Project site, may be utilized for emergency evacuation.

Wildland Fires

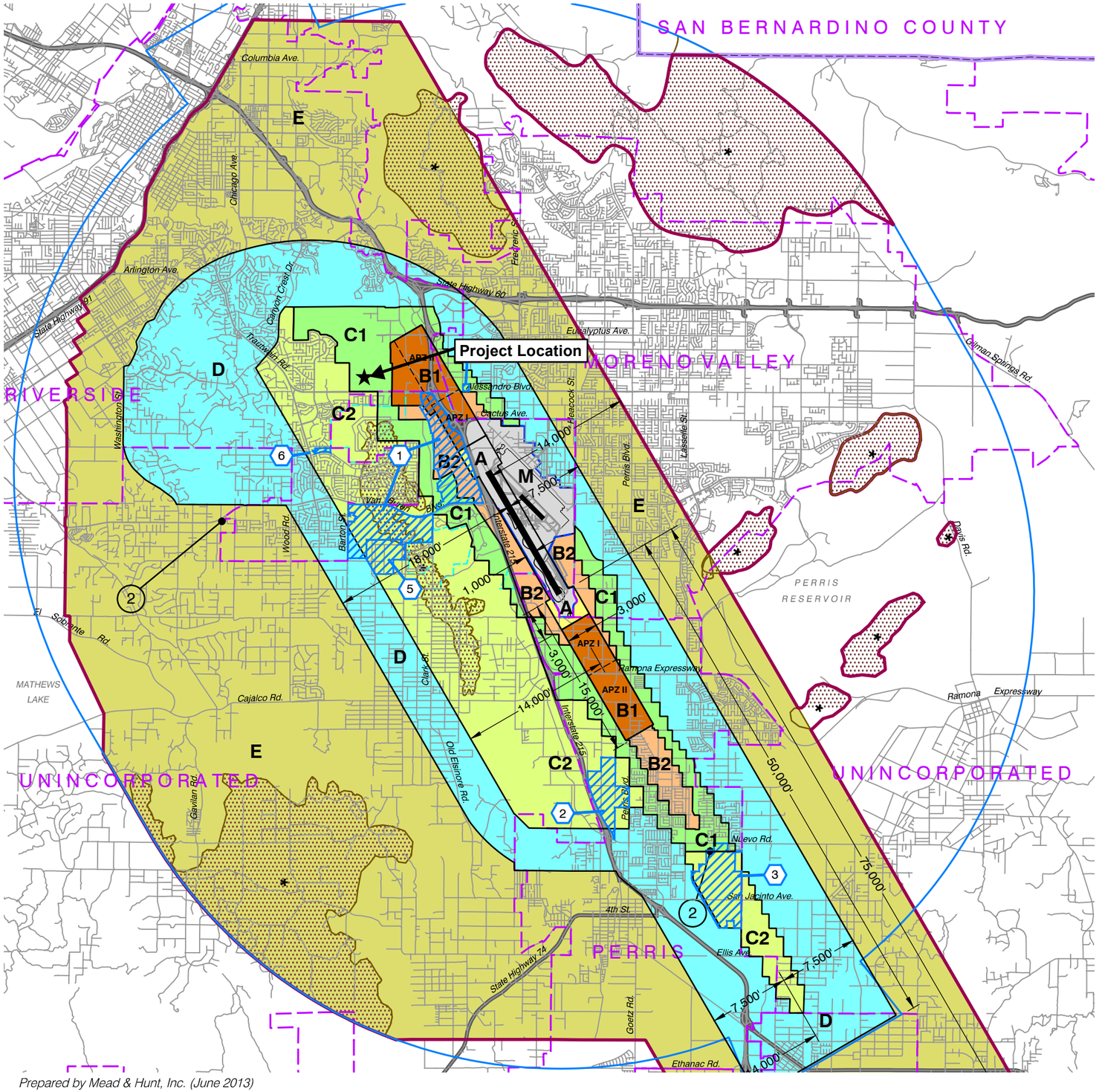
Due to its weather, topography and native vegetation, nearly all of Southern California is at some risk from wildland fires. The extended droughts characteristic of California's Mediterranean climate result in large areas of dry vegetation that provide fuel for wildland fires, which can spread into urban areas. Wildland-urban fires occur when a fire burning in wildland vegetation gets close enough to ignite urban structures. Areas of dense, dry vegetation, particularly in canyon areas and hillsides pose the greatest wildland fire potential. (GP 2025, FPEIR, p. 5.7-13)

The major urban/rural interface areas that are at risk of fire within the City of Riverside include Mount Rubidoux, the Santa Ana River basin, Lake Hills, Mockingbird Canyon/Monroe Hills, Sycamore Canyon, Box Springs Mountain and the La Sierra/Norco Hills (GP 2025, Figure PS-7). The Project site it is partially located within a *Hills and Canyons* area (generally coinciding with the Sycamore Canyon Wilderness Park) as identified in the GP 2025 Public Safety Element, Figure PS-7, Fire Hazard Areas. The Project site falls under the responsibility of RFD in the event of a fire (GP 2025 FPEIR, Figure 5.7-3A).

Airport Land Use Compatibility Zones

The Project site is located approximately 3.4 miles northwest from the March Air Reserve Base (MARB) and is located within MARB's airport influence area boundary. The Project site is located within Zone C1 of the March Air Reserve Base/Inland Port Airport (IPA) Land Use Compatibility Plan (LUCP), as reflected on Figure 5.8-4. Consistency with MARB's airport influence area is determined based on each criterion of the applicable compatibility zone, as shown on Table 5.8-2 – LUCP Compatibility Criteria for Zones C1.

Zone C1 encompasses most of the projected 60 dB CNEL contour plus immediately adjoining areas. The zone boundary follows geographic features. Accident potential risks are moderate because aircraft fly at low altitudes over or near the zone. Even though exposed to projected noise above 60 dB CNEL, the accident potential risks at this distance from the runway are reduced by the altitude at which aircraft fly over the area.



Prepared by Mead & Hunt, Inc. (June 2013)

LEGEND

Compatibility Zones

- Airport Influence Area Boundary
- Zone A
- Zone B1
- Zone B2
- Zone C1
- Zone C2
- Zone D
- Zone E
- Zone M
- High Terrain Zone
- FAR Part 77 Military Outer Horizontal Surface Limits
- FAR Part 77 Notification Area

(1) Point at which aircraft on Runway 32 ILS approach descend below 3,000 feet above runway end. Airport Elevation is 1,535 feet MSL.

(2) Point at which departing aircraft typically reach 3,000 feet above runway end.

Boundary Lines

- March Air Reserve Base / Air Force Property
- March Joint Powers Authority Property Line
- County Boundary
- City Limits
- Site-Specific Exceptions (existing local agency commitments to development projects)

(1) March JPA: March Business Center/Meridian
(2) Perris: Harvest Landing
(3) Perris: Park West
(4) Moreno Valley: Affordable Housing
(5) March JPA: Ben Clark Training Center
(6) Riverside: Ridge Crest Subdivision

Note:
All dimensions are measured from runway ends and centerlines.

Riverside County
Airport Land Use Commission

N

0 2 4 MILES

Base map source: County of Riverside 2013

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March Air Reserve Base/ Inland Port Airport Land Use Compatibility Plan Map

Figure 5.8-4

Table 5.8-2 – LUCP Compatibility Criteria for Zone C1

Zone	Locations	Density/Intensity Standards			Req'd Open Land	Additional Criteria	
		Residential (du/ac)	Other Uses (people/acre)[1]			Prohibited Uses[4]	Other Development Conditions
			Avg[2]	Single[3]			
C1	Primary Approach/ Departure Zone	≤3.0	100	250	None required	• Children's schools, day care centers, libraries • Hospitals, congregate care facilities, places of assembly • Noise-sensitive outdoor nonresidential uses[5] • Hazards to flight[6]	• Critical community infrastructure facilities discouraged[7] • Aboveground bulk storage of hazardous materials discouraged[8] • Sound attenuation as necessary to meet interior noise level criteria[9] • Airspace review required for objects >70 feet tall[10] • Electromagnetic radiation notification[11] • Deed notice and disclosure[12]

[1]Usage intensity calculations shall include all people (e.g., employees, customers/visitors, etc.) who may be on the property at a single point in time, whether indoors or outside.
[2]Average acre density. The total number of people permitted on a project site at any time, except rare special events, must not exceed the indicated usage intensity times the gross acreage of the site. Rare special events are ones (such as an air show at the airport) for which a facility is not designed and normally not used and for which extra safety precautions can be taken as appropriate.
[3]Single acre density. Clustering of nonresidential development is permitted. However, no single acre of a project site shall exceed the indicated number of people per acre. See Countywide Policy 4.2.5 for details.
[4]The uses listed here are ones that are explicitly prohibited regardless of whether they meet the intensity criteria. In addition to these explicitly prohibited uses, other uses will normally not be permitted in the respective compatibility zones because they do not meet the usage intensity criteria. See Riverside County Airport Land Use Compatibility Plan, Volume 1, Appendix D for a full list of compatibility designations for specific land uses.
[5]Examples of noise-sensitive outdoor nonresidential uses that should be prohibited include major spectator-oriented sports stadiums, amphitheaters, concert halls and drive-in theaters. Caution should be exercised with respect to uses such as poultry farms and nature preserves.
[6]Hazards to flight include physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations. Land use development that may cause the attraction of birds to increase is also prohibited. Man-made features must be designed to avoid heightened attraction of birds. Additionally, certain farm crops and farming practices that tend to attract birds are strongly discouraged. Also see Countywide Policy 4.3.7.
[7]Critical community facilities include power plants, electrical substations, and public communications facilities. See Countywide Policy 4.2.3(d).
[8]In Zone C1, aboveground storage of more than 6,000 gallons of hazardous or flammable materials per tank is discouraged.
[9]Office space must have sound attenuation features sufficient to reduce the exterior aviation-related noise level to no more than CNEL 45 dB. To ensure compliance with these criteria, an acoustical study shall be required to be completed for any development proposed to be situated where the aviation-related noise exposure is more than 20 dB above the interior standard (e.g., within the CNEL 60 dB contour where the interior standard is CNEL 40 dB). Standard building construction is presumed to provide adequate sound attenuation where the difference between the exterior noise exposure and the interior standard is 20 dB or less.
[10]This height criterion is for general guidance. Airspace review requirements are determined on a site-specific basis in accordance with Part 77 of the Federal Aviation Regulations. Shorter objects normally will not be airspace obstructions unless situated at a ground elevation well above that of the airport. Taller objects may be acceptable if determined not to be obstructions. The FAA or Caltrans Division of Aeronautics may require marking and/or lighting of certain objects. See Countywide Policies 4.3.4 and 4.3.6 for additional information.
[11]MARB must be notified of any land use having an electromagnetic radiation component to assess whether a potential conflict with MARB radio communications could result. Sources of electromagnetic radiation include microwave transmission in conjunction with a cellular tower, radio wave transmission in conjunction with remote equipment inclusive of irrigation controllers and other similar EMR emissions.
[12]Deed notice requirements indicated for specific compatibility zones apply only to new development and to reuse if discretionary approval is required.

5.8.2 Related Regulations

5.8.2.1 Federal Regulations

A variety of Federal laws and regulations governing the management and control of hazardous substances have been established at the Federal level to protect the environment. Primary Federal agencies with responsibility for hazardous materials management include the United States Environmental Protection Agency (USEPA), United States Department of Labor's Occupational Safety and Health Administration (OSHA), United States Department of Transportation (USDOT), and the Nuclear Regulatory Commission (NRC). Major Federal laws and issue areas include the following statutes and regulations:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

Discovery of environmental health damage from disposal sites prompted the United States Congress to pass CERCLA, also known as Superfund. The purpose of CERCLA is to identify and clean up chemically contaminated sites that pose a significant environmental health threat. The Hazard Ranking System is used to determine whether a site should be placed on the National Priorities List for cleanup activities.

Superfund Amendments and Reauthorization Act

The Superfund Amendments and Reauthorization Act (SARA) pertains primarily to emergency management of accidental releases. It requires formation of state and local emergency planning committees, which are responsible for collecting, material handling, and transportation data for use as a basis for planning. Chemical inventory data are made available to the community at large under the "right-to-know" provision of the law. Additionally, SARA also requires annual reporting of continuous emissions and accidental releases of specified compounds. These annual submissions are compiled into a nationwide Toxics Release Inventory (TRI).

Resource Conservation and Recovery Act

Resource Conservation and Recovery Act (RCRA) Subtitle C addresses hazardous waste generation, handling, transportation, storage, treatment, and disposal. It includes requirements for a system that uses hazardous waste manifests to track the movement of waste from its site of generation to its ultimate disposition. The 1984 amendments to RCRA created a national priority for waste minimization. Subtitle D establishes national minimum requirements for solid waste disposal sites and practices. It requires states to develop plans for the management of wastes within their jurisdictions. Subtitle I requires monitoring and contaminant systems for underground storage tanks that hold hazardous materials. Owners of tanks must demonstrate financial assurance for the cleanup of a potential leaking tank.

Hazardous Materials Transportation Act

The Hazardous Materials Transportation Act (HMTA) is the statutory basis for the extensive body of regulations aimed at ensuring the safe transport of hazardous materials on water, rail,

highways, in the sky, or in pipelines. It includes provisions for materials classification, packaging, marking, labeling, placarding, and shipping documentation.

Federal Aviation Regulations, Part 77

The Federal Aviation Regulations (FAR), Part 77, Objects Affecting Navigable Airspace, establishes standards for determining obstructions to navigable airspace and the effects of such obstructions on the safe and efficient use of that airspace. The regulations require that the Federal Aviation Administration (FAA) be notified of proposed construction or alteration of objects (whether permanent, temporary, or of natural growth) using FAA Form 7460-1 if those objects would be of a height that exceeds FAR Part 77 criteria. Further, FAR Part 77 regulations define a variety of imaginary surfaces at certain altitudes around airports. Surfaces include the primary surface, approach surface, transitional surface, horizontal surface, and conical surface. Collectively, the surfaces around an airport define a bowl-shaped area with ramps sloping up from each runway end. FAR Part 77 standards are not absolute height restrictions, but instead identify elevations at which structures may present a potential safety problem. Penetrations of the FAR Part 77 surface generally are reviewed on a case-by-case basis.

5.8.2.2 State Regulations

At the State level, California has developed hazardous waste regulations that are similar to the Federal laws, but that are more stringent in their application in some cases. The California Environmental Protection Agency (Cal/EPA) has broad jurisdiction over hazardous materials management in the State. Within Cal/EPA, the Department of Toxic Substances Control (DTSC) is the primary State agency with jurisdiction over hazardous chemical materials management. While DTSC has the primary responsibility for enforcement and implementation of hazardous waste control laws in the State, this responsibility is shared with other State and local government agencies, including the State Water Resources Control Board (SWRCB), Regional Water Quality Control Board (RWQCB), and City and County governments. Other State agencies involved in hazardous materials management are the California Department of Industrial Relations' Division of Occupational Safety and Health (Cal/OSHA), California Emergency Management Agency's Accidental Release Prevention (Cal/ARP), California Department of Fish and Wildlife (CDFW), California Air Resources Board (CARB), California Department of Transportation (Caltrans), California Office of Environmental Health Hazard Assessment (OEHHA), and the California Department of Resources Recycling and Recovery (CalRecycle). Hazardous chemical and bio-hazardous materials management laws in California include the following statutes and regulations:

California Code of Regulations

Most State and Federal regulations and requirements that apply to generators of hazardous waste are spelled out in the California Code of Regulations (CCR), Title 22, Division 4.5. Title 22 contains the detailed compliance requirements for hazardous waste generators, transporters, treatment, storage, and disposal facilities. As California is a fully authorized State according to RCRA, most RCRA regulations, such as those contained in 40 Code of Federal Regulations (CFR) 260, et seq., have been duplicated and integrated into Title 22. However, since DTSC regulates

hazardous waste more stringently than USEPA, the integration of State and Federal hazardous waste regulations that make up Title 22 do not contain as many exemptions or exclusions as RCRA. As with the California Health and Safety Code, Title 22 also regulates a wider range of waste types and waste management activities than do RCRA regulations in 40 CFR 260. To aid the regulated community, California compiled the hazardous materials, waste, and toxics-related regulations contained in CCR Titles 3, 8, 13, 17, 19, 22, 23, 24, and 27, into one consolidated CCR Title 26 "Toxics." However, the California hazardous waste regulations are still commonly referred to as Title 22.

California Hazardous Material Management Act

The California Hazardous Material Management Act (HMMA) requires that businesses handling or storing certain amounts of hazardous materials prepare a Hazardous Materials Business Plan (HMBP), which includes an inventory of hazardous materials stored on site above specified quantities, an emergency response plan, and an employee training program. Businesses that use, store, or handle 55 gallons of liquid, 500 pounds of a solid, or 200 cubic feet of a compressed gas at standard temperature and pressure require HMBPs. Plans must be prepared prior to facility operation and are reviewed/updated biennially or within 30 days of a change.

California Hazardous Waste Control Law

California Hazardous Waste Control Law (HWCL). HWCL is the primary hazardous waste statute in the State. HWCL requires a hazardous waste generator, which stores or accumulates hazardous waste for periods greater than 90 days at an on-site facility or for periods greater than 144 hours at an off-site or transfer facility that treats or transports hazardous waste, to obtain a permit to conduct such activities. HWCL implements RCRA as a "cradle-to-grave" waste management system in the State. HWCL specifies that generators have the primary duty to determine whether their wastes are hazardous and to ensure their proper management. HWCL also establishes criteria for the reuse and recycling of hazardous wastes used or reused as raw materials. HWCL exceeds Federal requirements by mandating source reduction planning and a much broader requirement for permitting facilities that treat hazardous waste. It also regulates the number of types of wastes and waste management activities that are not covered under Federal law with RCRA.

State Aeronautics Act

The State Aeronautics Act, which is codified in Public Utilities Code Section 21670, et seq., establishes the requirement for the creation of airport land use commissions for every county in which an airport is located that is served by a scheduled airline. Additionally, these sections of the Public Utilities Code mandate the preparation of Comprehensive Land Use Plans (CLUP) to provide for the orderly growth of each public airport and the area surrounding the airport. The purpose of CLUPs includes the protection of the general welfare of inhabitants within the vicinity of the airport and the general public.

California Emergency Services Act

California Government Code 8550-8692 provides for the assignment of functions to be performed by various agencies during an emergency so that the most effective use may be made of all manpower, resources, and facilities for dealing with any emergency that may occur. The coordination of all emergency services is recognized by the State to mitigate the effects of natural, manmade, or war-caused emergencies that result in conditions of disaster or extreme peril to life, property, and the resources of the State. The general purpose is to protect the health and safety and preserve the lives and property of the people of the State.

California Division of Occupational Safety and Health

Occupational safety standards exist in Federal and State laws to minimize worker safety risks from both physical and chemical hazards in the workplace. The California Division of Occupational Safety and Health (Cal/OSHA) is responsible for developing and enforcing workplace safety standards and assuring worker safety in the handling and use of hazardous materials. Among other requirements, Cal/OSHA obligates many businesses to prepare Injury and Illness Prevention Plans and Chemical Hygiene Plans. The Hazard Communication Standard requires that workers be informed of the hazards associated with the materials they handle.

California Building Code

The California Building Standards Code (CBC), in Part 2 of Title 24 of the California Code of Regulations (CCR), identifies building design standards, including those for fire safety. The CBC is based on the International Building Code but has been amended for California conditions. The CBC is updated every three years, and the current 2019 CBC went into effect January 1, 2020. It is effective statewide, but a local jurisdiction may adopt more restrictive standards based on local conditions under specific amendment rules prescribed by the State Building Standards Commission. Commercial and residential buildings are plan-checked by local city and county building officials for compliance with the CBC. Typical fire safety requirements of the CBC include the installation of fire sprinklers in new construction (unless otherwise exempt or using alternative fire suppression systems); the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas.

California Fire Code

The CFC, contained in Part 9 of CCR Title 24, incorporates by adoption the International Fire Code of the International Code Council, with California amendments. The CFC is updated every three years, and the current 2019 CFC went into effect January 1, 2020. It is effective statewide, but a local jurisdiction may adopt more restrictive standards based on local conditions under specific amendment rules prescribed by the State Building Standards Commission. The CFC regulates building standards in the CBC, fire department access, fire protection systems and devices, fire and explosion hazards safety, hazardous materials storage and use, and standards for building inspection.

5.8.2.3 Regional Regulations

Riverside County Hazardous Waste Management Plan

The Riverside County Hazardous Waste Management Plan (CHWMP) identifies current and projected future hazardous waste generation and management needs throughout the County. CHWMP also provides a framework for the development of facilities to manage hazardous wastes, i.e., facility siting criteria, and includes a Households Hazardous Waste Element that is designed to divert household hazardous wastes from County landfills. CHWMP addresses only those hazardous waste issues with which local governments have responsibilities, namely land use decisions. The County and cities are required to implement facility siting policies and criteria within local planning and permitting processes. Accordingly, the City of Riverside implements applicable portions of CHWMP.

March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan

The Riverside County Airport Land Use Commission (ALUC) is the lead agency responsible for airport land use compatibility planning in Riverside County. The fundamental purpose of ALUC is to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses. The basic function of the airport land use compatibility plans is to promote compatibility between airports and the land uses that surround them. Compatibility plans serve as a tool for use by airport land use commissions in fulfilling their duty to review proposed development plans for airports and surrounding land uses. Additionally, compatibility plans set compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances and to landowners in their design of new development. On November 13, 2014, ALUC adopted the March Air Reserve Base (MARB)/Inland Port Airport (IPA) Land Use Compatibility Plan (LUCP). The compatibility zones and associated criteria set forth in the LUCP provide noise and safety compatibility protection.

5.8.2.4 Local Regulations

Riverside General Plan 2025

The GP 2025 contains objectives and policies to protect against public safety issues within the City in the Public Safety Element. Policies that may be applicable to the Project include:

Objective PS-3: Minimize risks associated with the storage, transport and disposal of hazardous materials.

Policy PS-3.1: Ensure that the hazardous materials used in business and industry are handled properly.

Policy PS-3.4: Reduce the risks associated with ground transportation hazards, where feasible.

Objective PS-4: Protect the community from hazards related to air and ground transportation.

Policy PS-4.1: Minimize the risk of potential hazards associated with aircraft operations at the Riverside Municipal Airport, March Air Reserve Base/ March Inland Port and Flabob Airport

through the adoption and implementation of the Airport Protection Overlay Zone, and the Riverside County Airport Land Use Compatibility Plan, which includes the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan.

Policy PS-4.2: When planning for development near airports, anticipate possible increases in airport activity and expansion of airport facilities and services and the effects these changes may have on public safety.

Policy PS-4.3: Encourage development in the vicinity of the Riverside Municipal Airport that would not cause land use conflicts, hazards to aviation or hazards to the public and that is in compliance with the Riverside County Airport Land Use Compatibility Plan for the airport.

Policy PS-4.6: Ensure that development within airport influence areas is consistent with the Airport Protection Overlay Zone development standards and the Riverside County Airport Land Use Compatibility Plan, which includes the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan.

Policy PS-4.7: Ensure compatible land uses near March Air Reserve Base/March Inland Port through implementation of the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, adopted in November 2014.

Riverside Municipal Code

Section 9.48 of the Riverside Municipal Code requires that any person who uses or handles hazardous materials or mixtures containing hazardous materials in an amount equal to, or greater than: (i) five hundred pounds, (ii) fifty-five gallons, (iii) two hundred cubic feet at standard room temperature and pressure for compressed gas, (iv) ten pounds for organic peroxides, or (v) any known or suspected carcinogen, radioactive material, Class A poison, Class A or Class B explosive, shall, during the month of January prepare and submit a completed inventory form and file a hazardous materials business plan with the City Fire Department. Although Project is a speculative development and the tenants are unknown at this time, future tenants that plan to use or handle hazardous materials is required to prepare and submit a completed inventory form and file a hazardous materials business plan with the City Fire Department in accordance with Section 9.48 of the RMC.

Title 16 of the Riverside Municipal Code – Buildings and Construction provides minimum standards to safeguard life or limb, health, property and public welfare by regulating the design, construction, quality of materials, use and occupancy, location and maintenance of buildings, equipment, structures and grading within the City. The proposed warehouse buildings shall be constructed in accordance with Title 16 or the RMC. A permit may be withheld or denied if the Building Official finds there are existing on site violations of the provisions of Chapter 16.04 through 16.20 or any other ordinance of the City.

Title 17 of the Riverside Municipal Code sets forth rules and regulations which will further implement the goals, and objectives of the GP 2025 in order to control evacuation, grading, and earthwork construction. In addition, Title 17 establishes the administrative procedures for grading plan approval, issuance of permits, inspections, and penalties for unauthorized grading activity. With regard to blasting, Title 17 states that no person shall do any excavation blasting without a permit from the Fire Chief, and the conditions contained in the grading permit shall become

conditions of the excavation blasting permit As outlined in the Project Description (Section 3.2.2), it is anticipated that excavation of decomposed granite may be performed utilizing conventional earthmoving equipment. Blasting will not be required and is not proposed as part of the Project site preparation activities.

Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan (SCWP SKRMP)

The SCWP SKRMP was prepared with two purposes: update the park's conceptual development plan and provide a coordinated Maintenance/Management Plan for the endangered Stephens' kangaroo rat (SKR). Because the Sycamore Canyon Wilderness Park was designated as a core reserve in the Habitat Conservation Plan (HCP) for the SKR, the City was required to prepare a Maintenance/Management Plan for the core reserve. (SCWP SKRMP, p. 1). The SCWP SKRMP considers fire from two different perspectives: control of wildland fire and fire as a management tool. This plan also examines a variety of alternatives for trailheads, edge treatments, and interpretive day-use facilities that will avoid impacts to the SKR habitat. (SCWP SKRMP, p. 163). Refer to Section 5.15 Wildfire for additional details related to the SCWP SKRMP.

5.8.3 Project Design Considerations

Although the Project is not within a Moderate, High or Very High Fire Hazard Severity Zone it is partially located within a *Hills and Canyons* area (generally coinciding with the Sycamore Canyon Wilderness Park) as identified in the GP 2025 Public Safety Element, Figure PS-7, Fire Hazard Areas.

As part of the Project design features, the Project will provide for the safety of on-site employees, customers, and visitors, as well as RFD and will provide for the safe handling of any potential occurrences of hazardous materials that may be encountered during Project construction.

The Project will provide adequate fire access to ensure the safety of on-site building occupants as well as RFD. Building A fire access will be on the south side of the Project site located on Driveway 2/Vista Grande Drive and Alessandro Boulevard, and Building B fire access will be on the west side of the Project site located on Driveway 1 and Barton Street. Buildings A and B will both provide fire access and fire access lanes that will leave room for fire trucks to come in and out of the Project and will allow them to reach all areas of the Project site in the event of a fire. Building A and Building B will have a 26-foot-wide fire access lane (refer to Figure 3.0-9 – Site Plan), which would allow room for fire trucks to easily navigate through the planned development. The Project's buildings will be outfitted with sprinkler systems as a means of further protecting the structures from potential wildfire impacts. A fire truck access gate will be located on the east side of Building A, to provide access to the existing trail that extends east from the Project site. A fire department access gate will be provided at the terminus of Barton Street and the entrance to Sycamore Canyon Wilderness Park, as shown on the site plan (Figure 3.0-9). There is an existing gate at the current terminus of Barton Street to control vehicle access to the park and it will be removed and replaced with a new access gate at the new terminus of Barton Street constructed as part of this Project.

The edge treatment between Building A in Parcel 1 and the Sycamore Canyon Wilderness Park includes an 8-foot high concrete wall and landscaping with fire resistant groundcover, shrubs and columnar trees, consistent with the SCWP SKRMP. The edge treatment between Building B in Parcel 2 includes a 4-foot high wall with 4-foot high tubular steel fence on top along with landscaping that includes fire resistant groundcover, shrubs and columnar trees, also consistent with the SCWP SKRMP. The proposed trailhead parking lot (Parcel C, approximately 1.18 acres) provides an additional set back with landscaping and buffer from the Sycamore Canyon Wilderness Park boundary. The concrete walls, fire resistant landscaping, and set-backs between the wilderness park boundary and the buildings all reduce the risk of fires spreading to the park from the Project site or from the Project site to the park.

In addition, the Project will include risk-reduction design measures due to the Project site's proximity to MARB. Such risk-reduction design measures include:

- The project will not include:
    - Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light, visual approach slope indicator, or FAA-approved obstruction lighting;
    - Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport;
    - Any use which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area;
    - Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation; or
    - Children's schools, day care centers, libraries, hospitals, skilled nursing and care facilities, congregate care facilities, places of assembly, noise sensitive outdoor nonresidential uses and hazards to flight.
- The following deed notice and disclosure text will be provided to all potential purchasers of the Project site property and tenants of the buildings:

  NOTICE OF AIRPORT IN VICINITY. This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase

and determine whether they are acceptable to you. Business & Professions Code Section 11010(b)(13)A).

- Any outdoor lighting that is installed will be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky. All outdoor lighting will be downward facing:
- The applicant does not propose any uses prohibited or discouraged in Compatibility Zones C1.

5.8.4 Thresholds of Significance

The City's has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance thresholds in Appendix G ("Environmental Checklist") of the State CEQA Guidelines. The following threshold was determined to be less than significant and therefore scoped out from further analysis in this EIR: Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The Environmental Checklist prepared by the City of the Project (see Appendix A of this document) indicates that impacts related to the Sycamore Hills Distribution Center Project may be considered potentially significant if the proposed Project would:

- (Threshold A) create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials,
- (Threshold 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,
- (Threshold C) emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school,
- (Threshold D) 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,
- (Threshold E) for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area,
- (Threshold F) expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

5.8.5 Environmental Impacts

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?*

Construction of the Project may involve the limited transport of fuels, lubricants, and various other liquids for operation of construction equipment. Deliveries to the Project site would likely come from the Ports of Long Beach and Los Angeles as well as other locations. Overall construction is anticipated to last approximately 15 months, so any hazardous materials used in construction would not be onsite for more than approximately 15 months. The construction contractor would be required to dispose of construction waste in accordance with all federal, state and local regulations. Due to the limited quantities used in construction and the limited timing or nature of construction, use of hazardous materials including fuels, lubricants, paint products and solvents during construction is not anticipated to create a significant hazard to the public or the environment through transport, use, or disposal of these materials.

There is potential that commonly used hazardous materials such as petroleum products, pesticides, fertilizer, and other household hazardous products such as paint products, solvents, and cleaning products may be stored, used, and transported in conjunction with the proposed warehouse uses. As outlined in the Project Description (Section 3.0), the Project proposes warehouse uses that are anticipated to be for short-term storage and/or consolidation of end products or goods, and to a lesser extent, raw materials. These goods are usually stored on pallet loads or larger handling products in the warehouses prior to their distribution to retail locations or other warehouses. Warehouse uses are not anticipated to store, use, or transport any commonly used hazardous materials in large quantities in which an accidental spill could not be quickly and efficiently cleaned up and therefore could be a hazard to the public or environment.

The proposed use of the Project's warehouses is not for manufacturing. Manufacturing uses could include the manufacturing of chemical products that due to either the nature of the chemical or in large quantities could be hazardous if accidentally spilled or released. A manufacturing use of the site, if the manufacturing was of chemical products, could increase the risk of potential hazards to the public or the environment due to the increased volumes on site, as compared to warehouse uses with minimal. As manufacturing uses are permitted under the provisions of the Zoning Code and Specific Plan, implementation of **Mitigation Measure MM AIR-1** would not allow this use and reduce the higher risk of hazardous materials associated with a manufacturing use. Mitigation Measure **MM AIR-1** states the project applicant is required to record a covenant on the property (Parcels 1 and 2) that prohibits manufacturing use and that proof of the record of covenant shall be submitted to the City of Riverside Planning Department prior to issuance of Building Permits.

Exposure of persons to hazardous materials could occur in the following manners: improper handling or use of hazardous materials or hazardous wastes during warehouse operations, particularly by untrained personnel; transportation accident; environmentally unsound disposal methods; or fire, explosion or other emergencies. The types and amounts of hazardous materials would vary according to the nature of the activity. In some cases, it is the type of hazardous material that is potentially hazardous; in others, it is the amount of hazardous material that could present a hazard.

Whether a person exposed to a hazardous substance would suffer adverse effects depends upon a complex interaction of factors that determine the effects of exposure to hazardous materials: the exposure pathway (the route by which a hazardous material enters the body); the amount of

material to which the person is exposed; the physical form (e.g., liquid, vapor) and characteristics (e.g., toxicity) of the material; the frequency and duration of exposure; and the individual's unique biological characteristics such as age, gender, weight, and general health.

Although the overall quantity of hazardous materials present and in use in the Project area may increase as a result of implementation of the proposed Project, all new development that will handle or use hazardous materials would be required to comply with the regulations, standards, and guidelines established by USEPA, the State, County and the City, related to storage, use, and disposal of hazardous materials.

Both the Federal and State governments require all businesses that handle more than a specified amount of hazardous materials to submit a hazardous material business plan (HMBP) for business operations to a regulating agency. HMBPs are designed to be used by responding agencies for a quick and accurate evaluation of each situation for an appropriate response and would include an inventory of the hazardous materials used in the facility as well as emergency response plans and procedures to be used in the event of a significant or threatened significant release of a hazardous material.

Specifically, the state requires an owner or operator of a facility to complete and submit a HMBP if the facility handles a hazardous material or mixture containing a hazardous material that has a quantity at any one time during the reporting year equal or greater than:

- 55 gallons, 500 pounds, or 200 cubic feet at standard temperature and pressure for a compressed gas;
- The applicable Federal threshold planning quantity (TPQ) for an extremely hazardous substance (EHS) listed in Appendix A, Part 355, Title 40, of the Code of Federal Regulations; or
- Amounts of radioactive materials requiring an emergency plan pursuant to Parts 30, 40, or 70 of Chapter 1 of Title 10 of the Code of Federal Regulations.

The Federal government requires owners and operators of a facility to complete and submit an emergency and hazardous chemical inventory form annually, known as the Tier II form, if the facility handles at a minimum or greater:

- 500 pounds (or 227 kilograms – approximately 55 gallons) or applicable Federal threshold quantities for extremely hazardous substances listed in 40 CFR Part 355, Appendix A and B and hazardous chemicals, whichever is lower;
- 10,000 pounds of a hazardous chemical that is not an extremely hazardous substance;
- 75,000 gallons of gasoline; or
- 100,000 gallons of diesel.

Any new business that meets the specified criteria would be required to submit a full hazardous materials disclosure report that would include an inventory of the hazardous materials generated, used, stored, handled, or emitted and emergency response plans and procedures to be used in

the event of a significant or threatened significant release of a hazardous material. The plan would need to identify the procedures to follow for immediate notification to all appropriate agencies and personnel in the event of a release, identification of local emergency medical assistance appropriate for potential accident scenarios, contact information for all company emergency coordinators of the business, a listing and location of emergency equipment at the business, an evacuation plan, and a training program for business personnel.

as a result of oversight by the appropriate Federal, State, and local agencies, and compliance with applicable regulations related to the handling and storage of hazardous materials by the proposed warehouses, the risk of the public's potential exposure to hazardous substances are **less than significant with mitigation.** In order to ensure that manufacturing uses are not permitted, because they have not been analyzed, **Mitigation Measure MM AIR-1** is required.

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?*

The transportation of hazardous materials can result in accidental spills, leaks, toxic releases, fire, or explosion. It is possible that licensed vendors could bring some hazardous materials to and from the site as a result of the proposed Project. However, appropriate documentation for all hazardous waste that is transported in connection with specific Project-site activities would be provided in compliance with existing hazardous materials regulations codified in Titles 8, 22, and 26 of the CCR, and their enabling legislation set forth in Chapter 6.95 of the CHSC. In addition, future users would be required to comply with all applicable Federal, State, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste, including but not limited to the USDOT Office of Hazardous Materials Safety Title 49 of the CFR, and implemented by Title 13 of the CCR which prescribes strict regulations for the safe transportation of hazardous materials. Compliance with the applicable Federal and State laws related to the transportation of hazardous materials would reduce the likelihood and severity of accidents during transit; therefore, impacts would be less that significant.

Hazardous materials are required to be stored in designated areas designed to prevent accidental release to the environment. The CFC requirements prescribe safe accommodations for materials that present a moderate explosion hazard, high fire or physical hazard, or health hazards. Compliance with all applicable Federal and State laws related to the storage of hazardous materials would maximize containment and provide for prompt and effective clean-up if an accidental release occurs.

The Project's ESA found no potential hazardous substances or industrial hazardous waste impacts, nor was there any evidence that hazardous substances or petroleum products above *de minimus* quantities existed on the Project site. Further, the EDR report findings of LUSTs within the vicinity of the Project site found no indication of problems or violations at eight of the 14 sites, while the remaining six sites were listed as "Completed – Case Closed" indicating satisfactory cleanup of the spill. Regardless, these sites are not within the Project's property and none of the

reports found by the EDR or Geotracker searches raise an environmental concern for the Project site.

Thus, because future use will be subject to Federal, State, and local regulations, potential impacts related to the creation of a significant hazard to the public or the environment through reasonably foreseeable upset and accidental conditions involving the release of hazardous materials into the environment are **less than significant.**

Threshold C: *Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

The Project site is not located within a quarter-mile of an existing or proposed school site. The schools nearest the Project site are: 1) Taft Elementary School, located at 959 Mission Grove Parkway North in the City of Riverside (approximately 1.2 miles northwest of the Project site); and 2) John F. Kennedy Elementary School, located at, 19125 Schoolhouse Lane, in the City of Riverside (approximately 1.9 miles southwest of the Project site). As both schools are located over one-quarter mile away from the Project site, potential impacts would be **less than significant**.

Threshold D: *Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?*

The Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (CalEPA 2020). Further, as discussed above, the EDR report findings of LUSTs within the vicinity of, but not within, the Project site found no indication of problems or violations at eight of the 14 sites, while the remaining six sites were listed as "Completed – Case Closed" indicating satisfactory cleanup of the spill. None of the reports found by the EDR or Geotracker searches raise an environmental concern for the Project site. Potential impacts would be **less than significant**.

Threshold E: *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

Site Consistency

The Project site is located within the MARB/IPA LUCP. Consistency is determined by each criterion of the applicable compatibility zone. The Project site is located within Zone C1 of the LUCP, as reflected on Figure 5.8-4. The MARB/IPA LUCP identifies prohibited and discouraged uses within each land use compatibility zone as well as density/intensity standards, and open land requirements as reflected in Table 5.8-2 – LUCP Compatibility Criteria for Zone C1.

The Project will consist of light industrial activities, which are uses permitted within Zone C1. Zone C1 discourages above ground storage of more than 6,000 gallons of hazardous or flammable materials per tank. However, no above ground storage tanks are proposed as part of the Project.

Building Height

Zone C1 requires airspace review for structures over 70 feet in height (MARB/IPA LUCP, p. 10). FAR Part 77 establishes standards for determining obstructions to navigable airspace and the effects of such obstructions on the safe and efficient use of that airspace. Objects exceeding FAR Part 77 height limits require an FAA obstruction evaluation review. According to the MARB/IPA LUCP, objects over 70 feet tall within Zone C1 require airspace review in accordance with FAR Part 77. Both Building A and Building B would have maximum building heights of 45 feet, including parapets. Thus, the proposed buildings would not exceed the FAR Part 77 height limits of structures over 70 feet in height. In addition, the FAA staff has reviewed project information under the provisions of Title 14 of the Code of Federal Regulations, part 77 for Buildings A and B and issued determinations of *No Hazard to Air Navigation* based on the following building heights: Building A, with 1596 feet site elevation (SE), 45 feet above ground level (AGL) and 1641 feet above mean sea level (AMSL); and Building B, with 1609 feet SE, 45 feet AGL, and 1654 AMSL. Thus, potential impacts would be **less than significant**.

Building Occupancy

Building A and Building B will be subject to the intensity requirements of Zone C1 of ALUC Per Person Average Acre Maximum Occupancy of 100 and ALUC Per Person Single Acre Maximum Occupancy of 250 for warehouse use. Occupancy calculations for the proposed Project utilized Appendix C[1], *Methods for Determining Concentrations of People*, of the *Riverside County Airport Land Use Compatibility Plan Policy Document*, Table C1-*Occupancy Levels, California Building Code, adopted December 2004,* and are shown in Table 5.8-3 below. As shown on Table 5.8-3 – Proposed Project ALUC Occupancy Level Calculations, the maximum occupancy requirements of the C1 Zone will not be exceeded.

[1]http://www.rcaluc.org/Portals/13/PDFGeneral/plan/newplan/23-%20Appendix%20C.%20Determining%20Concentrations%20of%20People.pdf

Table 5.8-3 – Proposed Project ALUC Occupancy Level Calculations

Building	ALUC Calculation for C1 Zone	ALUC Maximum Occupancy	Minimum Square Feet (SF) per Occupant[2] Calculation	Proposed Project Persons
Building A	Per Person Average Acre	100 persons	Office SF: 10,000/100 = 100 people Warehouse SF: 390,000/500 = 780 people 880 total people/ 24.31 acres = 36	36
Building A	Per Single Acre	250 persons	(210 x 210) SF/ 200 = 221 people	221
Building A	Per Person Single Acre Parking Ratio	100 persons	388 auto stalls x 1.5 persons per stall = 935 persons / 34.63 acres = 24.31	24
Building B	Per Person Average Acre	100 persons	Office SF: 10,000/100 = 100 people Warehouse SF: 193,100/ 500 = 386 people 486 total people / 10.32 acres = 47	47
Building B	Per Single Acre	250 persons	(210 x 210) SF/ 200 = 221 people	221
Building B	Per Person Single Acre Parking Ratio	100 persons	235 auto stalls x 1.5 persons per stall = 353 persons / 10.32 acres = 34.21	34

Noise

Each airport has also established Community Noise Equivalent Level (CNEL) contours that reflect noise exposure in decibels (dB) to the surrounding area created by aircraft activity. MARB/IPA has three noise contours, which are 65 dB CNEL, 60 dB CNEL, and 55 dB CNEL, with 65 dB CNEL representing the highest noise exposure contour which is found closer to the airport runway. The MARB/IPA LUCP identifies compatibility criteria for noise as identified in Table 5.8-4 – MARB/IPA Compatibility Zone Factors for Zone C1 below.

Table 5.8-4 – MARB/IPA Compatibility Zone Factors for Zone C1

Zone	Location	Noise and Overflight Factors	Safety and Airspace Protection Factors
C1	Primary Approach / Departure Zone	Noise Impact: Moderate to High • Within or near 60-CNEL contour • Single-event noise may be disruptive to noise-sensitive land use activities; aircraft <2,000 feet above runway elevation on arrival and generally <3,000 feet above runway elevation on departure	*Risk Level: Moderate* • Beneath or adjacent to low altitude overflight corridors

Building A and Building B are located within Zone C1, which is within or near the 60-CNEL contour. The Project is located within an airport land use plan and partially within the Community Noise Equivalent Level (CNEL) contour designation of 60 CNEL airport noise contour area of the March Air Reserve Base (ARB). The maximum threshold for the proposed industrial warehouse use is 70 dBA. Because the noise contour level for the Project site is found to be a normally acceptable level for the proposed use of the Noise Element of the General Plan 2025, impacts related to exposure of people working in an airport land use plan area to excessive noise is considered **less than significant.**

Plan Consistency

In general, a review from ALUC is required when a major project is located within the boundaries of an Airport Influence Area and the local jurisdiction's General Plan has not yet been found consistent with the appropriate Airport Land Use Compatibility Plan, or when a local jurisdiction processes a legislative action such as a General Plan Amendment, Specific Plan Amendment, or Zone Change . Since the Project is consistent with ALUC and the GP 2025, and the project does not require a General Plan Amendment, Specific Plan Amendment, or Zone Change , the Project does not require ALUC review. In response to receipt of the Notice of Preparation for this Project, ALUC staff indicated that ALUC review was not required. Therefore, potential impacts would be **less than significant.**

Threshold F: *Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

As discussed, the Project site is not within a VHFHSZ although it is partially located within a *Hills and Canyons* area. Nonetheless, the Project would be required to comply with applicable CFC, GP 2025, and City Guideline requirements such as fire breaks, sprinklers, walls, emergency access roads, etc. The Project site will be landscaped with fire-resistant landscape, drought-tolerant and climate appropriate trees, shrubs, and ground cover that will meet or exceed the City's requirements. Additionally, the Project site is within approximately 2.5 miles of two fire stations, Fire Station 9 – Canyon Crest (6674 Alessandro Boulevard) and Fire Station 13 – Box Spring Station (6490 Sycamore Canyon Boulevard), which would provide adequate response times to the Project site.

Although the Project is allowing more accessibility to areas with the potential for fire risk/hazard, the Project will include necessary and adequate fire access for RFD to access the site and adjacent Sycamore Canyon Wilderness Park and for occupants (workers/employees) to leave the site in case of a fire. With the proposed development of Parcel 1 and associated fire lane and gate access along the parcel's eastern side, it would provide improved access for the Fire Department from Alessandro Boulevard to Sycamore Canyon Wilderness Park.

Additionally, the Project would comply with all CBC and CFC fire safety codes and regulations to further minimize the potential risk for a wildfire. The SCWP SKRMP also identifies appropriate edge treatments between the wilderness park and the Project site. Fencing and walls around the Project site have been designed to be compliant with requirements in the SCWP SKRMP. With

adherence to RFD practices, Project design considerations, and the Project compliance existing codes and policies, impacts involving wildland fires **would be less than significant.**

5.8.6 Proposed Mitigation Measures

MM AIR-1: The project applicant is required to record a covenant on the property (Parcels 1 and 2) that prohibit manufacturing. Proof of the record of covenant shall be submitted to the City of Riverside Planning Department prior to issuance of Building Permits.

5.8.7 Cumulative Environmental Effects

Hazardous Materials

The geographic context for cumulative impacts relative to the use of hazardous materials is considered to be the city limits and the surrounding areas, in the City of Moreno Valley and the County of Riverside, in which listed cumulative development projects are located. The Project, along with the cumulative development projects, may routinely transport, use, store, or dispose of hazardous materials and universal wastes. However, even though at this time no specific or known end user has been identified for the Project, Riverside Municipal Code, Chapter 9.48 requires businesses to disclose storage and handling of hazardous materials and hazardous waste, to establish and implement emergency response plans, and to cooperate in periodic reporting and inspections. Although the overall quantity of hazardous materials and waste generated in the City and the areas in which cumulative projects are located may increase as a result of implementation of the Project in combination with the cumulative development projects, all new development that will handle or use hazardous materials and all existing development that handles or uses hazardous materials are required to comply with the regulations, standards, and guidelines established by the EPA, the State of California, County of Riverside, and the City of Riverside related to storage, use, and disposal of hazardous materials.

Because the Project is in compliance with federal, State, and local regulations, standards, and guidelines, the Project would have less than significant impacts related to hazardous material, it would not contribute to cumulatively considerable impacts. With respect to the cumulative development projects (See Table 4.0-1 Summary of Cumulative Projects and Figure 4.0-1 Cumulative Development Location Map), each of these projects will be required to evaluate its own project-specific potential impacts and will also be required to comply with all applicable Federal, State, and local regulations governing the use, handling, storage and transport of hazardous materials and other hazards. Since hazardous materials and risk of upset conditions are largely site-specific, this would occur for each individual project affected, in conjunction with development proposals on these properties, and develop project specific mitigation measures to reduce potential impacts to less than significant levels, and as such would not contribute to cumulatively considerable impacts either. In light of the existing regulatory framework governing the storage and use of hazardous materials and waste, the Project's cumulative impact related to hazard and hazardous materials **is less than significant**, and the Project's contribution is not

considered cumulatively considerable. Therefore, cumulative impacts with regard to hazardous materials are **less than significant**.

Airport Land Use Compatibility

Cumulative development projects that do not meet all criteria set forth in the LUCP would be anticipated to contribute to a cumulative aviation hazard impact, and cumulative development projects within the Compatibility Zones, that do not meet all criteria set forth in the LUCP are subject to review by the Riverside County ALUC. ALUC may, as part of its review, impose height, use and lighting restrictions on development to reduce the potential impacts associated with aviation use the MARB/IPA from individual development projects to less than significant levels. Other cumulative projects (as listed in Table 4.0-1 and shown on Figure 4.0-1) proposed within the MARB/IPA LUCP would meet all criteria set forth in the LUCP, and if not, would be independently reviewed by ALUC and additional project design features or mitigation to ensure compliance with MARB/IPA LUCP policies would be imposed.

Because the Project is consistent with the MARB/IPA LUCP and would implement and additional safety design features to reduce project specific impacts to less than significant levels, implementation of the proposed Project would not contribute to cumulatively considerable impacts associated with operations at MARB and would not result in a safety hazard to people meeting or working in the Project area. The other cumulative projects would either meet the criteria set forth in the LUCP or be required to implement design features or mitigation measures for compliance with LUCP policies, and therefore, would not be anticipated to contribute to cumulatively considerable impacts either. For these reasons, the Project's contribution is not considered cumulatively considerable and cumulative impacts with regard to a safety hazard associated with an airport would be **less than significant**.

Wildfire

The Project site is not within a VHFHSZ, although it is partially located within a *Hills and Canyons* area. With compliance with applicable CBC and CFC standards and General Plan policies, implementation of the Project, combined with other development in the City and County, would not result in increased exposure to wildfire risks. Furthermore, cumulative projects would not result in permanent road closures, nor impede an established emergency or evacuation access route, or interfere with emergency response requirements, such as fire protection response time standards established by GP 2025. The Project is surrounded by mostly urban development and served by existing infrastructure. It would not contribute incrementally with other projects in the Cities of Riverside and Moreno Valley and Riverside County to create an environment that could exacerbate wildfire risks. Cumulative wildfire hazard impacts would be **less than significant**. (Additional analysis is provided in Section 5.15 Wildfire).

5.8.8 References

The following references were used in the preparation of this section of the DEIR:

ESA	EARSI, *Phase I Environmental Site Assessment (Updated Site Inspection)*, October 2018, June 2020.
GP 2025	City of Riverside, General Plan 2025, certified November 2007 with subsequent amendments to various elements. (Available at http://www.riversideca.gov/planning/gp2025program/general-plan.asp, accessed January 2020)
GP 2025 FPEIR	City of Riverside, General Plan 2025 Program Environmental Impact Report (SCH# 2004021108), certified November 2007. (Available at http://www.riversideca.gov/planning/gp2025program/, accessed January 2020)
MARB/IPA DEIR	Riverside County Airport Land Use Commission, March Air Reserve Base / Inland Port Airport Land Use Compatibility Plan, adopted November 13, 2014. (Available at http://www.rcaluc.org/Portals/13/PDFGeneral/plan/2014/Draft%20EIR%20for%20March%20ALUCP.pdf, accessed February 2021)
MARB/IPA LUCP	Riverside County Airport Land Use Commission, March Air Reserve Base / Inland Port Airport Land Use Compatibility Plan, adopted November 13, 2014. (Available at http://www.rcaluc.org/Portals/13/PDFGeneral/plan/2014/17%20-%20Vol.%201%20March%20Air%20Reserve%20Base%20Final.pdf, accessed February 2021)
RFD PD	City of Riverside Fire Department, Emergency Management Disaster Preparedness, Web site. (Available at http://www.riversideca.gov/fire/disasterpreparedness.asp, accessed January 2020)

5.9 Hydrology and Water Quality

Based on Appendix G of the *State CEQA Guidelines*, the analysis in the Initial Study (IS/NOP) prepared for this Project (Appendix A), and comments received during the NOP public comment period, this section evaluates the Project's potential impacts related to hydrology and water quality.

The following discussion is based on the *Project Specific Water Quality Management Plan* (WQMP, Appendix J) prepared by REC Consultants, Inc. in July 2019 and updated in March 2020, the *Jurisdictional Delineation Report* prepared by Wood December 2020 (Appendix D), and the *Geotechnical Engineering Investigation* prepared by NorCal Engineering dated March 2019 and updated in September 2020 (Appendix G).

5.9.1 Setting

The following discussion describes the proximity of the Project to nearby waterbodies, provides background information on water quality issues related to surface and groundwater in the Project area, describes the existing drainage condition, floodplains, and dam inundation areas in order to evaluate potential Project-related impacts.

Surface Water Resources and Existing Drainage Condition

California is divided into nine major watersheds and a Regional Water Quality Control Board (RWQCB) regulates water quality for each watershed. The Project site is located within the Santa Ana River Watershed Region (Region 8), which is under the jurisdiction of the Santa Ana Regional Water Quality Control Board. The Santa Ana River flows from the San Bernardino Mountains to the Pacific Ocean for over 100 miles. The Santa Ana River is the "receiving water" for more than 2,700 square miles covering portions of San Bernardino, Riverside, and Orange counties (GP 2025 FPEIR, p. 5.8-4). The Santa Ana River Watershed is broken up into six reaches for management purposes, in which the Project is within Reach 3. The Project site is located approximately 5 miles southeast of the Santa Ana River which is the main drainage feature in this watershed (Figure 5.9-1 – Santa Ana River Watershed).

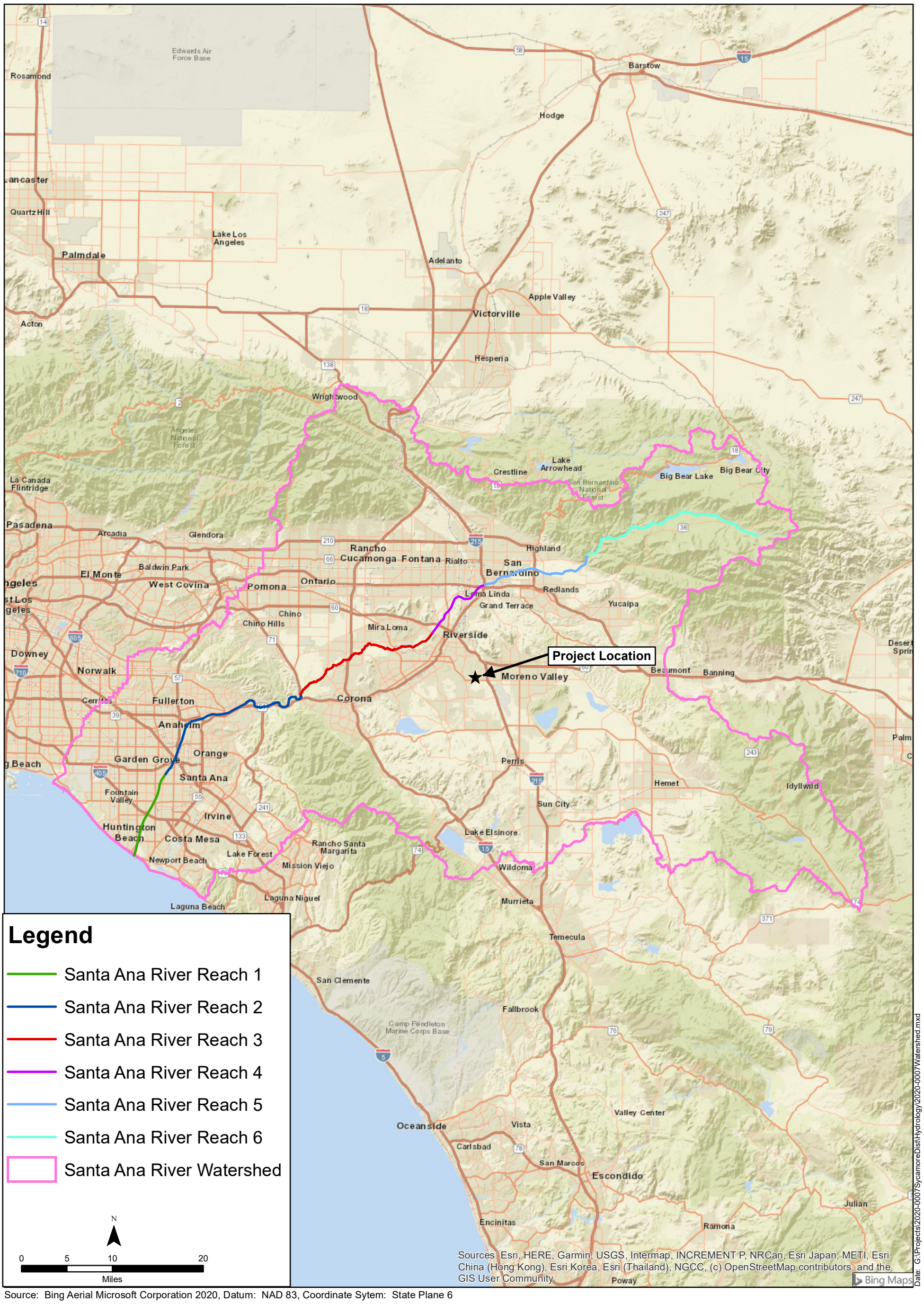
The average rainfall for the area is 9.86 inches per year (Western Regional Climate Center 2013). Weather data was recorded approximately 3.5 miles northwest of the Project site. After exiting the site, the on-site drainages flow north for one-half mile before converging with Sycamore Canyon Creek. Sycamore Canyon Creek flows for 2.5 miles northwest before converging with Tequesquito Arroyo. The Tequesquito Arroyo flows for 6.9 miles before reaching the Santa Ana River. The Santa Ana River flows southwest for 16 miles before reaching Prado Basin. As shown in Figure 5.9-2 – Project Connectivity to Santa Ana River, the Santa Ana River continues for 30 miles before reaching the Pacific Ocean.

As discussed in Section 5.3 Biological Resources, the Project site contains two drainages, Drainage A and Drainage B as identified in the Jurisdictional Delineation (Appendix D) and in Figure 5.3-5 Drainages Map. Drainage A enters the Project site along the western boundary and flows for approximately 1,183 feet before exiting the site near the middle of the northern boundary. Drainage A consists of a total of 0.08 acres of Non-Wetland "waters of the U.S." (WUS) and

"waters of the State" (WoS), and 0.35 acres under California Department of Fish and Wildlife (CDFW) jurisdiction (Wood). Additionally, Drainage B enters the study area near the middle of the southern boundary and flows in a northern direction for approximately 981 feet before exiting the site near the middle of the northern boundary. Drainage B consists of a total of 0.11 acres of Non-Wetland WUS and WoS, and 1.36 acres under CDFW jurisdiction (Wood). Drainages A and B converge just north of the Project's northern boundary within the Sycamore Canyon Wilderness Park.

The existing hydrology of the Project site is shaped by the existing topography of the site as well as the size of tributary area (areas that are at a higher elevation or upland to and drain to the site) and how stormwater runoff is conveyed from the tributary area to the site (i.e. via sheet flow or in stormwater drainage pipes or channels). As outlined in the Hydrology Memo (REC (b)), the existing Project site is comprised of five (5) drainage management areas (DMAs), which each drain to their respective points of discharge (POD). The existing DMAs are described as follows and shown in Figures 5.9-3A and 5.9-3B – Existing Condition Hydrology Maps:

- Runoff from DMA-1 overland flows to POD-1.
- Runoff from DMA-2 flows to POD-2. Note that POD-2 receives off-site run-on from the area west of Barton Street and the northwest corner of the storage facility to the south of the Project site and also via concentrated flow from concentration point 2-1, which collects the runoff of an undetermined area west of Barton Street and discharges such runoff to the Project site through a 48-inch storm drain pipe.
- Runoff from DMA-3 flows to POD-3. Note that POD-3 receives offsite run-on, via storm drain, from the residential/commercial developments to the south of Alessandro Boulevard and the surface flow run-on from the adjacent abandoned developed lot.
- Runoff from DMA-4 flows to POD-4. Note that POD-4 receives offsite run-on from the area east of the property boundary, mainly as sheet flow.
- Runoff from DMA-5 flows to POD-5. Note that POD-5 receives off-site run-on, via multiple storm drains, from residential areas south of Alessandro Boulevard and from Alessandro Boulevard itself.



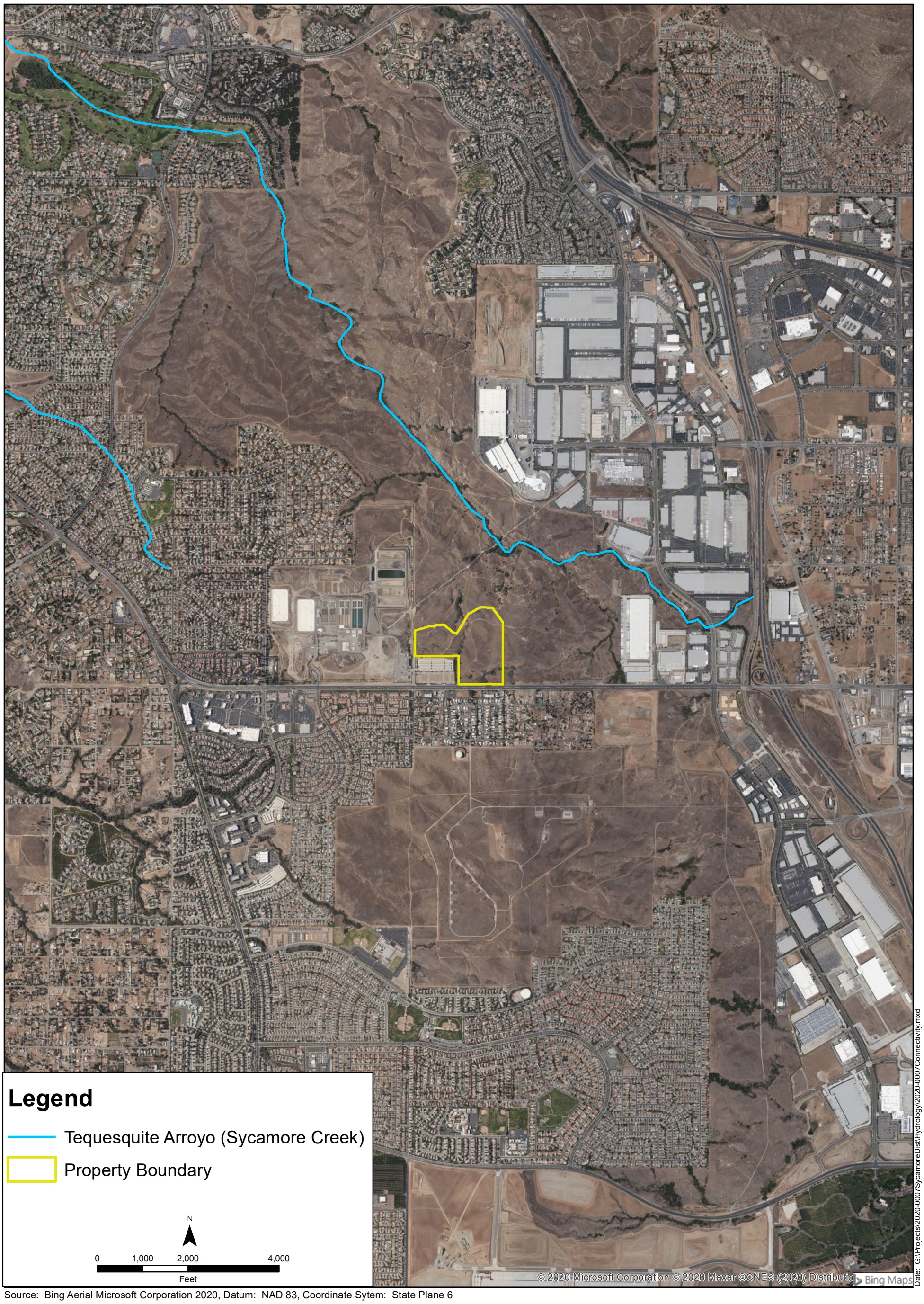
Source: Bing Aerial Microsoft Corporation 2020, Datum: NAD 83, Coordinate Sytem: State Plane 6

SYCAMORE HILLS DISTRIBUTION CENTER

RVA

Santa Ana River Watershed

Figure 5.9-1



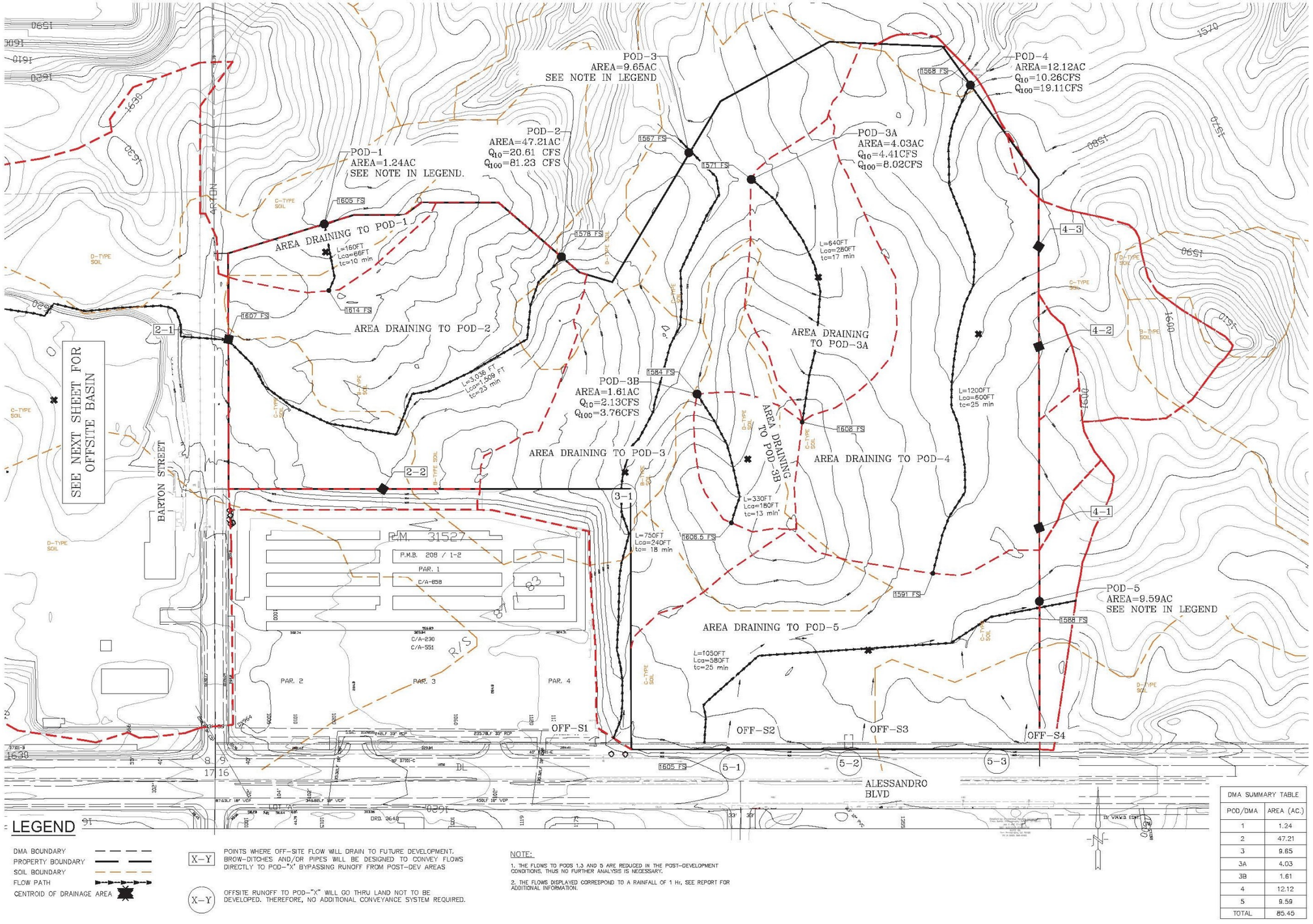
Source: Bing Aerial Microsoft Corporation 2020, Datum: NAD 83, Coordinate Sytem: State Plane 6

SYCAMORE HILLS DISTRIBUTION CENTER

RVA

Project Connectivity to Santa Ana River

Figure 5.9-2



LEGEND

- DMA BOUNDARY
- PROPERTY BOUNDARY
- SOIL BOUNDARY
- FLOW PATH
- CENTROID OF DRAINAGE AREA

X-Y — POINTS WHERE OFF-SITE FLOW WILL DRAIN TO FUTURE DEVELOPMENT. BROW-DITCHES AND/OR PIPES WILL BE DESIGNED TO CONVEY FLOWS DIRECTLY TO POD-"X" BYPASSING RUNOFF FROM POST-DEV AREAS

(X-Y) — OFFSITE RUNOFF TO POD-"X" WILL GO THRU LAND NOT TO BE DEVELOPED. THEREFORE, NO ADDITIONAL CONVEYANCE SYSTEM REQUIRED.

NOTE:

1. THE FLOWS TO PODS 1,3 AND 5 ARE REDUCED IN THE POST-DEVELOPMENT CONDITIONS, THUS NO FURTHER ANALYSIS IS NECESSARY.
2. THE FLOWS DISPLAYED CORRESPOND TO A RAINFALL OF 1 Hr, SEE REPORT FOR ADDITIONAL INFORMATION.

DMA SUMMARY TABLE

POD/DMA	AREA (AC.)
1	1.24
2	47.21
3	9.65
3A	4.03
3B	1.61
4	12.12
5	9.59
TOTAL	85.45

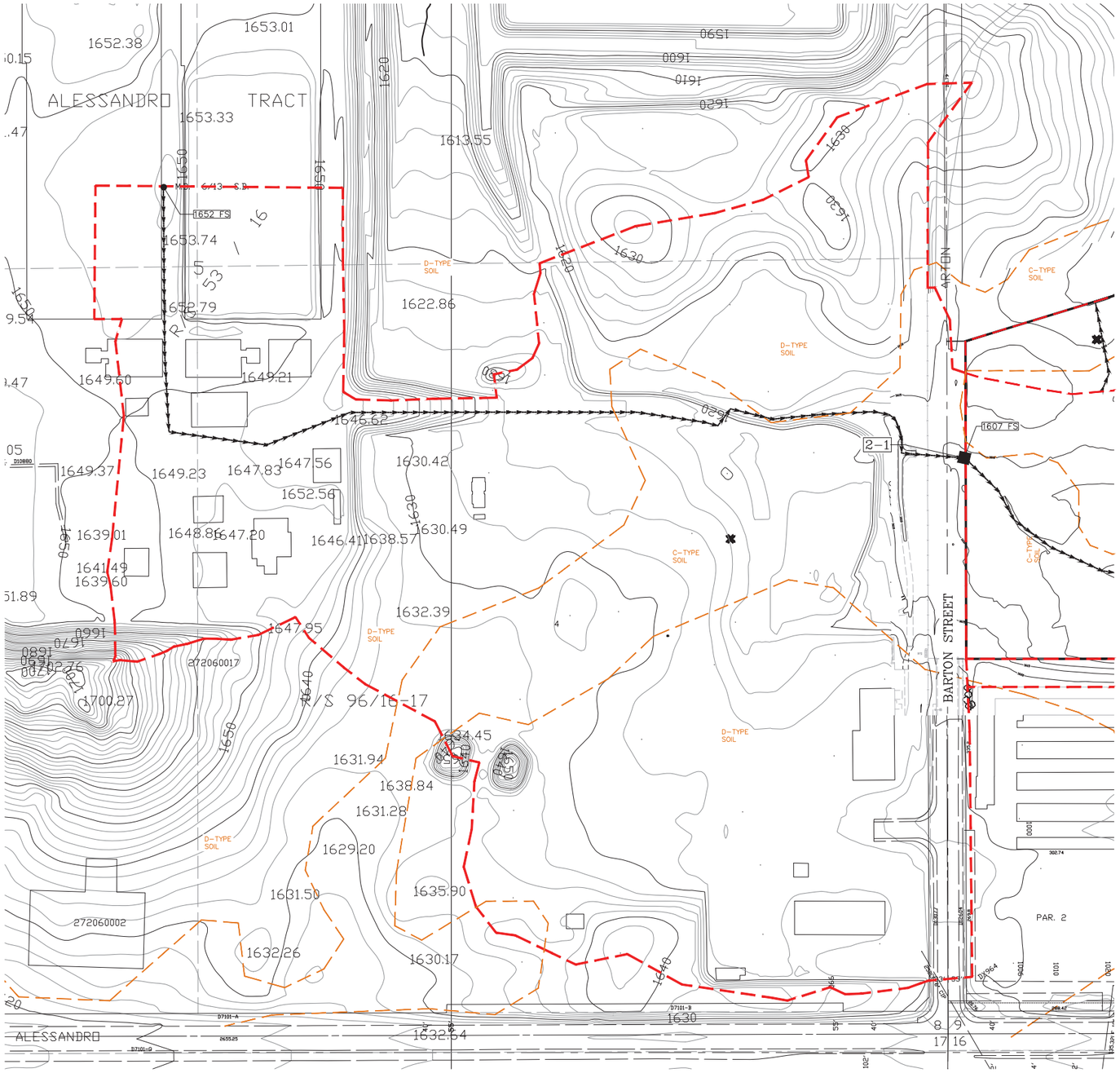
SYCAMORE HILLS DISTRIBUTION CENTER

Existing Condition Hydrology Map

Figure 5.9-3A

RVA

REC Consultants, Inc.


ALESSANDRO TRACT
BARTON STREET
ALESSANDRO
PAR. 2
D-TYPE SOIL
C-TYPE SOIL
2-1
1607 FS
1652 FS
6.43 S.P.
272060017
272060002
1653.01
1652.38
1653.33
1613.55
1622.86
1649.60
1649.21
1646.62
1649.37
1649.23
1647.83
1647.56
1652.56
1630.42
1639.01
1648.86
1647.20
1646.41
1638.57
1630.49
1641.49
1639.60
1647.95
1700.27
1624.45
1631.94
1638.84
1631.28
1629.20
1631.50
1635.90
1632.26
1630.17
1632.39
1632.54
1653.74
1652.79
1649.54
1650.47
1651.89
1650.05
1650.51
1650.89
1650.15
1650.47
1650.95
1650.76
1650.27
1650.00
1650.53
1650.16
1650.15
1650.59
1650.94
1650.96
1650.58
1650.40
1650.58
1650.70
1650.80
1650.90

Groundwater Resources

Water supplies throughout the City are predominately sustained by groundwater basins. Groundwater conditions in these basins are influenced by natural hydrologic conditions such as precipitation, groundwater seepage and surface water from the Santa Ana River and the six arroyos that traverse the City. In addition, local groundwater basins are actively recharged by various agencies with stormwater runoff, treated wastewater, and imported water (GP 2025 FPEIR, pp. 5.8-4 – 5.8-5). Groundwater quality and water rights issues are managed by the Santa Ana RWQCB through waste discharge permits and well permitting (GP 2025, p. OS-57). Groundwater elevation levels, and basin management is generally overseen by the California Department of Water Resources (DWR).

Although the Project site is mostly fill, natural soil and bedrock (NorCal Engineering, p. 3), the site overlies the Riverside South groundwater basin, from which the City's water utility, Riverside Public Utilities (RPU), extracts domestic water for its service area (GP 2025, Figure PF 1.1). Since 2009, RPU has met all of its water supply needs by utilizing groundwater sources located in the Bunker Hill Basin and Riverside North and South Basins[1], and water quality from these sources met or surpassed all State and Federal drinking water quality standards in 2015 (RPU(a), 2015). In past years when RPU has not been able to meet its water demand from pumping from these groundwater basins, RPU has purchased imported water from Western Municipal Water District (Western), which is the water utility that will serve the Project site (GP 2025 FPEIR, p. 5.16-10 and Figure 5.16-3).

The Riverside South Basin is adjudicated by the 1969 Orange County Judgment[2], with the pumping rights of the basin further defined in the 1969 Western-San Bernardino Judgment[3]. As the major pumper of the basin, RPU prepared the Riverside Basin Groundwater Management Plan (GWMP) in 2011 through a stakeholder-based planning effort with DWR guidance (RPU, 2012). The GWMP is intended to help operate and manage the basin in a sustainable manner. RPU also updates an Urban Water Management Plan (UWMP) every five years that is also aimed to facilitate long-range planning for reliable water supplies (RPU(b), 2015).

According to the 2015 RPU UWMP, The Riverside South Basin is projected to operate in a state of overdraft in the future. However, Western is responsible for replenishment of the basin should extractions exceed the base period extraction amount, or by more than 20 percent in a single year, unless credits are available from previous years, as detailed in the Western-San Bernardino Judgment. RPU participates in independent groundwater production is metered and reported to the Western-San Bernardino Watermaster (RPU(b), 2015).

[1] Riverside North and Riverside South basins are hydrologically connected but separated by the San Bernardino County/Riverside County line, per the 1969 Western-San Bernardino Judgment.
[2] Orange County Water District vs. City of Chino, et al., Case No. 117628 (i.e. the Orange County Judgment of April 17, 1969)
[3] Western Municipal Water District vs. East San Bernardino County Water District, et al., Case No. 78426 (i.e. the Western-San Bernardino Judgment of April 17, 1969) describes the groundwater pumping rights in the Colton, Riverside, and San Bernardino Area and is administered by the two-person Western-San Bernardino Watermaster.

Storm Drain System

The Riverside County Flood Control and Water Conservation District (RCFCWCD) is responsible for the regional flood control and drainage facilities. The City maintains local facilities that tie into the RCFCWCD regional system. Local drainage facilities, consisting mostly of underground closed conduits and storm drains located primarily in developed portions of the City collect stormwater and convey it to regional facilities, including the Santa Ana River (GP 2025 FPEIR, p. 5.8-4).

The Sycamore Canyon Business Park Specific Plan (SCBPSP) indicates that if necessary, adequate drainage-siltation basins will be built on the side canyons entering the arroyo so as to retard increased flow and retain debris originating in the industrial area. Such facilities shall be engineered, constructed and maintained through a Tax Assessment District and/or Redevelopment Agency Project.

On November 24, 1992, the City Council approved an amendment to the SCBPSP (SP-001-923) locating three drainage-siltation basins subject to conditions. Two of the facilities, Basins B and C are located entirely within Sycamore Canyon Wilderness Park and Basin A straddles the boundary with the SCBP (SCBPSP, p. 26). These basins are north and northwest of the Project site and storm water runoff from the Project site does not flow to these basins.

The Project site is not located within an existing RCFCWCD Master Drainage Plan area (GP 2025 FPEIR, Figure 5.16-1).

Flooding and Inundation

Flooding in the City mainly results from intense rainfall, which usually occurs in the winter. Flooding in the City could also result from dam failure. Most of the dams within the City and its Sphere of Influence fall under the jurisdiction of the California Department of Water Resources Division of Safety of Dams. Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps show that portions of the City fall within the 100-year flood zone. Flood hazard risks are greatest in the vicinity of channels, creeks, streams, and watercourses. This includes the Santa Ana River and several dams. (GP 2025 FPEIR, p. 5.8-5) The Project site, however, is not within a 100-year flood zone or dam inundation area (GP 2025, Figure PS-4).

Due to the City's distance from the ocean, there is no foreseeable risk of tsunami (tidal wave) inundation. Seiches are oscillations in enclosed bodies of water caused by seismic waves. Existing development is subject to hazards from seiches in reservoirs such as Lake Mathews and Lake Evans at Fairmount Park and other small waterbodies. Mudflows associated with erosion may also occur in portions of the community. (GP 2025 FPEIR, p. 5.8-5) The Project site is not located near Lake Mathews or Lake Evans; not located in a coastal area, which are subject to tsunamis; and not located near the Santa Ana River, Lake Hills, Norco Hills, or Box Springs Mountain area or arroyos that are subject to significant mudflows. (GP 2025 FPEIR, p. 5.8-24)

5.9.2 Related Regulations

5.9.2.1 Federal Regulations

Clean Water Act

The Clean Water Act (CWA) was designed to restore and maintain the chemical, physical, and biological integrity of the waters in the United States, so that all waters can be fishable and swimmable. The U.S. Environmental Protection Agency (EPA) has delegated responsibility for implementation of the CWA to the State Water Resources Control Board (SWRCB) and the nine RWQCBs, including water allocation and water quality protection programs and the National Pollutant Discharge Elimination System (NPDES) program. The NPDES program is a set of permits designed to regulate various activities that generate pollutants with potential to impact water quality. The City is a co-permittee with the County of Riverside in the Municipal Separate Storm Sewer System (MS4) NPDES permit, and is therefore required to mandate that all new development projects and substantial redevelopment projects incorporate Best Management Practices (BMPs) for construction and operation as identified in the Santa Ana Regional Drainage Area Management Plan (SAR-DAMP) (GP 2025, p. OS-57). As a co-permittee, the City must require that most development projects prepare a site-specific Water Quality Management Plan (WQMP). Its primary purpose is to ensure that the land use approval and permitting process of the City will minimize the impact of urban runoff, through the use of Low-Impact Development (LID) principles in site design, source control measures and treatment control BMPs (SAR-DAMP p.6-9). The Project would also be subject to another NPDES permit, the *General Permit for Stormwater Discharges Associated with Construction Activity*, requiring effective erosion and sediment controls during construction. Project-specific BMPs are referenced in Section 5.9.3-Project Design Considerations.

Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States, and section 303(d) requires a priority list of Impaired Waterbodies (“the 303(d) list”). These waters do not meet their numeric and/or narrative Water Quality Standards necessary to protect their Beneficial Uses (see Tables 5.9-1 and 5.9-2). To remedy the impairment, a Total Maximum Daily Load (TMDL) is developed for the waterbody that specifies the maximum amount of pollutant it can receive and still meet Standards and allocates pollutant loadings among point-source and non-point source discharges. The Project is within the Santa Ana River’s Reach 3. Reach 3 of the Santa Ana River has three impairments: pathogens, copper, and lead. The Middle Santa Ana River Bacterial Indicator TMDL is currently in effect to address pathogens. Copper and lead TMDLs are slated for 2021 (RWQCB(b), p.13).

Please refer to Section 5.3 – Biological Resources for a discussion of CWA section 401 and section 404 permits, as well as the CDFW and Streambed Alteration Agreement (Fish and Game code 1602).

5.9.2.2 State Regulations

Porter-Cologne Water Quality Control Act and the Basin Plan

The Porter-Cologne Water Quality Control Act, Division 7 of the California Water Code, authorizes the SWRCB to adopt, review, and revise policies for all waters of the state (including both surface and ground waters) and directs the RWQCBs to develop regional Basin Plans. The Water Quality Control Plan for the Santa Ana River Basin ("Basin Plan") is designed to preserve and enhance the quality of water resources in the Santa Ana River basin for the benefit of present and future generations. The purpose of the Basin Plan is to designate beneficial uses of the region's surface and ground waters, designate water quality objectives for the reasonable protection of those uses, and establish an implementation plan to achieve the objectives (RWQCB(b), p. 1-1).

Beneficial uses are all the various ways that water can be used for the benefit of people and/or wildlife. A total of 23 beneficial uses are defined statewide, of which 19 beneficial uses are recognized within the Santa Ana Region (RWQCB(b), p. 3-2). The main stem of the Santa Ana River is divided into six reaches, each of which is generally a hydrologic and water quality unit (RWQCB(b), p. 1-10). Reach 3 of the Santa Ana River, which is the ultimate receiving water for drainage leaving the Project site, includes the portion of the Santa Ana River from Mission Boulevard Bridge to Prado Dam (RWQCB(b), p. 1-10).

Tequesquite Arroyo and each reach of the Santa Ana River have assigned beneficial uses, which are threatened or lost when water quality objectives are violated. Tequesquite Arroyo has the following seven beneficial uses: municipal and domestic supply (MUN) waters used as drinking water supply, water contact recreation (REC 1), non-contact recreation (REC 2), warm freshwater habitat (WARM), wildlife habitat (WILD), rare, threatened or endangered species (RARE), and spawning reproduction and development (SPWN). In order to protect those beneficial uses, narrative water quality objectives apply to all inland surface waters, unless stricter numeric objectives exist, as detailed in Chapter 4 of the Basin Plan (RWQCB(b)).

The Santa Ana River's Reach 3 has the following eight beneficial uses: agricultural supply (AGR), groundwater recharge (GWR), REC1, REC2, WARM, WILD, RARE and SPWN. The Reach has been "excepted" from the municipal or domestic water supply (MUN) designation because it was determined not a good source for drinking water supply per the Sources of Drinking Water Policy (Res No. 88- 63). In addition to the narrative objectives, Reach 3 designations must be protected by numeric thresholds for various constituents that can cause adverse impacts, such as sodium, sulfate and boron (RWQCB(b), Table 4-1). Project-related runoff will discharge into Tequesquite Arroyo and ultimately Reach 3 of the Santa Ana River. The beneficial uses designated for the receiving waters for the Project are identified in Table 5.9-1– Constituents and Beneficial Uses for Receiving Waters.

Table 5.9-1 – Constituents and Beneficial Uses for Receiving Waters

Receiving Waterbody	303(d) List Constituents	TMDL Constituents	Beneficial Uses[a,b]
Tequesquite Arroyo	-----	-----	MUN, REC1, REC2, WARM, WILD, RARE, SPWN
Santa Ana River, Reach 3	Copper (wet season only) Lead	Pathogens	AGR, GWR, REC1, REC2, WARM, WILD, RARE, SPWN

Definitions of Beneficial Uses[a]	
AGR	Waters used for farming, horticulture or ranching. Uses may include, but are not limited to, irrigation, stock watering, and support of vegetation for range grazing.
GWR	Groundwater recharge waters, used for natural or artificial recharge of groundwater for purposes that may include future extraction, maintaining water quality, or halting saltwater intrusion in freshwater aquifers.
MUN	Waters are used for community, military, municipal or individual water supply systems. These uses may include, but are not limited to, drinking water supply.
REC1	Water contact recreation water used for recreational activities involving body contact with water where ingestion of water is reasonably possible. Uses may include swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing, and use of natural hot springs.
REC2	Non-contact water recreation waters, used for recreational activities involving proximity to water, but not normally involving body contact with water where ingestion of water would be reasonably possible. These uses may include picnicking, sunbathing, hiking, beachcombing, camping, boating, sightseeing, and aesthetic enjoyment in conjunction of the above activities.
WARM	Warm freshwater habitat waters support waters support warm ecosystems that may include preservation and enhancement of aquatic habitats, vegetation, fish and wildlife, including invertebrates.
WILD	Wildlife habitat waters support wildlife habitats that may include the preservation and enhancement of vegetation and prey species used by waterfowl and other wildlife.
RARE	Rare, threatened or endangered species waters support habitats necessary for the survival and successful maintenance of plant or animal species designated under the State or federal law as rare, threatened, or endangered.
SPWN	Spawning, reproduction and development sites

Noted:
[a]RWQCB(b) (chapter 3 updated June 2019 to include approved amendments), Table 3-1, p. 3-25; definitions adapted from pp. 3-2 – 3-3.
[b]PWQMP, p.10.

The Porter-Cologne Act defines water quality objectives as, "…the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area" (RWQCB(b), p. 4-1). The numeric water quality objectives for receiving waters of the Project site are shown in Table 5.9-2-Numeric Water Quality Objectives for Receiving Waters. Water quality standards are attained when designated beneficial uses are achieved and water quality objectives are being met. The regulatory programs of the RWQCB are designed to minimize pollutant discharges to surface and ground waters within the region, largely through permitting, such that water quality standards are effectively attained.

Table 5.9-2 – Numeric Water Quality Objectives for Receiving Waters

Water body	Water Quality Objectives (mg/L)							
	Total Dissolved Solids	Hardness	Sodium	Chloride	Total Inorganic Nitrogen	Sulfate	Chemical Oxygen Demand	Boron
Santa Ana River, Reach 3 – Base Flow	700	350	110	140	10[3a]	150	30	0.75

Notes:
[3a] Total nitrogen in a filtered sample
Source: RWQCB(b) (chapter 4 updated June 2019 to include approved amendments), Table 4-1, p. 4-35.

Whether or not a waterbody has numeric water quality objectives, narrative objectives apply to all inland surface waters and groundwater basins within the region under jurisdiction of the Santa Ana RWQCB. Where more than one narrative objective is applicable, the Santa Ana RWQCB requires application of the more stringent objective (RWQCB(b), pp. 4-6 and 4-18). Because no numeric objectives have been established for Tequesquite Arroyo, only narrative objectives apply.

Narrative water quality objectives vary in applicability and scope, reflecting the variety of beneficial uses of water that have been identified. Where numerical objectives are specified, they generally represent the levels that will protect beneficial uses. In some cases, an objective may tolerate natural levels of certain substances or characteristics but no increases over those values (RWQCB(b), p. 4-2).

The reduction of pollutants in urban stormwater discharge to the maximum extent practicable (MEP) through the use of structural and non-structural BMPs is one of the primary objectives of the water quality regulations for MS4 co-permittees. BMPs typically used to manage water quality of urban runoff includes controlling roadway and parking lot contaminants by installing filters with oil and grease absorbents at storm drain inlets, cleaning parking lots on a regular basis, incorporating peak-flow reduction and infiltration features (such as grass swales, infiltration trenches, and grass filter strips) into landscaping, and implementing education programs. BMPs have been incorporated into the design of the Project as discussed in Section 5.9.3 Project Design Considerations.

The Project-Specific Water Quality Management Plan (PWQMP) (Appendix J) for the Project was reviewed and deemed approved as preliminary by the City. The PWQMP is discussed in greater detail in Section 5.9.3. The primary objective of the PWQMP is to minimize the impact of Project-generated urban runoff and protect water quality in Reach 3 of the Santa Ana River.

Prior to the issuance of any building or grading permits in connection with the Project, the applicant will prepare a Final Project Specific WQMP, which must be approved by the City Public Works Department (GP 2025 FPEIR, p. 5.8-11). The City is also responsible for requiring the Project applicant to obtain coverage under the construction NPDES permit prior to commencement of any Project-related demolition or construction activities (GP 2025 FPEIR, p. 5.8-10). To obtain coverage, the Project applicant must file a Notice of Intent with a vicinity map and the appropriate fee with the SWRCB.

5.9.2.3 Local Regulations

Riverside General Plan 2025

The City's General Plan 2025 (GP 2025) contains objectives and policies related to drainage and water quality in the Open Space and Conservation Element and Public Facilities and Infrastructure Element that are applicable to the Project. The Project would be subject to the following objectives and policies:

Objective PS-2: Reduce potential flood hazards within Riverside

> **Policy PS-2.1:** Reduce flood risks for residents and businesses within urbanized areas, as feasible.
>
> **Policy PS-2.2:** Encourage flood control infrastructure that does not reduce the natural character or limit the use of the site.
>
> **Policy PS-2.3:** Minimize additional flood risk exposure in developing areas.

Riverside Municipal Code

The Riverside Municipal Code (RMC) contains several provisions regulating the discharge of stormwater and changes in hydrology. For example, Title 17 Grading Code of the RMC governs grading activities in the City. Most grading projects that exceed one acre will require a permit from the City. To obtain a permit, applicants must supply a grading plan, and if applicable, must demonstrate compliance with the General Construction Stormwater NPDES Permit described above.

In addition, Title 14 Public Utilities, Chapter 14.12 of the RMC regulates discharges into the City's sewer and storm drain systems and implements the City's requirements under the MS4 permit. Among other things, RMC Chapter 14.12 prohibits discharges to the City's sewer and storm drain systems that contain pollutants or that would impair the operation of those systems. Chapter 14.12 also contains specific regulations for industrial dischargers. Finally, this Chapter gives the City enforcement authority to declare violations, apply penalties, and impose stop-work orders, monitoring requirements, and other enforcement mechanisms.

City of Riverside Green Action Plan

The City of Riverside is committed to becoming a clean, green and sustainable community. Beginning in 2005, a task force of citizen volunteers assembled to outline sustainability goals resulting in the City's 2009 designation by the California Department of Conservation as an "Emerald City". Developed by the Green Accountability Performance Committee, the Green Action Plan in its eighth iteration lists 19 goals and more than 50 tasks for the City to achieve additional sustainability goals and reduce its ecological footprint.

Goal 16 of the current Green Action Plan states, "Reduce per capita water usage 20 percent citywide by 2020" and Goal 17 states, "Increase the use of recycled water by 30 percent by 2020, based on the 2008 baseline (GAP, p. 32)." An update to the Green Action Plan is currently pending by the City.

In order to effectively conserve water, the Project includes water conservation and efficiency measures as discussed in Section 3 – Project Description. The Project is also subject to RMC Chapter 14.22 – Water Conservation that includes the Water Conservation Ordinance, drought plan, and water conservation programs that help water users throughout the City conform to local and state regulations for water conservation including drought-related regulations.

5.9.3 Project Design Considerations

Hydrology

The existing site is comprised of five (5) drainage management areas (DMAs) and two (2) sub areas which each drain to their respective point of discharge (POD). In the proposed development, the Project site will comprise of ten (10) DMAs and three (3) sub areas. A detailed post-development conditions description of each DMA is provided as follows:

DMA-1 will remain undeveloped in post-development conditions. Runoff from DMA-A1 overland flows to POD-1. POD-1 is a natural flow path located near the northwestern corner of the Project site. POD-1 received practically no offsite run-on, thus there is no need to preserve or divert any offsite flow (PWQMP, p. 6).

DMA-2A, 2C and 2D consists of the eastern, western and northern side of the proposed western building, parking lot/driveway, and landscape area. Runoff from these areas will first flow into Filterras (engineered biofiltration systems) for water quality treatment prior to discharging into an underground detention system. Runoff from the detention system will then discharge to POD-2.

DMA-2B will contain the southern portion of the western building which will overland flow to Basin 2-1. Basin 2-1 is located upstream of Basin 2-2 and is configured such that detained flows shall be conveyed to POD-2 and overflow from Basin 2-1 will discharge to Basin 2-2 for additional detention. Detained outflows from the underground detention system and the basins will be confluence at POD-2 (PWQMP, p. 7).

DMA-2E consist of the parking lot in Parcel C located at the North West corner of the site. Parcel C will be dedicated to the City to be used in conjunction with an adjacent trail. This DMA will have a separate Filterra BMP to treat runoff from this parcel. Runoff from the BMP will then discharge to POD-2 (PWQMP, p.7).

DMA-2F is the self-treating area that will remain undisturbed along the north east side of Building B. This area will flow overland to POD-2 (PWQMP, p.7).

POD-2 is located near the northeast corner the western development; Building B. POD-2 receives a significant and undetermined amount of run-on from the 48-inch pipe discharging into the property as previously shown in Figure 5.9-4A and Figure 5.9-4B. This flow will be captured in a 48-inch pipe that will cross through the Project along the northern parking lot of Building B and will discharge to POD-2. Run-on from the south will be captured by a 18” diameter corrugated metal pipe (CMP) riser inlet and conveyed to POD-2 (PWQMP, p.7).

DMA-3 will remain undeveloped in existing and proposed development conditions. There are two (2) sub-areas within DMA-3A which will be subject to development. These sub-areas are

designated DMA-3A and DMA-3B. Run-off from DMA-3 flows to POD-3. POD-3 receives offsite run-on, via storm drain, from the residential/commercial developments to the south of Alessandro Boulevard and the surface flow run-on from the adjacent abandoned developed lot (PWQMP, p. 7).

DMA-3A consists of the southern entrance and southern parking lot of the eastern building. Runoff from DMA-3A shall overland flow to proposed Basin-3A for detention and storage. DMA-3B consists of the eastern and southwestern portion of the eastern building. Runoff from the DMA-3B shall overland flow to the proposed Basin-3B for detention and storage. Detained outflows from Basins 3A and 3B shall confluence at POD-3 (PWQMP, p. 7).

POD-3 is a natural flow path located near the northwestern corner of the eastern development. POD-3 receives run-on from point 3-1. Notice that in this case, the natural conveyance system will be preserved as the natural channel from 3-1 to POD-3. Due to POD-3 being in an area of no development, any run-on coming to 3-1 can flow freely to POD-3. The OFF-S1 represents the discharge of a pipe system into the natural channel, but such discharge and flow path occurs off-site the property until point 3-1 is reached. It should be mentioned that PODs 3A and 3B are natural flow paths located upstream of POD-3 (PWQMP, p.7).

DMA-4 consists of the remaining building and parking lot of the eastern development which does not drain to PODs 3A or 3B. Runoff from DMA-4 overland flows to Basin-4 for detention and treatment. Runoff from DMA-4 flows to POD-4 which is a natural flow path located near the northeast corner of the eastern development (PWQMP, p.7).

DMA-4A contains a small area of pervious landscaping at the north east corner of the site that bypasses the BMPs and drains directly to POD-4.

POD-4 receives a small and undetermined amount of sheet-flow from the adjacent areas that's enters to the property at points 4-1,4-2 and 4-3. The runoff from this area located to the east of the property line will be captured by a proposed brow-ditch / pipe system to be designed at a later phase of the Project, and conveyed to POD-4 (PWQMP, p.7).

DMA-5 remains undeveloped in post-development conditions. Runoff from DMA-5 flows to POD-5 which is a natural flow path located near the southeastern corner of the eastern development (PWQMP, p.7).

POD-5 receives run-on from multiple sources. All run-on eventually reaching POD-5 will flow through natural conveyance systems and areas to be preserved, and consequently the Project will have no impact on how this run-on flow. The only exception is the entrance road that must include a culvert design to convey the run-on from 5-1 and the little run-off produced by the property area west of the entrance (PWQMP, p.8). This culvert will be designed at a later phase of this Project.

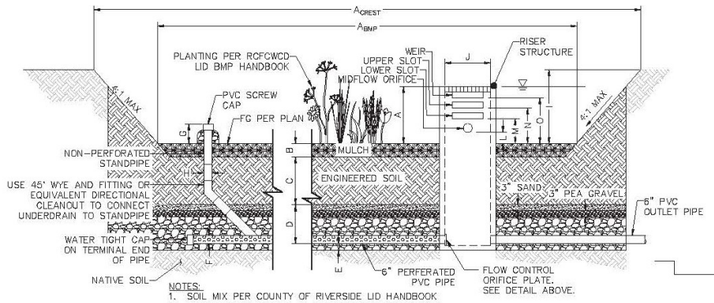
The onsite-tributary areas to PODs 1 and 5 will remain undisturbed in developed conditions and thus are considered self-treating. Similarly, the tributary areas to PODs 2 and 3 (not including sub-areas) are also considered self-treating. All other areas drain to a proposed BMP.

Table 5.9-3 below provides a summary of the areas of each of the aforementioned DMAs (PWQMP, p.8). Table 5.9-3 also describes where the DMAs drains to and the POD. Figure 5.9-4A and Figure 5.9-4B contain maps of the Project Site and Proposed Hydrology.

Table 5.9-3 – Summary of DMAs

DMA	Pervious (sf)	Impervious (sf)	Total (sf)	Drains to	POD
1	3,218	-	3,218	A-ST	1
2A	12,340	18,986	31,236	D-BMP-2A	2
2B	27,456	227,517	254,973	D-BMP-2B	
2C	6,566	80,222	86,788	D-BMP-2C	
2D	6,028	78,733	84,760	D-BMP-2D	
2E	14,528	31,761	46,289	D-BMP-2E	
2F	16,652	-	16,652	A-ST	
3	270,590	-	270,590	A-ST	3
3A	11,721	187,121	198,842	D-BMP-3A	
3B	36,880	113,782	150,662	D-BMP-3B	
4	65,423	536,417	601,840	D-BMP-4	4
4A	8,215	-	8,215	A-ST	
5	347,359	-	347,359	A-ST	5
Total	**811,477**	**1,288,805**	**2,100,282**	-	-

Note: ST= Self Treating



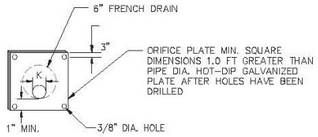
NOTES:
1. SOIL MIX PER COUNTY OF RIVERSIDE LID HANDBOOK
2. "WELL DRAINED SOIL" SHALL BE "SANDY LOAM" SOIL MIX WITH NO MORE THAN 5% CLAY CONTENT. THE MIX SHALL CONTAIN 50-60% SAND, 20-30% COMPOST OR HARDWOOD MULCH, AND 20-30% TOPSOIL.
3. BMP 2B, 2A, 3A, AND 3B TO HAVE A WALL PER PLAN
4. BMP 2B CONSISTS OF 2 HYDRAULICALLY CONNECTED BASINS (SURFACE AND SUBSURFACE)
5. A_{BMP} IS EQUAL TO THE AREA AT THE FINISH GRADE OF THE BASIN
6. D INCLUDES 3" OF SAND AND 3" OF PEA GRAVEL

1 BMP BASIN DETAILS
NOT TO SCALE

BIORETENTION BASIN TABULATED DATA

	BMP 2B-1	BMP 2B-2	BMP 3A	BMP 3B	BMP 4
A	2.75'	3.75'	4.25'	2.5'	4.75'
B	3"	3"	3"	3"	3"
C	33"	33"	33"	21"	33"
D	12"	12"	12"	12"	12"
E	3"	3"	3"	3"	3"
F	6"	6"	6"	6"	6"
G	3"	3"	3"	3"	3"
H	6"	6"	6"	6"	6"
I	3'	5'	4'	3.5'	6'
J	48"X48"	12"X12"	48"X48"	36"X36"	36"X36"
K	0.75"	1.65"	1.67"	1.125"	2.25"
MIDFLOW ORIFICE	–	–	0.875"	1.5"	1.75"
L	–	–	6"	6"	6"
LOWER SLOT(1)	6" X 2"	¾" X ¾"	–	–	24" X 3"
M	6"	39.6"	–	–	36"
UPPER SLOT(1)	–	–	0.96" X 0.167"	–	–
N	–	–	27"	–	–
WEIR	–	–	–	–	–
O	–	–	–	–	–
A_{BMP}	1,829 SF	4,912 SF	6,757 SF	10,584 SF	15,085 SF
A_{CREST}	1,829 SF	7,057 SF	6,757 SF	10,584 SF	25,275 SF
V_{CAP}	5,578 CF	28,827 CF	34,122 CF	37,044 CF	115,465 CF

(1): WIDTH X HEIGHT



FLOW CONTROL ORIFICE PLATE
NTS

LEGEND

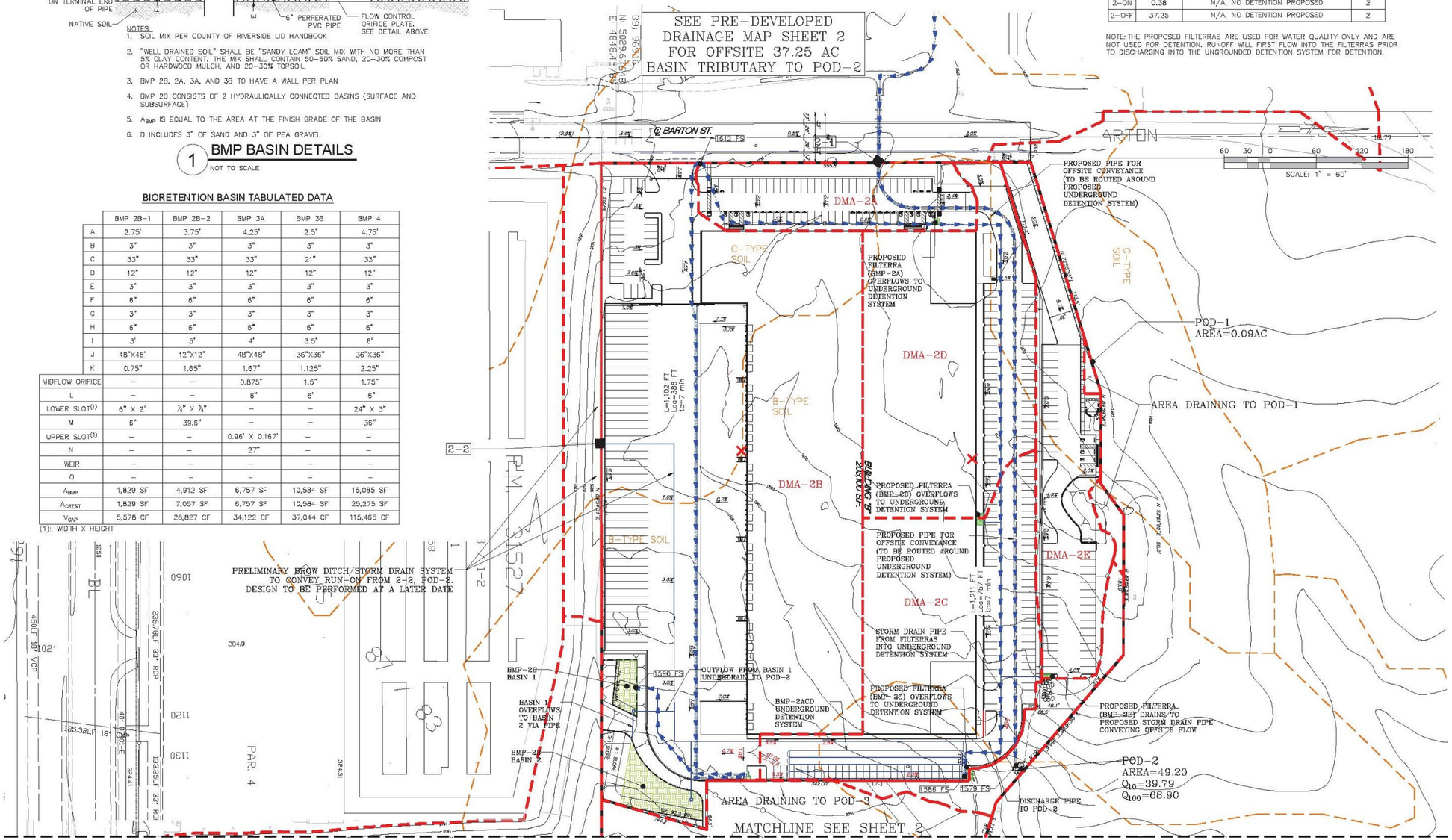
DMA BOUNDARY
PROPERTY BOUNDARY
PROPERTY BOUNDARY
BIORETENTION BASIN
FLOW PATH
CENTROID

X-Y POINTS WHERE OFF-SITE FLOW WILL DRAIN TO FUTURE DEVELOPMENT. BROW-DITCHES AND/OR PIPES WILL BE DESIGNED TO CONVEY FLOWS DIRECTLY TO POD-"X" BYPASSING RUNOFF FROM POST-DEV AREAS

(X-Y) OFFSITE RUNOFF TO POD-"X" WILL GO THRU LAND NOT TO BE DEVELOPED. THEREFORE, NO ADDITIONAL CONVEYANCE SYSTEM REQUIRED.

DMA SUMMARY TABLE			
DMA	AREA (AC.)	DETENTION BMP	POD
2A	0.72	MC-4500 UNDERGROUND CHAMBER	2
2B	5.86	BMP-2B BASIN 1& 2	2
2C	1.99	MC-4500 UNDERGROUND CHAMBER	2
2D	1.95	MC-4500 UNDERGROUND CHAMBER	2
2E	1.06	N/A, NO DETENTION PROPOSED	2
2-ON	0.38	N/A, NO DETENTION PROPOSED	2
2-OFF	37.25	N/A, NO DETENTION PROPOSED	2

NOTE: THE PROPOSED FILTERRAS ARE USED FOR WATER QUALITY ONLY AND ARE NOT USED FOR DETENTION. RUNOFF WILL FIRST FLOW INTO THE FILTERRAS PRIOR TO DISCHARGING INTO THE UNGROUNDED DETENTION SYSTEM FOR DETENTION.

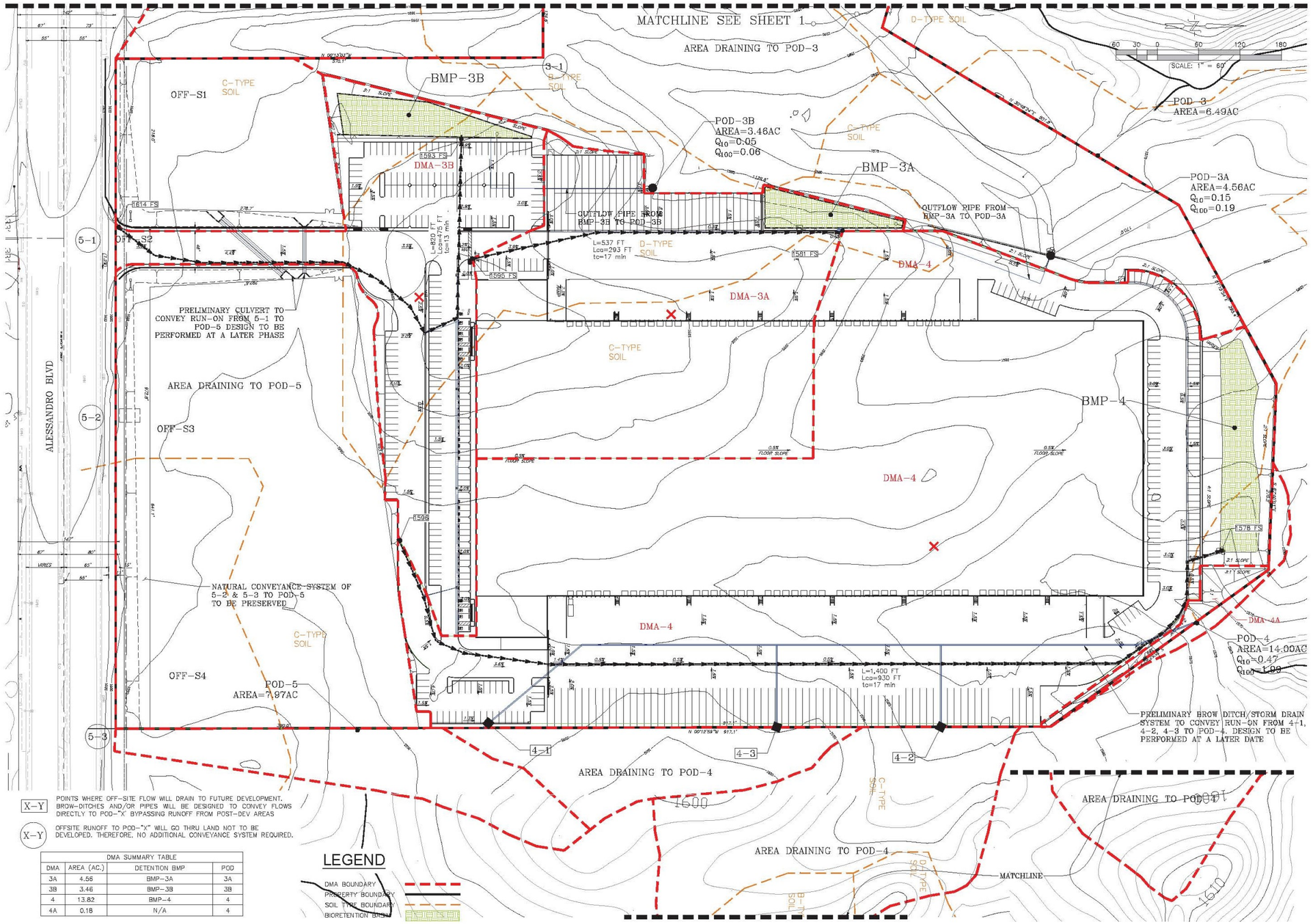


SYCAMORE HILLS DISTRIBUTION CENTER

Project Site & Proposed Hydrology

Figure 5.9-4A

RVA REC Consultants, Inc.



X-Y POINTS WHERE OFF-SITE FLOW WILL DRAIN TO FUTURE DEVELOPMENT. BROW-DITCHES AND/OR PIPES WILL BE DESIGNED TO CONVEY FLOWS DIRECTLY TO POD-"X" BYPASSING RUNOFF FROM POST-DEV AREAS

X-Y OFFSITE RUNOFF TO POD-"X" WILL GO THRU LAND NOT TO BE DEVELOPED. THEREFORE, NO ADDITIONAL CONVEYANCE SYSTEM REQUIRED.

DMA SUMMARY TABLE

DMA	AREA (AC.)	DETENTION BMP	POD
3A	4.56	BMP-3A	3A
3B	3.46	BMP-3B	3B
4	13.82	BMP-4	4
4A	0.18	N/A	4

LEGEND

DMA BOUNDARY
PROPERTY BOUNDARY
SOIL TYPE BOUNDARY
BIORETENTION BASIN

SYCAMORE HILLS DISTRIBUTION CENTER

Project Site & Proposed Hydrology

Figure 5.9-4B

RVA

REC Consultants, Inc.

A hydromodification study was prepared for the Project to support the PWQMP and is contained in Appendix 7 of the PWQMP. The purpose of this study is to prove that hydromodification conditions are met for the Project when a system with multiple bio-retention basins and an underground system is designed to control the runoff discharge of the post-development conditions. Per the Water Quality Management Plan for the Santa Ana Region of Riverside County, hydromodifications are met when: the post-development peak flows for the 24-hour, 2-year storm event are less, equal, or do not exceed by more than 10 percent, the peak flows for the pre-development conditions of the same storm. Table 5.9-4 below provides a comparison of the existing tributary area of each POD and the tributary area proposed with development of the site (Figures 5.9-3a and 5.9-3b).

Table 5.9-4 – Area Comparison Per POD

Location	Existing (acres)	Proposed (acres)	Difference (acres)
POD-1	1.24	0.07	- 1.17
POD-2	9.97**	11.96**	+1.99
POD-3*	9.65	6.21	-3.44
POD-3A	4.03	4.55	+0.52
POD-3B	1.61	3.46	+1.85
POD-4	12.12	13.82	+1.7
POD-5	9.59	7.96	-1.63
Total	**48.22**	**48.22**	**0.00**

***** Does not include the area of 3A and 3B
** This includes the proposed parking lot that will be dedicated to the City (DMA-E) and the area draining to POD-2 that will remain undisturbed. Hence, these areas do not match the area shown on the calculations for the routing portion (but is reported in the table to verify total area)

The proposed conditions tributary area to PODs 1, 3, and 5 is reduced compared to existing conditions. The land use (i.e. undeveloped) remains the same in both existing and proposed conditions. Therefore, the flows to these PODs are going to be lower in the proposed conditions as compared to the existing conditions. Thus, no further analysis is necessary at PODs 1, 3 and 5. Additionally, DMA-2E consists of a parking lot to be dedicated to the City which was not analyzed in this study. (PWQMP Appendix 7, p. 5)

Table 5.9-5 – Existing and Proposed Conditions Peak Flows (in cfs)

Condition	2-Year, 24-Hour Hydrograph Results			
	POD-2	POD-3A	POD-3B	POD-4
Existing	0.46	0.20	0.08	0.61
Proposed: Post-Unmitigated	2.16	0.98	0.63	2.87
Proposed: Post-Routed*	0.46	0.19	0.06	0.43
Difference: routed – existing	0.00	-0.01	-0.02	-0.18
*: result after modified puls and combination of hydrographs				

Prior to discharging from the Project site, first flush runoff will be treated via four bioretention based BMPs and four Filterra proprietary bioretention BMPs which drain to one combination underground detention system in accordance with the standards set forth by the Regional Water Quality Control Board and the County of Riverside's BMP Design Manual. The multi-purpose bioretention basins and combination underground detention plus proprietary bioretention BMPs are located within the Project site and are responsible for addressing water quality (including HCOC) and flood control requirements. (PWQMP Appendix 7, p. 5)

Table 5.9-5 shows the mitigated outflows for the 2-Year, 24-Hour storm analyzed POD, including a comparison between the existing and mitigated-proposed conditions outflows. As seen in the table, the 2-Year, 24-Hour peak flow rate for all analyzed PODs have decreased compared to the pre-developed condition. The remaining three PODs (1, 3 and 5) were not analyzed because the overall contributing area reduced and no impervious areas were draining to those PODs, which implies a reduction of the peak of the 2-Year, 24-Hour storm. Therefore, the proposed BMPs satisfy the conditions needed for hydromodification compliance: all PODs have peaks smaller, or not in excess of 110% of the pre-development peak flow generated by the 2-Year, 24-Hour storm event. (PWQMP Appendix 7, p. 7)

Water Quality

The PWQMP (Appendix J) identifies Site Design, Source Control, and Treatment Control BMPs, which would be implemented as part of the Project.

Site Design BMPs

Site Design BMPs are features that reduce the creation or severity of potential pollutant sources or reduce the alteration of a site's natural flow. Site Design BMPs are identified in the PWQMP to protect downstream water quality by minimizing the amount of urban runoff, minimizing the impervious footprint of the Project, and minimizing directly-connected impervious areas.

The Project proposes five (5) DMAs that drain to "self-treating" areas. The on-site tributary areas to PODs 1 and 5 will remain undisturbed in developed conditions and thus are considered self-treating. Similarly, the tributary areas to PODs 2 and 3 are also considered self-treating (PWQMP, p. 8). All other areas drain to a proposed BMP basins. Self-treating areas are natural areas that do not drain to stormwater BMP basins, but rather drain directly off site or to a system of conveyances known as a MS4 facility. By having the self-treating areas drain to MS4 facilities it prevents runoff from joining with runoff from the Project's impervious surfaces. Self-treating areas include landscaped slopes that drain off-site to an existing public street, natural conveyance, or MS4 facility. In general, self-treating areas include no impervious areas, unless very small, and slopes are gentle enough to ensure runoff from impervious areas will be absorbed into the vegetation and soil.

According to the WQMP Guidance Document for the Santa Ana Region of Riverside County, the minimum effective area required to be made available for LID BMPs at a "Mixed-Use, Commercial/Industrial land use with Floor-to-Area Ratio less than 1.0" is 10 percent (WQMP Guidance, Table 2-5, p.41). The Project meets this description, with an assumed impervious area of 29.58 acres. The Project design exceeds the minimum requirement by providing approximately 14.83 acres of self-treating areas, which are considered LID Principles (PWQMP, p.8).

Because the Project includes parking/loading/unloading areas for trucks, substation of pavement for landscaping is not feasible. The Project does not propose overflow parking where substitution of pavement for landscaping would be optimal.

Source Control BMPs

Generally speaking, Source Control BMPs are activities or programs intended to limit the contact between pollutant sources and stormwater. The PWQMP identifies Permanent Structural and Operational Source Control BMPs to be implemented by the Project. Permanent Structural Source Control BMPs identified for the Project include:

- On-site storm drain inlet markings;
- Interior floor drains;
- Landscape plan designs which include native species and minimize irrigation/runoff;
- Landscape areas that retain or detain stormwater while using minimum to no pesticides;
- Refuse areas such as dumpster enclosures which have signs on or near dumpsters with the words "Do not dump hazardous materials here" or similar;
- Adequate number of receptables;
- No processes to drain to exterior;
- Maintain clean loading docks;
- Draining fire sprinkler test water;
- Draining lines which do not discharge to the storm drain system;
- Maintenance of clean plazas, sidewalks, and parking lots (PWQMP p. 30-33).

Operational Source Control BMPs identified for the Project include:

- On-site storm drain inlet maintenance;
- Stormwater pollution prevention information to new occupants;
- Annual inspections of interior flood drains and elevator shaft sump pumps;
- Landscape maintenance with minimal pesticides use and providing Integrated Pest Management (IPM) information to new occupants;
- Minimum or no pesticide use for the maintenance of landscaping;
- Erosion prevention by planting fast-growing native vegetation while also reducing water;
- Daily maintenance or repair of waste receptacles;
- All industrial activities shall be performed indoors;
- Moving loaded and unloading items indoors as soon as possible;
- Periodically inspect storm drain system;
- Maintenance of debris from entry into the storm drain system (PWQMP, pp. 30-33).

Treatment Control BMPs

Treatment Control BMPs are engineered systems designed and constructed to remove pollutants from urban runoff (RWQCB(c), Appendix 4, p. 18). Per the site's geotechnical engineering investigation and working knowledge of poor infiltration characteristics throughout the March Joint Powers Authority (JPA) area, infiltration was determined to be infeasible for the LID BMP design. Therefore, treatment for developed condition's runoff is to be provided by four standard bioretention basins and one volume-based treatment control BMP. BMPs 2B, 3A, 3B, and 4 are standard bioretention basins. BMP-2A is the treatment control BMP and the chosen model is "MWS-L-4-19-V". The MWS was selected due to unavailable footprint for a standard bioretention basin. Furthermore, the selected MWS has sufficient capacity to both treat the project "Design Capture Volume" (DCV) and maintain "Hydrologic Conditions of Concern" (HCOC) compliance (PWQMP, p. 8). A HCOC exists when a site's hydrologic regime is altered and there are significant impacts on downstream channels and aquatic habitats, along or in conjunction with impacts of other projects. This typically occurs when the post-construction runoff rates are greater than the pre-development runoff rates. The Santa Ana Regional Board requires permittees (i.e., the City) to implement LID techniques to minimize the HCOC (RWQCB(c), p.30)

The Project site has minimal capability for infiltration based BMPs because it overlies granitic bedrock. In such a case, there is "Alternative Compliance," including "Stormwater Credits" for alternatives to infiltration, hydromodification (HCOC), and the other WQMP requirements (WQMP Guidance, p. 63). In the future, the City may establish such a water credit program.

Water Conservation and Efficiency Features of the Proposed Project

The proposed Project includes the following water conservation and efficiency features:

- Create water-efficient landscapes in compliance with the City's Water Efficient Landscape and Irrigation Ordinance 19.570;

- Install water-efficient irrigation systems and devices, such as soil moisture based irrigation controls and sensors for landscaping according to the City's Water Efficient Landscape and Irrigation Ordinance 19.570 developed pursuant to the California Department of Water Resources' Model Efficient Landscape Ordinance;
- Design buildings to be water-efficient; install water-efficient fixtures and appliances;
- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff;
- Provide education about water conservation and available programs and incentives to the building operators to distribute to employees.

5.9.4 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the *State CEQA Guidelines*. The City generally utilizes the CEQA significance thresholds in Appendix G ("Environmental Checklist") of the State CEQA Guidelines. The Environmental Checklist prepared by the City for the Project (Appendix A of this DEIR) indicates that there are no impacts related to flood hazard, tsunami or seiche zones or project inundation but impacts related to the Sycamore Hills Distribution Center Project may be considered potentially significant if the proposed project would:

- (Threshold A) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;
- (Threshold B) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- (Threshold C) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: i) result in substantial erosion or siltation on-or off-site; ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off site; iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or; iv) impede or redirect flood flows; and
- (Threshold D) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

5.9.5 Environmental Impacts

Threshold A: *Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?*

Construction of the Project has the potential to result in discharges from soil disturbance, which could violate water quality standards if not adequately addressed. Therefore, the Project would be required to comply with the NPDES Statewide General Construction Permit (Order No. 09-09-

DWQ). The permit requires preparation of an effective Storm Water Pollution Prevention Plan (SWPPP), which describes erosion and sediment control BMPs to prevent stormwater pollution during construction. The SWPPP must be prepared by a Qualified SWPPP Developer and implemented on site by a Qualified SWPPP Practitioner. Through compliance with the regulatory requirements of the NPDES Statewide General Construction Permit and on-site drainage facilities, the Project is not expected to violate any water quality standards or waste discharge requirements during construction; thus impacts would be **less than significant** in this regard.

Once the Project is constructed, operation of the site will have the potential to generate types of pollutants sourced from roof and parking lot runoff typical of a warehouse distribution center. These pollutants include: trash and debris, oil and grease, sediment/turbidity, nutrients, oxygen-demanding substances, pesticides, organic compounds (specifically petroleum hydrocarbons), bacteria and viruses, and metals. However, as discussed in Section 5.9.3 – Project Design Considerations, the Project will follow Site Control, Source Control, and Treatment Control BMPs. Additionally, the on-site tributary areas to POD 1 and 5 will remain undisturbed in developed conditions and are considered self-treating. Similarly, the tributary areas to PODs 2 and 3 (not including sub-areas) are also considered self-treating (PWQMP, p. 8).

The PWQMP (Appendix J) has been reviewed and deemed approved by the City. The PWQMP identifies the BMPs that will be used to address hydrologic conditions of concern and water quality from site development. Prior to the issuance of a grading permit for the Project, a Final Project-Specific WQMP would be prepared and submitted to the City for review and approval. The Final WQMP will contain the same measures identified in the PWQMP that would effectively treat all pollutants of concern (from the Project's land use), and hydrologic conditions of concern, but it will also include some additional details related to operations, maintenance of the BMPs, and educational materials for site tenants.

As described in Section 5.9.3 – Project Design Considerations, some on site runoff generated during operation will be captured by self-treating landscaping, which will facilitate settling of non-dissolved pollutants and some infiltration. Self-treating landscaping will consist of drought tolerant and undisturbed native vegetation (PWQMP, p. 13). Therefore, through compliance with the regulatory requirements of the NPDES permits and implementation of Site Control, Source Control, and Treatment Control BMPs as identified in the PWQMP, and the forthcoming Final WQMP, the Project's potential to violate water quality standards or waste-discharge requirements is considered to be **less than significant.**

Threshold B: *Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

The Project water service source would be provided by Western, which provides water to an approximately 527-square mile area in San Bernardino County and Riverside County. The Western derives its water sources from the Sacramento-San Joaquin Bay-Delta and from the Colorado River. Western also has a groundwater supply in its Murrieta Division, which is combined with imported water for the region's residents. Western also has rights to the

groundwater in the Bunker Hill Basin, which is transported into the Riverside Division through an agreement with the City.

The Project will increase the amount of impervious surface on the Project site, which could indirectly affect the ability of groundwater to be recharged locally through infiltration. However, the subsurface condition has been described as fill, natural undisturbed soil, and granitic bedrock as a result of exploratory trenches. Due to the existing conditions, no groundwater was encountered during the geotechnical survey (NorCal, p. 3). Additionally, per the review of the City of Riverside Public Safety Element – Liquefaction Zones (2006), the site is not situated in an area of generalized liquefaction susceptibility. Therefore, the historical groundwater depth is greater than 50 feet.

As discussed in Threshold A, landscaping will consist of drought tolerant species and will be provided in designated areas. Given that the site is not used for groundwater recharge for water supply reasons, and because the site is not suited for groundwater recharge geologically, development of the Project will not impact a local groundwater recharge condition. Therefore, the Project will not cause a net deficit in aquifer volume or a lowering of the local groundwater table level and impacts related to groundwater will be **less than significant.**

Threshold C: *Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surface, in a manner which would:*

i) result in substantial erosion or siltation on- or off-site;

Increased peak flows could be potentially problematic for safety considerations of increased erosion. However, as previously discussed in Table 5.9-6 under Section 5.9.3 – Project Design Considerations, peak flows will be reduced to or below pre-development levels via routing as all developed runoff will be conveyed to proposed BMPs for treatment and detention (Drainage Study, p. 4). LID BMPs will also be implemented on site and off site to mitigate for potential erosion (PWQMP, p. 29). Preventative landscape erosion will be incorporated composing of fast-growing, dense ground covering plants (PWQMP, p. 31). In addition, implementation of a SWPPP will prevent runoff from the construction site and will prevent water degradation of water quality during storm events through erosion, siltation, and other contaminations. Erosion, siltation, and other possible pollutants are addressed as part of the PWQMP. Therefore, the Project will not result in substantial erosion or siltation on- or off-site and impacts will be **less than significant**.

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

As previously discussed in Section 5.9.3 – Project Design Considerations, runoff volume for each POD was analyzed under a 2-year 24-hour duration storm (Table 5.9-6). The flows to PODs 1,3, and 5 are going to be lower in proposed conditions compared to existing conditions. Runoff volume will increase in PODs 2, 3A, 3B, and 4. Table 5.9-6 shows the peak flows rates are decreased in the proposed condition outflows with BMPs . The proposed BMPs and storm drain systems have been designed to mitigate the Hydrologic Conditions of Concern by matching, or reducing, the flowrates within the post-development hydrograph with the pre-development

hydrographs peak rates for the 2-year 24-hour storm event. (PWQMP, p. 29) Therefore, flooding is not anticipated on- or off site and impacts will be **less than significant**.

iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;

The Project is not anticipated to create additional runoff and existing runoff will be contained within the Project site. As indicated above in Section 5.9.3 – Project Design Consideration, the on-site tributary areas to PODs 1 and 5 will remain undisturbed in developed conditions and thus are considered self-treating. Similarly, the tributary areas to PODs 2 and 3 (not including subareas) are also considered self-treating. All other areas drain to a proposed BMP as previously shown on Table 5.9-3.

As outlined in the PWQMP, treatment for developed condition's runoff is to be provided by four (4) standard bioretention basins and four (4) volume-based treatment control BMP basins. BMPs 2B, 3A, 3B, and 4 are the standard bioretention basins. BMPs 2A, 2C, 2D, and 2E are the Filterra proprietary bioretention treatment control BMPs.

In order to determine design capture volumes and flow rates, the Project site was divided into a total of ten DMAs. Per the PWQMP, Table 5.9-6 shows the required area and flow rate for the proposed standard bioretention basins that would be needed to accommodate the design capture volume for the Project. As shown under the proposed volume column the standard bioretention basins will be able to contain more than the design capture volume.

Table 5.9-6 – Design and Proposed Volume for BMPs

BMP Type: Standard Bioretention Basins	Design Capture Volume, V_{BMP} (cubic feet)	Proposed Volume on Plans (cubic feet)
2B	10,316	11,818
3A	8,424	12,163
3B	5,287.2	15,876
4	24,326	27,432

Source: PWQMP

Pollutant sources are projected to include on-site storm drain inlets, landscape/outdoor pesticide use, refuse areas, plazas, sidewalks, loading docks, and parking lots (PWQMP, p.9). With the implementation of the BMPs, the Project will not exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Therefore, potential impacts are **less than significant.**

iv) and/or impede or redirect flood flows?

There are no streams or rivers located within the Project site. Although the site will be graded and improved, the Project would not significantly alter drainage patterns currently developed on or off the site. As outlined in the PWQMP, stormwater is generally conveyed through storm drainpipes into a proposed water quality infiltration basin as discussed above in threshold C iii. . The existing Project site is comprised of five (5) drainage management areas (DMAs), which each drain to their respective points of discharge (POD), along the northern and eastern Project site boundary as identified in Section 5.9.3 - Project Design Considerations. The planned onsite storm drain system for the site will convey stormwater runoff that drains onto the site from upland areas, as well as stormwater runoff from the site itself, to existing natural drainage courses that extend north into the Sycamore Canyon Wilderness Park, and an existing low lying area that extend east to adjacent private property. As the Project's stormwater runoff is not conveyed uphill and towards Alessandro Boulevard or Barton Street, the Project site would not connect to the existing public storm drain system or require the construction of stormwater management facilities in the public right of way. Flood flows will not be impeded or redirected, therefore, impacts are **less than significant**.

Threshold D: *Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The Project is located within the Santa Ana RWQCB planning and management boundaries. Local water management plans must, at a minimum, comply with water quality thresholds and measures as defined by the Santa Ana Basin Plan. The Santa Ana Basin Plan has factors to be considered for establishing water quality objectives which includes the following (RWQCB(b); chapter 4; p.1): 1. Past, present, and probable future beneficial uses of water; 2. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto; 3. Water quality conditions that could reasonable be achieved through the coordinated control of all factors which affect water quality in the area; 4. Economic consideration; 5. The need for developing housing within the region; and 6. The need to develop and use recycled water.

Per the County's WQMP template, future projects must submit a PWQMP to the City which contains BMPs, design the site to minimize imperviousness, cover or control sources of stormwater pollutants, use LID to infiltrate, ensure runoff does not create a hydrological condition of concern (HCOC). Implementation of the WQMP is enforceable under the City of Riverside Water Quality Ordinance (Municipal Code Section 14.12.315). With implementation of the Project's PWQMP, the Project is not anticipated to conflict with or obstruct implementation of the Santa Ana Basin Plan.

The Project will not conflict or obstruct implementation of a sustainable groundwater management plan. Per the Sycamore Canyon Business Park Specific Plan, Western has stated that there is adequate water volume available to serve any potential industrial development within the Specific Plan Area. Additionally, per Metropolitan's 2015 UWMP report, Western will have sufficient water supply available to serve the Project including any reasonably foreseeable future development during normal, dry and multiple dry years (outlined in further detail in the Utilities Section, 5.14.5

Environmental Impacts, Threshold B). Therefore, sufficient water supplies exist to serve the Project. Therefore, impacts are **less than significant.**

5.9.6 Proposed Mitigation Measures

An EIR is required to describe feasible mitigation measures which could minimize significant adverse impacts (*State CEQA Guidelines, Section 15126.4*.) No mitigation measures related to hydrology and water quality have been identified, as Project design features, implementation of a Final Project-Specific WQMP, SWPPP, and compliance with NPDES permit requirements would eliminate or reduce potential significant adverse impacts related to hydrology and water quality to **less than significant**.

5.9.7 Cumulative Environmental Effects

The cumulative impact area for hydrology and water quality impacts is the Santa Ana River watershed hydrologic unit. The City is located within the Santa Ana Region (Region 8) of the Regional Water Quality Control Board and Reach 3 of the Santa Ana River is the ultimate receiving water body for runoff from the Project site.

Cumulative impacts to water quality could be significant with the addition of substantial increases in development and temporary construction activities in the Santa Ana River watershed. These cumulative effects include increasing the amount of flow, sedimentation, and urban pollutants that are transmitted via storm flows to the Santa Ana River and its tributaries. The Project, along with all of the cumulative development projects, are required to comply with current storm water requirements for construction-related activities and operation of the site. Erosion and sediment control BMPs will be implemented during construction of the Project in compliance with the NPDES General Permit for Construction Activities. After construction, the Project would implement the permanent treatment systems identified in the PWQMP. As noted in Section 5.9.3 Project Design Considerations, the PWQMP identifies site design, source control, and treatment control BMPs to be implemented as part of the proposed Project. These include minimization of impervious area at the Project site as well as depressed landscape for infiltration, when appropriate, at the Project site. Permanent Structural Source Control BMPs include but are not limit to: onsite storm drain inlet markings, interior floor drains, and regular maintenance of refuse areas**,** as well as standard bioretention basins, volume-based treatment control BMP basins. BMPs 2B, 3A, 3B, and 4 are the standard bioretention basins, and Filterra proprietary bioretention treatment control BMPs. Therefore, Project construction and operation would not considerably contribute to a significant cumulative water quality impact.

Because the Project is not located within a groundwater recharge area, the increase in the amount of impermeable surfaces within the watershed resulting from the proposed Project has only the nominal potential to affect groundwater recharge and there would be no cumulative impacts in this regard. Per the Sycamore Canyon Business Park Specific Plan, Western has stated that there is adequate water volume available to serve any potential industrial development within the Specific Plan Area. Additionally, per Metropolitan's 2015 UWMP report, Western will have sufficient water supply available to serve the Project including any reasonably foreseeable future development during normal, dry and multiple dry years (outlined in further detail in the Utilities Section, 5.14.5 Environmental Impacts, Threshold B). Therefore, sufficient water supplies exist to serve the Project and the Project's water demand is not considered cumulatively considerable. For these reasons, cumulative impacts with regard to groundwater are **less than significant.**

The proposed Project will alter Drainage A due to the construction of Building B (see Figure 5.3-5 Drainages Map). The proposed Project will install a 48-inch pipe which will cross through Building A and capture runoff which will then discharge to POD-2. The remainder of the runoff will be collected by other PODs and a proposed brow-ditch/pipe system. No substantial erosion or siltation is expected either during Project operation or construction considering the proposed Project and erosion control methods that will be in place during construction. Through compliance with the terms of the NPDES general construction permit and the City's MS4 permit, the Project's impact to altering existing drainage patterns is not cumulatively considerable. Therefore, cumulative impacts with regard to alteration of existing drainage patterns are **less than significant.**

The Project site is not located within a flood hazard area or dam inundation zone; therefore, the Project would not contribute to cumulative flood or dam inundation hazards. Through implementation of the final PWQMP, SWPPP, and compliance with NPDES permit requirements, the Project's contribution to cumulative flood or dam inundation hazards is not cumulatively considerable. Therefore, cumulative impacts with regard to flood or dam inundation hazards are **less than significant**.

5.9.8 References

The following references were used in the preparation of this section of the DEIR:

GAP	City of Riverside. *Green Action Plan*. 2012. (Available at http://www.greenriverside.com/green-action/default.asp, accessed February 3, 2020.)
GP 2025	City of Riverside, General Plan 2025, certified November 2007 with subsequent amendments to various elements. (Available at http://www.riversideca.gov/planning/gp2025program/general-plan.asp, accessed February 2020.)
GP 2025 FPEIR	City of Riverside, General Plan 2025 Program Environmental Impact Report (SCH# 2004021108), certified November 2007. (Available at http://www.riversideca.gov/planning/gp2025program/, accessed February 2020.)
NorCal Engineering	*NorCal Engineering, Geotechnical Engineering Investigation*, prepared March 2019 and updated September 2020 (Appendix G).

PWQMP	*Project Specific Water Quality Management Plan, Revised* March 5, 2020. (Appendix J)
REC(a)	REC Consultants, Inc. Drainage Study for Sycamore Hills Business Center March Joint Powers Authority County of Riverside, California, Revised May 7, 2020. (Appendix J)
Res No. 88-63	State Water Resources Control Board. Sources of Drinking Water Policy, Resolution No. 88-63. (Available at www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/1988/rs1988_0063.pdf, accessed September 16, 2020)
RPU(a), 2015	City of Riverside Public Utilities, Water Quality Report 2015, June 2016. (Available at www.riversideca.gov/utilities/pdf/wqar/2015-Water-Quality-Annual-Report.pdf, accessed September 14, 2020)
RPU(b), 2015	Water Systems Consulting, Inc., 2015 Urban Water Management plan for Riverside Public Facilities, Water Division, July 2016. (Available at http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/docs/303d/2010_303d.pdf, accessed September 16, 2020)
RUWMP	Regional Urban Water Management Plan, June 2016. (Available at http://www.mwdh2o.com/PDF_About_Your_Water/2.4.2_Regional_Urban_Water_Management_Plan.pdf, accessed September 9, 2020)
RWQCB(a)	Santa Ana Regional Water Quality Control Board, 2010 Santa Ana Region 303(d) List of Water Quality Limited Segments, October 11, 2011. (Available at http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/docs/303d/2010_303d.pdf, accessed February 3, 2020)
RWQCB(b)	Santa Ana Regional Water Quality Control Board, *Water Quality Control Plan Santa Ana River Basin,* February 11, 2008 update. (Available at www.swrcb.ca.gov/rwqcb8/water_issues/programs/basin_plan/index.shtml, accessed February 3, 2020)
RWQCB(c)	Santa Ana Regional Water Quality Control Board, Order No. R8-2010-0033, NPDES No. CAS 618033, National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the Riverside County Flood Control and Water Conservation District, the County of Riverside, and the Incorporates Cities of Riverside County Within the Santa Ana Region, Area-Wide Urban Runoff Management Program, January 29, 2010. (Available at http://www.waterboards.ca.gov/santaana/board_decisions/adopted_orders/orders/2010/10_033_RC_MS4_Permit_01_29_10.pdf, accessed September 16, 2020)
SAR-DAMP	Riverside County Drainage Area Management Plan, Santa Ana Region. June 30, 2017. (Available at http://content.rcflood.org/downloads/NPDES/Documents/SA_SM_DAMP/SAR_DAMP.pdf, accessed September 14,2020)

SCBPSP	Beland Associates, Inc. with Takata/Associates, Inc. City of Riverside., Specific Plan/EIR Sycamore Canyon Business Park (Originally known as the Box Springs Industrial Park), originally adopted on April 10, 1984, edited to include Specific Plan Amendments as of May 1993 by the City of Riverside Planning Department. (Available online at https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/spec-plans/syc-bus-park/plan_doc.pdf, accessed September 16, 2020)
UWMP	Western Municipal Water District, 2015 Urban Water Management Plan Update, Adopted June 1, 2016. (Available online at http://www.wmwd.com/215/Urban-Water-Management-Plan, accessed February 3, 2020)
Western Regional Climate Center	Western Regional Climate Center. 2020. Desert Research Institute. (Available online at: http://www.wrcc.dri.edu/coopmap. Accessed September 16, 2020)
Wood	Wood Environmental & Infrastructure, Inc., *Jurisdictional Delineation Report, Sycamore Hills Distribution Center, City of Riverside, Riverside County, California,* December 2020. (Appendix D)
WQMP Guidelines	Water Quality Management Plan, A Guidance Document for the Santa Ana Region of Riverside County. Approved by Santa Ana RWQCB October 22, 2012. (Available online at http://rcflood.org/downloads/NPDES/Documents/SA_WQMP/SantaAnaWQMPGuidance.pdf, accessed September 16, 2020)

5.10 Land Use and Planning

Based on Appendix G of the *State CEQA Guidelines,* the analysis in the Initial Study (IS/NOP) prepared for this Project (Appendix A), and comments received during the NOP public comment period, this section evaluates potential impacts related land use and planning, and more specifically the Project's potential to conflict with any applicable land use plan, policy, or regulation, adopted for the purpose of avoiding or mitigating an environmental effect.

5.10.1 Setting

Existing Land Uses

The Project site is currently undeveloped and vacant, but has been used historically as open space. It has a General Plan land use designation of B/OP – Business Office Park as shown on Figure 3.0-5 - Land Use Designation Map and is zoned BMP-SP – Business and Manufacturing Park Specific Plan (Sycamore Canyon Business Park) Overlay Zones as shown on Figure 3.0-7 - Zoning Map, found in Section 3.0, Project Description. The Project site is also within the Industrial land use category of the Sycamore Canyon Business Park Specific Plan as shown on Figure 3.0-6, also found in Section 3.0, Project Description.

The Project site contains an existing Restricted Property area totaling 11.6 acres, as shown in Figure 3.0-3 – Project Site Map. The 11.6-acre Restricted Property area supports a jurisdictional drainage and associated riparian habitat, which was required as a condition of the Clean Water Act Section 404 permit from the US Army Corps of Engineers for construction of the Grove Community Church at an off-site location.

Surrounding Land Uses

The Project site is bordered on the north by the Sycamore Canyon Wilderness Park, vacant property to the east, Barton Street and a wastewater treatment plant to the west, and the Citywide Self Storage facility and Alessandro Boulevard to the south. Commercial and residential uses are located further south (across Alessandro Boulevard), within the City and County of Riverside jurisdiction. The land uses and zoning designations of the Project site and properties adjacent to the Project site are described in Table 5.10-1 below.

Table 5.10-1 – Project Site & Surrounding Land Uses

	Existing Land Use	General Plan Designation	Zoning Designation
Project Site	Vacant	B/OP – Business/Office Park	BPM-SP – Business and Manufacturing Park and Specific Plan (Sycamore Canyon Business Park) Overlay Zones
North	Sycamore Canyon Wilderness Park	P – Public Park	PF-SP – Public Facilities and Specific Plan (Sycamore Canyon Business Park) Overlay Zones
East	Vacant and Citywide Self-Storage	B/OP – Business/Office Park, and P – Public Park	BPM-SP – Business and Manufacturing Park and Specific Plan (Sycamore Canyon Business Park) Overlay Zones, and PF-SP – Public Facilities and Specific Plan (Sycamore Canyon Business Park) Overlay Zones
South	Citywide Self-Storage Across Alessandro Blvd. commercial and residential (in County of Riverside)	C – Commercial	CG-X-20 – Commercial General, Building Setback (20 feet from Barton Street) Overlay Zones, and CR – Commercial Retail Zone
West	Wastewater Treatment Plant	PF – Public Facilities/Institutions and C – Commercial	PF – Public Facilities Zone, CG-X-20 – Commercial General, Building Setback (20 feet from Barton Street) Overlay Zones, and CR-X-50/20 – Commercial Retail and Building Setback (50 feet from Alessandro Blvd. and 20 feet from other streets) Overlay Zones

5.10.2 Related Regulations

5.10.2.1 Federal Regulations

No Federal regulations would be applicable to land use and planning with respect to the Project.

5.10.2.2 State Regulations

Article XI, Section 7 of the California State Constitution is the primary authority for cities and counties to regulate land use. California State Planning and Land Use Law (Government Code § 65000 et seq.) sets forth minimum standards to be observed in local land use regulatory practices, reserving in cities and counties the maximum degree of control in such matters.

5.10.2.3 Regional Regulations

March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan

The Riverside County Airport Land Use Commission (ALUC) is the lead agency responsible for airport land use compatibility planning in Riverside County. The fundamental purpose of ALUC is to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses. The basic function of the airport land use compatibility plans is to promote compatibility between airports and the land uses that surround them. Compatibility plans serve as a tool for use by airport land use commissions in fulfilling their duty to review proposed development plans for airports and surrounding land uses. Additionally, compatibility plans set compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances and to landowners in their design of new development. On November 13, 2014, ALUC adopted the March Air Reserve Base Land Use Compatibility Plan (MARB/IPA LUCP). The compatibility zones and associated criteria set forth in the LUCP provide noise and safety compatibility protection.

5.10.2.4 Local Regulations

City of Riverside General Plan 2025

The *City of Riverside General Plan 2025* (GP 2025) serves as a guide for land use decision making and the implementation of the community's vision for the City. Each of the 12 elements in the GP 2025 contains objectives and policies to help guide development and decisions in the City.

Land Use and Urban Design Element

Objective LU 4: Minimize the extent of urban development in the hillsides, and mitigate any adverse impacts associated with urbanization to the extent feasible.

> **Policy LU-4.5:** Seek opportunities for new or enhanced trail/pedestrian linkages between hillside areas and other components of Riverside Park.

Policy LU-4.6: Ensure protection of prehistoric resources through consultations with the Native American tribe(s) identified by the Native American Heritage Commission pursuant to Government Code § 65352.3 and as required by the California Environmental Quality Act.

Objective LU-7: Preserve and protect significant areas of native wildlife and plant habitat, including endangered species.

Policy LU-7.1: Continue to maintain Sycamore Canyon Wilderness Park as primarily a functioning wildlife habitat.

Policy LU-7.2: Design new development adjacent and in close proximity to native wildlife in a manner which protects and preserves habitat.

Policy LU-7.3: Continue to require natural open space easements in conjunction with new development in hillside and arroyo areas over non-graded areas of the development.

Policy LU-7.4: Continue to participate in the Western Riverside County Species Habitat Conservation Plan (MSHCP).

Objective LU-9: Provide for continuing growth within the General Plan Area, with land uses and intensities appropriately designated to meet the needs of anticipated growth and to achieve the community's objective.

Policy LU-9.1: Identify sufficient locations for residential and non-residential development to accommodate growth anticipated through the year 2025 on the General Plan Land Use Policy Map (Figure LU-10).

Policy LU-9.3: Designate areas for urban land uses where adequate urban levels of public facilities and services exist or are planned, in accordance with the public facilities and service provisions policies of this General Plan.

Objective LU-22: Avoid land use/transportation decisions that would adversely impact the long-term viability of the March Air Reserve Base/March Inland Port, Riverside Municipal Airport, and Flabob Airport.

Policy LU-22.2: Work cooperatively with the Riverside County Airport Land Use Commission in developing, defining, implementing and protecting airport influence zones around the MARB/MIP, Riverside Municipal and Flabob Airports and in implementing the new Airport Land Use Compatibility Plan.

Objective LU-24: Maximize the economic impact of Riverside's industrial land by careful use of industrial properties, giving priority to clean enterprises that yield large numbers of highly skilled, high-paying jobs relative to site size.

Policy LU-24.1: Tailor zoning regulations for industrial and business/office park uses to ensure that future uses are in concert with the City's wider policy goals.

Objective LU-25: Add to the City's industrial land base where logically and physically possible to do so.

Policy LU-25.2: Encourage and facilitate appropriate annexations to the Hunter Business Park and Sycamore Canyon Business Park.

Objective LU-27: Enhance, maintain, and grow Riverside's inventory of street trees.

Policy LU-27.1: Require appropriately sized landscaped parkways in all new development. Parkway areas shall be of sufficient width to allow planting of trees that will become large canopy trees.

Policy LU-27.4: Encourage trees on private property to add to the City's urban forest.

Objective LU-30: Establish Riverside's neighborhoods as the fundamental building blocks of the overall community, utilizing Neighborhood and Specific Plans to provide a more detailed design and policy direction for development projects located in particular neighborhoods.

Policy LU-30.2: Ensure that every neighborhood has a unique community image that is incorporated and reflected in all public facilities, streetscapes, signage and entryways proposed for each neighborhood.

Policy LU-30.3: Encourage trees on private property to add to the City's urban forest.

Objective LU-79: Preserve and enhance the natural character and qualities of Sycamore Canyon Wilderness Park.

Policy LU-79.2: Ensure that development on the periphery of the park is minimally disruptive and maximally screened from the Park.

Policy LU-79.5: Enhance access points and encourage recreational use in accordance with the adopted Sycamore Canyon Wilderness Park – Stephen's Kangaroo Rat Management Plan and Updated Conceptual Development Plan.

Objective LU-80: Establish Sycamore Canyon Business Park and Canyon Springs as a center for economic growth.

Policy LU-80.3: Minimize any adverse land use conflicts between industrial uses and the residential and open space properties that abut specific plan areas.

Policy LU-80.6: Promote the development of Sycamore Canyon to achieve economic success defined by a diverse and compatible industrial base that provides economic opportunities for all its citizens. The City preferred outcome is to promote light industrial/flex space to maximize employment opportunities and utilization of the limited land supply. To achieve this goal, the City must first overcome complex infrastructure issues that limit development in the area. Large "big box" distribution or warehouse facilities will be necessary on a limited basis to create the critical mass required to solve some of these infrastructure issues.

Circulation and Community Mobility Element

Objective CCM-2: Build and maintain a transportation system that combines a mix of transportation modes and transportation system management techniques, and that is designed

to meet the needs of Riverside's residents and businesses, while minimizing the transportation system's impacts on air quality, the environment, and adjacent development.

Policy CCM-2.3: Maintain LOS D or better on Arterial Streets wherever possible. At key locations, such as City Arterials used by regional freeway bypass traffic and at heavily traveled freeway interchanges, allow LOS E at peak hours as the acceptable standard on a case-by-case basis.

Policy CCM-2.4: Minimize the occurrence of streets operating at LOS F by building out the planned street network and by integrating land use and transportation in accordance with the General Plan principles.

Objective CCM-12: Facilitate goods movement as a means of economic expansion, while protecting residents and visitors from the negative effects typically associated with truck operations and rail service.

Policy CCM-12.1: Discourage the use of public streets for heavy freight loading and unloading.

Policy CCM-12.2: Ensure that new development projects provide adequate truck loading and unloading facilities.

Policy CCM-12.4: Strive to minimize through truck traffic in residential areas and enforce City codes that restrict trucks on certain streets.

Public Safety Element

Objective PS-1: Minimize the potential damage to existing and new structures and loss of life that may result from geologic and seismic hazards.

Policy PS-1.1: Ensure that all new development in the City abides by the most recently adopted City and State seismic and geotechnical requirements.

Objective PS-2: Reduce potential flood hazards within Riverside.

Policy PS-2.1: Reduce flood risks for residents and businesses within urbanized areas, as feasible.

Policy PS-2.2: Encourage flood control infrastructure that does not reduce the natural character or limit the use of the site.

Policy PS-2.3: Minimize additional flood risk exposure in developing areas.

Objective PS-3: Minimize risks associated with the storage, transport and disposal of hazardous materials.

Policy PS-3.1: Ensure that hazardous materials used in business and industry are handled properly.

Policy PS-3.3: Work with responsible Federal, State, and County agencies to identify and regulate the disposal of toxic materials.

Policy PS-3.4: Reduce the risks associated with ground transportation hazards, where feasible.

Policy PS-3.5: Encourage sewer service to minimize groundwater contamination.

Objective PS-4: Protect the community from hazards related to air and ground transportation.

Policy PS-4.1: Minimize the risk of potential hazards associated with aircraft operations at the Riverside Municipal Airport, March Air Reserve Base/March Inland Port, and Flabob Airport through the adoption and implementation of the Airport Protection Overlay Zone, and the Riverside County Airport Land Use Compatibility Plan, which includes the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan.

Policy PS-4.2: When planning for development near airports, anticipate possible increases in airport activity and expansion of airport facilities and services and the effects these changes may have on public safety.

Policy PS-4.3: Encourage development in the vicinity of the Riverside Municipal Airport that would not cause land use conflicts, hazards to aviation or hazards to the public and that is in compliance with the Riverside County Airport Land Use Compatibility Plan for the airport.

Policy PS-4.6: Ensure that development within airport influence areas is consistent with the Airport Protection Overlay Zone development standards and the Riverside County Airport Land Use Compatibility Plan, which includes the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan.

Policy PS-4.7: Ensure compatible land uses near March Air Reserve Base/March Inland Port through implementation of the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, adopted in November, 2014.

Objective PS-6: Protect property in urbanized and nonurbanized areas from fire hazards.

Policy PS-6.1: Ensure that sufficient fire stations, personnel and equipment are provided to meet the needs of the community as it grows in size and population.

Policy PS-6.2: Endeavor to meet/maintain a response time of five minutes for Riverside's urbanized areas.

Policy PS-6.3: Integrate fire safety considerations in the planning process.

Policy PS-6.4: Evaluate all new development to be located in or adjacent to wildland areas to assess its vulnerability to fire and its potential as a source of fire.

Policy PS-6.5: Mitigate existing fire hazards related to urban development or patterns of urban development as they are identified and as resources permit.

Policy PS-6.6: Continue to implement stringent brush-clearance requirements in areas subject to wildland fire hazards.

Policy PS-6.7: Continue to involve the City Fire Department in the development review process.

Policy PS-6.8: Pursue strategies that maintain and improve the City's Class 2 ISO rating.

Policy PS-6.9: Provide outreach and education to the community regarding fire safety and prevention.

Policy PS-6.10: Identify noncontiguous streets and other barriers to rapid response and pursue measures to eliminate the barriers.

Policy PS-6.11: Promote the prevention, detection, investigation and prosecution of accidental and arson fires through coordinated investigative and training partnerships with fire and law enforcement agencies and prosecuting authorities.

Objective PS-8: Improve community safety and reduce opportunities for criminal activity through appropriate physical design.

Policy PS-8.1: Maximize natural surveillance in all new development through physical design features that promote visibility.

Objective PS-9: Minimize the effects from natural and urban disasters by providing adequate levels of emergency response services to all residents in Riverside.

Policy PS-9.8: Reduce the risk to the community from hazards related to geologic conditions, seismic activity, flooding and structural and wildland fires by requiring feasible mitigation of such impacts on discretionary development projects.

Noise Element

Objective N-1: Minimize noise levels from point sources throughout the community and, wherever possible, mitigate the effects of noise to provide a safe and healthful environment.

Policy N-1.2: Require the inclusion of noise-reducing design features in development consistent with standards in Figure N-10(Noise/Land Use Compatibility Criteria), Title 24 California Code of Regulations and Title 7 of the Municipal Code.

Policy N-1.3: Enforce the City of Riverside Noise Control Code to ensure that stationary noise and noise emanating from construction activities, private developments/residences and special events are minimized.

Policy N-1.4: Incorporate noise considerations into the site plan review process, particularly with regard to parking and loading area, ingress/egress points and refuse collection areas.

Policy N-1.5: Avoid locating noise-sensitive land uses in existing and anticipated noise-impacted areas.

Policy N-1.8: Continue to consider noise concerns in evaluating all proposed development decisions and roadway projects.

Objective N-2: Minimize the adverse effects of airport-related noise through proper land use planning.

Policy N-2.1: Ensure that new development can be made compatible with the noise environment by using noise/land use compatibility standards (Figure N-10 – Noise/Land Use

Noise Compatibility Criteria) and the airport noise contour maps (found in the riverside County Airport Land Use compatibility Plans) as guides to future planning and development decisions.

Policy N-2.5: Utilize the Airport protection Overlay Zone, as appropriate, to advise landowners of special noise considerations associated with their development.

Objective N-3: Ensure the viability of March Air Reserve Base/March Inland Port.

Policy N-3.1: Avoid placing noise-sensitive land uses (e.g., residential uses, hospitals, assisted living facilities, group homes, schools, day care centers, etc.) within the high noise impact areas (over 65dB CNEL) for March Air Reserve Base/March Inland Port in accordance with the Riverside County 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan.

Policy N-3.2: Work with the Riverside County Airport Land Use Commission and the March Joint Powers Authority to develop noise/land use guidelines and City land use plans that are consistent with ALUC policies.

Policy N-3.3: Carefully consider planned future operations of the March Air Reserve Base and March Inland Port in land use decisions for properties within the airport-influenced area.

Objective N-4: Minimize ground transportation-related noise impacts.

Policy N-4.1: Ensure that noise impacts generated by vehicular sources are minimized through the use of noise reduction features (e.g., earthen berms, landscaped walls, lowered streets, improved technology).

Open Space and Conservation Element

Objective OS-1: Preserve and expand open space areas and linkages throughout the City and sphere of influence to protect the natural and visual character of the community and to provide for appropriate active and passive recreational uses.

Policy OS-1.1: Protect and preserve open space and natural habitat wherever possible.

Policy OS-1.3: Work with Riverside County and adjacent cities, landowners and conservation organizations to preserve, protect and enhance open space and natural resources.

Policy OS-1.4: Support efforts of State and Federal agencies and private conservation organizations to acquire properties for open space and conservation uses. Support efforts of nonprofit preservation groups, such as the Riverside Land Conservancy, to acquire properties for open space and conservation purposes.

Policy OS-1.5: Require the provision of open space linkages between development projects, consistent with the provisions of the Trails Master Plan, Open Space Plan and other environmental considerations including the MSHCP.

Policy OS-1.6: Ensure that any new development that does occur is effectively integrated through convenient street and/or pedestrian connections, as well as through visual connections.

Objective OS-2: Minimize the extent of urban development in the hillsides, and mitigate any significant adverse consequences associated with urbanization.

Policy OS-2.2: Limit the extent and intensity of uses and development in areas of unstable terrain, steep terrain, scenic vistas, arroyos and other critical environmental areas.

Policy OS-2.3: Control the grading of land, pursuant to the City's Grading Code, to minimize the potential for erosion, landsliding and other forms of land failure, as well as to limit the potential negative aesthetic impact of excessive modification of natural landforms.

Policy OS-2.4: Recognize the value of ridgelines, hillsides and arroyos as significant natural and visual resources and strengthen their role as features which define the character of the City and its individual neighborhoods.

Objective OS-5: Protect biotic communities and critical habitats for endangered species throughout the General Plan Area.

Policy OS-5.1: Preserve significant habitat and environmentally sensitive areas, including hillsides, rock outcroppings, creeks, streams, viewsheds, and arroyos through application of the RC Zone standards and the Hillside/Arroyo standards of the City's Grading Code.

Policy OS-5.2: Continue to participate in the MSHCP program and ensure all projects comply with applicable requirements.

Policy OS-5.3: Continue to participate in the Stephens' Kangaroo Rat (SKR) Habitat Conservation Plan including Collection of mitigation fees.

Policy OS-5.4: Protect native plant communities in the General Plan Area, including sage scrub, riparian areas and vernal pools, consistent with the MSHCP.

Objective OS-6: Preserve and maintain wildlife movement corridors.

Policy OS-6.1: Protect and enhance known wildlife migratory corridors and create new corridors as feasible.

Policy OS-6.2: Support regional and local efforts to acquire develop and maintain open space linkages.

Policy OS-6.3: Preserve the integrity of Riverside's arroyos and riparian habitat areas through the preservation of native plants.

Objective OS-8: Encourage the efficient use of energy resources by residential and commercial users.

Policy OS-8.1: Support the development and use of non-polluting, renewable energy sources.

Policy OS-8.2: Require incorporation of energy conservation features in the design of all new construction and substantial rehabilitation projects pursuant to Title 24 and encourage the installation of conservation devices in existing developments.

Policy OS-8.3: Encourage private energy conservation programs that minimize high energy demand and that use alternative energy sources.

Policy OS-8.4: Incorporate solar considerations into development regulations that allow existing and proposed buildings to use solar facilities.

Policy OS-8.5: Develop landscaping guidelines that support the use of vegetation for shading and wind reduction and otherwise help reduce energy consumption in new development for compatibility with renewable energy sources (i.e., solar pools).

Policy OS-8.6: Require all new development to incorporate energy efficient lighting, heating and cooling systems pursuant to the Uniform Building Code and Title 24.

Policy OS-8.9: Encourage construction and subdivision design that allows the use of solar energy systems.

Policy OS-8.10: Support the use of public transportation, bicycling and other alternative transportation modes in order to reduce the consumption of non-renewable energy supplies.

Policy OS-8.11: Support public education programs for City residents and businesses to provide information on energy conservation and on alternative to nonrenewable energy resources.

Policy OS-8.12: Require bicycle parking in new non-residential development.

Air Quality Element

Objective AQ-1: Adopt land use policies that site polluting facilities away from sensitive receptors and vice versa; improve job-housing balance; reduce vehicle miles traveled and length of work trips; and improve the flow of traffic.

Policy AQ-1.3: Separate, buffer and protect sensitive receptors from significant sources of pollution to the greatest extent possible.

Policy AQ-1.8: Promote “Job/Housing Opportunity Zones” and incentives to support housing in job-rich areas and jobs in housing-rich areas, where the jobs are located at non-polluting or extremely low polluting entities.

Policy AQ-1.9: Adhere to the adopted Master Plan for open spaces, trails and bikeways.

Policy AQ-1.15: Establish land use patterns that reduce the number and length of motor vehicle trips and promote alternative modes of travel.

Policy AQ-1.16: Design safe and efficient vehicular access to commercial and uses from arterial streets to ensure efficient vehicular ingress and egress.

Policy AQ-1.17: Avoid locating multiple-family developments close to commercial areas that emit harmful air contaminants.

Policy AQ-1.20: Create the maximum possible opportunities for bicycles as an alternative work transportation mode.

Policy AQ-1.21: Cooperate and participate in regional air quality management plans, programs and enforcement measures.

Policy AQ-1.22: Implement the required components of the Congestion Management Plan (CMP) and continue to work with Riverside County Transportation Commission on annual updates to the CMP.

Objective AQ-2: Reduce air pollution by reducing emissions from mobile sources.

Policy AQ-2.4: Monitor and strive to achieve performance goals and/or VMT reduction which are consistent with SCAG's goals.

Policy AQ-2.6: Develop trip reduction plans that promote alternative work schedules, ridesharing, telecommuting and work-at-home programs, employee education and preferential parking.

Policy AQ-2.8: Work with Riverside Transit Authority (RTA) to establish mass transit mechanisms for the reduction of work-related and non-work-related vehicle trips.

Policy AQ-2.11: Develop ways to incorporate the "Good Neighbor Guidelines for Siting New and/or Modified Warehouse/Distribution Facilities" into the Development Review process and Citywide air quality education programs.

Policy AQ-2.24: Support full compliance with the SCAQMD's Clean Fleet Rules.

Objective AQ-3: Prevent and reduce pollution from stationary sources, including point sources (such as power plants and refinery boilers) and area sources, including (including small emission sources such as residential water heaters and architectural coatings).

Policy AQ-3.6: Support "green" building codes that require air conditioning/filtration installation, upgrades or improvements for all buildings, but particularly for those associated with sensitive receptors.

Policy AQ-3.7: Require use of pollution control measures for stationery and area sources through the use of best available control activities, fuel/material substitution, cleaner fuel alternatives, product reformulation, change in work practices and of control measures identified in the latest AQMP.

Objective AQ-4: Reduce particulate matter, as defined by the Environmental Protection Agency (EPA), as either airborne photochemical precipitates or windborne dust.

Policy AQ-4.1: Identify and monitor sources, enforce existing regulations and promote stronger controls to reduce particulate matter (e.g., require clean fuels for street sweepers and trash trucks, exceed the AQMD requirements for fleet rules).

Policy AQ-4.2: Reduce particulate matter from agriculture (e.g., require use of clean non-diesel equipment and particulate traps), construction, demolition, debris hauling, street

cleaning, utility maintenance, railroad rights-of-way and off-road vehicles to the extent possible, as provided in SCAQMD Rule 403.

Policy AQ-4.3: Support the reduction of all particulates potential sources.

Policy AQ-4.4: Support programs that reduce emissions from building materials and methods that generate excessive pollutants through incentives and/or regulations.

Policy AQ-4.5: Require the suspension of all grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour.

Policy AQ-4.6: Cooperate with local, regional, State and Federal jurisdictions to better control particulate matter.

Objective AQ-5: Increase energy efficiency and conservation in an effort to reduce air pollution.

Policy AQ-5.1: Utilize source reduction, recycling and other appropriate measures to reduce the amount of solid waste disposed of in landfills.

Policy AQ-5.3: Continue and expand use of renewable energy resources such as wind, solar, water, landfill gas, and geothermal sources.

Policy AQ-5.6: Support the use of automated equipment for conditioned facilities to control heating and air conditioning.

Policy AQ-5.7: Require residential building construction to meet or exceed energy use guidelines in Title 24 of the California Administrative Code.

Objective AQ-8: Make sustainability and global warming education a priority for the City's effort to protect public health and achieve State and Federal clean air standards.

Policy AQ-8.17: Develop measures that a minimum of 40 percent of the waste from all construction sites throughout Riverside be recycled by the end of 2008.

Public Facilities and Infrastructure Element

Objective PF-1: Provide superior water service to customers.

Policy PF-1.1: Coordinate the demands of new development with the capacity of the water system.

Policy PF-1.2: Support the efforts of the Riverside Public Utilities Department, Eastern Municipal Water District and Western Municipal Water District to work together for coordination of water services.

Policy PF-1.3: Continue to require that new development fund fair-share costs associated with the provision of water service.

Policy PF-1.4: Ensure the provision of water services consistent with the growth planned for the General Plan area, including the Sphere of Influence, working with other providers.

Policy PF-1.5: Implement water conservation programs aimed at reducing demands from new and existing development.

Objective PF-3: Maintain sufficient levels of wastewater service throughout the community.

Policy PF-3.1: Coordinate the demands of new development with the capacity of the wastewater system.

Policy PF-3.2: Continue to require that new development fund fair-share costs associated with the provision of wastewater service.

Objective PF-4: Provide sufficient levels of storm drainage service to protect the community from flood hazards and minimize the discharge of materials into the storm drain system that are toxic or which would obstruct flows.

Policy PF-4.2: Continue to cooperate in regional programs to implement the National Pollutant Discharge Elimination System program.

Objective PF-6: Provide affordable, reliable, and, to the extent practical, environmentally sensitive energy resources to residents and businesses.

Policy PF-6.1: Continue to support the development of green power and expand the use of green power in the City's energy portfolio.

Policy PF-6.3: Promote and encourage energy conservation.

Policy PF-6.4: Encourage energy-efficient development through its site plan and building design standards guidelines.

Policy PF-6.5: Promote green building design.

Historic Preservation Element

Objective HP-1: To use historic preservation principles as an equal component in the planning and development process.

Policy HP-1.1: The City shall promote the preservation of cultural resources to ensure that citizens of Riverside have the opportunity to understand and appreciate the City's unique heritage.

Policy HP-1.3: The City shall protect sites of archaeological and paleontological significance and ensure compliance with all applicable State and federal cultural resources protection and management laws in its planning and project review process.

Policy HP-1.7: The City shall ensure consistency between this Historic Preservation Element and all other General Plan elements, including subsequent updates of the General Plan.

Objective HP-2: To continue an active program to identify, interpret and designate the City's cultural resources.

Policy HP-2.1: The City shall actively pursue a comprehensive program to document and preserve historic buildings, structures, districts, sites (including archaeological sites), objects, landscapes, and natural resources.

Policy HP-2.3: The City shall provide information to citizens, and the building community about what to do upon the discovery of archaeological resources and burial sites, as well as, the treatment, preservation, and repatriation of such resources.

Objective HP-3: To promote the City's cultural resources as a means to enhance the City's identity as an important center of Southern California history.

Objective HP-4: To fully integrate the consideration of cultural resources as a major aspect of the City's planning, permitting and development activities.

Policy HP-4.3: The City shall work with the appropriate tribe to identify and address, in a culturally appropriate manner, cultural resources and tribal sacred sites through the development review process.

Objective HP-5: To ensure compatibility between new development and existing cultural resources.

Policy HP-5-1: The City shall use its design and plot plan review processes to encourage new construction to be compatible in scale and character with cultural resources and historic districts.

Objective HP-6: To actively pursue funding for a first-class historic preservation program, including money needed for educational materials, studies, surveys, staffing, and incentives for preservation by private property owners.

Objective HP-7: To encourage both public and private stewardship of the City's cultural resources.

Policy HP-7.4: The City shall promote the preservation of cultural resources controlled by other governmental agencies, including those related to federal, state, county, school district, and other agencies.

Parks and Recreation Element

Objective PR-2: Increase access to existing and future parks and expand pedestrian linkages between park and recreational facilities throughout Riverside.

Policy PR-2.2: Implement the revisions to the City's trails system as identified in the 2003 Park, Recreation and Community Services Master Plan.

Policy PR-2.3: Improve and create more connections and increase the safety of the bicycling, equestrian and pedestrian trail system within the City.

Riverside Municipal Code

Title 7 – Noise Control

The proposed Project will be subject to Title 7 the City's Noise Control Code both during construction and afterward during operation. It is determined that certain noise levels are detrimental to the public health, safety and welfare and are contrary to the public interest. Therefore, the City has created the Noise Control Chapter of the Municipal Code. Maintaining that

causing any noise in a manner not in conformity with the provisions of this Code, is a public nuisance and shall be punishable as such. In order to control unnecessary, excessive and/or annoying noise in the City, it is declared to be the policy of the City to prohibit such noise generated by the sources specified in this Chapter. It shall be the goal of the City to minimize noise levels and mitigate the effects of noise to provide a safe and healthy living environment. See Section 5.11 Noise for information on compliance with Title 7.

Title 16 – Buildings and Construction

The purpose of Title 16 is to provide minimum standards to safeguard life or limb, health, property and public welfare by regulating the design, construction, quality of materials, use and occupancy, location and maintenance of buildings, equipment, structures and grading within the City; the electrical, plumbing, heating, comfort cooling and certain other equipment specifically regulated in the City.

Title 17 – Grading Code

Grading of the Project site is regulated by Title 17 of the City of Riverside Municipal Code (Grading Code), which sets forth rules and regulations placed on grading to control erosion, grading, and earthwork construction, including fills and embankments. One of the purposes of the Grading Code is to regulate grading in a manner that minimizes the adverse effects of grading on natural landforms, soil erosion, dust control, water runoff, and construction equipment emissions.

Title 18 – Subdivision Code

The proposed parcel map is regulated by Title 18 of the City of Riverside Municipal Code (Subdivision Code). The Subdivision Code is a long range, general comprehensive guide which regulates and controls the design and improvement of subdivisions in order to assist in implementing the GP 2025. The code provides standards for creating accessible lots of sufficient size and appropriate design, streets of adequate capacity and design for anticipated traffic, and sidewalks for maximum safety of pedestrians and vehicles. The Subdivision Code also includes standards which preserve the natural assets of the City's setting by preventing the indiscriminate clearing of property and the destruction of trees and shrubs and other desirable landscape features.

Title 19 – Zoning Code

Development of the Project site is regulated by the City of Riverside, Zoning Code, Title 19, a key tool to implement the policies of the GP 2025. Many of the goals, policies, and actions of the GP 2025 are achieved through zoning, which regulates public and private development. The Zoning Code contains the regulatory framework that specifies allowable uses for property and development intensities; the technical standards such as site layout, building setbacks, heights, lot coverage, parking, etc.; and the aesthetic impacts related to physical appearance, landscaping, lighting; site design, building design are aspects of the Zoning Code.

Title 20 – Cultural Resources

The Project was reviewed pursuant to Title 20 for the purpose of promoting and providing for the identification, protection, enhancement, perpetuation and use of objects, features, sites, places, areas, works of art, natural features and significant permanent landscaping having special historical, archaeological, cultural, architectural, community, aesthetic or artistic value in the City. Doing so safeguards the City's heritage as embodied and reflected in such resources; encourages public knowledge, understanding and appreciation of the City's past; fosters civic and neighborhood pride and a sense of identity based on the recognition and use of cultural resources; promotes the enjoyment and use of cultural resources appropriate for the education and recreation of the people of the City; protects and enhances the City's attraction to tourists and visitors, thereby stimulating business and industry; identifies as early as possible and resolves conflicts between the preservation of cultural resources and alternative land uses; and integrates the preservation of cultural resources and the extraction of relevant data from such resources into public and private land management and development processes. Further analysis is provided in Section 5.4 for Cultural Resources and Section 5.13 for Tribal Cultural Resources.

Sycamore Canyon Business Park Specific Plan

The *Sycamore Canyon Business Park Specific Plan* (SCBPSP) is intended to guide development within the Plan's boundaries. The intent of the Plan is to establish a high-quality industrial development for the City that would strengthen the City's economic base. The SCBPSP recommends development of light industrial, distribution warehousing, and/or product assembly.

Citywide Design and Sign Guidelines

The *Citywide Design and Sign Guidelines* (CDSG) reinforce the physical image of the City. The CDSG work to reinforce the physical image of Riverside. They are intended to promote quality, well-designed development throughout Riverside that enhances existing neighborhoods, creates identity and improves the overall quality of life within the City.

City of Riverside Good Neighbor Guidelines for Siting New and/or Modified Warehouse Distribution Facilities

The City adopted Good Neighbor Guidelines for Siting New and/or Modified Warehouse/Distribution Facilities (GNG) in October 2008 to focus on the relationship between land use, permitting, and air quality. They also highlight strategies that can help minimize the impacts of diesel emissions associated with warehouse/distribution centers. Specifically, the Guidelines help to minimize the impacts of diesel particulate matter from on-road trucks associated with warehouses and distribution centers on existing communities and sensitive receptors.

On November 10, 2020, the Riverside City Council adopted updates to the GNG, in addition to associated amendments to Title 19 – Zoning Code of the Riverside Municipal Code (RMC), the Hunter Business Park Specific Plan, and the Sycamore Canyon Business Park Specific Plan related to siting industrial uses in the City when located adjacent to sensitive receptors, including residential neighborhoods, schools, parks, playgrounds, day care centers, nursing homes,

hospitals, and other public spaces. City Council action also allowed any project achieving substantial completion within 90 days of the effective date of the implementing ordinance to continue to be subject to the 2008 GNG. As the Project was deemed complete prior to adoption of the updated GNG, it does not need to comply with the updated GNG.

Sycamore Canyon Wilderness Park Stephen's Kangaroo Rat Management Plan and Updated Conceptual Development Plan

The Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan (SCWP SKRMP) was prepared with two purposes: updated the park's conceptual development plan and provide a coordinated Maintenance/Management Plan for the endangered Stephens' kangaroo rat (SKR). Because the Sycamore Canyon Wilderness Park was designated as a core reserve in the Habitat Conservation Plan (HCP) for the SKR, the City was required to prepare a Maintenance/Management Plan for the core reserve.

5.10.3 Project Design Considerations

Design features refer to ways in which the Project will avoid or minimize potential impacts through the design of the Project. The Project has been designed with sensitivity to the adjacent land uses, particularly Sycamore Canyon Wilderness Park to the north, and the existing residential neighborhoods to the south, across Alessandro Boulevard. The existing restricted property will largely[1] be preserved, which includes a natural drainage course and associated riparian woodland vegetation that will serve as a buffer between Building A and Alessandro Boulevard, as well as between Buildings A and B (Refer to Figure 3.0-3 - Site Plan).

Building A is approximately 400,000 square feet and consists of 10,000 square feet of office area and 390,000 square feet of warehouse area. A total of 39 dock doors are proposed on the west side and 49 dock doors on the east side of the building. Building A will be set back approximately 520 feet from Alessandro Boulevard. The restricted property/ conservation area and natural terrain and vegetation are located within the setback. The dock doors will be screened from the public view from the east and west sides of Building A by 8-foot high walls and from the south by 15-foot high walls on both sides of the southern end of Building A that faces Alessandro Boulevard. The 15-foot high walls will screen views of the dock doors and loading areas from Alessandro Boulevard.

Building B is approximately 203,100 square feet and consists of 10,000 square feet of office area and 193,100 square feet of warehouse area. A total of 34 dock doors are proposed on the south side of the building, adjacent to the back wall of Citywide Self Storage. The front of Building B faces Barton Street to the west. Building B will be set back 90 feet from Barton Street. A 6-foot

[1] The proposed Project includes removing 0.81 acre of the existing Restricted Property and adding 1.44 acres for a net gain of 0.63 acres.

high metal fence will be located along the westerly property line, with an 8-foot high metal fence along the southerly property line. An 8-foot high combination screening fence/wall, consisting of a 4-foot high tubular steel metal fence on top of a 4-foot high screen wall, will be located along the northerly property line adjacent to the trailhead parking lot.

On-site landscaping is proposed generally along the perimeters of Buildings A and B and along the proposed access road/driveway from Alessandro Boulevard to Building A as shown in Figure 3.0-10A and 3.0-10B – Landscape Design. The Project site will be landscaped with fire-resistant landscape, drought-tolerant and climate appropriate trees, shrubs, and ground cover that will meet or exceed the City's requirements. The landscape plan is designed to provide visual appeal and screen the views of Buildings A and B from Alessandro Boulevard and residential areas to the south as well as the Sycamore Canyon Wilderness Park. The proposed on-site landscaping does not include any plant species listed as invasive by the *Western Riverside County Multiple Species Habitat Conservation Plan* (MSHCP).

The Project site is within the March Air Reserve Base Land Use Compatibility Plan (MARB/IPA LUCP) with restrictions on heights of buildings, structures and vegetation to comply with low flying aircraft. The Project buildings adhere to the building height limit of 45 feet to reduce potential hazards.

5.10.4 Thresholds of Significance

The City of Riverside has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City of Riverside generally utilizes the CEQA significance thresholds in Appendix G ("Environmental Checklist") of the State CEQA Guidelines. Per the Environmental Checklist/ Initial Study prepared for the City for the Project (Appendix A), the Sycamore Hills Distribution Project may be considered potentially significant if the proposed project would:

- (Threshold A) 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.

Impacts related to Land Use Threshold B (physically divide an established community) were determined to be less than significant with no further analysis in the EIR required during the preparation of the Initial Study

5.10.5 Environmental Impacts

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?*

Section 15125(d) of the State CEQA Guidelines requires EIRs to "…discuss any inconsistencies between the proposed Project and applicable general plans, specific plans, and regional plans." The objective of such a discussion is to find ways to modify a proposed Project, if warranted, to reduce any identified inconsistencies with relevant plans and policies. Pursuant to Section

15125(d), this DEIR includes an evaluation of the consistency of the Project with pertinent goals and policies of relevant adopted local and regional plans, as outlined below.

City of Riverside General Plan 2025

Per the GP 2025, the Project site has a current land use designation of B/OP – Business Office Park and is zoned BMP-SP – Business Manufacturing Park and Specific Plan (Sycamore Canyon Business Park) Overlay Zones. The Project will be consistent with both the existing land use designation of the GP 2025 and the Sycamore Canyon Business Park Specific Plan (SCBPSP). The SCBPSP implements the GP 2025 and its intended purpose is to guide development within the SCBPS boundaries while establishing high-quality industrial development for the City that would strengthen the City's economic base. Therefore, the SCBPSP will guide this Project's development through its design guidelines in order to assure that the objectives and standards and guidelines and requirements of the SCBPSP are being met.

The Project is consistent with the objectives and policies in the Land Use and Urban Design Element, including those to mitigate any adverse impacts associated with urbanization, to preserve and protect significant areas of native wildlife and plant habitat, including endangered species, provide for continuing growth with land uses and intensities appropriately designed to meet the needs of anticipated growth and achieve the community's objective, avoid land use/transportation decisions that would adversely impact the long-term viability of the March Air Reserve Base/March Inland Port, maximize the economic impact of industrial land, preserve and enhance the natural character and qualities of Sycamore Canyon Wilderness Park, and to establish Sycamore Canyon Business Park as a center for economic growth. Refer to Appendix B for the analysis of the Project's consistency with applicable General Plan 2025 policies and the Sycamore Canyon Business Park Specific Plan objectives pertinent to this Project.

The Project is consistent with the objectives and policies in the Public Safety Element, including those to minimize potential damage and loss of life from geologic and seismic hazards, minimize risks associated with storage, transport and disposal of hazardous materials, protect the community from hazards related to air and ground transportation, protect property from fire hazards, improve community safety and reduce opportunities for criminal activity through appropriate physical design, and minimize the effects from natural and urban disasters by providing adequate levels of emergency response services.

The Project is consistent with the objectives and policies in the Noise Element, including to minimize noise levels from point sources throughout the community and mitigate the effects of noise to provide a safe and healthful environment, minimize the adverse effects of airport-related noise through proper land use planning, and ensure the viability of March Air Reserve Base/March Inland Port.

The Project is consistent with the objectives and policies in the Open Space and Conservation Element, including those that preserve and expand open space areas and linkages to protect the natural and visual character of the community and to provide for active and passive recreational uses, protect biotic communities and critical habitats for endangered species, preserve and maintain wildlife movement corridors, and encourage efficient use of energy resources.

The Project is consistent with the objectives and policies in the Air Quality Element, including those to improve job-housing balance, reduce vehicle miles traveled and length of work trips, improve flow of traffic, reduce air pollution by reducing emissions from mobile sources, reduce pollution from stationary sources, reduce particulate matter, and increase energy efficiency and conservation.

The Project is consistent with the objectives and policies in the Historic Preservation Element, including those to use historic preservation principles as an equal component in the planning and development process and to fully integrate the consideration of cultural resources as a major aspect of the City's planning, permitting and development activities.

The Project is consistent with the objectives and policies in the Parks and Recreation Element, including those to increase access to existing and future parks and expand pedestrian linkages between park and recreational facilities.

The Project is consistent with the objectives and policies in the Circulation and Community Mobility Element, including cooperate in the implementation of regional and inter-jurisdictional transportation plans and improvements to the transportation system, facilitate the goods movement as a means of economic expansion, while protecting residents and visitors from the negative effects typically associated with truck operations and rail service, and to ensure that adequate on-and off-street parking is provided throughout Riverside.

As outlined in the Transportation section (Section 5.12.5), based on the City's deficiency criteria, the following intersections were found to be deficient:

Driveway 2/Vista Grande Dr. and Alessandro Bl. (#4) – Although this intersection was found to operate at an unacceptable LOS (LOS F) during the AM and PM peak hours under existing traffic conditions, the intersection is anticipated to continue to operate at unacceptable levels during the peak hours with the addition of Project traffic. The increase in peak hour delay is anticipated to be greater than one second. Therefore, there is a deficiency based on the City's peak hour delay criteria for intersections operating at LOS F.

Sycamore Canyon Boulevard and Alessandro Boulevard (#6) – Although this intersection was found to operate at an unacceptable LOS (LOS E) during the AM peak hour under existing traffic conditions, the intersection is anticipated to continue to operate at unacceptable levels (LOS E) during the peak hours with the addition of Project traffic. The increase in peak hour delay is anticipated to be less than two seconds and the project traffic is less than 2% of the total traffic for E+P conditions. However, the intersection of Sycamore Canyon Boulevard and Alessandro Boulevard is currently built out to its General Plan ultimate cross-section and exceeds the General Plan target LOS. As such, the deficiency is considered unavoidable.

As outlined in the Transportation Section 5.12.5, Table 5.12-15 provides a summary of the opening year cumulative without Project conditions roadway segment capacity analysis based on the City of Riverside Traffic Impact Analysis Preparation Guide. As shown on Table 5.12-15, the following roadway segments that are anticipated to operate at an unacceptable LOS under opening year cumulative without Project traffic conditions:

- Alessandro Boulevard, from Barton Street to Private Driveway – LOS E
- Alessandro Boulevard, from Private Driveway to Vista Grande Drive – LOS E
- Alessandro Boulevard, from Vista Grande Drive to San Gorgonio Drive – LOS F
- Alessandro Boulevard, from San Gorgonio Drive to Sycamore Canyon Boulevard – LOS F

The effectiveness of the proposed improvements described in Section 5.12.3 – Project Design Considerations for the deficient intersections of Driveway 2/Vista Grande Drive and Alessandro Boulevard (see Table 5.12-14) is presented in Table 5.12-17 for opening year cumulative traffic conditions. Based on each jurisdiction's deficiency criteria, the Project is anticipated to result in deficiencies at the following intersections, as the Project would contribute to the total opening year cumulative with Project traffic forecasts:

- Driveway 2/Vista Grande Drive and Alessandro Boulevard (#4)
- Sycamore Canyon Boulevard and Alessandro Boulevard (#6)

The proposed improvements described in Section 5.12.3 – Project Design Considerations for the deficient intersection of Driveway 2/Vista Grande Drive and Alessandro Boulevard would bring the intersection out of the deficiency designation. However, as mentioned in Section 5.12.3 above, the addition of a traffic signal is not currently feasible as the intersection is too close in proximity to an existing signalized intersection of a private driveway at Alessandro Boulevard. The adjacent signalized intersection of the private driveway and Alessandro Boulevard does not currently warrant a traffic signal as the volumes on the north and south leg are nominal and are significantly less than the south leg of Vista Grande Drive and Alessandro Boulevard. Therefore, the removal of the existing traffic signal at the private driveway and Alessandro Boulevard would be required in order to install a traffic signal at Vista Grande Drive and Alessandro Boulevard. As outlined in the TA, it is recommended that the existing signal at private driveway and Alessandro Boulevard be removed and that the Project construct a new traffic signal at the intersection of Driveway 2/Vista Grande Drive and Alessandro Boulevard.

The intersection of Sycamore Canyon Boulevard and Alessandro Boulevard is currently built out to its General Plan ultimate cross-section and exceeds the General Plan target LOS. Until additional right-of-way beyond those designated in the General Plan is obtained, there are no anticipated feasible improvements. As such, the deficiency at this existing built out intersection is considered unavoidable.

Based on the applicable jurisdiction's significance criteria, the Sycamore Canyon Boulevard and Alessandro Boulevard intersection was found to be deficient by the Project for opening year cumulative with Project traffic conditions. Although the General Plan target LOS will be exceeded, the intersection is currently built out to its General Plan ultimate cross-section and until additional right-of-way beyond those designated in the General Plan is obtained, there are no anticipated feasible improvements. Although the LOS target in the General Plan Circulation Element cannot be achieved for the Sycamore Canyon Boulevard and Alessandro Boulevard intersection, the

Project would not conflict with any other General Plan policies addressing the circulation system and potential impacts are **less than significant.**

March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan

The Project site is located within the March Air Reserve Base Land Use Compatibility Plan (MARB/IPA LUCP). The proposed Project site is located within Zone C1 of the LUCP, as reflected and discussed in Section 5.8, Hazards and Hazardous Materials. MARB/IPA LUCP identifies prohibited and discouraged uses within each land use compatibility zone as well as density/intensity standards, and open land requirements.

Zone C1 requires airspace review for structures over 70 feet in height (MARB/IPA LUCP, p. 10). FAR Part 77 establishes standards for determining obstructions to navigable airspace and the effects of such obstructions on the safe and efficient use of that airspace. Objects exceeding FAR Part 77 height limits require an FAA obstruction evaluation review. According to the MARB/IPA LUCP, objects over 70 feet tall within Zone C1 require airspace review in accordance with FAR Part 77. Both Building A and Building B have a maximum building height of 45 feet, including parapets. Thus, the proposed buildings would not exceed the FAR Part 77 height limits of structures over 70 feet in height. In addition, the FAA staff has reviewed project information under the provisions of Title 14 of the Code of Federal Regulations, part 77 for Buildings A and B and issued determinations of *No Hazard to Air Navigation* based on the following building heights: Building A, with 1596 feet site elevation (SE), 45 feet above ground level (AGL) and 1641 feet above mean sea level (AMSL); and Building B, with 1609 feet SE, 45 feet AGL, and 1654 AMSL.

Building A and Building B will be subject to the intensity requirements of Zone C1 of ALUC Per Person Average Acre Maximum Occupancy of 100 and ALUC Per Person Single Acre Maximum Occupancy of 250 for warehouse use. Occupancy calculations for the proposed Project utilized Appendix C[2], *Methods for Determining Concentrations of People*, of the *Riverside County Airport Land Use Compatibility Plan Policy Document*, Table C1-*Occupancy Levels, California Building Code, adopted December 2004,* and are shown in Table 5.10-2 below. As shown on Table 5.10-2 – Proposed Project ALUC Occupancy Level Calculations, the maximum occupancy requirements of the C1 Zone will not be exceeded.

[2]http://www.rcaluc.org/Portals/13/PDFGeneral/plan/newplan/23-%20Appendix%20C.%20Determining%20Concentrations%20of%20People.pdf

Table 5.10-2 – Proposed Project ALUC Occupancy Calculations

Building	ALUC Calculation for C1 Zone	ALUC Maximum Occupancy	Minimum Square Feet (SF) per Occupant[2] Calculation	Proposed Project Persons
Building A	Per Person Average Acre	100 persons	Office SF: 10,000/100 = 100 people Warehouse SF: 390,000/500 = 780 people 880 total people/ 24.31 acres = 36	36
Building A	Per Single Acre	250 persons	(210 x 210) SF/ 200 = 221 people	221
Building A	Per Person Single Acre Parking Ratio	100 persons	388 auto stalls x 1.5 persons per stall = 935 persons / 34.63 acres = 24.31	24
Building B	Per Person Average Acre	100 persons	Office SF: 10,000/100 = 100 people Warehouse SF: 193,100/ 500 = 386 people 486 total people / 10.32 acres = 47	47
Building B	Per Single Acre	250 persons	(210 x 210) SF/ 200 = 221 people	221
Building B	Per Person Single Acre Parking Ratio	100 persons	235 auto stalls x 1.5 persons per stall = 353 persons / 10.32 acres = 34.21	34

Riverside Municipal Code

Title 7 – Noise Control

See Section 5.11 Noise for information on compliance with Title 7.

Title 16 – Buildings and Construction

The purpose of Title 16 is to provide minimum standards to safeguard public health, safety and general welfare by regulating the design, construction, quality of materials, use and occupancy, location and maintenance of buildings, equipment, structures and grading within City; the electrical, plumbing, heating, comfort cooling and certain other equipment specifically regulated by the City.

As first outlined in Section 3.2.4 Sustainability Features (See Section 3.0 Project Description), the Project will meet or exceed all applicable standards under California's Green Building Code Title 24 Standards. The Project is required to and will include automatic fire sprinkler systems and a public-safety radio amplification system. Construction plans are required to be submitted and permitted prior to construction. Fire Department access shall be maintained during all phases of construction. Barton Road shall be maintained clear and unobstructed at all times during construction. All required public and private fire hydrants sill be in service and fire flow available prior to building permit release by the Fire Department. The Project will meet the requirements of the Building Codes.

Title 17 – Grading Code

Grading of the Project is regulated by Title 17 – Grading Code of the Riverside Municipal Code (RMC), which sets forth rules and regulations to control erosion, grading, and earthwork construction, including fills and embankments. The purpose of the Grading Code is to regulate grading in a manner that minimizes the adverse effects on natural landforms, soil erosion, dust control water runoff, and construction equipment emissions. A Grading Exception is needed for Building B on Parcel 2 to allow installation of three retaining walls to exceed 6 feet in vertical height, in accordance with Chapter 17.28 of Title 17 - Grading. The three retaining walls, ranging in height from 4.7 feet to 11.5 feet, are required at the northeast and southeast corners of Parcel 2 due to existing topography relief and to avoid sensitive resources as shown on Figure 3.0-10 – Grading Exception & Wall Variance Exhibit. Following is a summary of the requested Grading Exceptions:

- To allow a 6.5 to 11.5-foot retaining wall in the northeast corner on Parcel 2 (Area 1);
- To allow a 4.7 to 8.2 foot high retaining wall and a 6 to 10-foot high retaining wall in the southeast corner of Parcel 2 (Area 2).

Title 18 – Subdivision Code

Subdivision of the Project site is regulated by Title 18 – Subdivision Code of the Riverside Municipal Code (RMC), which sets forth rules and regulations to control the design and improvement of subdivisions for the purpose of providing lots of sufficient size and design for the proposed use, providing streets of adequate capacity to ensure maximum safety for pedestrians

and vehicles, providing sidewalks or pedestrian ways, preserving the natural assets of the City's setting, and encouraging clustering, the preservation of natural features, and limiting grading. The Parcel Map includes the creation of two numbered parcels, and three lettered lots, and will be recorded prior to Building Permit issuance. The Project includes street and sidewalk improvements along Alessandro Boulevard and Barton Street. The Project largely retains and expands the existing Restricted Property which includes the preservation of natural features. Grading of the Project site will be confined to Parcels 1 and 2. The proposed parcel map meets all requirements of the Subdivision Code including lot size, width and depth, and street requirements.

Title 19 – Zoning Code

The Project will require a wall variance to allow installation of combination retaining/freestanding walls where the retaining portion exceeds 4 feet in vertical height. Additionally, a parking variance is needed Building A to allow 388 parking spaces, where 430 parking spaces are required by the City's Municipal Code. All parking will be provided on site. Findings are required for the Project's wall and parking variances. In all other aspects, the Project as proposed complies with the Title 19 – Zoning Code.

Title 20 – Cultural Resources

As described in Section 5.4 Cultural Resources, Title 20 of the Riverside Municipal Code (RMC) is the primary body of local historic preservation laws. The purpose of Title 20 is to promote the public health, safety, and general welfare by providing for the identification, protection, enhancement, perpetuation and use of improvements, buildings, structures, signs, objects, features, sites, places, areas, districts, neighborhoods, streets, works of art, natural features, and significant permanent landscaping having special historical, archaeological, cultural, architectural, community, aesthetic, or artistic value in the City. Title 20 of the Riverside Municipal Code established procedures for preserving, protecting, and designating significant cultural resources should the resource be considered a historic/cultural resource. Title 20 provides definitions of eligible cultural resources, landmarks, structures or resources of merit, and historic districts (see Sections 5.4 for complete definitions). The bedrock milling sites analyzed in Sections 5.4 were found to not meet any of the City's definitions for eligible cultural resources, landmarks, structures or resources of merit, or historic districts. The milling features individually do not meet title 20 definitions for eligibility. Additionally, as is further discussed in Sections 5.4, per feedback from the City and consulting tribes, Project design considerations have been made to avoid and allow to remain intact several of the bedrock outcrops that comprise the bedrock milling sites. Thus, as none of the features identified on site meet Title 20 definitions and as the Project would include design considerations to avoid bedrock outcrops, the Project would not conflict with Title 20's intent to preserve and protect cultural resources.

Citywide Design and Sign Guidelines

The Citywide Design and Sign Guidelines (CDSG) are an implementing tool of the GP 2025 that is intended to improve overall urban design and applies to all properties in the City (CDG, p. I-4). These guidelines work to reinforce the physical image of the City and are intended to promote

quality, well-designed development throughout the City that enhances existing neighborhoods, creates identity, and improves the overall quality of life. Moreover, these guidelines supplement the contents of the City's Zoning Code on matters of design and aesthetics (CDG, p. I-1).

The Project falls within the CDSG related to industrial design guidelines, which includes considerations of the Project's design related to sign design, parking and loading, landscaping, walls and fencing, screening, architectural design, signs, and lighting. The Project's architectural plans (floor plan, roof plan, fencing plan), building elevations, materials board/ color palette, landscape plans, and photometric plan are in compliance with the Citywide Design and Sign Guidelines. The applicant worked with City staff to ensure the CDSG were followed where applicable, such as to enhance the landscaping to provide for additional screening of the buildings from public views along Alessandro Boulevard and Barton Street and to change the color palette to natural colors that occur in and around the Project site.

Sycamore Canyon Business Park Specific Plan

The Project site is designated as Industrial in the SCBPSP, which allows warehouse uses. The Project has been reviewed for compliance with the SCBPSP, in particular the permitted uses, lot standards, setback standards, parking standards, outdoor storage and loading areas, lighting and utilities, sign standards, display medians, screening of mechanical equipment, trash collection areas, walls/fence standards, and rail service standards and has been found to be generally in compliance with the Sycamore Canyon Business Park Specific Plan standards as set forth in Section 3.0 Development Standards and Criteria as modified by Resolution 23240 adopted November 7, 2012.

Appendix B summarizes the Project's consistency with SCBPSP policies.

City of Riverside Good Neighbor Guidelines for Siting New and/or Modified Warehouse Distribution Facilities

The project was evaluated for consistency with the City's *Good Neighbor Guidelines for Siting New and/or Modified Warehouse Distribution Facilities* (Good Neighbor Guidelines; City of Riverside 2008).

The Good Neighbor Guidelines were designed to help minimize the impacts of DPM from on-road trucks associated with warehouses and distribution centers on existing communities and sensitive receptors located in the region. The City's Good Neighbor Guidelines are tailored to the City's unique characteristics and specific needs. The Good Neighbor Guidelines goals and strategies, adopted by the City in 2008, applicable to the Project include: *GOAL 1: Minimize exposure to diesel emissions to neighbors that are situated in close proximity to the warehouse/distribution center.*

- *Recommended strategy: Design facilities to allow for the queuing of truck on-site and away from sensitive receptors. Conversely, prevent the queuing of trucks on streets or elsewhere outside of facility in compliance with Title 10 – Vehicles and Traffic – Chapter 10.44 – Stopping, Standing and Parking.*

  Project consistency: Based on the project location and design, no truck queuing would occur next to sensitive receptors, which are located south of Alessandro Boulevard. Truck queuing would not occur outside the Project site.

- *Recommended strategy: To the extent possible, locate driveways, loading docks and internal circulation route away from residential uses or any other sensitive receptors.*

  Project consistency: Driveways, loading docks, and internal circulation routes are not angled to face sensitive receptors such as the neighboring residential communities or the wilderness park. Further, as calculated in the Project's *Air Quality Analysis* and the *Mobile Source Health Risk Assessment* (Appendix C), emissions due to on-site operations would not expose sensitive receptors to substantial pollutant concentrations.

- *Recommended strategy: Conduct SCAQMD URBEMIS and EMFAC computer models as appropriate, to initially evaluate warehouse and distribution projects on a case by case basis to determine the significance of air quality impacts and whether air quality thresholds would be exceeded as a result of the project. Where thresholds are exceeded, a more detailed air quality analysis/health risk assessment by an air quality specialist is required to be prepared and submitted by the project applicant.*

  Project consistency: As calculated and concluded in Project's *Air Quality Analysis*, the project would not result in significant air quality impacts.

- *Recommended strategy: Enforce compliance with Riverside Municipal Code Section 19.880 – "Transportation Demand Management Regulations". This section of the Code requires trip reduction plans to be submitted for all businesses, including warehouses, with over one hundred employees to reduce work-related vehicles trips by six- and one-half percent from the number of trips related to the project.*

Project consistency: The project would include transportation demand management measures that would reduce emissions associated with employee trips. These include access to public transit (Routes 20 and 208), bicycle parking, clean air/van pool parking spaces, and electric vehicle parking.

GOAL 2: Eliminate diesel trucks from unnecessarily traversing through residential neighborhoods.

- *Recommended strategy: Require warehouse/distribution centers to establish a specific truck route between the warehouse/distribution center and the State Route 60 and Interstate 215 freeways for City approval as part of the Design Review process. In addition, a haul route plan for construction activities should also be provided as part of the Design Review process.*

  Project consistency: The project site is located one mile west of Interstate 215, with direct access via Alessandro Boulevard which is an existing truck route for operations as well as transporting construction equipment to and from the site. As identified on the site plans, an existing 20-foot wide dirt road located between proposed Parcels 1 and 2 will be used temporarily as a haul route during grading activities to move excess earthen material from Parcel 1 to Parcel 2.

- *Recommended strategy: Require warehouse/distribution centers to clearly specify all entrance and exit points on the site plan submitted for City review and approval.*

  Project consistency: The project site plans indicate all entrance and exit points.

- *Recommended strategy: Require warehouse/distribution centers to provide on-site signage for directional guidance to trucks entering and exiting the facility.*

  Project consistency: On-site signage for directional guidance will be provided.

- *Recommended strategy: Require warehouse/distribution centers to provide signage or flyers that advise truck drivers of the closest restaurants, fueling stations, truck repair facilities, lodging and entertainment.*

  Project consistency: The future tenants are unknown at this time; however, this information will be made available to truck drivers.

GOAL 3: Eliminate trucks from using residential areas and repairing vehicles on the streets;

- *Recommended strategy: Enforce compliance with Riverside Municipal Code Section 10.44.155 – "Parking of certain commercial vehicles, trailers and semi-trailers prohibited; exceptions", Section 10.44.160 – "Parking of certain commercial vehicles prohibited in residential districts" and Section 10.44.040 "Parking for certain purposes prohibited".*

  Project consistency: The project would comply with all Municipal Code requirements. No trucks would be parked off-site or drive through residential communities.

GOAL 4: Reduce and/or eliminate diesel idling within the warehouse/distribution center;

- *Recommended strategy: Promote the installation of on-site electric hook-ups to eliminate the idling of main and auxiliary engines during loading and unloading of cargo and when*

trucks are not in use – especially where Transportation Refrigeration Units are proposed to be used.

Project consistency: The project would not include Transportation Refrigeration Units. All trucks would be required to comply with the CARB idling limit of 5 minutes.

- *Recommended strategy: Implement General Plan 2025 Program Final Program Environmental Impact Report, Mitigation Measure MM Air 12. This Mitigation Measure requires that all new truck terminals, warehouses and other shipping facilities requiring the use of refrigerated trucks and with more than 50 truck trips per day shall provide electrical hookups for the refrigerated units to reduce idling and its associated air quality pollutants. Additionally, future tenant improvements involving conversion of a warehouse for refrigeration storage shall include electrical hookups for refrigerated units.*

  Project consistency: The project would not include Transportation Refrigeration Units or refrigeration storage.

- *Recommended strategy: Require signage (posted inside and outside of the warehouse facility) to inform truck drivers of CARB regulations, idling limits, authorized truck route, and designated truck parking locations. Post signs requesting truck drivers to turn off engines when not in use and restrict idling within facilities to less than 5 minutes.*

  Project consistency: The project would include signage regarding idling limits, truck routes, and parking.

Therefore, the Project is consistent with the 2008 City of Riverside Good Neighbor Guidelines.

On November 10, 2020, the Riverside City Council adopted updates to the Good Neighbor Guidelines (GNG), in addition to associated amendments to Title 19 – Zoning Code of the Riverside Municipal Code (RMC), the Hunter Business Park Specific Plan, and the Sycamore Canyon Business Park Specific Plan related to siting industrial uses in the City when located adjacent to sensitive receptors, including residential neighborhoods, schools, parks, playgrounds, day care centers, nursing homes, hospitals, and other public spaces. City Council action also allowed any project achieving substantial completion within 90 days of the effective date of the implementing ordinance to continue to be subject to the 2008 GNG. As this Project was deemed complete prior to adoption of the updated GNG, it does not need to comply with the updated GNG.

The updated 2020 Good Neighbor Guidelines include new requirements for technical studies and new guidelines related to noise and neighborhood character. The following is a short summary of the applicable updates:

- **Technical Studies:** The 2020 GNGs require the preparation of an Air Quality Analysis, and Health Risk Assessments for industrial uses within 1,000 feet of sensitive receptors.

  Project Consistency: The Project has completed an Air Quality Analysis (Appendix C) and Health Risk Assessments (Appendix C) as part of the EIR process.

- **Noise:** The updated guidelines include measures related to minimizing noise from construction activities and ensuring compliance with Title 7 – Noise of the Riverside Municipal Code as it relates to noise in residential neighborhoods.

  Project Consistency: As outlined in Section 5.11 Noise, **Mitigation Measure MM NOI-1** is required to minimize construction noise and operational noise generated by the Project will comply with the noise standards in Title 7 of the RMC.

- **Neighborhood Character:** The new guidelines incorporate tiered development standards in Title 19 – Zoning Code related to building setbacks, height, and size, based on proximity to residential uses. The guidelines also require screening of industrial uses from Sensitive Receptors, and landscaping to soften visual impacts.

  Project Consistency: The tiered development standards of Title 19 do not apply to the Project, as the proposed buildings are located more than 800 feet from residential uses. As outlined in Section 5.1 Aesthetics, extensive design considerations are included in the Project, as well as **Mitigation Measure MM AES-2**, to minimize visual impacts from the Project on nearby sensitive receptors.

Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan (SCWP SKRMP)

The SCWP SKRMP includes the following proposed public use facilities: an interpretive center/day use area, major trailheads and minor trailheads. A minor trailhead is planned at the northerly terminus of Barton Street at the Park boundary and will include a typical trailhead shade structure and is sited in a location conducive to on-street parking. The Project is located adjacent to Barton Street and the Sycamore Canyon Wilderness Park boundary.

As outlined in Section 3.0 Project Description, Parcel C of the Project is proposed to be developed with a trailhead parking lot for the Sycamore Canyon Wilderness Park. It consists of 51,284 square feet (1.18 acres). The proposed trailhead parking lot will include an improved decomposed granite parking lot, landscaping, a shade structure with benches, a bike rack, a drinking fountain (including for pets), and ADA (Americans with Disabilities Act) compliant parking spaces and sidewalk. Trail fencing, gates, and signage will also be installed to direct access, circulation and trail connection to existing trails as well as the master planned multipurpose trail on the west side of Barton Street. The proposed trailhead parking lot is not required but is being provided by the applicant as an amenity and addition to the City's Sycamore Canyon Wilderness Park. Parcel C would be dedicated to the City and operated and managed by the City's Parks, Recreation, & Community Services Department.

The SCWP SKRMP also identifies appropriate edge treatments between the wilderness park and the Project site. Fencing and walls around the Project site have been designed to be compliant with requirements in the SCWP SKRMP.

As outlined above, the Project is consistent with all goals, objectives, and design guidelines of the Sycamore Canyon Business Park Specific Plan and General Plan and other regional and local plans and policies. Therefore, impacts from the Project would **be less than significant.**

5.10.6 Proposed Mitigation Measures

Potential impacts are **less than significant** and mitigation measures are not required.

5.10.7 Cumulative Environmental Effects

As discussed in Section 4.0 Environmental Setting of this EIR, cumulative development in the City and in surrounding cities and the County would include residential development, warehouses, commercial, office, and public facilities. The planned and pending Projects in the area of the Project, listed in Table 4.0-1, include about 27 Projects. Cumulative development in the City and the surrounding area would modify existing land use patterns through the development of vacant lots or through redevelopment. Proposed projects that are consistent with the designated land use and zoning and comply with Citywide Design Guidelines and Sign Guidelines are not considered to have impacts related to land use and planning. Similar to the Project, land use regulations and policy consistency impacts associated with other cumulative Projects would be addressed on a case-by-case basis in order to determine their consistency with applicable plans and policies. As the Project is consistent with the underlying land use regulations, the City's design and sign guidelines, and applicable policies of the GP 2025 and SCBPSP, it would not have a cumulative land use or planning impact. Therefore, cumulative impacts are **less than significant**.

5.10.8 References

The following references were used in the preparation of this section of the EIR:

CDSG	City of Riverside, *Riverside Citywide Design Guidelines and Sign Guidelines* adopted November 2007, Resolution No. 21544. (Available at https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/Citywide_Design_and_Sign_Guidelines_web%20version_Amended%2001-15-19_1.pdf, accessed January 2020)
2008 GNG	City of Riverside, *Good Neighbor Guidelines for Siting New and/or Modified Warehouse Distribution Facilities*, Adopted October 14, 2008. (Available at the City of Riverside Planning Department)
GP 2025	City of Riverside, *General Plan 2025*, certified November 2007 with subsequent amendments to various elements. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0,accessed January 2020)

GP 2025 FPEIR	City of Riverside, *General Plan 2025 Program Environmental Impact Report* (SCH# 2004021108), certified November 2007. (Available at https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/general-plan/vol2/5-9_Land_Use_Planning.pdf accessed January 2020)
MARB/IPA LUCP	Riverside County Airport Land Use Commission, *March Air Reserve Base / Inland Port Airport Land Use Compatibility Plan,* adopted November 13, 2014. (Available:http://www.rcaluc.org/Portals/13/17%20%20Vol.%201%20March%20Air%20Reserve%20Base%20Final.pdf?ver=2016-08-15-145812-700 accessed January 2020)
RMC	City of Riverside, *Municipal Code*. (Available at http://www.riversideca.gov/municode/, accessed January 2020)
RRG-CAP	Riverside Restorative Growthprint, Economic Prosperity Action Plan and Climate Action Plan, January 2016. (Available at https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/other-plans/2016%20Riverside%20Restorative%20Growthprint%20Economic%20Proposerity%20Action%20Plan%20and%20Climate%20Action%20Plan.pdf)
SCBP	City of Riverside, *Sycamore Canyon Business Park Specific Plan*, adopted April 10, 1984, as amended through Amendment No. 14, January 23, 2007. (Available at: https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/spec-plans/syc-bus-park/plan_doc.pdf, accessed January 2020)
SCWP SKRMP	Dangermond & Associates, et. al, Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan, March 1999. (Available at https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/spec-plans/SycCynMnmgtPlan_UpdatedConceptualPlan.pdf, accessed January 2020)

5.11 Noise

Based upon Appendix G of the *State CEQA Guidelines,* the analysis in the Initial Study (IS/NOP) prepared for this Project (Appendix A), and comments received during the NOP public review period (Appendix A), this section analyzes both the temporary noise impacts related to construction activity and long-term impacts associated with Project operations. The analysis in this section is based on the *Noise Analysis for the Sycamore Hills Distribution Center*, prepared by RECON (Appendix K, October 2020) and the *Traffic Operations Analysis* (TA) prepared by Urban Crossroads (Appendix L, September 2020).

5.11.1 Setting

Characteristics of Sound

Noise is most often defined as unwanted sound. Although sound can be easily measured, the perceptibility is subjective and the physical response to sound complicates the analysis of its impact on people. People judge the relative magnitude of sound in subjective terms such as "noisy" or "loud." To the human ear, sound has two significant characteristics: pitch and loudness. Pitch is generally an annoyance, while loudness can affect our ability to hear. The analysis of any project's noise impact defines the noise environment of the project area in terms of sound intensity and its effect on adjacent land uses and receivers.

Quantification of Sound

Sound pressure magnitude is measured and quantified using a logarithmic ratio of pressures, the scale of which defines the level of sound in decibels (dB). Because human hearing is not equally sensitive to sound at all frequencies, the A-weighting system is used to adjust quantified or measured sound levels to approximate this frequency-dependent response; A-weighted sound is expressed as dBA. From the noise source to the receiver, noise changes both in level and frequency spectrum. The most obvious is the decrease in noise as the distance from the source increases. The manner in which noise reduces with distance depends on whether the source is a point or line source as well as ground absorption, atmospheric effects and refraction, and shielding by natural and manmade features. Sound from point sources, such as air conditioning condensers, radiates uniformly outward as it travels away from the source in a spherical pattern. The noise drop-off rate associated with this geometric spreading is 6 dBA per each doubling of the distance (dBA/DD). Transportation noise sources such as roadways are typically analyzed as line sources, since at any given moment the receiver may be impacted by noise from multiple vehicles at various locations along the roadway. Because of the geometry of a line source, the noise drop-off rate associated with the geometric spreading of a line source is 3 dBA with each doubling of distance.

As a source of reference, common indoor and outdoor noise sources, presented in terms of dBA, are shown in relation to the approximate corresponding noise level in Table 5.11-1 – Representative Environmental Noise Levels.

Table 5.11-1 – Representative Environmental Noise Levels[1]

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock band
Jet fly-over at 1,000 feet	105	
	100	
Gas lawnmower at 3 feet	95	
	90	
Diesel truck, 50 mph at 50 feet	85	Food blender at 3 feet
Noisy urban area during daytime	75	
Gas lawnmower at 100 feet	70	Vacuum cleaner at 10 feet
Commercial area	65	Normal speech at 3 feet
Heavy traffic at 300 feet	60	
	55	Large business office
Quiet urban area during daytime	50	Dishwasher in next room
	45	
Quiet urban area during nighttime	40	Theater, large conference room (background)
Quiet suburban area during nighttime	35	
	30	Library
Quiet rural area during nighttime	25	Bedroom at night, concert hall (background)
	20	
	15	Broadcast/recording studio
	10	
	5	
Lowest threshold of human hearing	0	Lowest threshold of human hearing

Notes: [1]Source: California Department of Transportation, *Technical Noise Supplement,* September 2013, Table 2-5, p. 2 20

Sound is a pressure wave created by a moving or vibrating source that travels through an elastic medium such as air. Specifically, noise is defined as unwanted or objectionable sound which consists of pitch, loudness, and duration. However, the effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and in extreme circumstances, hearing impairment. Although it is difficult to describe noise with a single unit of measure because the human ear is not equally sensitive to all frequencies within the sound spectrum, the unit of measurement used to describe a noise level is the decibel (dB), and the A-weighted noise scale which weights the frequencies to which humans are sensitive is dBA. Furthermore, Federal and State agencies have established noise and land use compatibility guidelines that use averaging methods to noise measurement. Two measurement scales commonly used in California are the Community Noise Equivalent Level (CNEL) and the day-night level (DNL or L_{dn}). CNEL is a 24-hour weighted average measure of community noise; DNL is also a 24-hour average measure, but it only weighs nighttime hours. To account for increased human sensitivity at night, the L_{dn} scale includes a 10 dB weighting penalty on noise occurring during the 10:00 p.m. to 7:00 a.m. time period. The CNEL scale includes a 5 dB weighting penalty on noise occurring during the 7:00 p.m. to 10:00 p.m. time period, and a 10 dB weighting penalty on noise occurring during the 10:00 p.m. to 7:00 a.m. time period. This weighting accounts for the increased human sensitivity to noise during the evening and nighttime hours. As such, it is widely

accepted that average healthy ear can barely perceive changes of 3 dBA; that a change of 5 dBA is readily perceptible; and that an increase or decrease of 10 dBA sounds twice as loud.

Other noise rating scales of importance when assessing the annoyance factor include the peak or maximum noise level (L_{max}), which is the highest exponential, time-averaged sound level that occurs during a stated period. Short-term noise impacts in this discussion are specified in terms of maximum levels, denoted by L_{max} which reflects acoustical peaks during operational conditions and addresses the annoying aspects of constant noise.

Noise is particularly problematic when noise-sensitive land uses are affected. Noise-sensitive land uses are defined as uses where one would typically find activities that are interrupted by noise, such as residential uses, schools, hospitals, churches, performing arts facilities, and hotels and motels. The City deems residential uses particularly noise sensitive because families and individuals expect to use time in the home for quiet rest; intrusive noise can interfere with such pursuits (GP 2025). Although some variability in standards for noise sensitivity may apply to different densities of residential development, specifically infill and mixed-use developments, single-family uses are frequently considered the most sensitive (GP 2025).

Groundborne Vibration

Groundborne vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of ground-borne vibration are trains, buses on rough roads, and construction activities such as blasting, pile-driving, and operating heavy earth-moving equipment.

Vibration is an oscillatory motion which can be described in terms of the displacement, velocity, or acceleration. Displacement is the easiest descriptor to understand. For a vibrating floor, the displacement is simply the distance that a point on the floor moves away from its static position. The velocity represents the instantaneous speed of the floor movement and acceleration is the rate of change of the speed.

Although displacement is easier to understand than velocity or acceleration, it is rarely used for describing ground-borne vibration. Most transducers used for measuring ground-borne vibration use either velocity or acceleration. Furthermore, the response of humans, buildings, and equipment to vibration is more accurately described using velocity or acceleration. The effects of ground-borne vibration include “feelable” movement of the building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. The rumble is the noise radiated from the motion of the room surfaces. In essence, the room surfaces act like a giant loudspeaker causing what is called ground-borne noise. In extreme cases, the vibration can cause damage to buildings.

There are several different methods used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings and is typically measured in inches per second. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. The RMS amplitude is defined as the squared amplitude of the signal. The

PPV and RMS velocity are normally described in inches per second in the United States. Although it is not universally accepted, decibel notation (VdB) is in common use for vibration.

Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of vibration. Man-made vibration issues are therefore, usually confined to short distances (i.e., 500 feet or less) from the source. Sensitive receptors for vibration include structures (especially older masonry structures); people (especially residents, the elderly, and the sick) and vibration sensitive equipment.

Existing Conditions

Existing Site and Surrounding Conditions

The Project site is currently undeveloped and vacant, but has been used historically as open space. The topography consists of natural rolling terrain descending gradually from a west to east direction. There are granitic rock outcroppings throughout the property. The Project site contains two drainages, Drainage A and Drainage B. Drainage A enters the site near the northern portion of the western boundary and flows for approximately 1,183 feet before exiting the site near the middle of the northern boundary. Drainage B enters the site near the middle of the southern boundary and flows for approximately 981 feet before exiting the site near the middle of the northern boundary. The Project site is surrounded by the Sycamore Canyon Wilderness Park to the north; a storage facility to the southwest; a water treatment plant to the west, across Barton Street; vacant land and Alessandro Business Center to the east; and multi-family residences, single-family residences, and retail/commercial uses to the south, across Alessandro Boulevard. The single-family residences across Alessandro Boulevard are located in the County of Riverside jurisdiction.

The Project site has a General Plan land use designation of Business/Office Park (B/OP) as shown in Figure 3.0-5 – Land Use Designation Map and a zoning designation of Business Manufacturing Park and Specific Plan (Sycamore Canyon Business Park) Overlay Zones (BMP-SP) as shown in Figure 3.0-6 – Zoning Map. The Project site is located within the *Sycamore Canyon Business Park Specific Plan* (SCBPSP). The City adopted the SCBPSP on April 10, 1984. The SCBPSP contains land use objectives and design guidelines to provide for planned industrial development, such as the proposed Project, within this area. The Project Site is designated as Industrial within the SCBPSP.

Existing Noise Environment

Noise Contours

Existing noise levels in the vicinity of the Project site are dominated by vehicle traffic noise on Alessandro Boulevard. Alessandro Boulevard is a six-lane arterial roadway with a posted speed limit of 55 miles per hour adjacent to the Project site. The existing traffic volume ranges from 29,467 to 40,796 vehicles between Barton Street and Interstate 215 (I-215). The traffic volumes used for this analysis are from the *Traffic Operations Analysis* (TOA), Appendix L. The existing noise level contours associated with Alessandro Boulevard are shown in Figure 5.11-1, and the

existing noise level contour distances are summarized in Table 5.11-2. The roadway segments in Table 5.11-2 are based on segments analyzed in the TA.

Table 5.11-2 – Existing Alessandro Boulevard Noise Contours (CNEL)

Alessandro Blvd. Roadway Segments	Noise Level at 50 feet from Centerline	Distance to Centerline (feet)			
		75 CNEL	70 CNEL	65 CNEL	60 CNEL
Barton Street to Private Driveway[1] (of Vacant lot SW of Project)	77 CNEL	55 ft.	106 ft.	190 ft.	387 ft.
Private Driveway (of Vacant lot SW of Project) to Vista Grande Drive	77 CNEL	62 ft.	106 ft.	196 ft.	394 ft.
Vista Grande Drive to San Gorgonio Drive	77 CNEL	73 ft.	106 ft.	202 ft.	404 ft.
San Gorgonio Drive to Sycamore Canyon Blvd.	78 CNEL	60 ft.	112 ft.	200 ft.	397 ft.
Sycamore Canyon Blvd. to I-215 Southbound Ramps	79 CNEL	51 ft.	106 ft.	180 ft.	357 ft.
I-215 Southbound Ramps to I-215 Northbound Ramps	78 CNEL	52 ft.	102 ft.	172 ft.	331 ft.

[1] Private Driveway identified in Exhibit 1-1: Preliminary Site Plan in Traffic Operations Analysis (TA), Appendix L

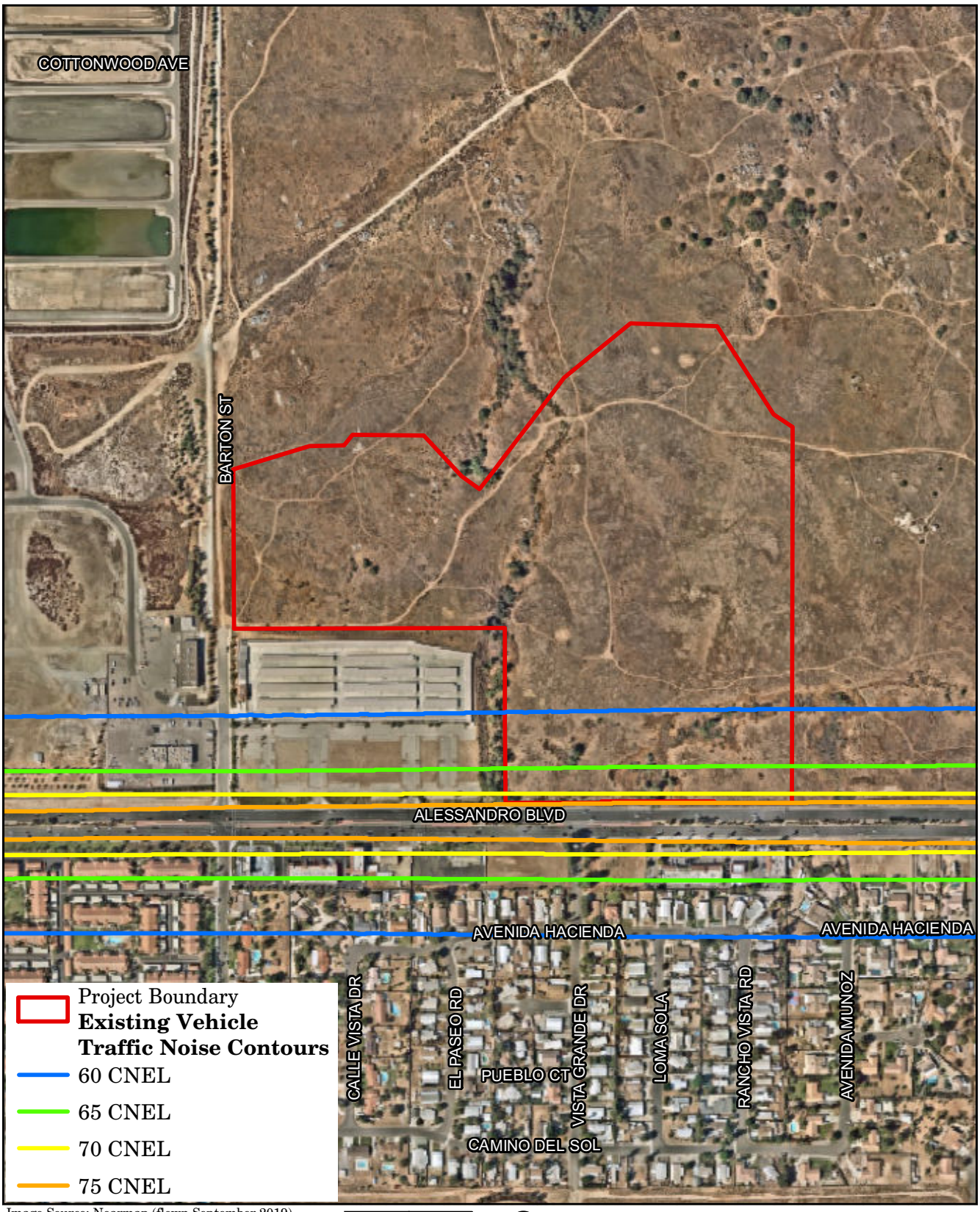


Image Source: Nearmap (flown September 2019)

SYCAMORE HILLS DISTRIBUTION CENTER

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Existing Vehicle Traffic Noise Contours

Figure 5.11-1

Ambient Noise Measurements

Existing noise levels at the Project site were measured on July 11, 2019, and December 18 and 19, 2019, using one Larson-Davis LxT Sound Expert Sound Level Meters, serial numbers 3827 and 3828. The following parameters were used:

Filter:	A-weighted
Response:	Slow
Time History Period (Short-Term):	5 seconds
Time History Period (Long-Term):	15 minutes

The meters were calibrated before the measurements. The meters were set 5 feet above the ground level for each measurement.

Noise measurements were taken to obtain typical ambient noise levels at the Project site and in the vicinity. The weather was warm and sunny. Three short-term (15-minute) measurements and one long-term (24-hour) measurement were taken, as described below. The primary sources of on-site noise were from traffic on Alessandro Boulevard. The measurement locations are shown on Figure 5.11-2.

Measurement 1 was located near the northern Project boundary on an unofficial trail within the future conservation area within the Project site and near the property line with the Sycamore Canyon Wilderness Park. The measurement location was selected to provide a sample of the noise environment within the Sycamore Canyon Wilderness Park and proposed on-site conservation areas. The sources of noise at this location included wind, occasional aircraft, and vehicle traffic in the distance. Noise levels were measured for 15 minutes; and are taken to identify an average noise level for that location. The average measured noise level was 50.9 dB(A) L_{eq}. The measurement was located more than 1,000 feet from Alessandro Boulevard, and vehicle traffic was not the observed dominant noise source. Thus, existing ambient noise levels at other locations in the Sycamore Canyon Wilderness Park and along the northern property line would be acoustically equivalent to noise levels at Measurement 1.



Image Source: Nearmap (flown September 2019)

0 Feet 450

SYCAMORE HILLS DISTRIBUTION CENTER

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Noise Measurement Locations

Figure 5.11-2

Measurement 2 was located south of the Project site, approximately 60 feet from the centerline of Alessandro Boulevard. The measurement location was selected to provide a sample of the noise environment at the southern project boundary closest to the dominant noise source in the project area (i.e., traffic on Alessandro Boulevard). Noise levels at measurement location 2 are acoustically equivalent to noise levels at the residences located just south of Alessandro Boulevard (Measurement 3). The main source of noise at this location was vehicle traffic on Alessandro Boulevard. Therefore, during the 15-minute measurement period, vehicle traffic on Alessandro Boulevard was also counted. The average measured noise level was 70.3 dB(A) L_{eq}.

Measurement 3 was located at the residential property line south of the Project site, approximately 220 feet from the centerline of Alessandro Boulevard. The measurement location was selected to provide a sample of the noise environment at the residences located directly across from the future site access driveway. The main source of noise at this location was vehicle traffic on Alessandro Boulevard. Therefore, during the 15-minute measurement period, vehicle traffic on Alessandro Boulevard was also counted. The average measured noise level was 59.7 dB(A) L_{eq}.

Measurement 4 was located at the western Project boundary at the existing terminus of Barton Street improvements, at the current entrance to the Sycamore Canyon Wilderness Park. The measurement location was selected to provide a sample of the noise environment at the current entrance to the Sycamore Canyon Wilderness Park, along the Project's western boundary, and closest to the dominant noise source in the project area (i.e., traffic on Alessandro Boulevard). The sources of noise at this location included wind, occasional aircraft, pedestrians accessing the park, and vehicle traffic noise. Nighttime average hourly noise levels (10 p.m. to 7 a.m.) ranged from 46.5 to 54.1 dB(A) L_{eq}.

Noise measurements are summarized in Table 5.11-3 and vehicle traffic counts for measurements 2 and 3 are summarized in Table 5.11-4.

Table 5.11-3 – Noise Measurements

Measurement	Location	Time	Noise Sources	L_{eq}
1	Northern Project boundary, within open space	July 11, 10:56 a.m. – 11:11 a.m.	Wind, aircraft, distant vehicle traffic	50.9
2	South of Project site, 60 feet from Alessandro Blvd. centerline	July 11, 11:24 a.m. – 11:39 a.m.	Vehicle traffic on Alessandro Blvd.	70.3
3	Residential property line south of the Project site, 220 feet from Alessandro Boulevard centerline.	December 18, 10:07 a.m. – 10:22 a.m.	Vehicle traffic on Alessandro Boulevard	59.7
4	Western Project boundary, at the entrance to Sycamore Canyon Wilderness Park	December 18, 10:00 p.m. – December 19, 7:00 a.m.	Wind, aircraft, pedestrians, vehicle traffic	46.5-54.1

Table 5.11-4 – 15-Minute Traffic Count for Noise Measurement Locations Where Traffic is the Main Noise Source

Measurement	Roadway	Direction	Autos	Medium Trucks	Heavy Trucks	Buses	Motorcycles
2	Alessandro Boulevard	Westbound	333	6	2	1	1
		Eastbound	279	1	2	1	1
3	Alessandro Boulevard	Westbound	357	7	3	1	0
		Eastbound	230	2	1	0	1

5.11.2 Related Regulations

5.11.2.1 Federal Regulations

The adverse impact of noise was officially recognized by the federal government in the Noise Control Act of 1972, which serves three purposes:

- Promulgating noise emission standards for interstate commerce;
- Assisting State and local abatement efforts; and
- Promoting noise education and research.

The Federal Office of Noise Abatement and Control was initially tasked with implementing the Noise Control Act. However, the Office of Noise Abatement and Control has since been eliminated, leaving the development of federal noise policies and programs to other federal agencies and interagency committees. For example, the Occupational Safety and Health Administration (OSHA) agency prohibits exposure of workers to excessive sound levels. The United States Department of Transportation assumed a significant role in noise control through its various operating agencies. The Federal Aviation Administration regulates noise of aircraft and airports. Surface transportation system noise is regulated by a host of agencies, including the Federal Transit Administration (FTA) and Federal Highway Administration (FHWA). Finally, the federal government actively advocates that local jurisdictions use their land use regulatory authority to arrange new development in such a way that “noise sensitive” uses are either prohibited from being sited adjacent to a highway or, alternately, that the developments are planned and constructed in such a manner that potential noise impacts are minimized.

Since the federal government has preempted the setting of standards for noise levels that can be emitted by the transportation sources, the City is restricted to regulating the noise generated by the transportation system through nuisance abatement ordinances and land use planning.

The proposed Project will comply with the appropriate OSHA regulations relative to worker exposure to noise during Project construction and operation.

5.11.2.2 State Regulations

California Green Building Standards Code, Title 24, Part 11

Part 11 of Title 24 (California Green Building Standards Code) provides mandatory measures for residential and non-residential buildings. Section 5.507, Environmental Comfort, addresses interior noise control in non-residential buildings. This section provides the minimum Sound

Transmission Class and Outdoor–Indoor Sound Transmission Class for wall, roof–ceiling assemblies, and windows for buildings located within the 65 CNEL contour of an airport, freeway, expressway, railroad, industrial source, or fixed guideway source as determined by the Noise Element of the General Plan. Buildings shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed an hourly average equivalent level of 50 dB(A) L_{eq}. Exterior features such as sound walls or earth berms may be utilized as appropriate to the building, addition, or alteration project to mitigate sound migration to the interior. An acoustical analysis documenting complying interior sound levels is required to be prepared by personnel approved by the architect or engineer of record.

State of California General Plan Guidelines 2003

Through not adopted by law, the State of California General Plan Guidelines 2003, published by the California Governor's Office of Planning and Research (OPR) (OPR Guidelines), provide guidance for the computability of projects within areas of specific noise exposure. The OPR Guidelines identify the suitability of various types of construction relative to a range of outdoor noise levels and provide each local community some flexibility in setting local noise standards that allow for the variability in community preferences. Findings presented in the Levels of Environmental Noise Document (EPA 1974) influenced the recommendation of the OPR Guidelines, most importantly in the choice of noise exposure metrics (i.e. L_{dn} or CNEL) and in the upper limits for the Normally Acceptable outdoor exposure of noise-sensitive uses. The OPR Guidelines include a Noise and Land Use Compatibility Matrix that identifies acceptable and unacceptable community noise exposure limits for various land use categories. The City of Riverside has utilized the State's noise/land use compatibility matrix as a model to create their own.

Noise Insulation Standards

The California Commission of Housing and Community Development officially adopted noise standards in 1974. In 1988, the Building Standards Commission revised the noise standards (California Noise Insulation Standards). The Project will comply with the appropriate noise insulation standards.

California Government Code

California Government Code Section 65302 mandates the legislative body of each county and city in California adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines published by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable. The City's GP 2025 contains a noise element that ranks land use compatibility as required by the California Government Code. The GP 2025 Noise Element is discussed below.

5.11.2.3 Regional Regulations

County of Riverside

The Project site is located adjacent to the boundary between the City of Riverside and the County of Riverside, and noise sensitive land uses (medium density residential) near the Project site are located within the county of Riverside.

The County regulates noise in accordance with Chapter 9.52, Noise Regulations of the Riverside County Municipal Code. Section 9.52.030 of the Municipal Code defines a sensitive receptor as a land use that is sensitive to noise including, but not limited to, residences, schools, hospitals, churches, rest homes, cemeteries, or public libraries. Section 9.52.040 of the Municipal Code states that the maximum noise levels from stationary noise sources at the property line of a sensitive receptor are to remain below 45 dB(A) L_{eq} during the nighttime hours (10:00 p.m. to 7:00 a.m.) and are not to exceed 55 dB(A) L_{eq} during the daytime hours (7:00 a.m. to 10:00 p.m.). Section 9.52.020[I] states that sound emanating from private construction projects located within on-quarter mile from an inhabited dwelling is exempt from the provisions of Chapter 9.52, if construction occurs between the hours of 6:00 a.m. and 6:00 p.m. during the months of June through September, and between the hours of 7:00 a.m. and 6:00 p.m. during the months of October through May.

March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan

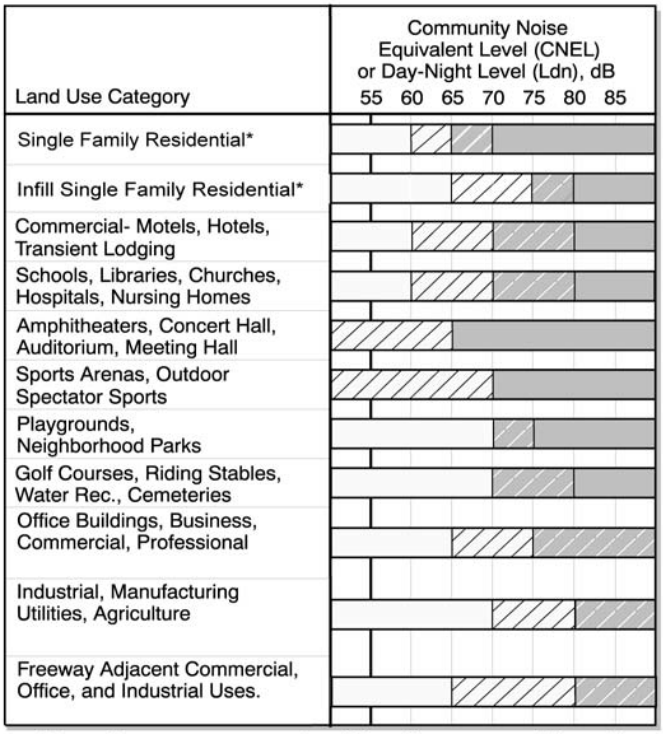
The Riverside County Airport Land Use Commission (ALUC) is the lead agency responsible for airport land use compatibility planning in Riverside County. The fundamental purpose of ALUC is to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses. The basic function of the airport land use compatibility plans is to promote compatibility between airports and the land uses that surround them. Compatibility plans serve as a tool for use by airport land use commissions in fulfilling their duty to review proposed development plans for airports and surrounding land uses. Additionally, compatibility plans set compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances and to landowners in their design of new development. On November 13, 2014, ALUC adopted the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan MARB/IPA LUCP. The compatibility zones and associated criteria set forth in the LUCP provide noise and safety compatibility protection.

5.11.2.4 Local Regulations

General Plan 2025 Noise Element

The City noise/land use compatibility criteria are outlined in Figure 5.11-3, which provides Figure N-10 of the City's General Plan Noise Element. These criteria establish noise standards for various land use categories. As shown, industrial uses are normally acceptable up to 70 CNEL, conditionally acceptable up to 80 CNEL, and normally unacceptable above 80 CNEL.

Noise/Land Use Noise Compatibility Criteria



Nature of the noise environment where the CNEL or Ldn level is:

Below 55 dB
Relatively quiet suburban or urban areas, no arterial streets within 1 block, no freeways within 1/4 mile.

55-65 dB
Most somewhat noisy urban areas, near but not directly adjacent to high volumes of traffic.

65-75 dB
Very noisy urban areas near arterials, freeways or airports.

75+ dB
Extremely noisy urban areas adjacent to freeways or under airport traffic patterns. Hearing damage with constant exposure outdoors.

Normally Acceptable
Specific land use is satifactory, based on the assumption that any building is of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable
New construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features included in design. Conventional construction, but with closed windows and fresh air supply systems or air condition-ing, will normally suffice.

Normally Unacceptable
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in design.

Conditionally Unacceptable
New construction or develop-ment should generally not be undertaken, unless it can be demonstrated that noise reduction requirements can be employed to reduce noise impacts to an acceptable level. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.

The Community Noise Equivalent Level (CNEL) and Day-Night Noise Level (Ldn) are measures of the 24-hour noise environment. They represent the constant A-weighted noise level that would be measured if all the sound energy received over the day were averaged. In order to account for the greater sensitivity of people to noise at night, the CNEL weighting includes a 5-decibel penalty on noise between 7:00 p.m. and 10:00 p.m. and a 10-decibel penalty on noise between 10:00 p.m. and 7:00 a.m. of the next day. The Ldn includes only the 10-decibel weighting for late-night noise events. For practical purposes, the two measures are equivalent for typical urban noise environments.

* For properties located within airport influence areas, acceptable noise limits for single family residential uses are established by the Riverside County Airport Land Use Compatibility Plan.

Goals, Policies, and Implementation Measures

The City utilizes the following GP 2025 'Noise Element' objectives and policies to assess and evaluate the project's suitability in light of noise impacts.

Objective N-1: Minimize noise levels from point sources throughout the community and, wherever possible, mitigate the effects of noise to provide a safe and healthful environment.

> **Policy N-1.2**: Require the inclusion of noise-reducing design features in development consistent with standards in Figure N-10 (Noise/Land Use Compatibility Criteria; GP 2025 Noise Element), Title 24 California Code of Regulations, and Title 7 of the Municipal Code.
>
> **Policy N-1.3**: Enforce the City of Riverside Noise Control Code to ensure that stationary noise and noise emanating from construction activities, private developments/residences and special events are minimized.
>
> **Policy N-1.4**: Incorporate noise considerations into the site plan review process, particularly with regard to parking and loading areas, ingress/egress points and refuse collection areas.
>
> **Policy N**-1.5: Incorporate noise considerations into the site plan review process, particularly with regard to parking and loading area, ingress/egress points and refuse collection areas.
>
> **Policy N-1.8**: Continue to consider noise concerns in evaluating all proposed development decisions and roadway projects.

Objective N-2: Minimize the adverse effects of airport related noise through proper land use planning.

> **Policy N-2.1**: Ensure that new development can be made compatible with the noise environment by using noise/land use compatibility standards (Figure N-10, Noise/Land Use Noise Compatibility Criteria) and the airport noise contour maps (found in the Riverside County Airport Land Use Compatibility Plans) as guides to future planning and development decisions.

Objective N-3: Ensure the viability of the March Air Reserve Base/March Inland Port

> **Policy N-3.2**: Work with the Riverside County Airport Land Use Commission and the March Joint Powers Authority to develop noise/land use guidelines and City land use plans that are consistent with ALUC policies.
>
> **Policy N-3.3**: Carefully consider planned future operations of the March Air Reserve Base and March Inland Port in land use decisions for properties within the airport-influenced area.

Objective N-4: Minimize ground transportation-related noise impacts.

> **Policy N-4.1**: Ensure that noise impacts generated by vehicular sources are minimized through the use of noise reduction features (e.g., earthen berms, landscaped walls, lowered streets, improved technology).

Riverside Municipal Code

Title 7 – Noise Control of the City's Municipal Code regulates stationary noise sources in the City. Chapters 7.25, 7.30, and 7.35 outline noise level limits and general noise requirements (City of Riverside 2018).

Chapter 7.25 – Nuisance Exterior Sound Level Limits

7.25.010 – Exterior Sound Level Limits

A. Unless a variance has been granted as provided in this chapter, it shall be unlawful for any person to cause or allow the creation of any noise which exceeds the following:
    1. The exterior noise standard of the applicable land use category, up to five decibels, for a cumulative period of more than 30 minutes in any hour; or
    2. The exterior noise standard of the applicable land use category, plus five decibels, for a cumulative period of more than 15 minutes in any hour; or
    3. The exterior noise standard of the applicable land use category, plus ten decibels, for a cumulative period of more than five minutes in any hour; or
    4. The exterior noise standard of the applicable land use category, plus 15 decibels, for the cumulative period of more than one minute in any hour; or
    5. The exterior noise standard for the applicable land use category, plus 20 decibels or the maximum measured ambient noise level, for any period of time.
B. If the measured ambient noise level exceeds that permissible within any of the first four noise limit categories, the allowable noise exposure standard shall be increased in five decibel increments in each category as appropriate to encompass the ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under said category shall be increased to reflect the maximum ambient noise level.
C. If possible, the ambient noise level shall be measured at the same location along the property line with the alleged offending noise source inoperative. If for any reason the alleged offending noise source cannot be shut down, then the ambient noise must be estimated by performing a measurement in the same general area of the source but at a sufficient distance that the offending noise is inaudible. If the measurement location is on the boundary between two different districts, the noise shall be the arithmetic mean of the two districts.
D. Where the intruding noise source is an air-conditioning unit or refrigeration system which was installed prior to the effective date of this chapter, the exterior noise level when measured at the property line shall not exceed 60 dBA for units installed before 1-1-80 and 55 dBA for units installed after 1-1-80.

Chapter 7.30 – Nuisance Interior Sound Level Limits

7.30.015 – Interior Sound Level Limits

A. No person shall operate or cause to be operated, any source of sound indoors which causes the noise level, when measured inside another dwelling unit, school or hospital, to exceed:

   1. The interior noise standard for the applicable land category area, up to five decibels, for a cumulative period of more than five minutes in any hour;

   2. The interior noise standard for the applicable land use category, plus five decibels, for a cumulative period of more than one minute in any hour;

   3. The interior noise standard for the applicable land use category, plus ten decibels or the maximum measured ambient noise level, for any period of time.

B. If the measured interior ambient noise level exceeds that permissible within the first two noise limit categories in this section, the allowable noise exposure standard shall be increased in five decibel increments in each category as appropriate to reflect the interior ambient noise level. In the event the interior ambient noise level exceeds the third noise limit category, the maximum allowable interior noise level under said category shall be increased to reflect the maximum interior ambient noise level.

C. The interior noise standard for various land use districts shall apply, unless otherwise specifically indicated, within structures located in designated zones with windows opened or closed as is typical of the season.

Table 5.11-5 summarizes the exterior and interior noise standards contained in the City's Municipal Code.

Table 5.11-5 – Riverside Municipal Code – Title 7 Interior and Exterior Noise Standards

Land Use	Noise Standards	
	Interior	Exterior
Residential	35 dB(A) (night 10 p.m. – 7 a.m.)	45 dB(A) (night 10 p.m. – 7 a.m.)
	45 dB(A) (day 7 a.m. – 10 p.m.)	55 dB(A) (day 7 a.m. – 10 p.m.)
Schools	45 dB(A) (7 a.m. – 10 p.m.) while school is in session	--
Hospitals	45 dB(A)	--
Office/Commercial	--	65 dB(A)
Industrial	--	70 dB(A)
Community Support	--	60 dB(A)
Public Recreation Facility	--	65 dB(A)
Non-Urban	--	70 dB(A)

Chapter 7.35 – General Noise Regulations

7.35.010 – General Noise Regulations

The general noise regulations from Chapter 7.35 that are applicable to the Project are those associated with loading and unloading activities and construction.

Loading, unloading, opening, closing or other handling of boxes, crates, containers, building materials, garbage cans, or similar objects, or permitting these activities between the hours of 10:00 p.m. and 7:00 a.m. in such a manner as to cause a noise disturbance across a residential property line or at any time exceeds the maximum permitted noise level for the underlying land use category is prohibited.

The City's noise ordinance limits construction activities to the hours of 7:00 a.m. to 7:00 p.m. on weekdays, and to 8:00 a.m. to 5:00 p.m. on Saturdays. Construction is not allowed on Sundays and Federal holidays. Provisions of the noise ordinance do not apply to construction, maintenance and repair operations, which are deemed necessary to serve the best interest of the public and which are conducted by public agencies and/or utilities or their contractors.

Construction noise is exempt from the limits shown in Table 5.11-5, and the City has no established noise standards or thresholds for construction. In addition, neither the City of Riverside General Plan nor Municipal Code establish numeric maximum acceptable construction source noise levels at potentially affected receivers for CEQA analysis purposes. Therefore, a numerical construction threshold based on FTA "Transit Noise and Vibration Impact Assessment Manual" is used for analysis of daytime construction impacts, as discussed below.

According to the FTA, project construction noise criteria should account for the existing noise environment, the absolute noise levels during construction activities, the duration of the construction, and the adjacent land use. Due to the lack of standardized construction noise thresholds, the FTA provides guidelines that can be considered reasonable criteria for construction noise assessment. The FTA considers a daytime exterior construction noise level of 80 dB(A) Leq as a reasonable threshold for noise sensitive residential land use.

Western Riverside County Multiple Species Habitat Conservation Plan

The Project site is surrounded by the Sycamore Canyon Wilderness Park. The U.S. Fish and Wildlife Service and other resource agencies, such as the U.S. Army Corps of Engineers and California Department of Fish and Wildlife, require limitation of noise levels to the habitats of threatened and endangered birds, such as the least Bell's vireo (*Vireo bellii pusillus*). The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) focusing on conservation of species and their associated habitats in western Riverside County. The MSHCP area encompasses approximately 1.26 million acres; it includes all unincorporated Riverside County land west of the crest of the San Jacinto Mountains to the Orange County line, as well as the cities of Temecula, Murrieta, Lake Elsinore, Canyon Lake, Norco, Corona, Riverside, Moreno Valley, Banning, Beaumont, Calimesa, Perris, Hemet, and San Jacinto. Section 6.1.4 of the MSHCP provides guidelines to address indirect effects associated with locating development in proximity to the MSHCP conservation areas. The section states:

> 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.

For operation of the project, the Municipal Code residential noise level standards discussed above were also applied to the Sycamore Canyon Wilderness Park. These noise level limits are 55 dB(A) L_{eq} for noise occurring between 7 a.m. and 10 p.m., and 45 dB(A) L_{eq} for noise occurring between 10 p.m. and 7 a.m. For construction noise, the Western Riverside County Regional Conservation Authority applies a noise level limit of 65 dB(A) L_{eq} (Western Riverside County Regional Conservation Authority, personal communication 2019). These construction and operational limits were applied at the boundary between the Project site and the Sycamore Canyon Wilderness Park and at the edge of the on-site conservation areas.

5.11.3 Project Design Considerations

It is anticipated that excavation of on-site decomposed granite may be performed utilizing conventional earthmoving equipment. Blasting will not be required and is not proposed as part of the Project site preparation activities.

As outlined in Section 5.11.2.2 above, the Project would adhere to all applicable requirements of Part 11 of Title 24 of the California Green Building Standards Code. Section 5.507, Environmental Comfort, addresses interior noise control in non-residential buildings. This section provides the minimum Sound Transmission Class and Outdoor–Indoor Sound Transmission Class for wall, roof–ceiling assemblies, and windows for buildings located within the 65 CNEL contour of an airport, freeway, expressway, railroad, industrial source, or fixed guideway source as determined by the Noise Element of the General Plan. Buildings shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed an hourly average equivalent level of 50 dB(A) L_{eq}.

As described in Section 3.0 project Description and shown on Figure 3.0-11 – Fencing Plan, the Project includes perimeter walls to minimize noise from on-site operations to adjacent sensitive uses including the Sycamore Canyon Wilderness Park and on-site conservation areas. Several different fences and walls will be installed with the most northern being a 42-inch cable rail theme fence along the northern property line, adjacent to the Sycamore Canyon Wilderness Park. The 42-inch cable rail theme fence will also extend along the western side of Parcel 1 and the boundary of Parcel A, the Restricted Property/Conservation Area. The 42-inch cable rail theme fence will also run along Parcels A and B Conservation Areas southern boundary and frontage along Alessandro Boulevard and on both sides of the Parcel 1/ Building A driveway on Alessandro Boulevard. An 8-foot-high concrete screen wall will be constructed around the east, north and west sides of Building A at the outer edge of the drive aisles and parking area. A 6-foot to 8-foot-high metal fence will be placed along the outer edge of the drive aisles and parking area on the south side of Building A. An 8-foot-high metal sliding gate and 15-feet high concrete screening walls will be located on both sides of the southern end of Building A that faces Alessandro Boulevard to screen views of the dock doors and loading areas from Alessandro Boulevard.

This 8-foot-high concrete screen wall will be installed around the northeast, east, and southeast sides of Building B, at the outer edge of the drive aisles and parking areas, adjacent to the Parcel

A Conservation Area. A 6-foot to 8-foot-high metal fence will be placed along the northwestern, western, and southern sides of Building B at the outer edge of the drive aisles and parking areas. To separate the Building B northern parking lot/property line and the trail head parking lot an 8-foot-high combination screening fence/wall, consisting of a 4-foot high tubular steel metal fence on top of a 4-foot high screen wall, will be installed. An 8-foot-high metal sliding gate and 15-feet high concrete screening walls will be located on the south side of Building B facing west to Barton Street to screen views of the dock doors and loading area from Barton Street.

5.11.4 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance thresholds in Appendix G ("Environmental Checklist") of the *State CEQA Guidelines*. The Environmental Checklist prepared by the City for the Project (see Appendix A of this document) indicates that two of the three Noise impact thresholds shall be analyzed in this EIR as impacts related to Noise Threshold C (exposure of people residing or working in the Project area to excessive noise levels from an airport) was determined to be less than significant with no further analysis in the EIR required. Thus, per the Environmental Checklist prepared for the Project, the Sycamore Hills Distribution Project may be considered potentially significant if the proposed project would:

- (Threshold A) result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- (Threshold B) result in generation of excessive groundborne vibration or groundborne noise levels;

5.11.5 Environmental Impacts

Threshold A: *Would the Project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Construction Noise

Project construction noise would be generated by diesel engine-driven construction equipment used for site preparation and grading, building construction, loading, unloading, and placing materials and paving. No blasting is proposed for the Project. Construction noise is exempt from the noise level limits established in Title 7. However, construction noise is calculated in this analysis in an abundance of caution. Neither the City of Riverside General Plan nor Municipal Code establish numeric maximum acceptable construction source noise levels at potentially affected receivers for CEQA analysis purposes. For the purposes of this analysis, the Federal Transit Administration (FTA) recommended threshold of 80 dB(A) L_{eq} (A-weighted decibels one-hour equivalent noise level) at noise sensitive residential land uses was used. Further, the Western Riverside County Regional Conservation Authority applies a noise level limit of 65 dB(A) L_{eq}. This limit was analyzed at the boundary between the Project site and the Sycamore Canyon Wilderness Park and at the edge of the on-site conservation areas. Construction noise levels

were modeled at the residential uses, Sycamore Canyon Wilderness Park, and on-site conservation area for comparison to these limits.

To reflect the nature of grading and construction activities, equipment was modeled as an area source distributed over each building footprint and the temporary access road between the two building sites. The total sound energy of the area source was modeled with all pieces of equipment operating simultaneously, which would be a worst-case scenario. Noise levels were modeled at a series of 45 receivers located at the adjacent uses. The results are summarized in Table 5.11-6 – Construction Noise Levels, and modeled receiver locations and construction noise contours are shown in Figure 5.11-4.

Table 5.11-6 – Construction Noise Levels

Receiver	Land Use	Noise Level Limit [dB(A) L_{eq}]	Construction Noise Level [dB(A) L_{eq}][1]
1	Residential	80	55
2	Residential	80	57
3	Commercial	--	59
4	Vacant (Residential Land Use Designation)	--	60
5	Vacant (Residential Land Use Designation)	--	59
6	Residential (County)	80	58
7	Residential (County)	80	58
8	Residential (County)	80	58
9	Residential (County)	80	58
10	Commercial	--	58
11	Commercial	--	57
12	Residential (County)	80	57
13	Residential (County)	80	57
14	Residential (County)	80	56
15	Residential	80	56
16	Residential	80	55
17	Residential	80	54
18	Public Facilities	--	59
19	Public Facilities	--	59
20	Commercial	--	72
21	Commercial	--	72
22	Commercial	--	69
23	On-Site Conservation Area	65	**69**
24	On-Site Conservation Area	65	**68**
25	On-Site Conservation Area	65	**69**
26	On-Site Conservation Area	65	**69**
27	On-Site Conservation Area	65	**69**
28	Business and Manufacturing Zone	--	69
29	Business and Manufacturing Zone	--	70
30	Sycamore Canyon Wilderness Park	65	**68**
31	Sycamore Canyon Wilderness Park	65	**68**
32	Sycamore Canyon Wilderness Park	65	**68**
33	Sycamore Canyon Wilderness Park	65	**68**
34	Sycamore Canyon Wilderness Park	65	**70**
35	Sycamore Canyon Wilderness Park	65	**71**
36	Sycamore Canyon Wilderness Park	65	**69**
37	Sycamore Canyon Wilderness Park	65	**69**
38	Sycamore Canyon Wilderness Park	65	**71**
39	On-Site Conservation Area	65	**71**
40	On-Site Conservation Area	65	**69**
41	On-Site Conservation Area	65	**71**
42	On-Site Conservation Area	65	**72**
43	On-Site Conservation Area	65	**72**
44	On-Site Conservation Area	65	**72**
45	On-Site Conservation Area	65	**74**

[1]**Bold** text indicates when construction noise levels exceed noise level limits.



Image Source: Nearmap (flown September 2019)

SYCAMORE HILLS DISTRIBUTION CENTER

RVA RECON

Construction Noise Contours

Figure 5.11-4

Construction Noise to Adjacent Residential Uses

As shown in Table 5.11-6 above, construction noise levels would range from 54 to 60 dB(A) L_{eq} at the adjacent residential land uses. Construction noise levels would not exceed 80 dB(A) L_{eq} at any adjacent residential property lines. Thus, construction noise levels would not exceed the FTA recommended threshold of 80 dB(A) L_{eq} at the residential uses and would not be considered a substantial increase in noise.

The City's noise ordinance (Title 7) limits construction activities to the hours of 7:00 a.m. to 7:00 p.m. on weekdays, and to 8:00 a.m. to 5:00 p.m. on Saturdays. No construction is permitted on Sundays or on federal holidays. Some adjacent residential uses are located within the County of Riverside. Similar to the City, the County exempts construction noise from noise level limits, but restricts construction activity to the hours of 6:00 a.m. to 6:00 p.m. in June through September, and 7:00 a.m. to 6:00 p.m. in October through May. In order to comply with City and County requirements, project construction activities would only occur between 7:00 a.m. and 6:00 p.m. on weekdays and 8:00 a.m. to 5:00 p.m. on Saturdays and would not occur on Sundays or federal holidays. As construction activities would comply with Title 7 and would not be considered a substantial increase in ambient noise, temporary increases in noise levels from construction activities would be **less than significant** at the adjacent residential use areas.

Construction Noise to Adjacent Sycamore Canyon Wilderness Park and On-Site Conservation Areas

Sensitive least Bell's vireo habitat is located within the Sycamore Canyon Wilderness Park and on-site conservation areas. For construction noise, the Western Riverside County Regional Conservation Authority applies a noise level limit of 65 dB(A) L_{eq} (Western Riverside County Regional Conservation Authority, personal communication 2019). This limit was analyzed at the boundary between the Project site and the Sycamore Canyon Wilderness Park and at the edge of the on-site conservation areas. As shown in Table 5.11-6, construction noise levels at the adjacent Sycamore Canyon Wilderness Park and on-site conservation areas would range from 68 to 74 dB(A) L_{eq}. Based on the construction noise contours shown in Figure 5.11-4, construction noise levels would exceed 65 dB(A) L_{eq} within a majority of the Parcel A conservation area, the portion of Parcel B conservation area that is approximately 100 feet or closer to the development footprint, and within the portion of the Sycamore Canyon Wilderness Park that is within up to 300 feet of the project boundary. Should sensitive species be present within the Sycamore Canyon Wilderness Park and on-site conservation areas, construction noise impacts to sensitive species would be potentially significant.

The implementation of mitigation measure **MM NOI-1** would be required should least Bell's vireo be present within 300 feet of the Project site from the Sycamore Canyon Wilderness Park or within 100 feet of the Project site from the conservation areas that are Parcel A and B. Specifically, **MM NOI-1** includes the following:

Prior to issuance of grading permit, should least Bell's vireo be present in the Sycamore Canyon Wilderness Park within 300 feet of the Project site, in Parcel A on-site conservation area, or within

Parcel B on-site conservation area within 100 feet of the development footprint, construction noise impacts shall be minimized through implementation of the following measure:

1. A 12-foot temporary noise barrier shall be installed at the perimeter of the limits of disturbance between the construction activities and the adjacent Sycamore Canyon Wilderness Park to the north and east and the on-site conservation areas as shown in Figure 5.11-5 – Construction Barrier. The barrier must be installed within the Project development limits and not encroach into the adjacent Sycamore Canyon Wilderness Park or the on-site conservation areas. The barrier shall be continuous without openings, holes, or cracks, and shall reach the ground. The barrier may be constructed with 1-inch plywood and provide a reduction of at least 10 dB(A) to ensure noise levels do not exceed 65 dB(A) L_{eq} at the Sycamore Canyon Wilderness Park and on-site conservation areas. Other barrier materials providing the same reduction shall also be permitted.
2. Heavy grade rubber mats/pads shall be used within the bed of the trucks. These mats will help attenuate initial impact noise generated when an excavator drops rock and debris into the bed of the truck. These mats must be maintained and/or replaced as necessary.
3. During all Project site excavation and grading on-site, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturer standards.
4. The contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the Project site.
5. Equipment shall be shut off and not left to idle when not in use.
6. The contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise/vibration sources and sensitive receptors nearest the Project site during all Project construction.
7. The Project proponent shall mandate that the construction contractor prohibit the use of music or sound amplification on the Project site during construction.
8. The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment (7:00 a.m. to 6:00 p.m. on weekdays, and 8:00 a.m. to 5:00 p.m. on Saturdays).
9. The use of heavy equipment or vibratory rollers and soil compressors shall be limited along the Project boundaries to the greatest degree possible. It is acknowledged that some soil compression may be necessary along the Project boundaries.
10. Any jackhammers, pneumatic equipment and all other portable stationary noise sources shall be shielded, and noise shall be directed away from sensitive receptors.
11. For the duration of construction activities, the construction manager shall serve as the contact person should noise levels become disruptive to local residents. A sign should be posted at the Project site with the contact phone number. This sign shall be posted at the Alessandro Boulevard frontage as well as the Barton Street frontage.

The implementation of the above measures under **MM NOI-1** would reduce construction noise impacts to a level **less than significant**. As described above, mitigation measure **MM NOI-1** will require that work be conducted outside of nesting season whenever possible and/or ensure the adjacent habitat is unoccupied prior to the initiation of breeding season. If least Bell's vireo should be present within the parameters mentioned above, the measure would require the installation of a 12-foot temporary noise barrier at the perimeter of the limits of disturbance between construction activities and the adjacent Sycamore Canyon Wilderness Park to the north and east and the on-site conservation areas (see Figure 5.11-5 – Construction Barrier) to provide a reduction of at least 10 dB(A) to ensure noise levels do not exceed the 65 dB(A) limit at the Sycamore Canyon Wilderness Park and on-site conservation areas. With the implementation of **MM NOI-1**, construction noise impacts at the Sycamore Canyon Wilderness Park and on-site conservation areas would be reduced to **less than significant with mitigation**.



Image Source: Nearmap (flown September 2019)

0 Feet 450

SYCAMORE HILLS DISTRIBUTION CENTER

RVA RECON

Construction Barriers

Figure 5.11-5

Operational Noise

Traffic Noise

On-Site Noise/Land Use Compatibility

On-site traffic noise contours were developed using the SoundPLAN program. Noise level contours were modeled at the first-floor level. These contours take into account shielding provided by proposed and adjacent buildings, topography, and proposed grading. Future vehicle traffic noise-level contours are shown in Figure 5.11-6. The main source of noise at the Project site is vehicle traffic on Alessandro Boulevard. As shown in Figure 5.11-6, first-floor exterior noise levels at the proposed buildings are projected to be less than the City's normally acceptable compatibility standard of 70 CNEL.

Off-Site Traffic Noise

The primary factor affecting off-site noise levels would be increased traffic volumes. The Project would increase traffic volumes on Alessandro Boulevard but would not substantially alter the vehicle classifications mix on local or regional roadways or alter the speed on an existing roadway or create a new roadway. Though changes in noise levels would occur along any roadway where project-related traffic occurs, noise levels are assumed to be the greatest nearest the Project site, as this location would represent the greatest concentration of project-related traffic.

Impacts related to a noise level increase from traffic are considered significant if the Project-generated traffic would result in exposure of sensitive receptors to an unacceptable increase in noise levels. Additionally, operational and traffic-generated noise levels would have a significant impact on identified noise-sensitive receptors if the ambient noise levels:

- Are less than 60 CNEL and the project results in an increase of 5 dB(A) or greater;
- Range from 60 to 65 CNEL and the project results in an increase of 3 dB(A) or greater; or
- Exceed 65 CNEL and the project results in an increase of 1.5 dB(A) or greater.

According to the Project's Traffic Operations Analysis, the Project would generate 847 trips. Table 5.11-7 – Traffic Noise Levels with and without Project and Ambient Noise Increase presents a conservative assessment of traffic noise levels based on the existing conditions, year 2023, and year 2040 cumulative traffic volumes with and without the Project along various segments of Alessandro Boulevard. As shown in Table 5.11-7, Project-related traffic would increase ambient noise levels by 0.2 dB(A) or less in existing, year 2023, and year 2040 conditions. The project-related increases in ambient noise would not be audible and would not exceed the thresholds outlined above. **Impacts would be less than significant without mitigation**.

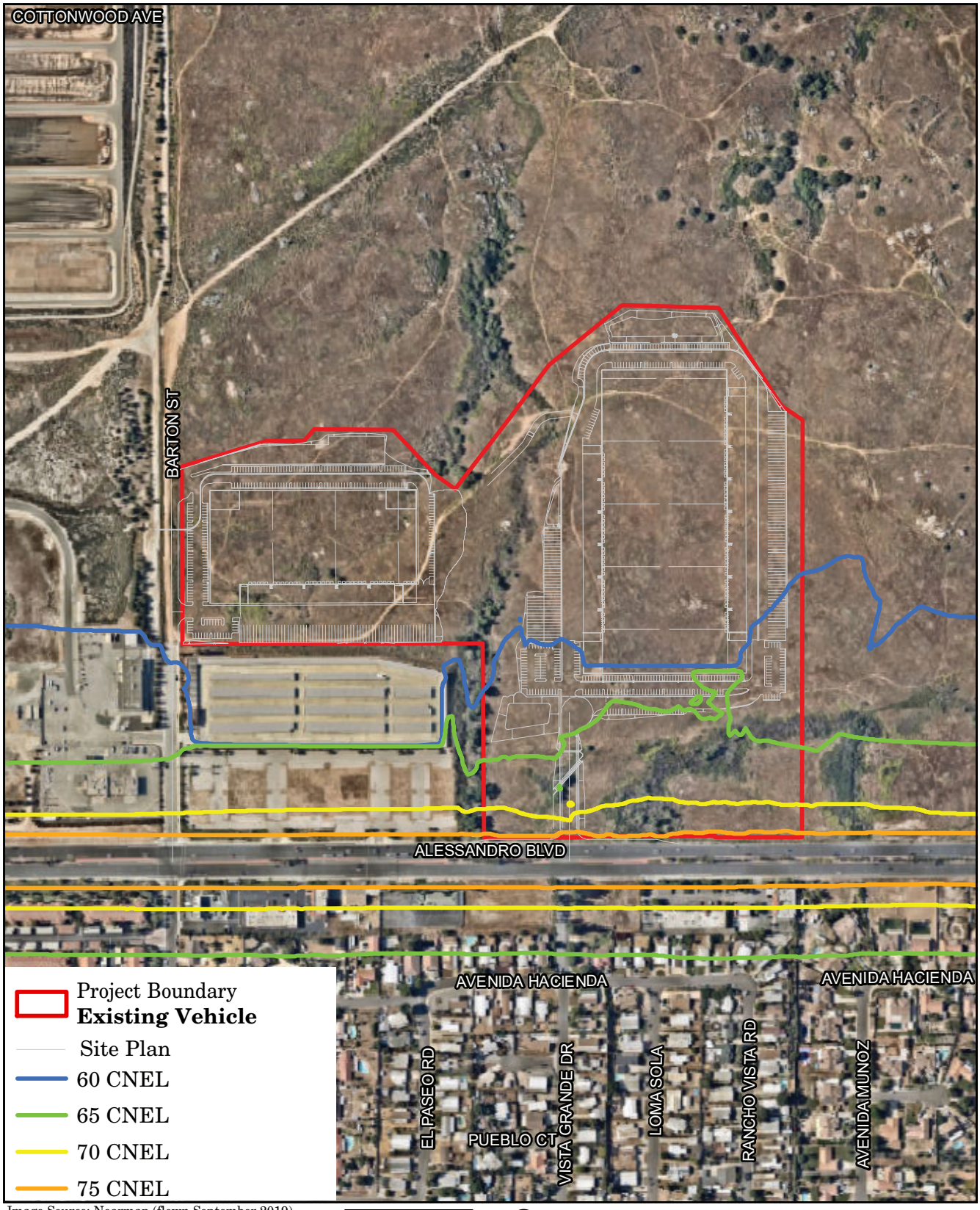


Image Source: Nearmap (flown September 2019)

SYCAMORE HILLS DISTRICT CENTER

RVA RECON

Vehicle Traffic Noise Contours with Project

Figure 5.11-6

Table 5.11-7 – Traffic Noise Levels with and without Project and Ambient Noise Increase (CNEL)

Traffic Noise Levels with and without Project and Ambient Noise Increase (CNEL)									
	Existing			Year 2023			Year 2040		
Roadway Segment	Without Project	With Project	Project-Related Increase	Without Project	With Project	Project-Related Increase	Without Project	With Project	Project-Related Increase
Alessandro Boulevard									
Barton Street to Private Driveway	76.9	76.9	0.0	77.7	77.7	0.0	79.9	79.9	0.0
Private Driveway to Vista Grande Drive	77.2	77.2	0.0	78.0	78.1	0.1	80.2	80.2	0.0
Vista Grande Drive to San Gorgonio Drive	77.3	77.5	0.2	78.2	78.3	0.1	80.5	80.6	0.1
San Gorgonio Drive to Sycamore Canyon Boulevard	78.1	78.2	0.1	78.9	79.0	0.1	81.3	81.3	0.0
Sycamore Canyon Boulevard to I-215 Southbound Ramps	78.5	78.6	0.1	79.4	79.6	0.2	81.9	82.0	0.1
I-215 Southbound Ramps to I-215 Northbound Ramps	77.7	77.8	0.1	78.8	78.8	0.0	81.2	81.2	0.0

On-Site Generated Noise

On-site generated noise levels in the City are regulated by Chapter 7.25 of Title 7 of the City's Municipal Code (see Table 5.11-5). The Project is located adjacent to the boundary between the City of Riverside and the County of Riverside, and residential uses near the Project site are located within the County of Riverside. However, the residential noise ordinance limits in the County are the same as those in the City. In addition, according to the MSHCP, the residential noise level limits are also applicable to the Sycamore Canyon Wilderness Park and on-site conservation areas.

The primary noise sources on-site would be truck activity (idling trucks, truck trailer hitching and unhitching, back up warning beepers), parking lot activities, trash compactors, and roof-mounted HVAC units. Noise levels were modeled at a series of 45 receivers located at the adjacent residential, commercial, and public facility properties, Sycamore Canyon Wilderness Park, and on-site conservation areas. Modeled noise levels took into account grading and shielding provided by the proposed buildings as well as the existing self-storage building south of the Project site. The Project would include a number of perimeter walls and screening walls throughout the Project site. The perimeter fences and walls were incorporated into the Project's design as part of standard practices for this type of development for security and visual screening and where necessary retaining walls for the Project's proposed grading. Therefore, as the perimeter walls are part of the design, they are not considered noise mitigation.

As shown on Figure 3.0-11 – Fencing Plan, several different fences and walls will be installed with the most northern being a 42-inch cable rail theme fence along the northern property line, adjacent to the Sycamore Canyon Wilderness Park. The 42-inch cable rail theme fence will also extend along the western side of Parcel 1, and the boundaries of Parcels A and B (Restricted Property/Conservation Area). An 8-foot-high concrete screen wall will be constructed around the east, north and west sides of Building A at the outer edge of the drive aisles and parking area. A 6-foot to 8-foot-high metal fence will be placed along the outer edge of the drive aisles and parking area on the south side of Building A. An 8-foot-high metal sliding gate and 15-feet high concrete screening walls will be located on both sides of the southern end of Building A that faces Alessandro Boulevard to screen views of the dock doors and loading areas from Alessandro Boulevard.

This 8-foot-high concrete screen wall will be installed around the northeast, east, and southeast sides of Building B, at the outer edge of the drive aisles and parking areas, adjacent to the Parcel A Conservation Area. A 6-foot to 8-foot-high metal fence will be placed along the northwestern, western, and southern sides of Building B at the outer edge of the drive aisles and parking areas. To separate the Building B northern parking lot/property line and the trail head parking lot an 8-foot-high combination screening fence/wall, consisting of a 4-foot high tubular steel metal fence on top of a 4-foot high screen wall, will be installed. An 8-foot-high metal sliding gate and 15-feet high concrete screening walls will be located on the south side of Building B facing west to Barton Street to screen views of the dock doors and loading area from Barton Street.

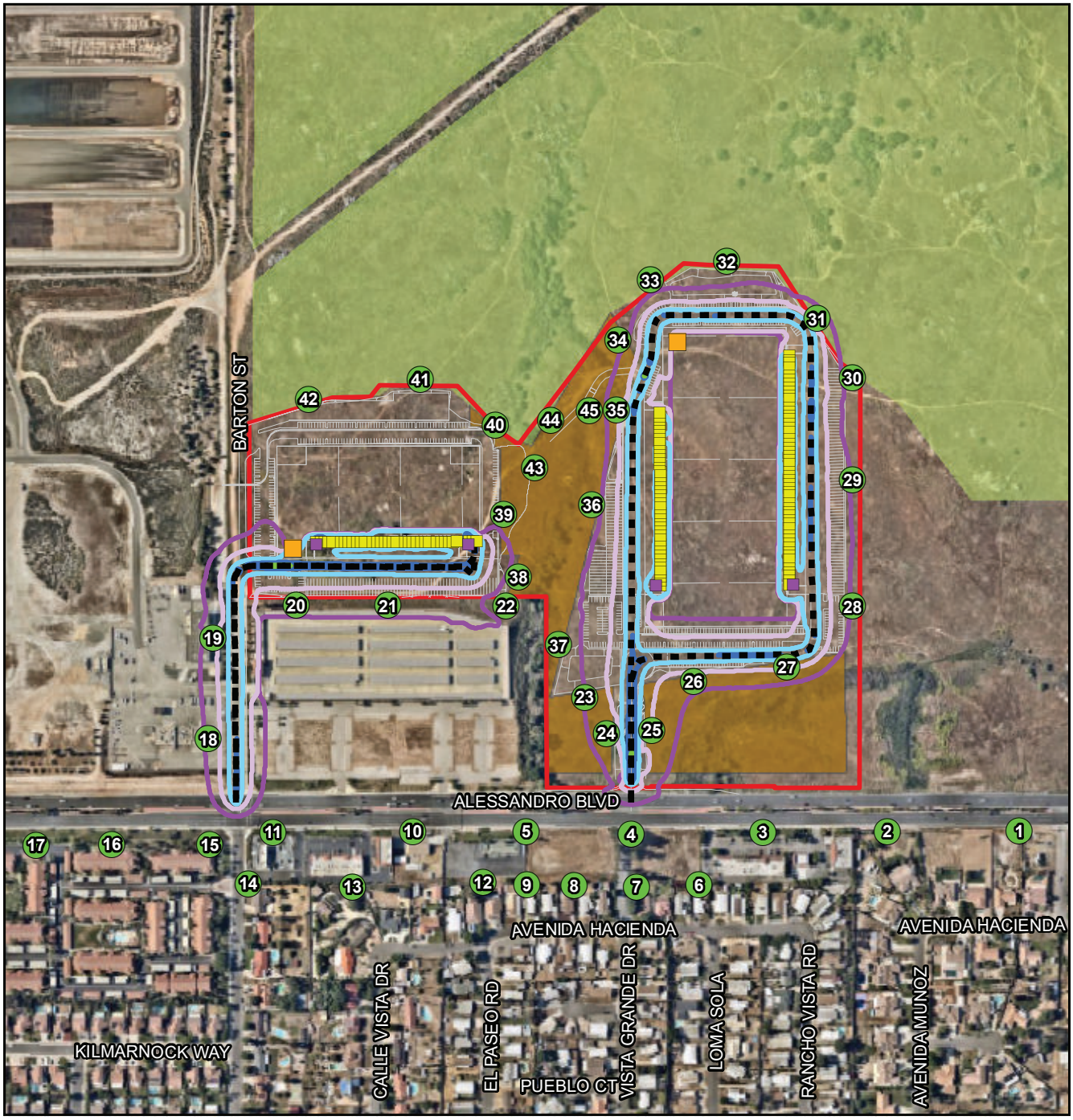
Noise levels were modeled without and with incorporation of the 4-foot-high concrete walls. As the 4-foot high walls would provide less noise attenuation than the 8-foot-high walls, they were modeled to show the worst-case noise scenario - if the 4-foot walls provide adequate noise attenuation, then the 8-foot walls would also.

Daytime on-site generated noise contours without and with the 4-foot-high barrier are shown in Figures 5.11-7A and 5.11-7B, respectively, and nighttime contours without and with the 4-foot-high barrier are shown in Figures 5.11-8A and 5.11-8B, respectively. Future noise levels are summarized in Table 5.11-8. As shown in Table 5.11-8, daytime noise levels at the residential, commercial, and public facilities land uses (Receivers 1 through 22) and business and manufacturing zone (Receivers 28 and 29) would range from 32 to 48 dB(A) L_{eq} and nighttime noise levels would range from 25 to 42 dB(A) L_{eq}. Noise levels associated with backup warning beepers were modeled at the same set of 45 receivers. Three simultaneous beepers were modeled at the dock door areas on the western and eastern sides of Building A and at the southern side of Building B. Backup beeper noise levels at the nearby residential uses would range from 19 to 37 dB(A) L_{eq} and would not exceed the Title 7 nighttime Noise Ordinance limit of 45 dB(A) $L_{eq.}$ Thus, noise levels would be less than the applicable daytime and nighttime Title 7 Noise Ordinance limits at the nearby residential property lines.

Moreover, daytime noise levels within the Sycamore Canyon Wilderness Park and on-site conservation areas (Receivers 23 through 27 and 30 through 45) would range from 32 to 51 dB(A) L_{eq} and nighttime noise levels would range from 30 to 45 dB(A) L_{eq}. Backup beeper noise levels at the adjacent Sycamore Canyon Wilderness Park and on-site conservation areas would range from 8 to 38 dB(A) L_{eq} and would also be less than the applicable nighttime limit of 45 dB(A) $L_{eq.}$ As operation noise levels within the Sycamore Canyon Wilderness Park and on-site conservation areas would not exceed the applicable Title 7 residential noise level limits of 55 dB(A) L_{eq} during the daytime hours and 45 dB(A) L_{eq} during the nighttime hours, noise impacts due to on-site generated noise would be **less than significant without mitigation**.

As outlined in the Setting Section 5.11.1, a 24-hour noise measurement (Measurement 4) located at the western Project boundary at the existing terminus of Barton Street improvements and current entrance to the Sycamore Canyon Wilderness Park, was taken to provide an average noise level, and to identify the quietest and loudest noise levels. The average measured noise level during the 24-hour period was 50.2 dB(A) L_{eq}. The quietest measured hourly noise level was 45.9 dB(A) L_{eq} and occurred between 3 and 4 p.m. and the loudest hourly noise level was 54.1 dB(A) L_{eq} and occurred between 5 and 6 a.m. Nighttime average hourly noise levels (10 p.m. to 7 a.m.) ranged from 46.5 to 54.1 dB(A) L_{eq}. The noisiest night-time operations would be truck activities in and around the loading docks (idling trucks, truck trailer hitching and unhitching, including backup warning beeping), trash compactors, and HVAC units. As outlined above, modeled noise from these activities at nearby sensitive receivers, including residences on the south side of Alessandro Boulevard, the Sycamore Canyon Wilderness Park to the north, and the on-site conservation areas would not exceed the nighttime limit of 45 dB(A) $L_{eq.}$ The following site design and setting factors all contribute to reducing operational noise from the Project site operations, during daytime and nighttime hours, to or below applicable limits: orientation of the loading docks, 8-foot-high concrete walls at the perimeter of loading dock areas and drive aisles,

setbacks from the Sycamore Canyon Wilderness Park boundary, the existing City-Wide Self Storage buildings, and the distance from loading dock areas and drive aisles to the nearest residences, located across Alessandro Boulevard to the south. As shown in Table 5.11-8, operational noise levels would be less than the applicable daytime and nighttime Title 7 Noise Ordinance limits at the nearby residential property lines and potential noise impacts are **less than significant without mitigation**.



Project Boundary
Sycamore Canyon Wilderness Park
On-site Conservation Area
Site Plan
On-Site Truck Maneuvering
Loading Docks
HVAC
Trash Compactor

Modeled Receivers

Daytime On-Site Generated Noise Contours

45 dB(A) Leq
50 dB(A) Leq
55 dB(A) Leq
60 dB(A) Leq
65 dB(A) Leq

0 Feet 500

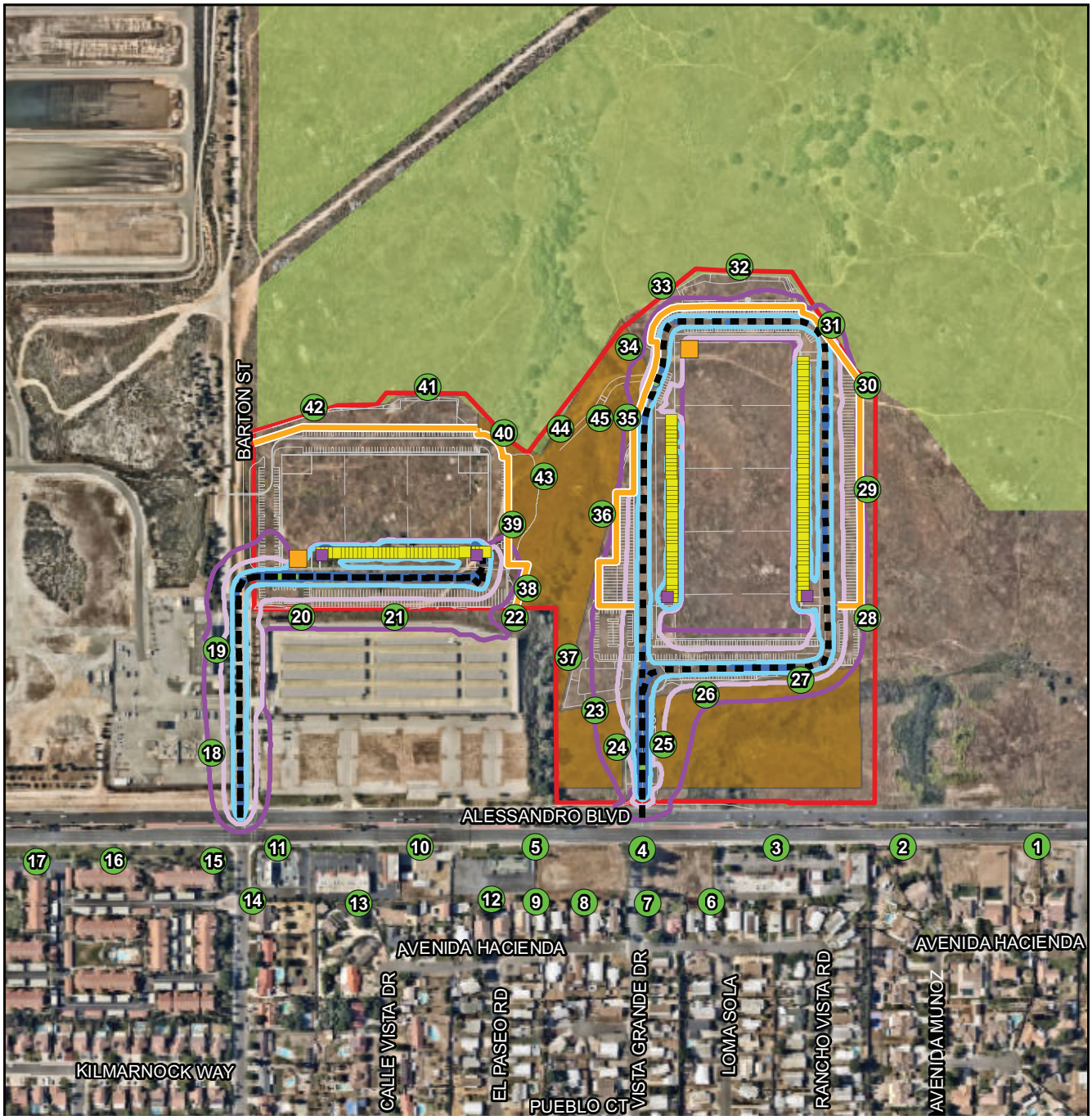
Image Source: Nearmap (flown September 2019)

SYCAMORE HILLS DISTRIBUTION CENTER

RVA RECON

Daytime On-Site Generated Noise Contours
without 4- Foot Barrier

Figure 5.11-7A



Project Boundary
Sycamore Canyon Wilderness Park
On-site Conservation Area
Site Plan
4-foot Barrier
On-Site Truck Maneuvering
Loading Docks
HVAC
Trash Compactor

Modeled Receivers

Daytime On-Site Generated Noise Contours

45 dB(A) Leq
50 dB(A) Leq
55 dB(A) Leq
60 dB(A) Leq
65 dB(A) Leq

0 Feet 500

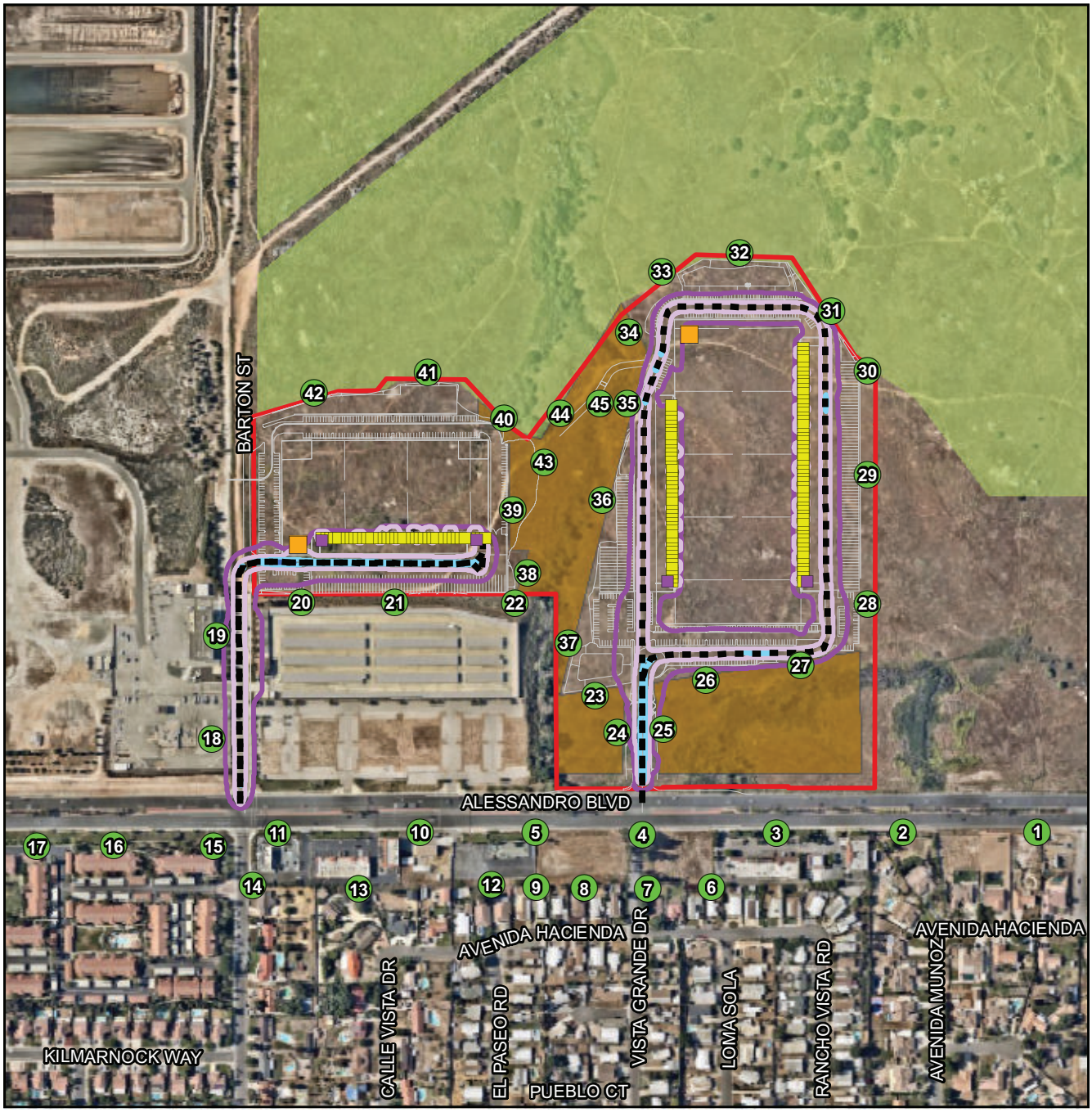
Image Source: Nearmap (flown September 2019)

SYCAMORE HILLS DISTRIBUTION CENTER

RVA RECON

Daytime On-Site Generated Noise Contours with 4- Foot Barrier

Figure 5.11-7B



Project Boundary

Sycamore Canyon Wilderness Park

On-site Conservation Area

Site Plan

On-Site Truck Maneuvering

Loading Docks

HVAC

Trash Compactor

Modeled Receivers

Nighttime On-Site Generated Noise Contours

45 dB(A) Leq

50 dB(A) Leq

55 dB(A) Leq

60 dB(A) Leq

0 Feet 500

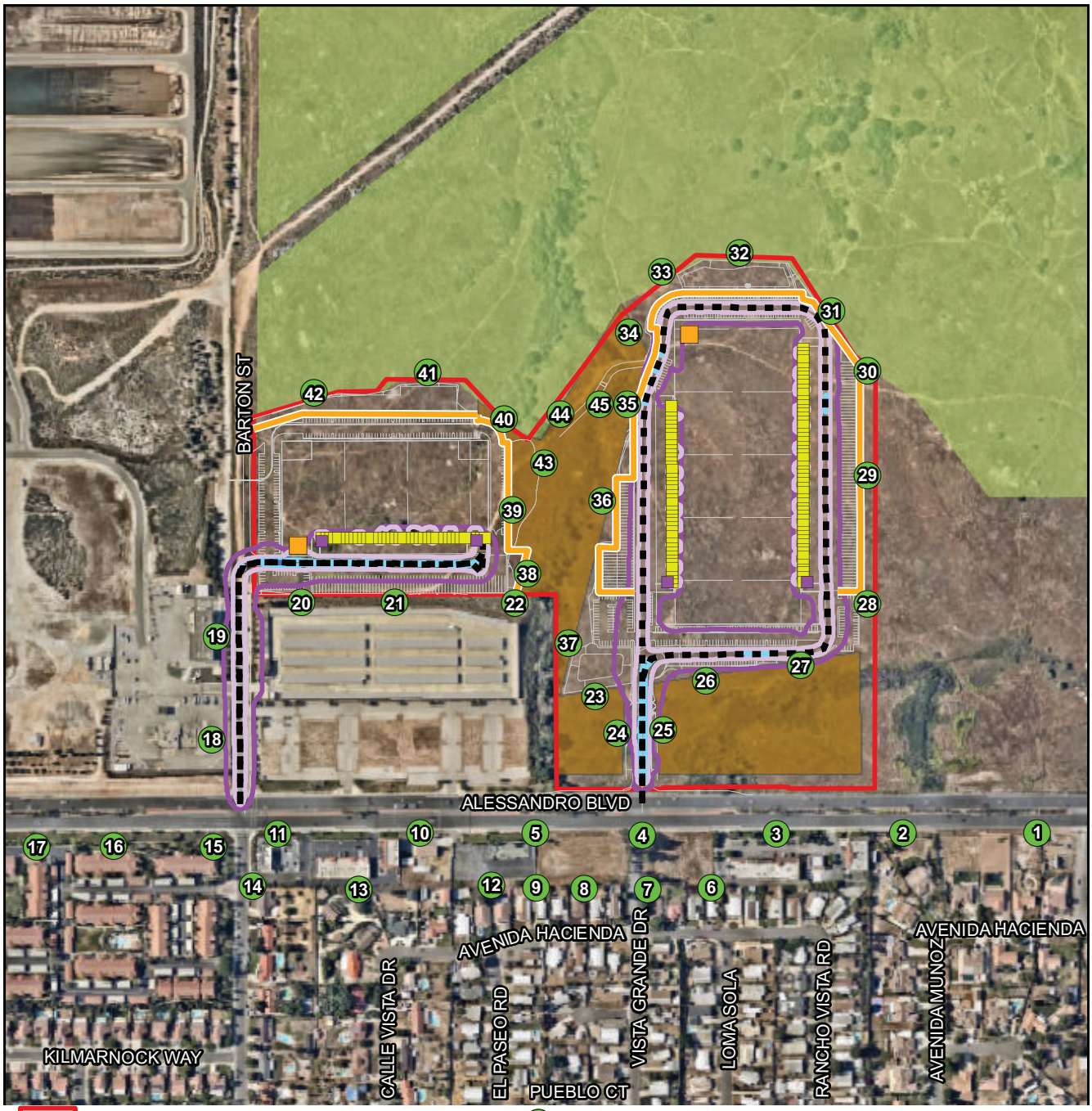
Image Source: Nearmap (flown September 2019)

SYCAMORE HILLS DISTRIBUTION CENTER

RVA RECON

Nightitme On-Site Generated Noise Contours without 4- Foot Barrier

Figure 5.11-8A



Project Boundary
Sycamore Canyon Wilderness Park
On-site Conservation Area
Site Plan
4-foot Barrier
On-Site Truck Maneuvering
Loading Docks
HVAC
Trash Compactor

Modeled Receivers

Nighttime On-Site Generated Noise Contours

45 dB(A) Leq
50 dB(A) Leq
55 dB(A) Leq
60 dB(A) Leq

0 Feet 500

Image Source: Nearmap (flown September 2019)

SYCAMORE HILLS DISTRIBUTION CENTER

RVA RECON

Nighttime On-Site Generated Noise Contours with 4- Foot Barrier

Figure 5.11-8B

Table 5.11-8 – Noise Levels Due to Project On-Site Operational Noise Sources

Receiver	Land Use	Daytime Noise Level [dB(A) L_{eq}]	Nighttime Noise Level [dB(A) L_{eq}]	Noise Limit Daytime/Nighttime [dB(A) L_{eq}]	Exceed Noise Limit (Daytime/Nighttime)?[1]
1	Residential	32	26	55/45	No/No
2	Residential	34	28	55/45	No/No
3	Commercial	36	30	65	No/No
4	Vacant (Residential Land Use Designation)	39	33	55/45	No/No
5	Vacant (Residential Land Use Designation)	36	30	55/45	No/No
6	Residential (County)	35	29	55/45	No/No
7	Residential (County)	36	30	55/45	No/No
8	Residential (County)	35	29	55/45	No/No
9	Residential (County)	34	28	55/45	No/No
10	Commercial	34	28	65	No/No
11	Commercial	38	32	65	No/No
12	Residential (County)	34	28	55/45	No/No
13	Residential (County)	33	27	55/45	No/No
14	Residential (County)	35	29	55/45	No/No
15	Residential	37	31	55/45	No/No
16	Residential	34	28	55/45	No/No
17	Residential	32	25	55/45	No/No
18	Public Facilities	45	39	70	No/No
19	Public Facilities	47	41	70	No/No
20	Commercial	48	42	65	No/No
21	Commercial	47	40	65	No/No
22	Commercial	44	37	65	No/No
23	On-Site Conservation Area	45	39	55/45	No/No
24	On-Site Conservation Area	47	41	55/45	No/No
25	On-Site Conservation Area	50	44	55/45	No/No
26	On-Site Conservation Area	47	41	55/45	No/No
27	On-Site Conservation Area	51	45	55/45	No/No
28	Business and Manufacturing	44	39	70	No/No
29	Business and Manufacturing	45	38	70	No/No
30	Sycamore Canyon Wilderness Park	43	37	55/45	No/No
31	Sycamore Canyon Wilderness Park	46	40	55/45	No/No
32	Sycamore Canyon Wilderness Park	40	35	55/45	No/No
33	Sycamore Canyon Wilderness Park	41	35	55/45	No/No

Receiver	Land Use	Daytime Noise Level [dB(A) L_{eq}]	Nighttime Noise Level [dB(A) L_{eq}]	Noise Limit Daytime/Nighttime [dB(A) L_{eq}]	Exceed Noise Limit (Daytime/Nighttime)?[1]
34	Sycamore Canyon Wilderness Park	42	36	55/45	No/No
35	Sycamore Canyon Wilderness Park	46	40	55/45	No/No
36	Sycamore Canyon Wilderness Park	41	35	55/45	No/No
37	Sycamore Canyon Wilderness Park	43	37	55/45	No/No
38	Sycamore Canyon Wilderness Park	43	37	55/45	No/No
39	On-Site Conservation Area	41	35	55/45	No/No
40	On-Site Conservation Area	36	30	55/45	No/No
41	On-Site Conservation Area	35	31	55/45	No/No
42	On-Site Conservation Area	32	30	55/45	No/No
43	On-Site Conservation Area	39	33	55/45	No/No
44	On-Site Conservation Area	39	33	55/45	No/No
45	On-Site Conservation Area	41	35	55/45	No/No

dB(A) = A-weighted decibels; L_{eq} = one-hour equivalent noise level
[1]"Does the daytime/nighttime noise level exceed the daytime/nighttime noise limit?"

Threshold B: *Would the Project result in generation of excessive groundborne vibration or groundborne noise levels?*

Construction Vibration

Construction activities have the potential to result in varying degrees of temporary ground vibration, depending on the specific construction equipment used and activities involved. Ground vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. The effects of ground vibration may be imperceptible at the lowest levels, low rumbling sounds and detectable vibrations at moderate levels, and damage to nearby structures at the highest levels. Vibration perception occurs primarily at structures, as people do not perceive vibrations without vibrating structures.

On-site construction equipment that would cause the most noise and vibration would be associated with the use of large bulldozers and trucks. According to Caltrans, vibration levels associated with the use of bulldozers range from approximately 0.003 to 0.089 inches per second (in/sec) PPV at 25 feet, as shown in Table 5.11-9. Per the Project's Noise Analysis, a vibration impact would generally be considered significant if it involves any construction-related or operations-related impacts in excess of 0.2 PPV. This standard is reflective of Table 2 – Reaction of People and Damage to Buildings at Various Continuous Vibration Amplitudes from the Caltrans

Transportation and Construction Vibration Guidance Manual (Caltrans 2020). Table 2 of the Guidance Manual identifies 0.2 PPV as "vibrations annoying to people in buildings" and the "threshold at which there is a risk of 'architectural' damage to normal dwellings – houses with plastered walls and ceilings" (Caltrans 2020).

The self-storage facility southwest of the Project site is the closest structure and is located approximately 50 feet from the Project boundary. The closest residential use is located approximately 280 feet from the southeast corner of the Project site. The groundborne vibration level at the self-storage facility due to a large bulldozer would be 0.031 PPV and the groundborne vibration level at the nearest residential use would be 0.002 PPV. As vibration levels from construction would not exceed 0.2 PPV, groundborne vibration impacts generated during construction would be **less than significant**.

Table 5.11-9 – Typical Construction Equipment Vibration Levels

Equipment	PPV at 25 feet (in/sec)[1]
Large Bulldozer	0.089
Trucks	0.076
Mounted Impact Hammer	0.089

[1]Where PPV is the peak particle velocity.
Source: FTA 2006; Caltrans 2013b.

Operational Vibration

The main source of operational groundborne vibration would be from trucks. As shown in Table 5.11-9 above, trucks generate a vibration level of 0.076 PPV at 25 feet. This vibration would attenuate to 0.027 PPV at the self-storage facility and 0.002 PPV at the nearest residential use. As vibration levels from Project operation would not exceed 0.2 PPV, groundborne vibration generated during operations would be **less than significant without mitigation**.

5.11.6 Proposed Mitigation Measures

An EIR is required to describe feasible mitigation measures which could minimize significant adverse impacts (CEQA Guidelines, Section 15126.4). As discussed in Section 5.11.5 under Threshold A above, Project construction noise levels at the adjacent Sycamore Canyon Wilderness Park and on-site conservation areas would range from 68 to 74 dB(A) $L_{eq,}$ which would exceed the 65 dB(A) L_{eq} threshold within the Parcel A conservation area, a portion of the Parcel B conservation area, and within a portion of the Sycamore Canyon Wilderness Park. Should sensitive species be present within the Sycamore Canyon Wilderness Park and on-site conservation areas, construction noise impacts to sensitive species would be potentially significant. Thus, the following mitigation measure has been proposed to reduce potentially significant construction noise impacts to sensitive species to a less than significant level.

MM NOI-1: Prior to issuance of grading and construction activities, should least Bell's vireo be present in the Sycamore Canyon Wilderness Park within 300 feet of the Project site, in Parcel A on-site conservation area, or within Parcel B on-site conservation area within 100 feet of the development footprint, construction noise impacts shall be minimized through implementation of the following measure:

1. A 12-foot temporary noise barrier shall be installed at the perimeter of the limits of disturbance between the construction activities and the adjacent Sycamore Canyon Wilderness Park to the north and east and the on-site conservation areas as shown in Figure 5.11-5 – Construction Barrier. The barrier shall be continuous without openings, holes, or cracks, and shall reach the ground. The barrier may be constructed with 1-inch plywood and provide a reduction of at least 10 dB(A) to ensure noise levels do not exceed 65 dB(A) L_{eq} at the Sycamore Canyon Wilderness Park and on-site conservation areas. Other barrier materials providing the same reduction shall also be permitted.
2. Heavy grade rubber mats/pads shall be used within the bed of the trucks. These mats will help attenuate initial impact noise generated when an excavator drops rock and debris into the bed of the truck. These mats must be maintained and/or replaced as necessary.
3. During all Project site excavation and grading on-site, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturer standards.
4. The contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the Project site.
5. Equipment shall be shut off and not left to idle when not in use.
6. The contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise/vibration sources and sensitive receptors nearest the Project site during all Project construction.
7. The Project proponent shall mandate that the construction contractor prohibit the use of music or sound amplification on the Project site during construction.
8. The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment (7:00 a.m. to 6:00 p.m. on weekdays, and 8:00 a.m. to 5:00 p.m. on Saturdays).
9. The use of heavy equipment or vibratory rollers and soil compressors shall be limited along the Project boundaries to the greatest degree possible. It is acknowledged that some soil compression may be necessary along the Project boundaries.
10. Any jackhammers, pneumatic equipment and all other portable stationary noise sources shall be shielded, and noise shall be directed away from sensitive receptors.
11. For the duration of construction activities, the construction manager shall serve as the contact person should noise levels become disruptive to local residents. A sign should be posted at the Project site with the contact phone number. This sign shall be posted at the Alessandro Boulevard frontage as well as the Barton Street frontage.

5.11.7 Cumulative Environmental Effects

As discussed in Section 4.0 Environmental Setting of this DEIR, cumulative development in the City and in surrounding cities and the County would include residential development, warehouses, commercial, office, and public facilities. Each of the proposed developments would generate temporary noise during construction. Construction activities at the related projects and developments in the area would generate similar noise levels as the Project. It would be speculative to determine noise levels from construction from nearby projects because construction schedules are not known for all projects. However, construction noise and vibration are localized and rapidly attenuate within an urban environment. With implementation of mitigation measure **MM NOI-1**, the Project would not contribute to temporary cumulative construction noise impacts.

Because noise dissipates as it travels away from its sources, noise impacts associated with on-site activities and sources, including on-site truck and vehicle activity, and other stationary sources would be limited to the Project site and vicinity. Operational noise from the Project would not exceed applicable standards or significance thresholds. Therefore, on-site operation activities at the Project site, in combination with other planned and pending development, would not contribute considerable to long-term, cumulative noise or vibration impact.

Further, the primary factor affecting off-site noise levels would be increased traffic volumes, which the Project would increase on Alessandro Boulevard. However, as earlier discussed and as shown in Table 5.11-7 in Section 5.11.5 above, in opening year 2023 and horizon year 2040, direct off-site noise level increases due to the Project would be less than 1 dB in existing, year 2023, and year 2040 conditions. Thus, Project-related increases in ambient noise would not be audible and would not exceed the thresholds outlined in Section 5.11.5 as they relate to off-site traffic noise. As such, the Project would not contribute to considerable long-term cumulative noise impacts.

Because the Project and cumulative development projects will comply with current temporary and operational noise standards as identified in RMC Title 7, cumulative impacts would be **less than significant with mitigation**.

5.11.8 References

The following references were used in the preparation of this section of the DEIR:

City of Riverside 2007	City of Riverside, *Program Environmental Impact Report for the City of Riverside General Plan and Supporting Documents, Resolution No. 21535*, Certified November 2007.
Caltrans 2020	California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, April 2020. (Available at https://dot.ca.gov/programs/environmental-analysis/noise-vibration/guidance-manuals)

FTA 2006	Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, Office of Planning and Environment. FTA-VA-90-1003-06. May 2006. (Available at https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf)
GP 2025	City of Riverside, *Riverside General Plan 2025*, certified November 2007 with subsequent amendments to various elements. (Available at City of Riverside and at https://www.riversideca.gov/planning/gp2025program/general-plan.asp)
GP 2025 FPEIR	City of Riverside, *General Plan 2025 Program Environmental Impact Report* (SCH #2004021108), certified November 2007. (Available at City of Riverside and at https://www.riversideca.gov/planning/gp2025program/)
MARB/IPA LUCP	Riverside County Airport Land Use Commission, *March Air Reserve Base / Inland Port Airport Land Use Compatibility Plan*, adopted November 2014. (Available at http://www.rcaluc.org/Portals/13/17%20-%20Vol.%201%20March%20Air%20Reserve%20Base%20Final.pdf?ver=2016-08-15-145812-700)
RCALUC	Riverside County Airport Land Use Commission (Available at www.rcaluc.org)
RECON 2020	RECON, *Noise Analysis for the Sycamore Hills Distribution Center*, September 2020. (Appendix K)
Urban Crossroads 2020	Urban Crossroads, *Sycamore Hills Distribution Center Traffic Operations Analysis*, September 2020. (Appendix L)

5.12 Transportation

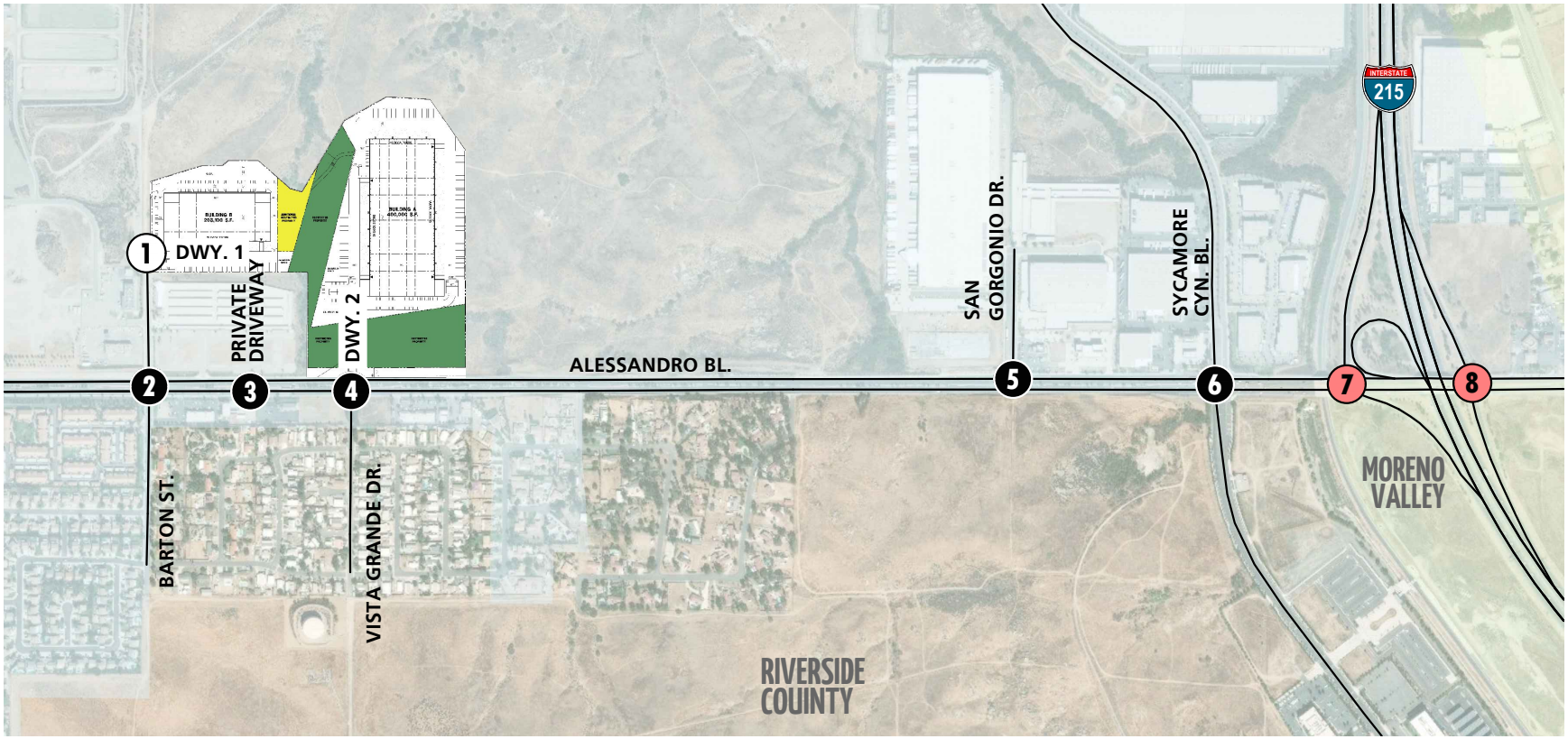
Based on Appendix G of the *State CEQA Guidelines*, the analysis in the Initial Study (IS/NOP) and comments received during the NOP public review comment period (Appendix A), this section describes the existing transportation network and potential effects from project implementation. The analysis in this section is based on the *Traffic Operations Analysis* (TA, Appendix L, September 2020) and the *Vehicle Miles Travelled* (VMT) *Analysis* prepared by Urban Crossroads (Appendix L, October 2020).

5.12.1 Setting

This section provides a summary of the existing circulation network, the City's General Plan Circulation Network, and a review of existing peak hour intersection operations, roadway segment capacities, and traffic signal warrant analyses.

Existing Circulation Network

The existing street system in the Project area consists of roadways designated in the City's General Plan 2025 (GP 2025), Circulation and Community Mobility Element, Figure CCM-4 Master Plan of Roadways as Special Boulevards, Arterial Streets, Collector Streets, and Local Streets. For streets within the Sycamore Canyon Business Park Specific Plan area, the Specific Plan Circulation Plan governs with regard to street standards. Arterial Streets provide sub-regional and local access circulation opportunities, and the Collector Streets provide connecting access from Arterial Streets with Local Streets (GP 2025, p. CCM-10). Both the I-215 and SR-60 freeways are in close proximity to the Project site. The study area includes a total of 8 existing and future intersections as shown on Figure 5.12-1. Figure 5.12-2 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls. Table 5.12-1 indicates the location and agency jurisdiction of the intersections analyzed and shown in Figure 5.12-2. The intersections studied were those where the Project is anticipated to contribute 50 or more peak hour trips. If the Project was not anticipated to increase peak hour trips by 50 or more at other nearby intersections, they were screened out and not evaluated further in the TA.



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LEGEND:

0 = EXISTING INTERSECTION ANALYSIS LOCATION

0 = FUTURE INTERSECTION ANALYSIS LOCATION

0 = CMP INTERSECTION

N

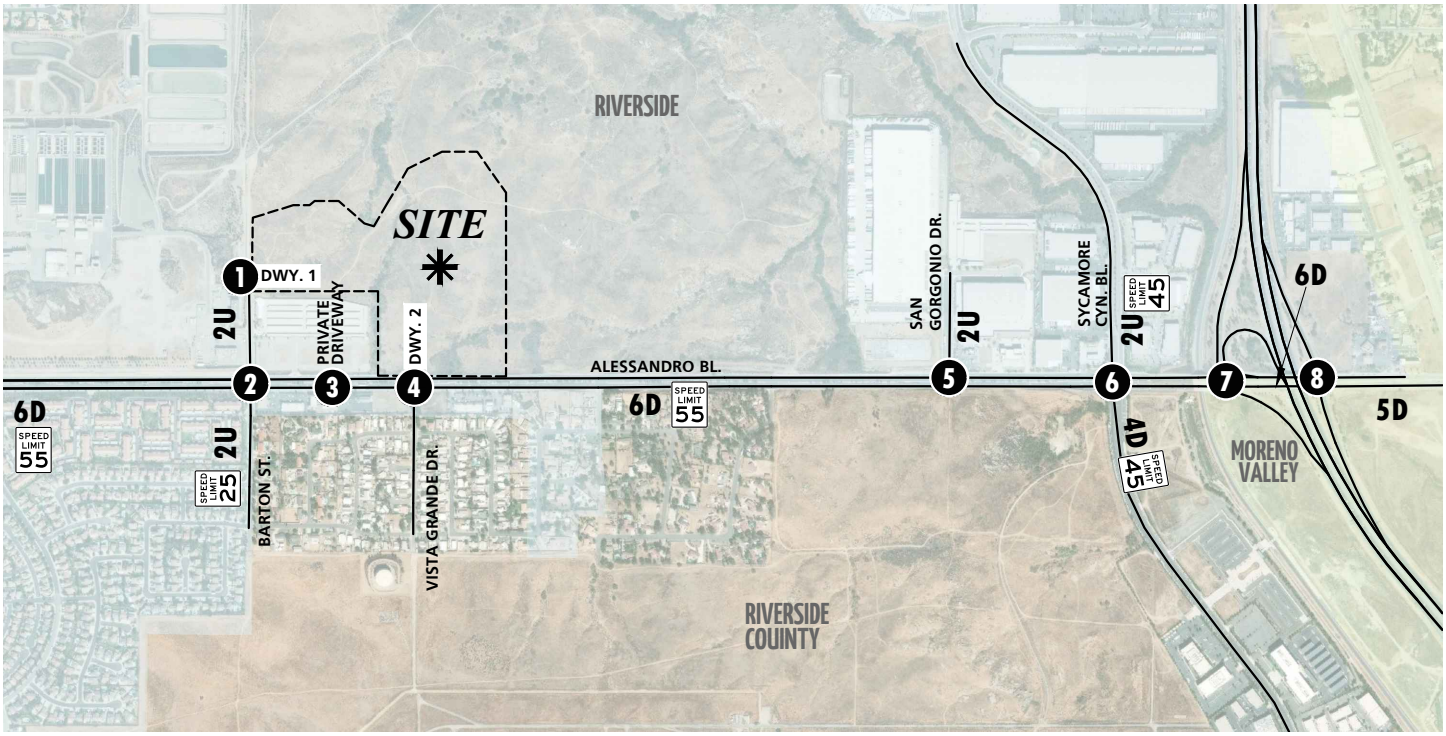
SYCAMORE HILLS DISTRIBUTION CENTER

RVA

URBAN CROSSROADS

Location Map

Figure 5.12-1



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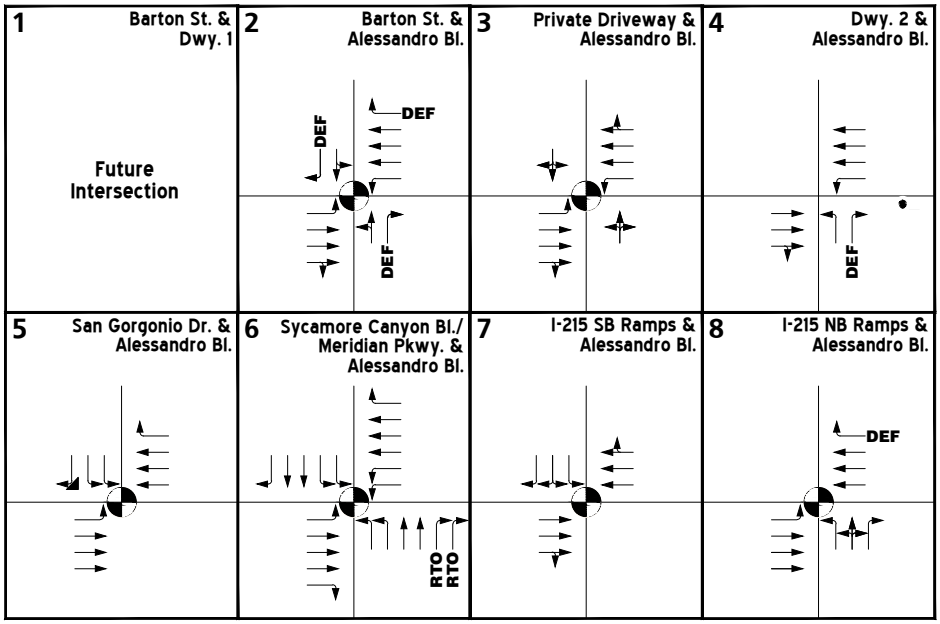


LEGEND:

- = TRAFFIC SIGNAL
- = STOP SIGN
- 4 = NUMBER OF LANES
- D = DIVIDED
- U = UNDIVIDED
- RTO = RIGHT TURN OVERLAP
- DEF = DEFACTO RIGHT TURN
- SPEED LIMIT 25 = SPEED LIMIT (MPH)

N

SYCAMORE HILLS DISTRIBUTION CENTER

RVA

URBAN CROSSROADS

Existing Number of Through Lanes and Intersection Controls

Figure 5.12-2

Table 5.12-1 – Location of the Intersection Analysis

ID	Intersection Location	Jurisdiction
1	Barton St & Driveway 1	Riverside
2	Barton St. & Alessandro Boulevard	Riverside/JPA
3	Private Driveway & Alessandro Boulevard	Riverside/JPA
4	Driveway 2/Vista Grande Dr. & Alessandro Boulevard	Riverside/JPA
5	San Gorgonio Drive & Alessandro Boulevard	Riverside/JPA
6	Sycamore Canyon Boulevard & Alessandro Boulevard	Riverside/JPA
7	I-215 SB Ramps & Alessandro Boulevard	Caltrans/Riverside/County
8	I-215 NB Ramps & Alessandro Boulevard	Caltrans/Riverside/County

City of Riverside General Plan Circulation Element

As noted previously, the Project site is located within the City of Riverside (Riverside). However, the study area includes intersections that share borders with the neighboring jurisdictions of the County of Riverside (County), the March Joint Powers Authority (March JPA), the City of Moreno Valley, and California Department of Transportation (Caltrans).

City of Riverside

The roadway classifications and planned (ultimate) roadway cross-sections of the major roadways within the study area, as identified in the City General Plan Circulation Element are shown on Figure 5.12-3 and Figure 5.12-4 illustrates the City of Riverside General Plan roadway cross-sections.

County of Riverside

The roadway classifications and planned (ultimate) roadway cross-sections of the major roadways within the study area, as identified in the County General Plan Circulation Element are shown on Figure 5.12-5 and Figure 5.12-6 illustrates the County General Plan roadway cross-sections.

March JPA

The roadway classifications and planned (ultimate) roadway cross-sections of the major roadways within the study area, as identified on the March JPA General Plan Circulation Element, are described subsequently. Figure 5.12-7 shows the March JPA General Plan Circulation Element and Figure 5.12-8 illustrates the March JPA General Plan roadway cross-sections. March JPA Resolution 16-05 had minor amendments to General Plan Transportation Element.

City of Moreno Valley

The roadway classifications and planned (ultimate) roadway cross-sections of the major roadways within the study area, as identified on the City of Moreno Valley General Plan Circulation Element are shown on Figure 5.12-9 and Figure 5.12-10 illustrates the City of Moreno Valley General Plan roadway cross-sections.

Truck Routes

While the City's General Plan recognizes the trucking industry and the importance of the region's role in the movement of goods, there are no truck routes defined within the City. The March JPA designated truck route map is shown on Figure 5.12-11. The I-215 freeway, Alessandro Boulevard, west of the I-215 freeway to San Gorgonio Drive, and Meridian Parkway are all identified as designated truck routes.

Transit Services

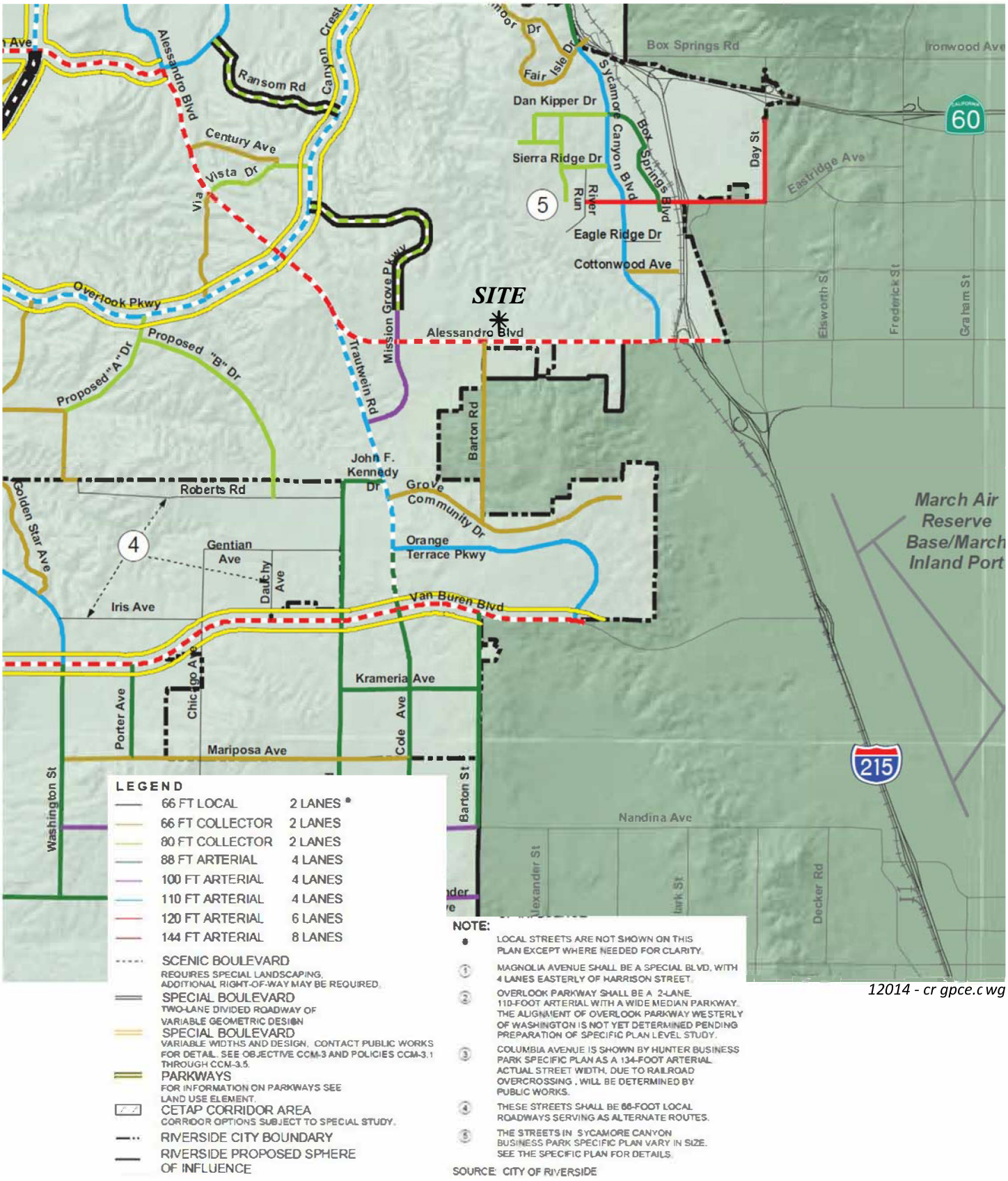
The study area within the City and the surrounding County of Riverside and City of Moreno Valley are currently served by the Riverside Transit Authority (RTA), a public transit agency serving various jurisdictions within Riverside County. The existing bus routes provided within the area by RTA are shown on Figure 5.12-12.

RTA Routes 20 and 26 could potentially serve the Project as it currently operates along Alessandro Boulevard to the south of the Project site. 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.

It should also be noted that the Moreno Valley/March Field Metrolink Station is located on Meridian Parkway.

Bicycle & Pedestrian Facilities

Field observations conducted in October 2018 indicate nominal pedestrian and bicycle activity within the study area. Existing pedestrian facilities within the study area are shown on Figure 5.12-13. There are currently Class II bike lanes along Alessandro Boulevard and Meridian Parkway within the study area. Class II bikeways are bike lanes which are established adjacent to traffic lanes and share the same roadway. Existing sidewalks are currently in place along the Alessandro Boulevard on the north and south side of the street.



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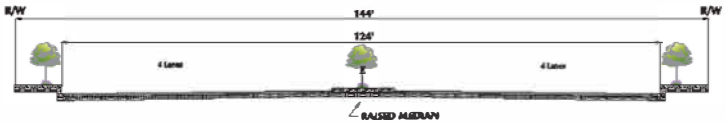
RVA

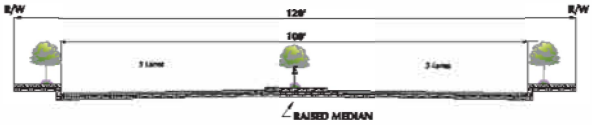
URBAN CROSSROADS

City of Riverside General Plan
Circulation Element

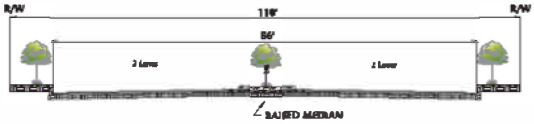
Figure 5.12-3



144-FOOT ARTERIAL



120-FOOT ARTERIAL



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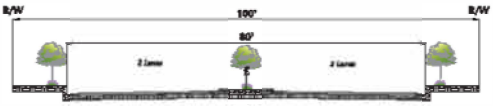
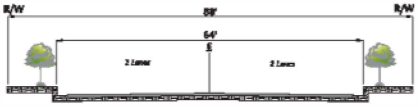
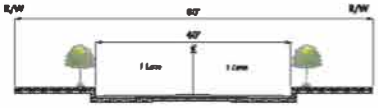


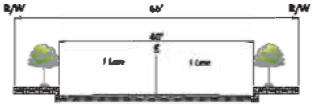
100-FOOT ARTERIAL



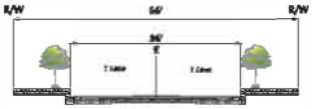
88-FOOT ARTERIAL



80-FOOT COLLECTOR



66-FOOT COLLECTOR



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LOCAL STREET

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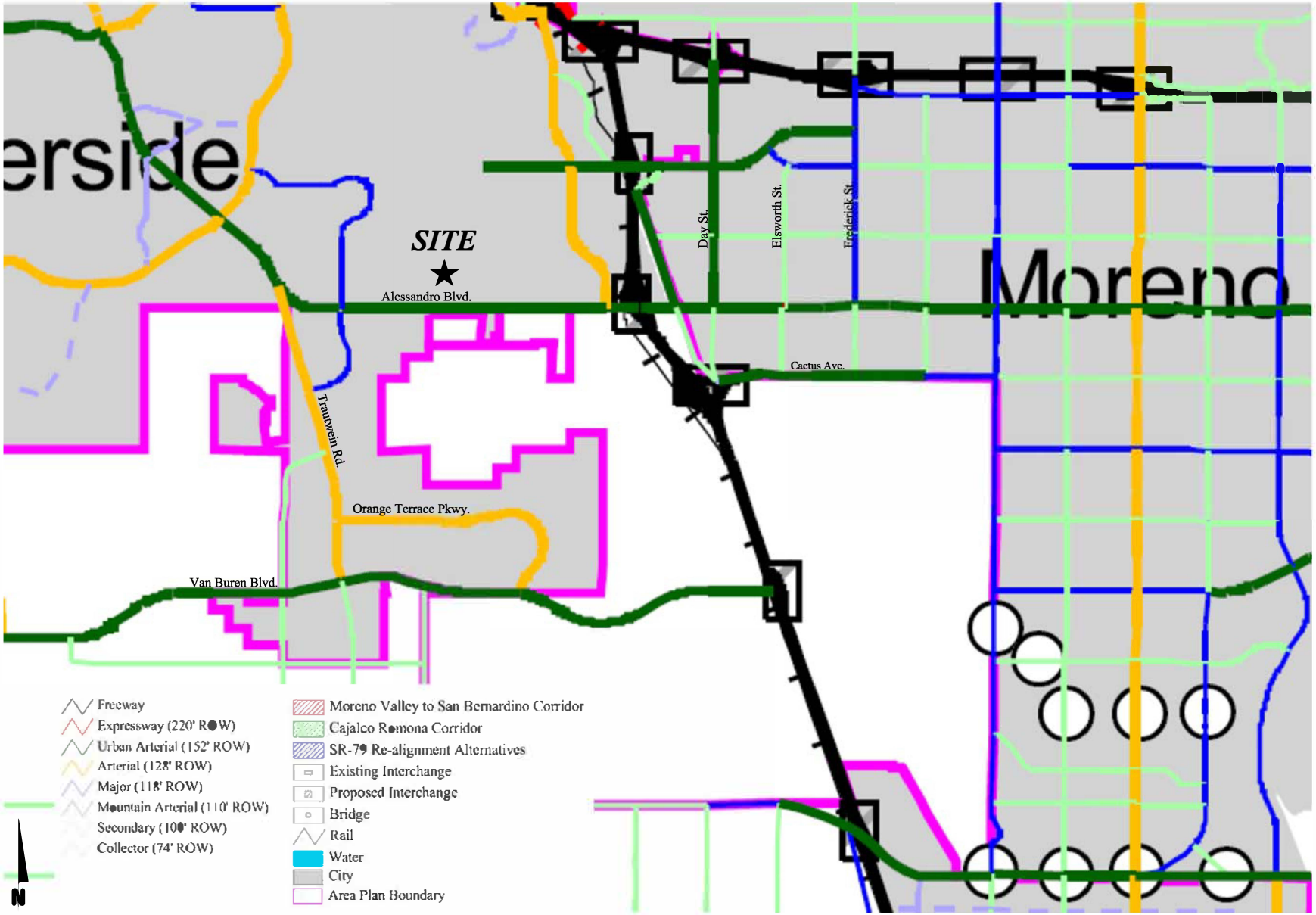
City of Riverside General Plan Roadway Cross-Sections

Figure 5.12-4



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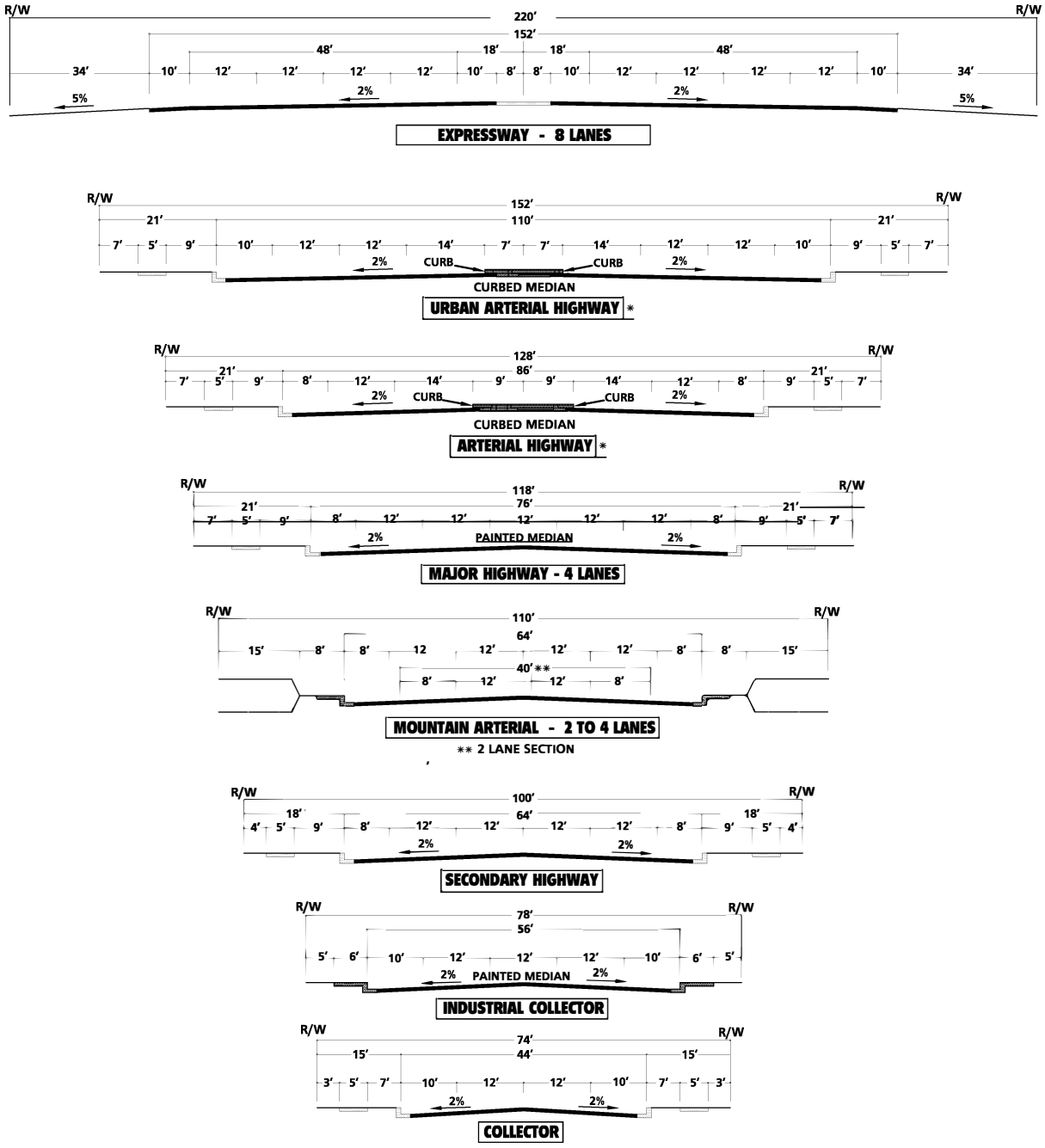
SYCAMORE HILLS DISTRIBUTION CENTER

County of Riverside General Plan Circulation Element

Figure 5.12-5



* *IMPROVEMENTS MAY BE RECONFIGURED TO ACCOMMODATE EXCLUSIVE TRANSIT LANES OR ALTERNATIVE LANE ARRANGEMENTS ADDITIONAL RIGHT OF WAY MAY BE REQUIRED AT INTERSECTIONS TO ACCOMMODATE ULTIMATE IMPROVEMENTS FOR STATE HIGHWAYS SHALL CONFORM TO CALTRANS DESIGN STANDARDS.*

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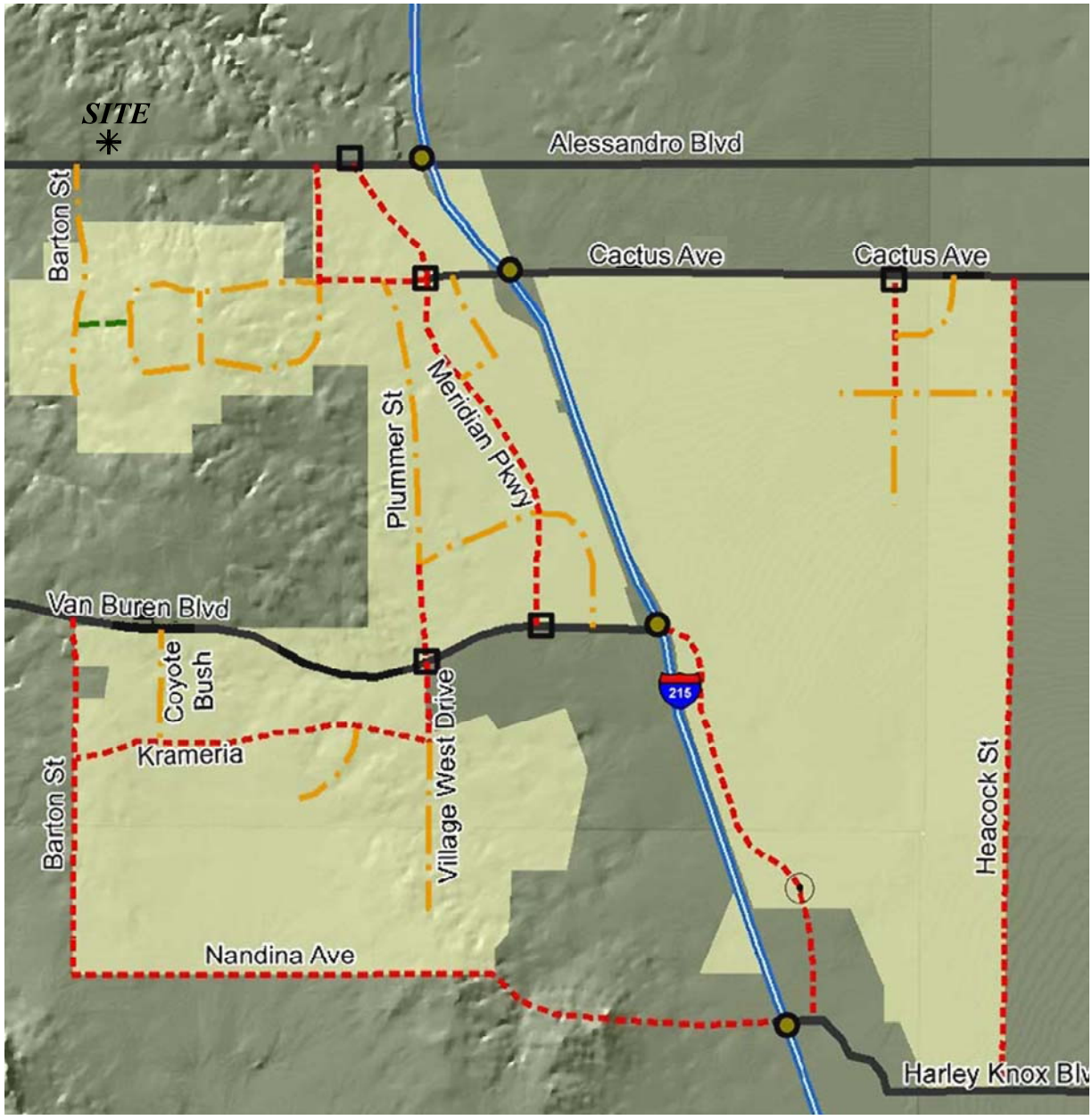
NOT TO SCALE

SOURCE: COUNTY OF RIVERSIDE

SYCAMORE HILLS DISTRIBUTION CENTER

County of Riverside General Plan
Roadway Cross-Section

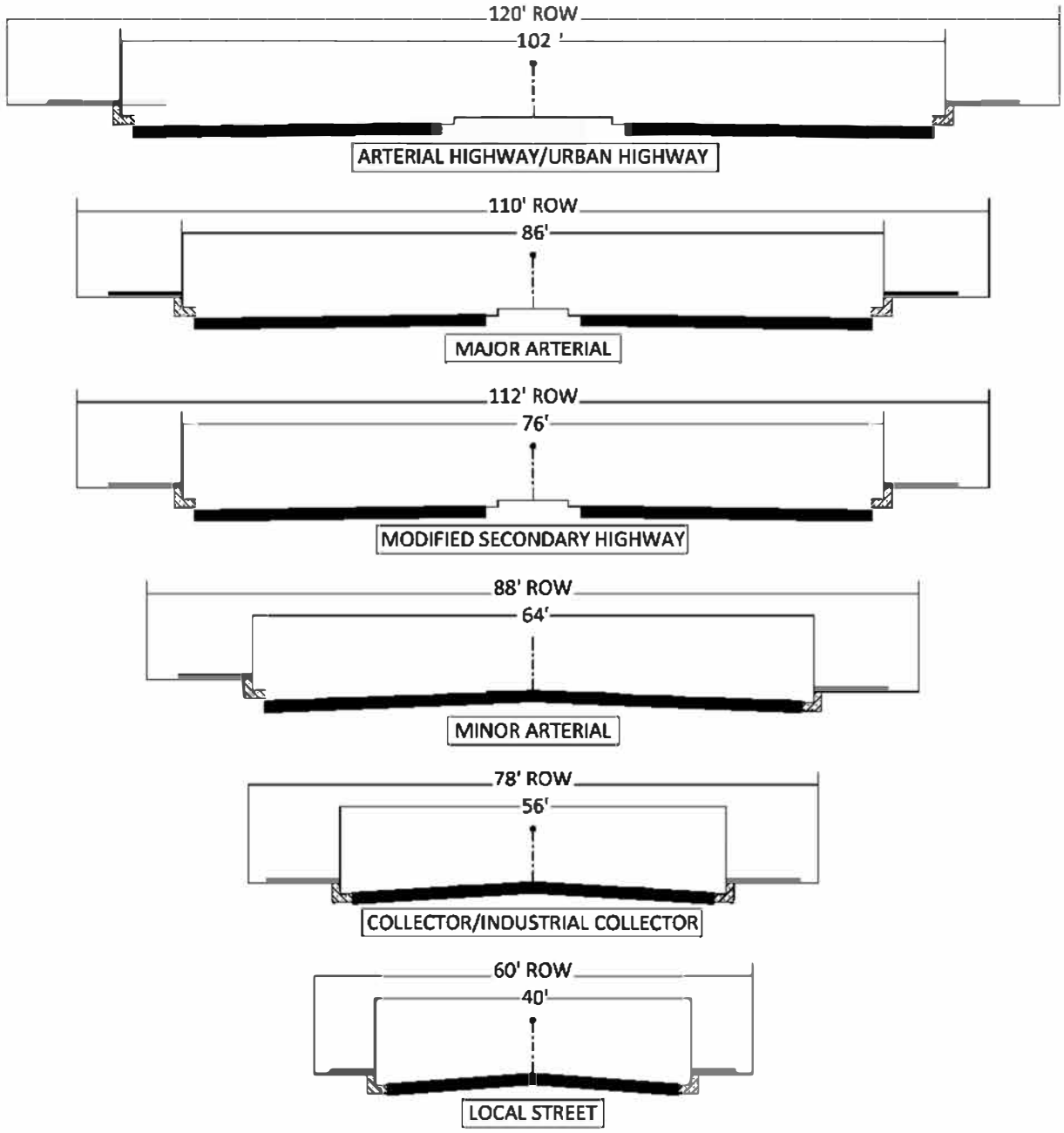
Figure 5.12-6



SYCAMORE HILLS DISTRIBUTION CENTER

March JPA General Plan Circulation Element

Figure 5.12-7



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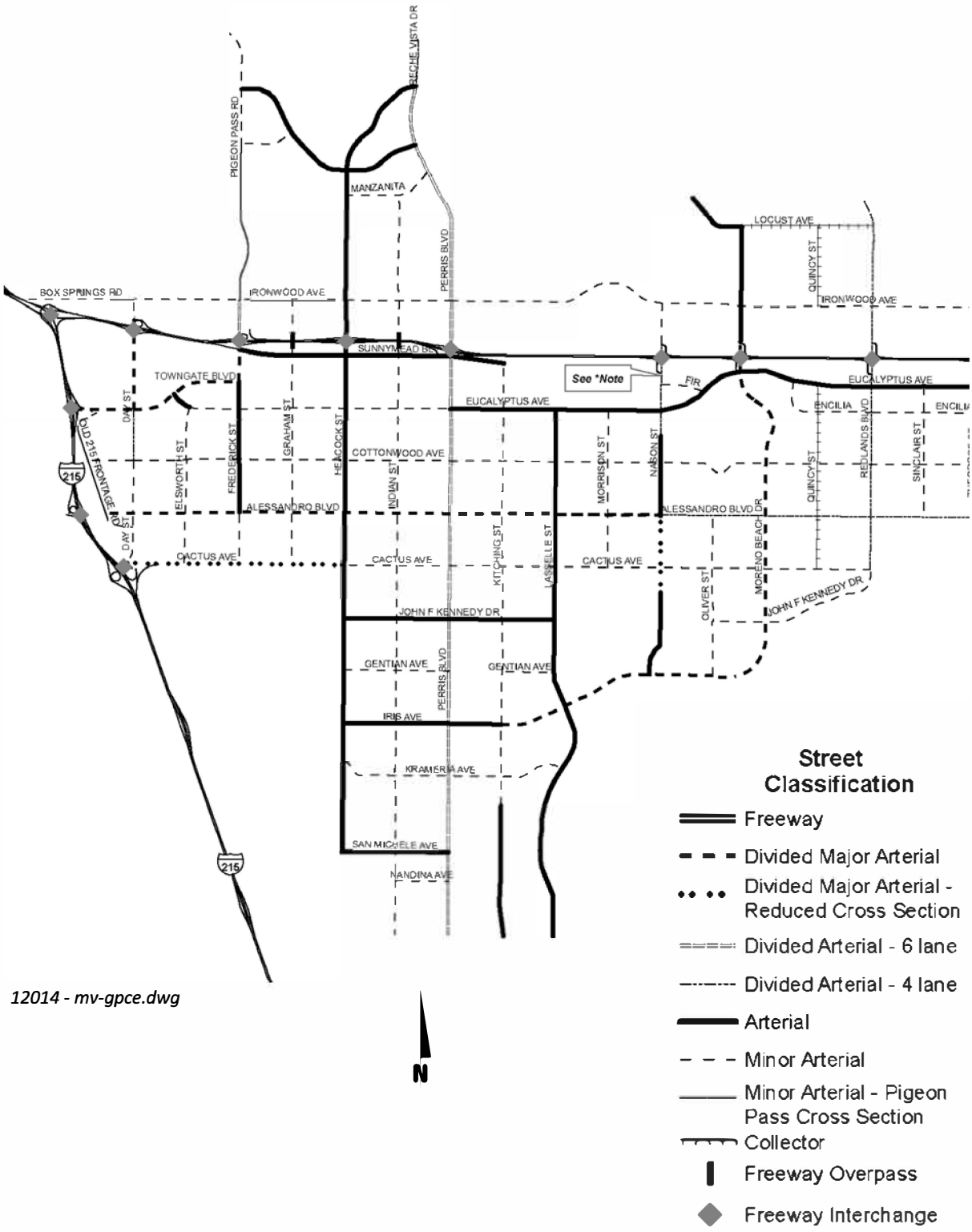
SYCAMORE HILLS DISTRIBUTION CENTER

RVA

URBAN CROSSROADS

March JPA General Plan Roadway Cross-Section

Figure 5.12-8



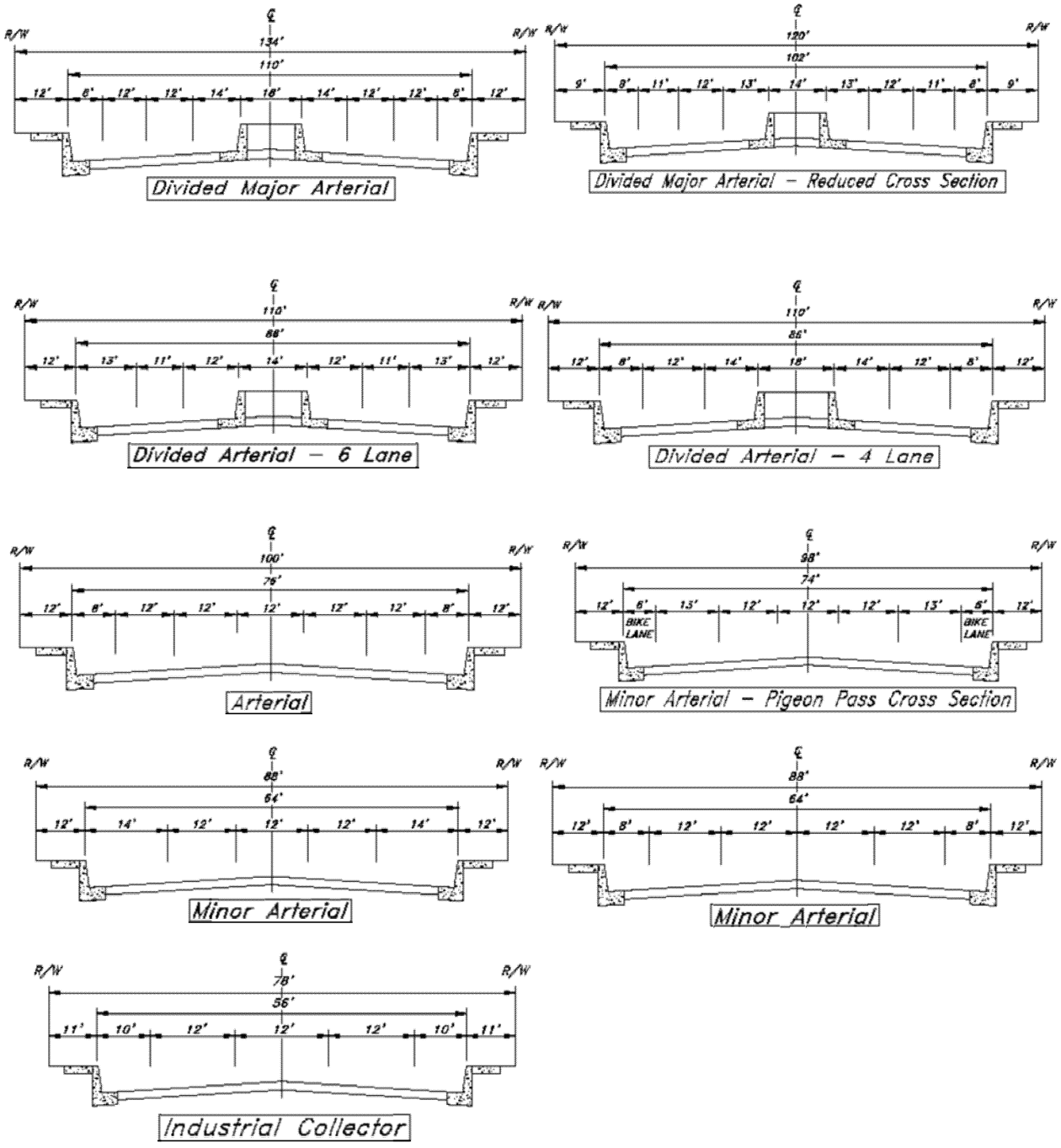
SYCAMORE HILLS DISTRIBUTION CENTER

RVA

URBAN CROSSROADS

City of Moreno Valley General Plan
Circulation Element

Figure 5.12-9



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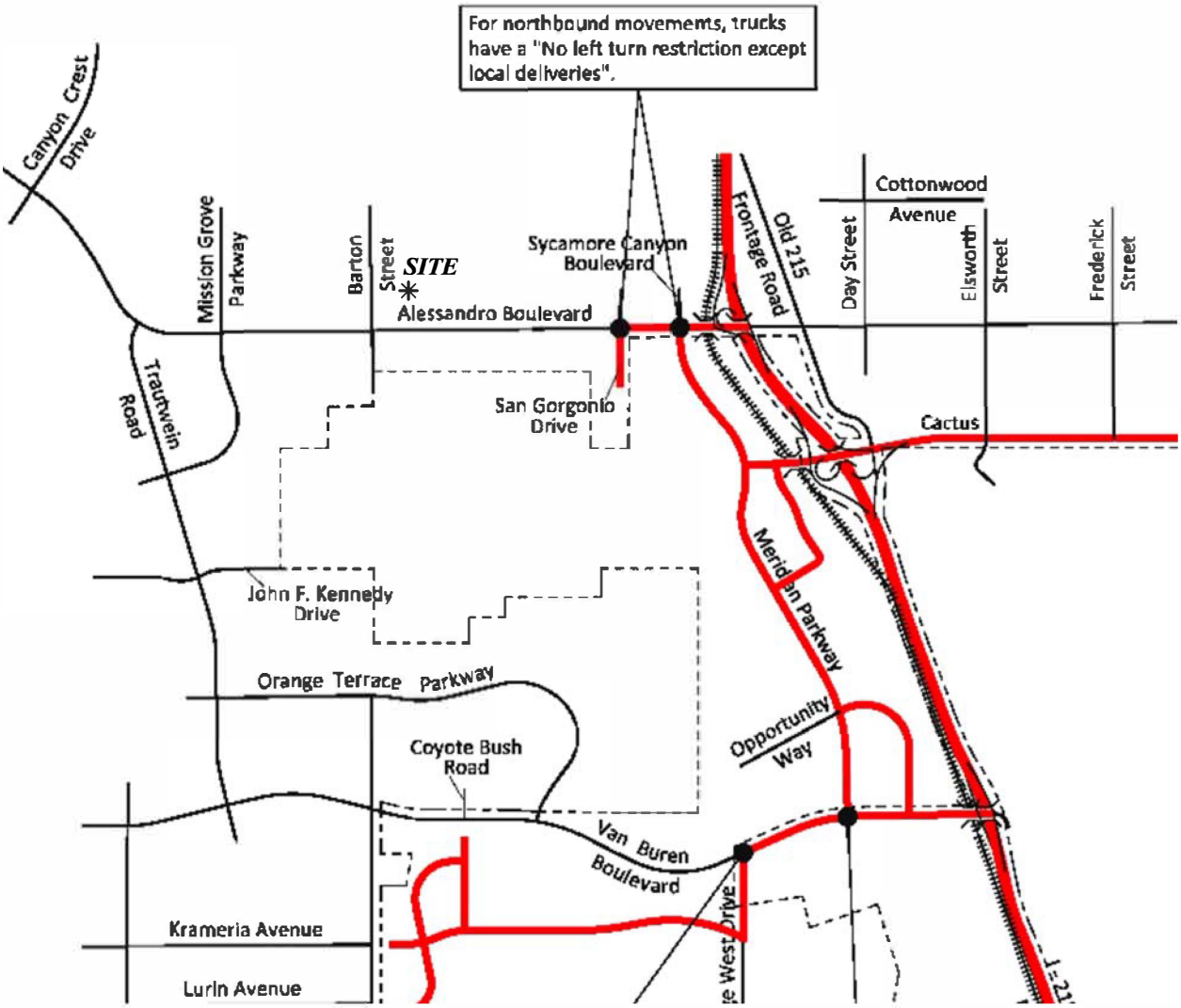
SYCAMORE HILLS DISTRIBUTION CENTER

City of Moreno Valley General Plan Roadway Cross-Section

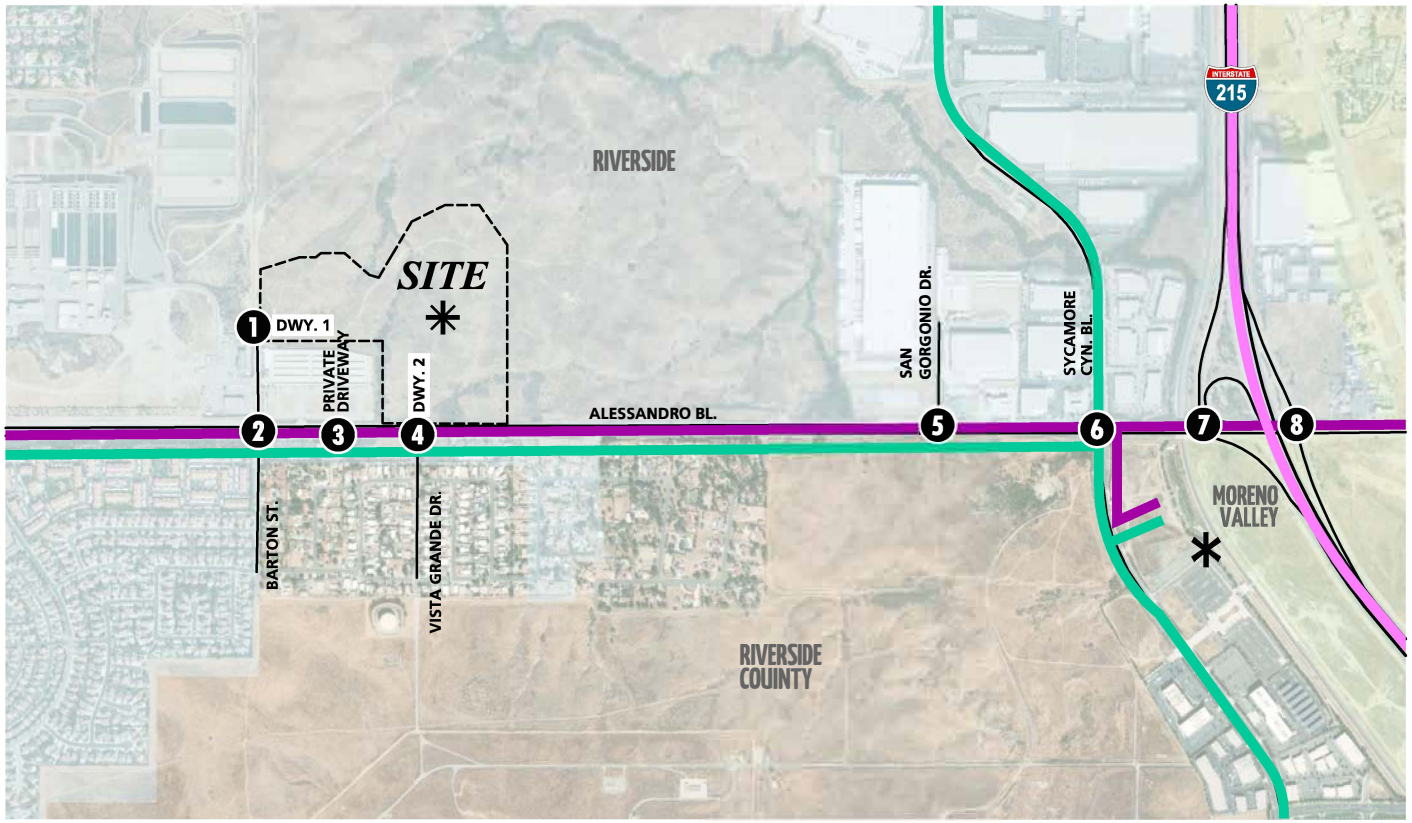
Figure 5.12-10



SYCAMORE HILLS DISTRIBUTION CENTER

March JPA Truck Routes

Figure 5.12-11



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LEGEND:

- = RTA ROUTE 22
- = RTA ROUTE 208/212
- = RTA ROUTE 20
- = RTA ROUTE 26

N

* MORENO VALLEY/MARCH FIELD METROLINK STATION.

SYCAMORE HILLS DISTRIBUTION CENTER

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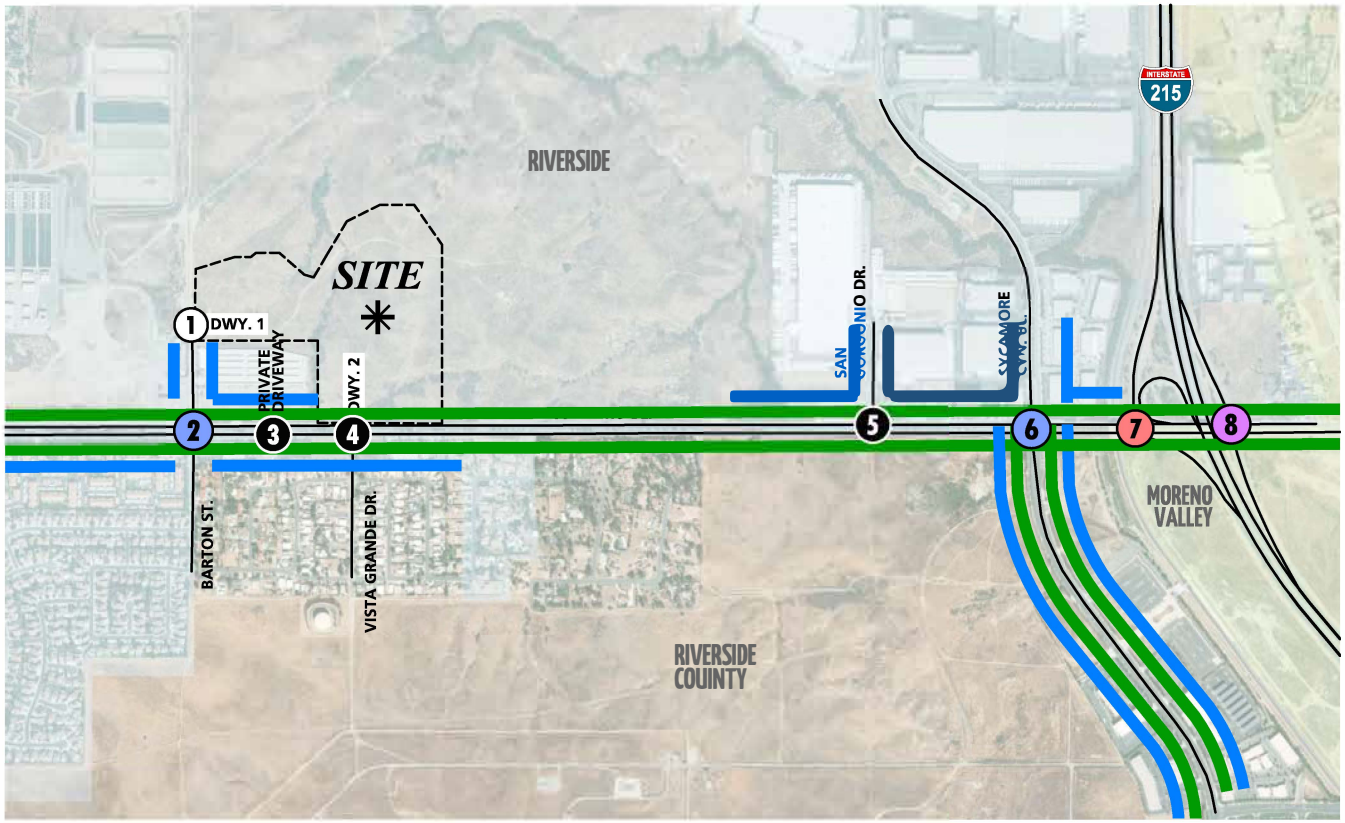
URBAN CROSSROADS

Existing Transit Routes

Figure 5.12-12



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LEGEND:

- = SIDEWALK
- = BIKE LANE
- B = BUS STOP
- 0 = NO CROSSWALK
- 0 = FUTURE INTERSECTION
- 0 = CROSSWALK ON ALL APPROACHES
- 0 = CROSSWALK ON THREE APPROACHES
- 0 = CROSSWALK ON TWO APPROACHES
- 0 = CROSSWALK ON ONE APPROACH

N

SYCAMORE HILLS DISTRIBUTION CENTER

RVA

URBAN CROSSROADS

Existing Pedestrian Facilities

Figure 5.12-13

5.12.2 Methodology

This section of the report presents the methodologies used to perform the traffic analyses summarized in the TA. The methodologies described are consistent with City traffic study guidelines.

Levels 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.

Intersection Capacity Analysis

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The Highway Capacity Manual (HCM) methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. The HCM uses different procedures depending on the type of intersection control. Study area intersections located within the City, County, and City of Moreno Valley have been analyzed using the software package Synchro (Version 10).

Signalized Intersections

City of Riverside, March JPA, City of Moreno Valley, County of Riverside

The City, March JPA, City of Moreno Valley, and County require signalized intersection operations analysis based on the methodology described in the HCM. Intersection LOS operations are based on an intersection’s average control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For signalized intersections LOS is directly related to the average control delay per vehicle and is correlated to a LOS designation as described in Table 5.12-2.

Table 5.12-2 – Signalized Intersection LOS Thresholds

Description	Average Control Delay (Seconds), V/C ≤ 1.0	LOS, V/C ≤ 1.0	LOS, V/C > 1.0
Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00	A	F
Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00	B	F
Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00	C	F
Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00	D	F
Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00	E	F
Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths	80.01 and up	F	F

Source: HCM

Study area intersections located within the City, March JPA, and City of Moreno Valley have been analyzed using the software package Synchro (Version 10).

The peak hour traffic volumes have been adjusted using a peak hour factor (PHF) to reflect peak 15-minute volumes. Common practice for LOS analysis is to use a peak 15-minute rate of flow. However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume (e.g. PHF = [Hourly Volume] / [4 x Peak 15-minute Flow Rate]). The use of a 15-minute PHF produces a more detailed analysis as compared to analyzing vehicles per hour. It is unlikely that the PHF would decrease from their current values and would more likely increase. However, in an effort to conduct a conservative analysis and overstate as opposed to understate potential traffic impacts, existing PHFs have been used for all analysis scenarios.

Caltrans

Per the Caltrans Guide for the Preparation of Traffic Impact Studies, the traffic modeling and signal timing optimization software package Synchro (Version 10) has also been utilized to analyze signalized intersections under Caltrans' jurisdiction, which include interchange to arterial ramps (i.e. I-215 freeway ramps at Alessandro Boulevard). Synchro is a macroscopic traffic software program that is based on the signalized intersection capacity analysis as specified in the HCM. Macroscopic level models represent traffic in terms of aggregate measures for each movement at the study intersections. Equations are used to determine measures of effectiveness such as delay and queue length. The level of service and capacity analysis performed by Synchro takes into consideration optimization and coordination of signalized intersections within a network. Signal timing for the freeway arterial-to-ramp intersections have been obtained from Caltrans District 8 and were utilized for the purposes of this analysis.

Unsignalized Intersections

The City, March JPA, City of Moreno Valley, and County of Riverside require the operations of unsignalized intersections be evaluated using the methodology described the HCM. The LOS rating is based on the weighted average control delay expressed in seconds per vehicle, see Table 5.12-3.

Table 5.12-3 – Unsignalized Intersection LOS Thresholds

Description	Average Control Delay Per Vehicle (Seconds)	LOS, V/C ≤ 1.0	LOS, V/C > 1.0
Little or no delays.	0 to 10.00	A	F
Short traffic delays.	10.01 to 15.00	B	F
Average traffic delays.	15.01 to 25.00	C	F
Long traffic delays.	25.01 to 35.00	D	F
Very long traffic delays.	35.01 to 50.00	E	F
Extreme traffic delays with intersections capacity exceeded.	>50.00	F	F

Source: HCM

At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. For all-way stop controlled intersections, LOS is computed for the intersection as a whole.

Roadway Segment Capacity Analysis

Roadway segment operations have been evaluated using the City Roadway Capacity provided in the City Traffic Impact Analysis Preparation Guide. The City requires LOS D capacities to be maintained on City roadways. The daily roadway segment capacities for each type of roadway are summarized in Table 5.12-4. These roadway capacities are "rule of thumb" estimates for planning purposes and are affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic), and pedestrian bicycle traffic. As such, where the average daily traffic (ADT) based roadway segment analysis indicates a deficiency (unacceptable LOS), a review of the more detailed peak hour intersection analysis and progression analysis are undertaken. The more detailed peak hour intersection analysis explicitly accounts for factors that affect roadway capacity. Therefore, roadway segment widening is typically only recommended if the peak hour intersection analysis indicates the need for additional through lanes.

Table 5.12-4 – Roadway Segment Capacity LOS Thresholds

Facility Type	Levels of Service Capacity[1]		
	C	D	E
Local	2,500-2,799	2,800-3,099	3,100+
Collector (66' or 80')	9,900-11,199	11.200-12,499	12,500+
Arterial	14,000-16,199	16,200-17,999	18,000+
Arterial (88')	16,800-19,399	19,400-21,199	22,000+
Arterial (100')	26,200-29,599	29, 600-32,999	33,000+
Arterial (120')	38,700-44,099	44,100-49,499	49,500+
Arterial (144')	50,600-57,799	57,800-64,999	65,000+

[1]Source: Exhibit D of the City of Riverside Traffic Impact Analysis Preparation Guide All capacity exhibits are based on optimum conditions and are intended as guidelines for planning purposes only.

Freeway Off-Ramp Queuing Analysis

The study area for the TA includes the freeway-to-arterial interchange of the I-215 freeway at Alessandro Boulevard off-ramps. Consistent with Caltrans requirements, the 95th percentile queuing of vehicles has been assessed at the off-ramps to determine potential queuing impacts at the freeway ramp intersections on Alessandro Boulevard. Specifically, the queuing analysis is

utilized to identify any potential queuing and “spill back” onto the I-215 freeway mainline from the off-ramps.

Traffic Signal Warrant Analysis Methodology

The term "signal warrants" refers to the list of established criteria used by the Caltrans and other public agencies to quantitatively justify or ascertain the potential need for installation of a traffic signal at an otherwise unsignalized intersection. This TA uses the signal warrant criteria presented in the latest edition of the Caltrans California Manual on Uniform Traffic Control Devices (CA MUTCD) for all unsignalized study area intersections.

The signal warrant criteria for the existing study area intersections are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. The CA MUTCD indicate that the installation of a traffic signal should be considered if one or more of the signal warrants are met. Specifically, the TA utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for existing traffic conditions. Warrant 3 is appropriate to use for the TA because it provides specialized warrant criteria for intersections with urban characteristics (e.g. located in communities with populations of more than 10,000 persons or with adjacent major streets operating below 40 miles per hour). For the purposes of the study, the speed limit was the basis for determining whether Urban or Rural warrants were used for a given intersection.

Future unsignalized intersections, that currently do not exist, were assessed regarding the potential need for new traffic signals based on future ADT volumes, using the Caltrans planning level ADT-based signal warrant analysis worksheets.

As shown on Table 5.12-5, traffic signal warrant analyses were performed for the following unsignalized study area intersections operating at LOS E or F during the peak weekday conditions wherein the Project is anticipated to contribute the highest trips:

Table 5.12-5 – Traffic Signal Warrant Analysis Location

ID	Intersection Location	Jurisdiction
1	Barton St & Driveway 1	Riverside
3	Private Driveway & Alessandro Boulevard (*currently signalized*)	Riverside
4	Driveway 2/Vista Grande Dr. & Alessandro Boulevard	Riverside

It is important to note that a signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this threshold condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. It should

also be noted that signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant.

Minimum LOS

The definition of an intersection deficiency has been obtained from each of the applicable surrounding jurisdictions.

City of Riverside

The City General Plan states the City will strive to maintain LOS D or better on arterial streets wherever possible. At some key locations, such as City arterial roadways, which are used as freeway bypass by regional through traffic and at heavily traveled freeway intersections, LOS E may be acceptable as determined on a case-by-case basis. Locations that may warrant the LOS E standard include portions of Arlington Avenue/Alessandro Boulevard, Van Buren Boulevard throughout the City, portions of La Sierra Avenue, and selected freeway interchanges. A higher standard, such as LOS C or better, may be adopted for Local and Collector streets in residential areas. The City recognizes that along key freeway feeder segments during peak commute hours, LOS F may be expected due to regional travel patterns. A minimum LOS utilized for the purposes of the TA analysis was LOS D.

March JPA

As identified in the City Traffic Impact Study Preparation Guide (August 3, 2011) all intersections within the City Planning Area shall operate at LOS D or better with limiting circumstances of LOS E to occur. LOS E may also be allowed to the extent that would support transit-oriented development (TOD) and walkable communities. LOS E is also acceptable during peak hours at interchange ramp intersections where ramp metering occurs. The Project is not proposed to be a TOD and neither the Alessandro Boulevard on-ramps are currently metered; as such, the minimum LOS utilized for the purposes of the analysis is LOS D.

City of Moreno Valley

The Minimum LOS for the City of Moreno Valley is LOS D for intersections that are adjacent to freeway on/off ramps, and/or adjacent to employment generating land uses. LOS C is applicable to all other intersections. Boundary intersections are assumed to be LOS D.

County of Riverside

County General Plan Policy C 2.1 states that the following minimum target levels of service have been designated for the review of development proposals in the unincorporated areas of Riverside County:

- LOS C shall apply to all development proposals in any area of the Riverside County not located within the boundaries of an Area Plan, as well those areas located within the following Area Plans: REMAP, Eastern Coachella Valley, Desert Center, Palo Verde

Valley, and those non- Community Development areas of the Elsinore, Lake Mathews/Woodcrest, Mead Valley and Temescal Canyon Area Plans.

- LOS D shall apply to all development proposals located within any of the following Area Plans: Eastvale, Jurupa, Highgrove, Reche Canyon/Badlands, Lakeview/Nuevo, Sun City/Menifee Valley, Harvest Valley/Winchester, Southwest Area, The Pass, San Jacinto Valley, Western Coachella Valley and those Community Development Areas of the Elsinore, Lake Mathews/Woodcrest, Mead Valley and Temescal Canyon Area Plans. LOS E may be allowed by the Board of Supervisors within designated areas where transit-oriented development and walkable communities are proposed.

Notwithstanding the forgoing minimum LOS targets, the Board of Supervisors may, on occasion by virtue of their discretionary powers, approve a project that fails to meet these LOS targets in order to balance congestion management considerations in relation to benefits, environmental impacts and costs, provided an Environmental Impact Report, or equivalent, has been completed to fully evaluate the impacts of such approval. Any such approval must incorporate all feasible mitigation measures, make specific findings to support the decision, and adopt a statement of overriding considerations.

Caltrans

Based on recent guidance from Caltrans District 8, the LOS for operating State highway facilities is based on Measures of Effectiveness (MOE) identified in the HCM. Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on State highway facilities; however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing State highway facility is operating at less than this target LOS, the existing MOE should be maintained. In general, the region-wide goal for an acceptable LOS on all freeways, roadways segments, and intersections is D. For undeveloped or not densely developed locations, the goal may be to achieve LOS C.

VMT Analysis Methodology

Changes to the CEQA Guidelines were adopted in December 2018, which requires all lead agencies to adopt Vehicle Miles Travelled (VMT),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, the Governor's Office of Planning and Research (OPR) released a Technical Advisory on Evaluating Transportation Impacts in CEQA (December of 2018) (Technical Advisory). Based on OPR's Technical Advisory, the Western Riverside Council of Governments (WRCOG) prepared a WRCOG SB 743 Implementation Pathway Document Package (March 2019) to assist its member agencies with implementation tools necessary to adopt analysis methodology, impact thresholds and mitigation approaches for VMT. To add to the previous work effort, WRCOG in February 2020 released its Recommended Traffic Impact Analysis Guidelines for Vehicle Miles Travelled and Level of Service Assessment (WRCOG Guidelines), which provides specific procedures for complying with the new CEQA requirements for VMT analysis.

Through consultation with City staff, VMT thresholds adopted by City Council on June 16, 2020, have been used to prepare the VMT Analysis. The City's VMT Analysis Methodology includes three types of screening that can apply to effectively screen projects from project level assessment: Transit Priority Area Screening, Low VMT Area Screening, and Project Type Screening and Mixed Use and Redevelopment Projects. A land use project need only meet one of the above screening thresholds to result in a less than significant impact. Projects not screened through one of these screening types must complete VMT analysis and forecasting through the Riverside Transportation Analysis Model (RIVTAM) model to determine VMT impacts in the City. The 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 of the SCAG model. The model was originally completed in 2009 and was later updated to include a 2012 base year and 2040 forecast horizon year. The model was designed to provide a greater level of detail and sensitivity in the Riverside County area as compared to the regional SCAG model. Project VMT has been calculated using the most current version of RIVTAM, which includes a 2012 base year model and a 2040 horizon year model.

Based on the adopted VMT thresholds applicable to the Project, a significant impact for VMT would occur if the following condition is met:

- For new office and industrial projects, utilizing a threshold consistent with 15% below the City's current baseline VMT Per Worker/Employee.

5.12.3 Existing Conditions

Existing Traffic Counts

The intersection LOS analysis is based on the traffic volumes observed during the peak hour conditions using traffic count data collected in October 2018[1] plus an ambient growth rate of 2% to account for area growth. Consistent with standard traffic engineering practice, these traffic counts were conducted either on Tuesday, Wednesday, or Thursday due to potential fluctuations in traffic that typically occur on Mondays, Fridays, Holidays, or weekends. The following peak hours were selected for analysis:

- Weekday AM Peak Hour (peak hour between 7:00 AM and 9:00 AM)
- Weekday PM Peak Hour (peak hour between 4:00 PM and 6:00 PM)

The weekday AM and weekday PM peak hour count data is representative of typical weekday peak hour traffic conditions in the study area. There were no observations made in the field that would indicate atypical traffic conditions on the count dates, such as construction activity or detour routes, and near-by schools were in session and operating on normal schedules. The raw manual

[1] Starting in March of 2020, the COVID-19 Pandemic has drastically altered trip patterns and reduced traffic levels as a result of the California Governor's Stay at Home Order and school closures. Therefore, the October 2018 data is still considered valid for the purposes of this analysis.

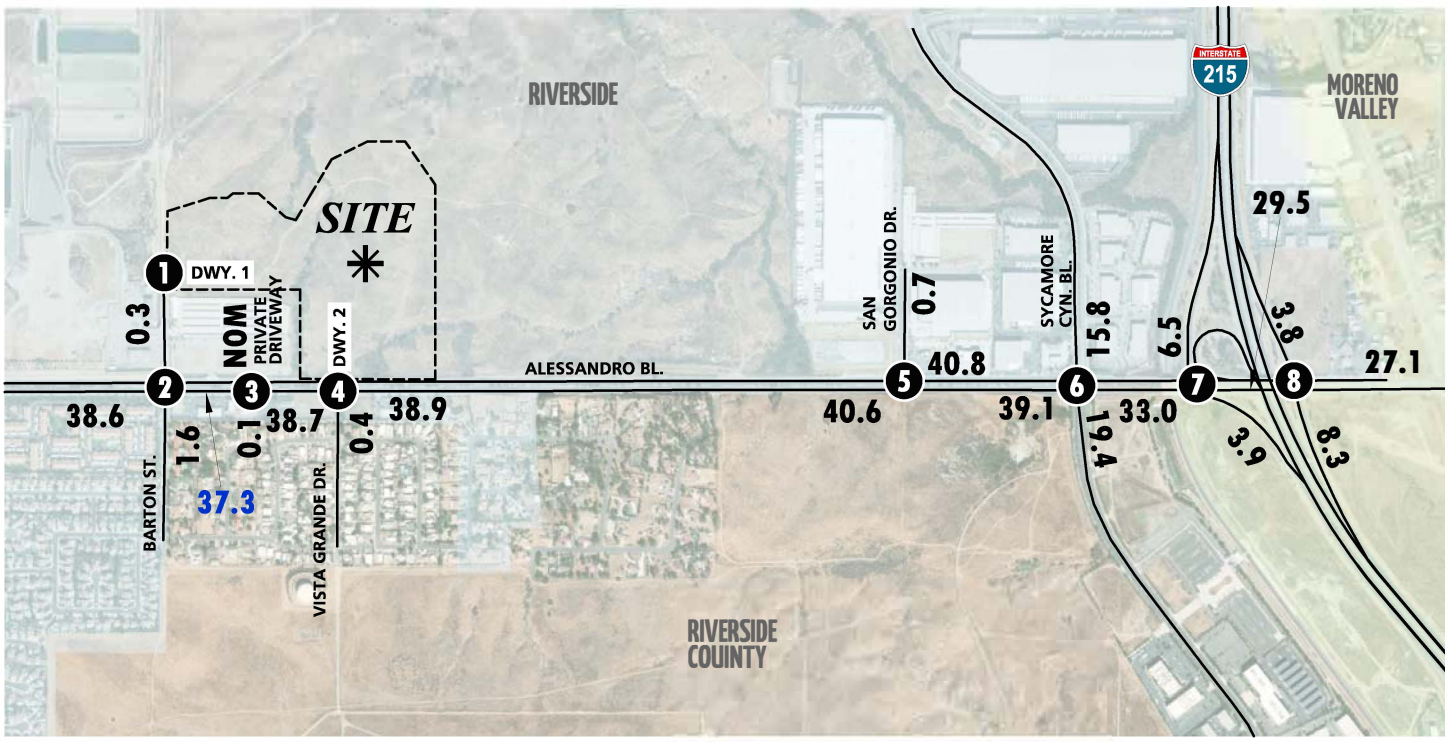
peak hour turning movement traffic count data sheets are included in Appendix 3.1 of the TA. These raw turning volumes have been flow conserved between intersections with limited access, no access and where there are currently no uses generating traffic (e.g., between ramp-to-arterial intersections, etc.). The traffic counts collected in October 2018 include the following vehicle classifications: Passenger Cars, 2-Axle Trucks, 3-Axle Trucks, and 4 or More Axle Trucks.

To represent the impact large trucks, buses, and recreational vehicles have on traffic flow, all trucks were converted into passenger car equivalents (PCE). By their size alone, these vehicles occupy the same space as two or more passenger cars. In addition, the time it takes for them to accelerate and slowdown is much longer than for passenger cars and varies depending on the type of vehicle and number of axles. For the purpose of this analysis, a PCE factor of 1.5 has been applied to 2-axle trucks, 2.0 for 3-axle trucks and 3.0 for 4+-axle trucks to estimate each turning movement. These factors are consistent with the values recommended for use in the San Bernardino County Congestion Management Program (CMP) and are in excess of the factor recommended for use in the County of Riverside traffic study guidelines.

Existing weekday ADT volumes on arterial highways throughout the study area are shown on Figure 5.12-14. Where actual 24-hour tube count data was not available, existing ADT volumes were based upon factored intersection peak hour counts collected by Urban Crossroads, Inc. using the following formula for each intersection leg:

Weekday PM Peak Hour (Approach Volume + Exit Volume) x 9.17 = Leg Volume

A comparison of the PM peak hour and daily traffic volumes of various roadway segments within the study area indicated that the peak-to-daily relationship is approximately 10.91 percent. As such, the above equation utilizing a factor of 9.17 estimates the ADT volumes on the study area roadway segments assuming a peak-to-daily relationship of approximately 10.91 percent (i.e., 1/0.01091 = 9.17) and was assumed to sufficiently estimate average daily traffic (ADT) volumes for planning-level analyses. Existing weekday AM and weekday PM peak hour intersection volumes are shown on Figure 5.12-14.



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1 Barton St. & Dwy. 1 Future Intersection	**2** Barton St. & Alessandro Bl. 3(12) 3(0) 1(8) — 1(1) 2476(1814) 42(46) 9(6) 1203(2287) 23(41) — 62(55) 0(0) 36(28)	**3** Private Driveway & Alessandro Bl. 0(0) 0(0) 0(0) — 0(0) 2488(1926) 2(3) 5(3) 1217(2294) 5(1) — 3(5) 0(0) 3(2)	**4** Dwy. 2 & Alessandro Bl. 2488(1922) 12(23) 1213(2286) 7(12) — 3(2) 14(9)	**5** San Gorgonio Dr. & Alessandro Bl. 14(16) 20(27) — 35(20) 2642(1983) 11(14) 1239(2421)
6 Sycamore Canyon Bl./ Meridian Pkwy. & Alessandro Bl. 115(310) 83(654) 122(189) — 522(146) 1997(1334) 110(156) 142(148) 902(1612) 208(516) — 522(349) 678(279) 67(158)	**7** I-215 SB Ramps & Alessandro Bl. 311(357) 210(216) — 200(131) 2412(1332) 710(1536) 324(424)	**8** I-215 NB Ramps & Alessandro Bl. 140(206) 1582(945) 63(195) 891(1501) — 934(598) 0(8) 218(303)		

N

LEGEND:

- 10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES
- 10.0 = VEHICLES PER DAY (1000'S)
- 10.0 = ACTUAL (COUNT-BASED) VEHICLES PER DAY (1000'S)
- NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

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Existing Traffic Volumes

Figure 5.12-14

Intersection Operations Analysis

The intersection operations analysis results are summarized in Table 5.12-6 which indicates that the existing study area intersections are all currently operating at acceptable LOS during the peak hours, with the exception of the following locations:

- Driveway 2/Vista Grande Dr. & Alessandro Bl. (#4) – LOS F AM and PM peak hours
- Sycamore Canyon Bl. & Alessandro Bl. (#6) – LOS F AM and PM peak hours

Consistent with Table 5.12-6, a summary of the peak hour intersection LOS for existing conditions are shown on Figure 5.12-15. The intersection operations analysis worksheets are included in Appendix 3.2 of the TA.

Table 5.12-6 – Intersection Analysis for Existing Conditions

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		LOS		Jurisdiction
			Northbound			Southbound			Eastbound			Westbound							
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	
1	Barton St. & Driveway 1	-	Future Intersection												-	-	-	-	Riverside
2	Barton St. & Alessandro Bl.	TS	0	1	d	0	1	d	1	3	0	1	3	d	40.8	36.8	D	D	Riverside
3	Private Driveway & Alessandro Bl.	TS	0	1	0	0	1	0	1	3	0	1	3	0	2.4	3.8	A	A	Riverside
4	Driveway 2/Vista Grande Dr. & Alessandro Bl.	CSS	0	1	d	0	0	0	0	3	0	1	3	0	**77.3**	**>100.0**	**F**	**F**	Riverside
5	San Gorgonio Dr. & Alessandro Bl.	TS	0	0	0	2	0	1>>	1	3	0	0	3	1	8.1	8.3	A	A	Riverside/ JPA
6	Sycamore Canyon Bl. & Alessandro Bl.	TS	2	2	2>	2	2	1	1	3	1	2	3	1	**72.3**	48.5	**E**	D	Riverside/ JPA
7	I-215 SB Ramps & Alessandro Bl.	TS	0	0	0	1	1	1	0	3	0	0	3	0	6.2	9.4	A	A	Caltrans/ Riverside/ County
8	I-215 NB Ramps & Alessandro Bl.	TS	1	1	1	0	0	0	1	3	0	0	3	d	20.2	20.4	C	C	Caltrans/ Riverside/ County

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e, unacceptable LOS).
[1]When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.; L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free-Right Turn Lane; d = Defacto Right Turn Lane
[2]Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
[3]CSS = Cross-street Stop; TS = Traffic Signal



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LEGEND:

- AM PEAK HOUR
- PM PEAK HOUR
- LOS A-D
- LOS E
- LOS F
- NA - NOT AN ANALYSIS LOCATION FOR THIS SCENARIO

N

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Existing Summary of LOS

Figure 5.12-15

Traffic Signal Warrants Analysis

Traffic signal warrants for existing traffic conditions are based on existing peak hour intersection turning volumes. No study area intersections currently warrant a traffic signal for existing traffic conditions. The traffic signal warrant analysis worksheets are included in Appendix 3.3 of the TA.

Roadway Segment Analysis

The City stated roadway segment capacities are approximate figures only and are used at the General Plan level to assist in determining the roadway functional classification (number of through lanes) needed to meet future traffic demand.

Table 5.12-7 provides a summary of the existing plus project conditions roadway segment capacity analysis based on the City of Riverside Traffic Impact Analysis Preparation Guide identified previously on Table 5.12-4. As shown on Table 5.12-7, all roadway segments are anticipated to operate at an acceptable LOS under existing traffic conditions (e.g., LOS D or better).

Table 5.12-7 – Roadway Segment Analysis for Existing Conditions

#	Roadway	Segment Limits	Roadway Section	LOS Capacity[1]	Existing	V/C[2]	LOS	Acceptable LOS
1	Alessandro Bl.	Barton St. to Private Driveway	6D	49,500	37,331	0.75	C	D
2		Private Driveway to Vista Grande Dr.	6D	49,500	38,724	0.78	C	D
3		Vista Grande Dr. to San Gorgonio Dr.	6D	49,500	40,640	0.82	D	D
4		San Gorgonio Dr. to Sycamore Canyon Bl.	6D	49,500	40,796	0.82	D	D
5		Sycamore Canyon Bl. to I-215 SB Ramps	6D	49,500	32,950	0.67	B	D
6		I-215 SB Ramps to I-215 NB Ramps	6D	49,500	29,467	0.60	A	D

[1]These maximum roadway capacities have been extracted from the following source: City of Riverside Traffic Impact Analysis Preparation Guide (Exhibit D) for each applicable roadway type. These roadway capacities are "rule of thumb" estimates for planning purposes. The LOS "E" service volumes are estimated maximum daily capacity for respective classifications. Capacity is affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian and bicycle traffic.
[2]V/C = Volume-to-capacity

Off-Ramp Queuing Analysis

A queuing analysis was performed for the off-ramps at the I-215 Freeway at Alessandro Boulevard interchange to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially “spill back” onto the I-215 Freeway mainline. It is important to note that off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline. The results of the queuing analysis show there are no existing queuing issues.

5.12.4 Related Regulations

5.12.4.1 Federal Regulations

No Federal regulations are applicable to the Project with respect to transportation/traffic.

5.12.4.2 State Regulations

State Senate Bill 743

SB 743 was signed into law by Governor Brown in 2013 and tasked the State Office of Planning and Research (OPR) with establishing new criteria for determining the significance of transportation impacts under the California Environmental Quality Act (CEQA). SB 743 requires the new criteria to "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." It also states that alternative measures of transportation impacts may include "vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated."

On September 27, 2013, California Governor Jerry Brown signed SB 743 into law and started a process that changes transportation impact analysis as part of CEQA compliance. SB 743 requires the Governor's OPR to identify new metrics for identifying and mitigation transportation impacts within CEQA. In January 2018, OPR transmitted its proposed CEQA Guidelines implementing SB 743 to the California Natural Resources Agency, which were adopted and became effective on December 18, 2018. The CEQA Guidelines promulgated under SB 743 change the way that public agencies evaluate the transportation impacts of Projects under CEQA, recognizing that roadway congestion, while an inconvenience to drivers, is not itself an environmental impact (Public Resource Code, § 21099, subd. (b)(2)). In addition to new exemptions for Projects consistent with specific plans, the CEQA Guidelines from the Office of Planning and Research replace congestion-based metrics, such as auto delay and LOS, with VMT as the basis for determining significant impacts.

Caltrans

As determined by the Caltrans, the LOS for operating State highway facilities is based upon MOEs. These MOEs describe the measures best suited for analyzing State highway facilities (i.e., freeway segments, signalized intersections, on- or off-ramps, etc.). Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on State highway facilities. However, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing State highway facility is operating at less than the appropriate target LOS, the existing MOE should be maintained. In general, the region-wide goal for an acceptable LOS on all freeways, roadway segments, and intersections is D.

5.12.4.3 Regional Regulations

Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) is an association of local governments and agencies that serves as a Metropolitan Planning Organization (MPO), a Regional Transportation Planning Agency (RTPA) and a Council of Governments (COG). The SCAG region encompasses six (6) counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura) and 191 cities. SCAG is responsible for developing long-range regional transportation plans, including the regional Sustainable Communities Strategy (SCS) and

associated growth forecasts, regional transportation improvement programs, and regional housing needs allocations (SCAG 2018).

SCAG's Connect SoCal – The 2040-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. Connect SoCal embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions (CTCs), tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura (SCAG 2020).

Riverside County Integrated Project

In 2003, Riverside County completed a comprehensive planning program called the Riverside County Integrated Project (RCIP). The Riverside County Board of Supervisors initiated the RCIP to deal with environmental issues as part of regional land use and infrastructure planning. The RCIP comprises the Community Environmental Transportation Corridor Acceptability Process (described below), the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP; see Section 5.3 Biological Resources), and the Riverside County General Plan Update. Riverside County's Strategic Vision, which is included in its General Plan, incorporates a set of 15 consensus planning principles intended to guide the work of the RCIP.

Community Environmental Transportation Corridor Acceptability Process

The Community Environmental Transportation Corridor Acceptability Process is a coordinated regional transportation planning effort included in the RCIP. It identified potential transportation corridors in western Riverside County that would benefit commuters and serve the County's growing economy.

Riverside County Congestion Management Program

Riverside County Transportation Commission (RCTC) is designated as the Congestion Management Agency (CMA) to oversee the CMP (GP 2025, p. CCM-7). RCTC approved a modification of the CMP Land Use Coordination Element that included the elimination of the Traffic Impact Assessment report process and replaced it with an Enhanced Traffic Monitoring System. Prior to this modification of the CMP, a Traffic Impact Assessment had to be prepared consistent with the CMP/Local Agency Guidelines whenever a proposed development generated greater than 200 peak hour trips. However, as of July 1, 1997, assessing these impacts consistent with the CMP guidelines is no longer required by RCTC. Therefore, although the City's Environmental Checklist includes a reference to CMA LOS, for the purposes of this analysis, the GP 2025 will be used as the guiding document for acceptable LOS, against which impacts are measured.

Western Riverside County Transportation Uniform Mitigation Fee

In 2002, the jurisdictions of western Riverside County, including the City, agreed to participate in the Western Riverside County Transportation Uniform Mitigation Fee (TUMF) program. TUMF is a multi-jurisdictional impact fee program administered by the WRCOG that funds transportation

improvements on a regional and sub-regional basis associated with new growth. All new development in each of the participating jurisdictions is subject to TUMF, based on the proposed intensity and type of development. (GP 2025, p. CCM-6)

TUMF fees are submitted to WRCOG as the program administrator. TUMF funds are distributed on a formula basis to the regional, local, and transit components of the program. Of the TUMF funds received by WRCOG, 2.6 percent is allocated to RTA for making regional transit improvements, 48.7 percent is allocated to RCTC for programming improvements to the arterials of regional significance on the Regional System of Highways and Arterials, and 48.7 percent is allocated to the five zones for programming improvements to the Regional System of Highways and Arterials (RSHA) as determined by the respective zone committees (TUMF AP, p. 7).

RSHA is the system of roadways that serve inter-community trips within western Riverside County and therefore are eligible for improvement funding with TUMF funds (TUMF Nexus 2009, p. 16). RSHA for western Riverside County was identified based on several transportation network and performance guidelines as follows:

- Arterial highway facilities proposed to have a minimum of four lanes at ultimate buildout (not including freeways);
- Facilities that serve multiple jurisdictions and/or provide connectivity between communities both within and adjoining western Riverside County;
- Facilities with forecast traffic volumes in excess of 20,000 vehicles per day by 2035;
- Facilities with forecast volume to capacity ratio of 0.90 (LOS E) or greater in 2035;
- Facilities that accommodate regional fixed route transit services;
- Facilities that provide direct access to major commercial, industrial, institutional, recreational, or tourist activity centers, and multi-modal transportation facilities (such as airports, railway terminals, and transit centers) (TUMF Nexus 2009, p. 16).

Specific transportation improvement projects are identified by WRCOG's Public Works Committee, which is responsible for developing objective criteria for project selection and prioritization including, but not limited to, the following factors: traffic safety issues potentially created by growth, regional significance, availability of matching funds, mitigation of congestion created by new development, system continuity, geographic balance, project readiness, and completed projects with reimbursement agreements (TUMF AP, p. 12). Recommendations of the Public Works Committee are then submitted to WRCOG's Technical Advisory Committee, which are then submitted to WRCOG's Executive Committee (TUMF AP, p. 18). The Executive Committee is responsible for reviewing and acting on recommendations for project selection and prioritization of the Regionally Significant Arterials, 10-year Strategic Plan, and the Transportation Improvement Program (TUMF AP, p. 11).

The City participated in the preparation of the Western Riverside County Transportation Uniform Fee Nexus Study (dated October 18, 2002) and adopted TUMF fees based on that study. The City also participated in the preparation of an updated nexus study titled Transportation Uniform

Mitigation Fee Nexus Study: 2009 Update. Due to the impacts of the economic recession on construction and development in Western Riverside County, the City determined that a temporary 50 percent reduction of the TUMF fees identified in the Transportation Uniform Mitigation Fee Nexus Study: 2009 Update would encourage development and assure that each development continues to contribute to its fair share of TUMF program costs. The reduction in TUMF fees was to be effective through December 31, 2010 (RMC Chapter 16.68, Section 16.68.020). On February 15, 2011, the City Council adopted Ordinance No. 7119 and extended the reduction in TUMF fees from January 1, 2011 through December 31, 2011, or as otherwise specified in the Ordinance (Ord. 7119). Furthermore, on April 2, 2012, the WRCOG Executive Committee decided to end the 50 percent reduction in TUMF on December 31, 2012 (Ord. 7146) and to increase the TUMF in phases over a three-month period, beginning January 1, 2013 until TUMF reached 100 percent on April 1, 2013 (Ord. 7171).

The Project will participate in the TUMF program through the payment of mitigation fees based on the current fee schedule in effect at time of payment. Payment is due prior to the final inspection for the Project (RMC Chapter 16.68, Section 16.68.060).

5.12.4.4 Local Regulations

Traffic Signal and Railroad Signal Mitigation Fees and Transportation Impact Fees

The City's local development impact fee (DIF) related to transportation improvements is set forth in Chapter 16.64 of the Riverside Municipal Code. This DIF is comprised of two fees: the traffic signal and railroad signal mitigation fee and the transportation impact fee, which together address local transportation needs throughout the City. In creating these fees, the City Council determined that new private development in the City increases the amount of traffic utilizing the City street system. This increased traffic requires the installation of additional traffic signals, railroad signals including crossing gates and associated work and street improvements at specific locations to increase or improve transportation capacity. In order to protect health, safety and welfare of the general public, the City determined that new private development should pay its fair share towards needed improvements. The traffic signal and railroad signal mitigation fee is imposed on the construction of all new nonresidential units, dwelling units, and mobile home spaces upon application for a building permit. Funds collected through payment of this fee shall be used solely for the installation of additional traffic signals and railroad signals including crossing gates and other protective devices, and all costs associated with railroad crossing protection, including, but not limited to planking, sidewalks, and curbs and gutters. (RMC, Sections 16.64.010, 16.64.030, 16.64.050) The Project will pay the traffic signal and railroad signal mitigation fee.

Funds collected through payment of the transportation impact fee shall be expended solely for construction of street improvements as designated by the City Council to increase or improve the transportation capacity of the designated streets. This fee is imposed on the construction of new dwelling units and mobile home spaces upon application for a building permit. (RMC Sections 16.64.040, 16.64.060) Because the Project does not include buildings that will be used for residential occupancy it is not subject to the transportation impact fee component (RMC Chapter 16.64).

The City is responsible for maintaining, administering, and updating the DIF program as appropriate. The City's DIF's were lasted updated as of August 17, 2015; there are no immediate plans to update the transportation related DIF fees.

City of Riverside General Plan 2025 Circulation and Community Mobility Element

The Circulation and Mobility Element of the GP 2025 identifies LOS D or better as the desired performance standard for arterial streets, whenever possible. The GP 2025 also indicates that LOS E may be warranted on a case-by-case evaluation at certain key locations such as City arterial roadways that are used as freeway bypass by regional through traffic and at heavily traveled freeway interchanges. The following streets are considered locations that may warrant the LOS E standards: portions of Arlington Avenue\Alessandro Boulevard, Van Buren Boulevard, portions of La Sierra Avenue, and selected freeway interchanges. (GP 2025, p. CCM-11)

The GP 2025 sets forth policies and goals for a transportation network consisting of freeways, streets, bike paths, railways, and airports that provide circulation within the City and access to areas outside the City.

Sycamore Canyon Business Park Specific Plan

The Sycamore Canyon Business Park Specific Plan (SCBPSP) is intended to guide development within its boundaries. The intent is to establish a high-quality industrial development for the City that would strengthen the City's economic base. The plan recommends development of light industrial, distribution warehousing, and/or product assembly. The basic premise of the SCBPSP in regard to transportation/traffic is to assure adequate traffic flow and safety in the Plan area by implementing circulation policies which include access controls and road improvements (SCBPSP, pp. 13-14).

Traffic Signal Warrants

The CA MUTCD states that the satisfaction of a traffic signal warrant or warrants shall not, in and of itself, require the installation of a traffic control signal. Peak-hour traffic signal warrant analysis should only be considered as an "indicator" of the likelihood of an un-signalized intersection warranting a traffic signal. Intersections that exceed the peak-hour warrant are more likely to meet one or more of the other volume-based signal warrants. CA MUTCD also advises that a traffic control signal should not be installed unless:

- One or more of the traffic signal warrants is satisfied;
- An engineering study indicates that installing a traffic control signal will improve the overall safety and/or operation of the intersection; and
- It will not seriously disrupt progressive traffic flow.

City of Riverside Bicycle Master Plan

The City's Bicycle Master Plan provides a blueprint for bicycle transportation and recreation in the city of Riverside. A Bicycle Master Plan Update, adopted May 22, 2007, enhanced and expanded the existing bikeway network, connecting gaps, addressing constrained areas and improving

intersections, providing for greater local and regional connectivity, and encouraging more residents to bicycle. In March 2012, the Riverside Bicycle Master Plan Update Addendum was published, which provides an updated inventory of all bicycle infrastructure and non-infrastructure improvements implemented over the past five (5) years, presents current and future bicycle and walking impact analysis, and contains an updated list of recommended bicycle improvements. The Bicycle Master Plan contains the following goals:

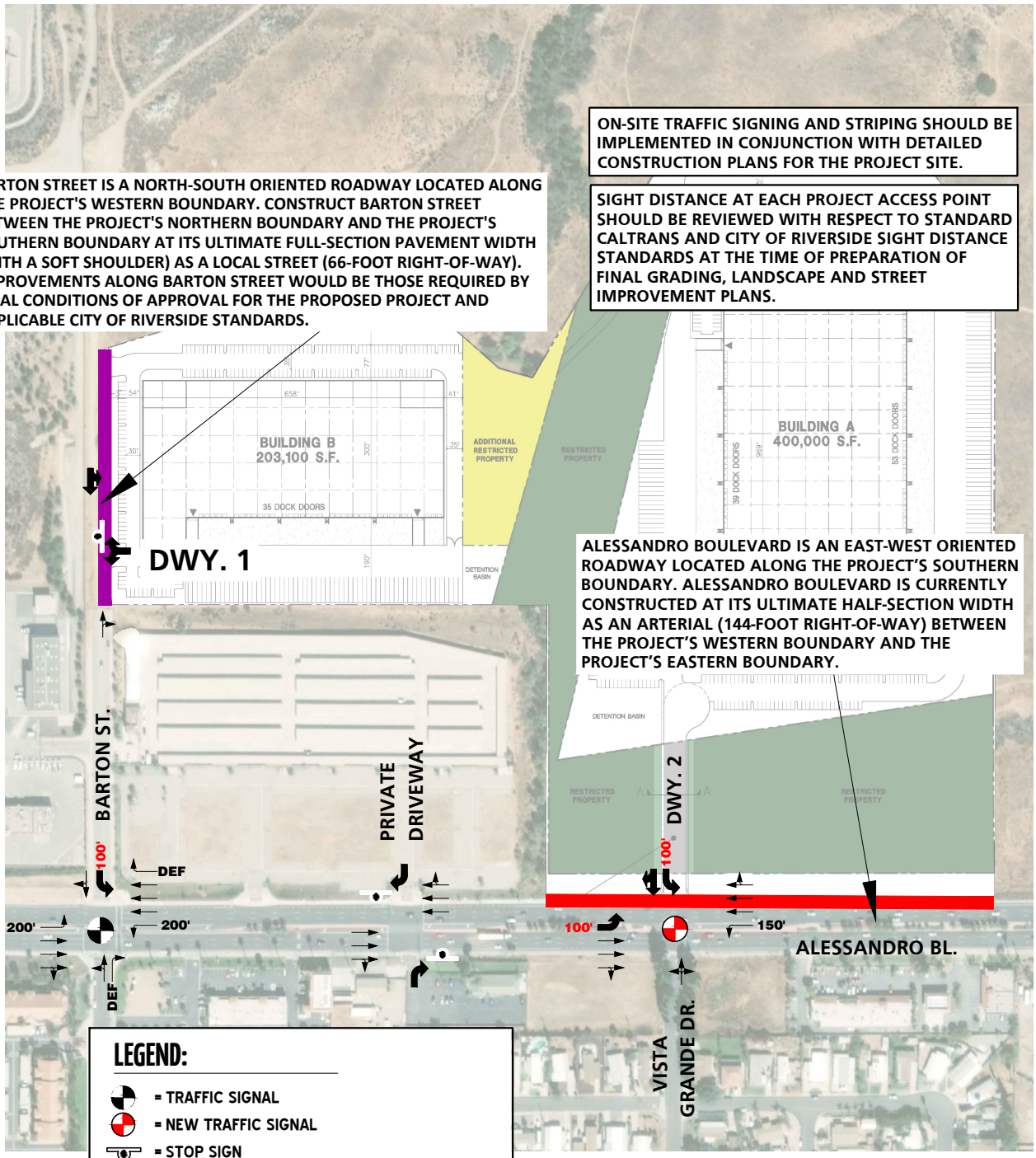
1) Expand and enhance Riverside's bikeway network
2) Plan for the needs of bicyclists
3) Eliminate barriers to bicycling
4) Increase awareness of and use of the bicycle as a viable transportation alternative
5) Preserve and sustain existing bicycle infrastructure

5.12.5 Project Design Considerations

The Project has been designed to facilitate traffic in an efficient manner using the existing roadway network. The majority of passenger cars and truck traffic is expected to use Barton Street and Driveway 2 to Alessandro Boulevard which will provide on-/offramp access to I-215. Vehicular access to the Project will be provided via Driveway 1 on Barton Street and Driveway 2 on Alessandro Boulevard. The Project site plan includes two driveways off of Barton Street for Building B (Figure 3.0-8); as these driveways are not existing or proposed signalized intersections, they were analyzed in the TA, and referenced herein, as one driveway. Both driveways are assumed to allow full-access turning movements. Regional access to the project site is provided via the I-215 Freeway at Alessandro Boulevard interchange. The Project is proposed to have access via the following driveways:

- Barton Street and Driveway 1 – Full access driveway (passenger cars only). Trucks will be restricted from heading westbound on Alessandro Boulevard.
- Driveway 2/Vista Grande Drive and Alessandro Boulevard – Full access driveway (passenger cars only). Trucks will be restricted from heading westbound on Alessandro Boulevard.

The Project will modify curb-and-gutter and sidewalk improvements along the Project's southern and western boundaries with Alessandro Boulevard accordingly based on the proposed driveway locations. The Project will construct Barton Street between the Project's northern boundary and southern boundary at its ultimate full-section pavement width as a Local Street (66-foot right-of-way). At the intersection of Barton Street and Alessandro Boulevard, the Project will construct an exclusive southbound left-turn lane and provide a minimum of 100-feet of storage, as shown on Figure 5.12-16.



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Site Adjacent Roadway and Site Access Recommendations

Figure 5.12-16

Based on volume warrants, the intersection of Vista Grande Drive and Alessandro Boulevard is not warranted for a traffic signal. However, the intersection is anticipated to continue to operate at a deficient LOS. The addition of a traffic signal would improve the LOS to acceptable levels. However, the addition of a traffic signal is not currently feasible as the intersection is in close proximity to an existing signalized intersection of a private driveway at Alessandro Boulevard, as shown on Figure 5.12-16. The adjacent signalized intersection of the private driveway and Alessandro Boulevard does not currently warrant a traffic signal as the volumes on the north and south leg are nominal and are significantly less than the south leg of Vista Grande Drive and Alessandro Boulevard. Therefore, the removal of the existing traffic signal at the private driveway and Alessandro Boulevard would be required in order to install a traffic signal at Vista Grande Drive and Alessandro Boulevard. As outlined in the TA, it is recommended that the existing signal at private driveway and Alessandro Boulevard be removed and that the Project construct a new traffic signal at the intersection of Driveway 2/Vista Grande Drive and Alessandro Boulevard.

Buildings A and B will have a 26-foot wide fire lane wrapping around each buildings to provide easy fire access to the building in case of an emergency. Parcel C will have a driveway off Barton Street that will lead drivers (non-truck traffic) to the proposed trailhead parking lot.

5.12.6 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. Therefore, significance thresholds in Appendix G ("Environmental Checklist") of the State CEQA Guidelines are utilized. The Environmental Checklist prepared by the City for the Project (see Appendix A of this document) indicates that impacts related to the Sycamore Hills Distribution Center Project may be considered potentially significant if the proposed Project would:

- (Threshold A) conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
- (Threshold B) conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b);
- (Threshold C) result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks; or
- (Threshold D) substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

5.12.7 Environmental Impacts

Threshold A: *Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Project Trip Generation

Trip generation represents the amount of traffic that is attracted and produced by a development and is based upon the specific land uses planned for a given project. Trip generation rates (actual

vehicles) for the Project are shown in Table 5.12-8 and trip generation rates using PCEs for the Project are shown in Table 5.12-9. Both tables illustrate daily and peak hour trip generation estimates based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition, 2017, for High Cube Transload and Short Term Storage (ITE Land Use Code 154). Shipping containers, used on cargo ships, trains and trucks, are either standard size 40 feet long, 8-foot-wide and either 8.5-foot-high or 1 foot higher than standard for high cube. The City's zoning code does not get any more specific than warehouse use. The ITE Land Use of *High Cube Transload and Short Term Storage* is more specific to the activities occurring in the warehouse building, than the term warehouse as used in the City's Zoning Code. The proposed use within the Project's warehouse buildings is the short term storage of goods transported in high cube containers on trucks and represents a distribution center. Refrigeration, or cold storage, is not proposed. Therefore, the ITE Land Use of *High Cube Transload and Short Term Storage* is used just for the purposes of calculating the appropriate trip generation rate for the proposed Project in the Traffic Operations Analysis and is the correct land use type to use for the Project as those are the proposed uses within the warehouse buildings. For all other purposes, the project's buildings and proposed use are considered warehouse (the more general term), consistent with the City's Zoning Code.

Data regarding the truck percentage and vehicle mix have been obtained from High Cube Warehouse Vehicle Trip Generation Analysis, October 2016. The High Cube Warehouse Vehicle Trip Generation Analysis provides vehicle mix for Short-Term Storage, Transload & Non-Cold Storage, which consists of 32.2% trucks for daily trips, 30.8% trucks for AM peak hour trips and 21.7% trucks for PM peak hour trips. The South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type for high-cube warehouses were utilized for the 2-axle, 3-axle, and 4+-axle trucks.

The trip generation rates used for the TA were based upon information collected by the ITE as provided in their Trip Generation manual, 10th Edition, 2017. For purposes of the TA, ITE land use code 154 (High Cube Tra) have been used to derive site specific trip generation estimates. As noted on Tables 5.12-8 and 5.12-9, refinements to the raw trip generation estimates have been made to provide a more detailed breakdown of trips by vehicle mix. Total vehicle mix percentages were also obtained from the ITE Trip Generation manual in conjunction with the SCAQMD recommended truck mix, by axle type. Finally, PCE factors were applied to the trip generation rates for heavy trucks (large 2-axles, 3-axles, 4+-axles). PCEs allow the typical "real-world" mix of vehicle types to be represented as a single, standardized unit, such as the passenger car, to be used for the purposes of capacity and level of service analyses. The PCE factors are consistent with the recommended PCE factors in Appendix "B" of the San Bernardino County Congestion Management Program (CMP), 2016 Update. Trip generation rates with PCE factors are also shown on Table 5.12-9.

Table 5.12-8 – Trip Generation Summary (Actual Vehicles)

Project Trip Generation Rates									
	ITE LU Code	Units[2]	AM Peak Hour			PM Peak Hour			Daily
Land Use[1]			In	Out	Total	In	Out	Total	
High-Cube Transload Short-Term Warehouse without Cold Storage[3,4,5]	154	TSF	0.062	0.018	0.080	0.028	0.072	0.100	1.400
Passenger Cars (69.2% AM, 78.3% PM, 67.8% Daily)			0.043	0.013	0.056	0.022	0.056	0.078	0.949
2-Axle Trucks (5.14% AM, 3.62% PM, 5.38% Daily)			0.003	0.001	0.004	0.001	0.003	0.004	0.076
3-Axle Trucks (6.38% AM, 4.49% PM, 6.66% Daily)			0.004	0.001	0.005	0.001	0.003	0.004	0.093
4-Axle+ Trucks (19.28% AM, 13.59% PM, 20.16% Daily)			0.012	0.003	0.015	0.004	0.010	0.014	0.282
Project Trip Generation									
Project	Quantity	Units[2]	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
High-Cube Transload Short-Term Warehouse without Cold Storage	603.100	TSF							
Passenger Cars:			26	8	34	14	34	48	573
Truck Trips:									
2-axle:			2	1	3	1	2	3	46
3-axle:			3	1	4	1	2	3	57
4+-axle:			8	2	10	3	7	10	171
- Total Truck Trips (Actual Vehicles)			*13*	*4*	*17*	*5*	*11*	*16*	*274*
TOTAL TRIPS (Actual Vehicles)[6]			***39***	***12***	***51***	***19***	***45***	***64***	***847***

[1] Trip Generation Source: ITE, Trip Generation Manual, Tenth Edition (2017).
[2] TSF = thousand square feet
[3] Vehicle Mix Source: ITE, Trip Generation Handbook, Third Edition (September 2017).
[4] Vehicle Mix Source: ITE, High-Cube Warehouse Vehicle Trip Generation Analysis (October 2016).
[5] Truck Mix Source: SCAQMD Warehouse Truck Trip Study Data Results and Usage (2014). Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks
[6] TOTAL TRIPS (Actual Vehicles) = Passenger Cars + Truck Trips (Actual Trucks).

Table 5.12-9 – Trip Generation Summary (Actual PCE)

Project Trip Generation Rates									
Land Use[1]	ITE LU Code	Units[2]	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
High - Cube Transload Short - Term Warehouse without Cold Storage[3,4,5]	154	TSF	0.062	0.018	0.080	0.028	0.072	0.100	1.400
Passenger Cars (69.2% AM, 78.3% PM, 67.8% Daily)			0.043	0.013	0.056	0.022	0.056	0.078	0.949
2 - Axle Trucks (5.14% AM, 3.62% PM, 5.38% Daily)			0.005	0.002	0.007	0.002	0.005	0.007	0.114
3 - Axle Trucks (6.38% AM, 4.49% PM, 6.66% Daily)			0.008	0.002	0.010	0.002	0.006	0.008	0.186
4 - Axle+ Trucks (19.28% AM, 13.59% PM, 20.16% Daily)			0.036	0.009	0.045	0.012	0.030	0.042	0.846

Project Trip Generation									
Project	Quantity	Units[2]	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
High - Cube Transload Short - Term Warehouse without Cold Storage	603.100	TSF							
Passenger Cars:			26	8	34	14	34	48	573
Truck Trips[6]:									
2 - axle (PCE=1.5):			4	2	6	2	4	6	69
3 - axle (PCE=2.0):			5	2	7	2	4	6	113
4+ - axle (PCE=3.0):			22	6	28	8	19	27	511
- Total Truck Trips (PCE)			*31*	*10*	*41*	*13*	*28*	*39*	*693*
TOTAL TRIPS (PCE) [7]			***57***	***18***	***75***	***27***	***62***	***87***	***1,266***

[1]Trip Generation Source: ITE, Trip Generation Manual, Tenth Edition (2017).
[2]TSF = thousand square feet
[3]Vehicle Mix Source: ITE, Trip Generation Handbook, Third Edition (September 2017).
[4]Vehicle Mix Source: ITE, High-Cube Warehouse Vehicle Trip Generation Analysis (October 2016).
[5]Truck Mix Source: SCAQMD Warehouse Truck Trip Study Data Results and Usage (2014). Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks
[6]PCE rates are per San Bernardino County Transportation Authority (SBCTA).
[7]TOTAL TRIPS (PCE) = Passenger Cars + Truck Trips (PCE).

As shown on Table 5.12-9, the Project is anticipated to generate a net total of 1,266 PCE trip-ends per day with 75 net PCE AM peak hour trips and 87 net PCE PM peak hour trips. For comparison, as shown on Table 5.12-8, the Project is anticipated to generate a net total of 847 actual vehicle trip-ends per day with 51 net actual vehicle AM peak hour trips and 64 net actual vehicle PM peak hour trips.

Project Trip Distribution

The Project trip distribution and assignment process represents the directional orientation of traffic to and from the Project site. The trip distribution pattern of passenger cars is heavily influenced by the geographical location of the site, the location of surrounding land uses, and the proximity to the regional freeway system. The trip distribution pattern for truck traffic is also influenced by the local truck routes approved by the City, March JPA, City of Moreno Valley, and Caltrans.

Given these differences, separate trip distributions were generated for both passenger cars and truck trips.

Existing Plus Project Conditions

While the Traffic Operations Analysis examined Level of Service (LOS) within the project vicinity, a deficiency in Level of Service is no longer considered as a significant transportation related impact pursuant to updated CEQA guidelines. Instead, the assessment of LOS is intended to identify key access, circulation and operational issues within the project area, and to confirm consistency with the City's General Plan. Consistency with General Plan policies are addressed in Section 5.10 Land Use.

Consistent with the City of Riverside traffic study guidelines, the existing plus Project (E+P) analysis determines circulation system deficiencies that would occur on the existing roadway system in the scenario of the Project being placed upon existing conditions. The E+P analysis is intended to identify the project-specific traffic deficiencies associated solely with the development of the proposed Project based on a comparison of the E+P traffic conditions to existing conditions. As such, E+P traffic conditions were evaluated for each phase of development to determine the project-specific traffic deficiencies associated with each phase. For the study area intersections that lie within the City, to determine whether the addition of Project traffic (as defined through the comparison of existing traffic conditions to E+P traffic conditions) at a study intersection would result in a direct project-specific traffic deficiency, the following will be utilized:

- When the pre-Project condition is at or better than LOS D (i.e., acceptable LOS), and project-generated traffic, as measured by 50 or more peak hour trips, causes deterioration below LOS D (i.e., unacceptable LOS) or increases to the peak hour delay, a deficiency is deemed to occur.

For the study area intersections that lie within March JPA, to determine whether the addition of project traffic (as defined through the comparison of existing to E+P traffic conditions) at a study intersection would result in a direct project-specific traffic deficiency, both of the following conditions must occur:

- Peak hour project traffic plus existing traffic causes an intersection to operate at LOS E or F; and
- Peak hour project traffic comprises 2% or more of the total peak hour traffic on the intersection for LOS E and 2% or more for LOS F.

For the study area intersections that lie within the County of Riverside, to determine whether the addition of project traffic (as defined through the comparison of existing traffic conditions to E+P traffic conditions) at a study intersection would result in a direct project-specific traffic deficiency, the following will be utilized:

- When the pre-Project condition is at or better than LOS D (i.e., acceptable LOS), and project-generated traffic, as measured by 50 or more peak hour trips, causes deterioration below LOS D/LOS E (i.e., unacceptable LOS), a deficiency is deemed to occur.

The City of Moreno Valley does not have its own deficiency criteria, therefore, study intersections that lie within the City of Moreno Valley are evaluated according to either March JPA or County of Riverside deficiency criteria where intersections share the respective jurisdiction. Caltrans criteria would apply for study area intersections that are freeway facilities within the City of Moreno Valley.

However, when the pre-Project condition is already below LOS D (i.e., unacceptable LOS), the Project will be responsible for improving its deficiency to a level of service equal to or better than it was without the Project for intersections that receive 50 or more peak hour project-related trips. This is a standard protocol in many urban jurisdictions because to require a Project to improve to LOS D or better would in effect force the Project to improve beyond its Project deficiencies, which is prohibited under California law. Thus, for intersections currently operating at unacceptable LOS during either the AM and/or PM peak hour under existing traffic conditions, improvements have been identified to improve the deficiencies of the Project to an intersection LOS that is equal to or better than pre-Project conditions.

Intersection Operations Analysis

The intersection analysis results are summarized in Table 5.12-10, which indicates that two study area intersections are anticipated to operate at the same unacceptable LOS for E+P traffic conditions. The deficiencies are summarized in Table 5.12-11, which indicates that two study area intersections are anticipated to be deficient.

Table 5.12-10 – Intersection Analysis for E+P Conditions

#	Intersection	Traffic Control[2]	Existing				E+P				Jurisdiction	Deficiency?[3]
			Delay[1] (secs.)		Level of Service		Delay[1] (secs.)		Level of Service			
			AM	PM	AM	PM	AM	PM	AM	PM		
1	Barton St. & Driveway 1	**CSS**	Future Intersection				8.6	8.6	A	A	Riverside	No
2	Barton St. & Alessandro Bl.	TS	40.8	36.8	D	D	40.9	39.4	D	D	Riverside	No
3	Private Driveway & Alessandro Bl.	TS	2.4	3.8	A	A	2.4	3.9	A	A	Riverside	No
4	Driveway 2/Vista Grande Dr. &	CSS	**77.3**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**	Riverside	**Yes**
5	Alessandro Bl.	TS	8.1	8.3	A	A	10.0	8.5	A	A	Riverside/JPA	No
6	San Gorgonio Dr. & Alessandro Bl.	TS	**72.3**	48.5	**E**	D	**72.8**	49.3	**E**	D	Riverside/JPA	**Yes**
7	Sycamore Canyon Bl. & Alessandro Bl.	TS	6.2	9.4	A	A	6.5	9.7	A	A	Caltrans/City/County	No
8	I‐215 SB Ramps & Alessandro Bl.	TS	20.2	20.4	C	C	20.6	21.1	C	C	Caltrans/City/County	No
	I‐215 NB Ramps & Alessandro Bl.											

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).
[1]Per the Highway Capacity Manual 6th Edition, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control.
For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
[2]CSS = Cross-street Stop; TS = Traffic Signal; **CSS** = Improvement
[3]See Table 5-2 for a detailed summary of deficiencies.

Table 5.12-11 – Deficient Intersection Summary for E+P Conditions

#	Intersection	Jurisdiction	Project % of Total Traffic		Change in Delay (secs.)		Project Trip Contribution		Deficiency? [1,2,3]
			AM	PM	AM	PM	AM	PM	
1	Barton St. & Driveway 1	Riverside	N/A	N/A	--	--	N/A	N/A	No
2	Barton St. & Alessandro Bl.	Riverside	N/A	N/A	0.1	2.6	N/A	N/A	No
3	Private Driveway & Alessandro Bl.	Riverside	N/A	N/A	0.0	0.1	N/A	N/A	No
4	Driveway 2/Vista Grande Dr. & Alessandro Bl.	Riverside	N/A	N/A	**>1.0**	**>1.0**	N/A	N/A	**Yes**
5	San Gorgonio Dr. & Alessandro Bl.	Riverside/JPA	N/A	N/A	1.9	0.2	N/A	N/A	No
6	Sycamore Canyon Bl. & Alessandro Bl.	Riverside/JPA	1.2%	1.3%	0.5	0.8	68	80	**Yes[4]**
7	I-215 SB Ramps & Alessandro Bl.	Caltrans/City/County	N/A	N/A	0.3	0.3	N/A	N/A	No
8	I-215 NB Ramps & Alessandro Bl.	Caltrans/City/County	N/A	N/A	0.4	0.7	N/A	N/A	No

BOLD = Deficient Intersection N/A = Not Applicable

[1]For intersections within the jurisdiction of the City of Riverside, a deficiency occurs at a study area intersection when the addition of project related trips causes either peak hour LOS to degrade from acceptable (LOS A through D) to unacceptable levels (LOS E/F) or the peak hour delay to increase as follows:

LOS A/B = By 10.0 seconds; LOS C = By 8.0 seconds; LOS D = By 5.0 seconds; LOS E = By 2.0 seconds; LOS F = By 1.0 seconds

[2]For intersections within the jurisdiction of March JPA, if the pre-project condition is at or better than LOS D (or acceptable LOS) and the project-generated traffic causes deterioration below acceptable levels, a deficiency is deemed to occur. However, if the pre-project condition is already below LOS D (or acceptable LOS), deficiency occurs if the Project contributes more than 2% of the total traffic.

[3]For intersections within the jurisdiction of Caltrans, the County of Riverside, or City of Moreno Valley, if the pre-project condition is at or better than LOS D (or acceptable LOS) and the project-generated traffic causes deterioration below acceptable levels, a deficiency is deemed to occur. A deficiency also occurs if the Project contributes 50 or more peak hour trips to an already deficient intersection.

[4]The intersection currently built out to the General Plan ultimate cross-section and exceeds the General Plan target LOS. As such, the deficiency is unavoidable.

Driveway 2/Vista Grande Dr. and Alessandro Bl. (#4) – Although this intersection was found to operate at an unacceptable LOS (LOS F) during the AM and PM peak hours under existing traffic conditions, the intersection is anticipated to continue to operate at unacceptable levels during the peak hours with the addition of Project traffic. The increase in peak hour delay is anticipated to be greater than one second. Therefore, there is a deficiency based on the City's peak hour delay criteria for intersections operating at LOS F.

Sycamore Canyon Boulevard and Alessandro Boulevard (#6) – Although this intersection was found to operate at an unacceptable LOS (LOS E) during the AM peak hour under existing traffic conditions, the intersection is anticipated to continue to operate at unacceptable levels (LOS E) during the peak hours with the addition of Project traffic. The increase in peak hour delay is anticipated to be less than two seconds and the project traffic is less than 2% of the total traffic for E+P conditions. However, the intersection of Sycamore Canyon Boulevard and Alessandro Boulevard is currently built out to its General Plan ultimate cross-section and exceeds the General Plan target LOS. As such, the deficiency is considered unavoidable. As auto delay, on its own, is no longer an environmental impact pursuant to CEQA guidelines, the Project will have **no impacts** to transportation, as a result of LOS deficiency.

Roadway Segment Analysis

As noted previously, the City stated roadway segment capacities are approximate figures only and are used at the General Plan level to assist in determining the roadway functional classification (number of through lanes) needed to meet future traffic demand.

Table 5.12-12 provides a summary of the E+P conditions roadway segment capacity analysis based on the City of Riverside Traffic Impact Analysis Preparation Guide. As shown on Table 5.12-12 and consistent with Existing traffic conditions, all roadway segments are anticipated to operate at an acceptable LOS under E+P traffic conditions (e.g., LOS D or better).

Table 5.12-12 – Roadway Segment Analysis for E+P Conditions

#	Roadway	Segment Limits	Roadway Section	LOS Capacity[1]	Existing	V/C[2]	LOS	E+P	V/C[2]	LOS	Acceptable LOS
1	Alessandro Bl.	Barton St. to Private Driveway	6D	49,500	37,331	0.75	C	37,795	0.76	C	D
2		Private Driveway to Vista Grande Dr.	6D	49,500	38,724	0.78	C	39,188	0.79	C	D
3		Vista Grande Dr. to San Gorgonio Dr.	6D	49,500	40,640	0.82	D	41,792	0.84	D	D
4		San Gorgonio Dr. to Sycamore Canyon Bl.	6D	49,500	40,796	0.82	D	41,948	0.85	D	D
5		Sycamore Canyon Bl. to I-215 SB Ramps	6D	49,500	32,950	0.67	B	34,073	0.69	B	D
6		I-215 SB Ramps to I-215 NB Ramps	6D	49,500	29,467	0.60	A	30,072	0.61	B	D

[1]These maximum roadway capacities have been extracted from the following source: City of Riverside Traffic Impact Analysis Preparation Guide (Exhibit D) for each applicable roadway type. These roadway capacities are "rule of thumb" estimates for planning purposes. The LOS "E" service volumes are estimated maximum daily capacity for respective classifications. Capacity is affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian and bicycle traffic.
[2]V/C = Volume to Capacity ratio

Off-Ramp Queuing Analysis

A queuing analysis was performed for the off-ramps at the I-215 freeway at Alessandro Boulevard interchange to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially “spill back” onto the I-215 freeway mainline. It is important to note that off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline. The anticipated vehicle queues would be accommodated by the turning lane’s available storage length.

Opening Year Cumulative Traffic Conditions

Opening Year Cumulative without Project Traffic Conditions

LOS calculations were conducted for the study intersections to evaluate their operations under opening year cumulative without Project conditions with roadway and intersection geometrics. As shown in Table 5.12-13, the following intersections were found to operate at a deficient LOS:

- Driveway 2/Vista Grande Drive and Alessandro Boulevard (#4) – LOS F AM and PM peak hours
- Sycamore Canyon Boulevard and Alessandro Boulevard (#6) – LOS F AM and PM peak hours

As auto delay, on its own, is no longer an environmental impact pursuant to CEQA guidelines, the Project will have **no impacts** to transportation, as a result of LOS deficiency.

Opening Year Cumulative with Project Traffic Conditions

As shown on Table 5.12-13 and illustrated on Figure 5.12-17, there are no additional study area intersections anticipated to operate at an unacceptable LOS with the addition of Project traffic during one or more peak hours, in addition to those identified under opening year cumulative without Project traffic conditions. The deficiencies are summarized in Table 5.12-14.

Table 5.12-13 – Intersection Analysis for Opening Year Cumulative Conditions

			2023 Without Project				2023 With Project					
			Delay[1] (secs.)		Level of Service		Delay[1] (secs.)		Level of Service			
#	Intersection	Traffic Control[2]	AM	PM	AM	PM	AM	PM	AM	PM	Jurisdiction	Deficiency?[3]
1	Barton St. & Driveway 1	**CSS**	Future Intersection				8.6	8.7	A	A	Riverside	No
2	Barton St. & Alessandro Bl.	TS	28.7	39.7	C	C	28.7	40.1	C	D	Riverside	No
3	Private Driveway & Alessandro Bl.	TS	2.8	4.6	A	A	2.8	4.7	A	A	Riverside	No
4	Driveway 2/Vista Grande Dr. & Alessandro Bl.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**	Riverside	**Yes**
5	San Gorgonio Dr. & Alessandro Bl.	TS	15.0	21.5	B	C	15.3	22.3	B	C	Riverside/JPA	No
6	Sycamore Canyon Bl. & Alessandro Bl.	TS	**120.2**	**87.6**	**F**	**F**	**120.9**	**88.2**	**F**	**F**	Riverside/JPA	**Yes**
7	I-215 SB Ramps & Alessandro Bl.	TS	8.9	12.5	A	B	9.4	13.0	A	B	Caltrans/Riverside/County	No
8	I-215 NB Ramps & Alessandro Bl.	TS	23.7	24.2	C	C	24.1	25.1	C	D	Caltrans/Riverside/County	No

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).
[1]Per the Highway Capacity Manual 6th Edition, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
[2] CSS = Cross-street Stop; TS = Traffic Signal; CSS = Improvement
[3] See Table 5.12-14 for a detailed summary of deficiencies.



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LEGEND:

- = AM PEAK HOUR
- = PM PEAK HOUR
- = LOS A-D
- = LOS E
- = LOS F

N

SYCAMORE HILLS DISTRIBUTION CENTER

RVA

URBAN CROSSROADS

Opening Year Cumulative with Project
Summary of LOS

Figure 5.12-17

Table 5.12-14 – Deficient Intersection Summary for Opening Year Cumulative Conditions

#	Intersection	Jurisdiction	Project % of Total Traffic		Change in Delay (secs.)		Project Trip Contribution		Deficiency? [1,2,3]
			AM	PM	AM	PM	AM	PM	
1	Barton St. & Driveway 1	Riverside	N/A	N/A	--	--	N/A	N/A	No
2	Barton St. & Alessandro Bl.	Riverside	N/A	N/A	0.0	0.4	N/A	N/A	No
3	Private Driveway & Alessandro Bl.	Riverside	N/A	N/A	0.0	0.1	N/A	N/A	No
4	Driveway 2/Vista Grande Dr. & Alessandro Bl.	Riverside	N/A	N/A	**>1.0**	**>1.0**	N/A	N/A	**Yes**
5	San Gorgonio Dr. & Alessandro Bl.	Riverside/JPA	N/A	N/A	0.3	0.8	N/A	N/A	No
6	Sycamore Canyon Bl. & Alessandro Bl.	Riverside/JPA	1.0%	1.1%	0.7	0.6	68	80	**Yes[4]**
7	I-215 SB Ramps & Alessandro Bl.	Caltrans/Riverside /County	N/A	N/A	0.5	0.5	N/A	N/A	No
8	I-215 NB Ramps & Alessandro Bl.	Caltrans/Riverside /County	N/A	N/A	0.4	0.9	N/A	N/A	No

BOLD = Deficient Intersection
N/A = Not Applicable
[1]"For intersections within the jurisdiction of the City of Riverside, a deficiency occurs at a study area intersection when the addition of project related trips causes either peak hour LOS to degrade from acceptable (LOS A through D) to unacceptable levels (LOS E/F) or the peak hour delay to increase as follows:
- LOS A/B = By 10.0 seconds
- LOS C = By 8.0 seconds
- LOS D = By 5.0 seconds
- LOS E = By 2.0 seconds
- LOS F = By 1.0 seconds"
[2] For intersections within the jurisdiction of March JPA, if the pre-project condition is at or better than LOS D (or acceptable LOS) and the project-generated traffic causes deterioration below acceptable levels, a deficiency is deemed to occur. However, if the pre-project condition is already below LOS D (or acceptable LOS), deficiency occurs if the Project contributes more than 2% of the total traffic.
[3] For intersections within the jurisdiction of Caltrans, the County of Riverside, or City of Moreno Valley, if the pre-project condition is at or better than LOS D (or acceptable LOS) and the project-generated traffic causes deterioration below acceptable levels, a deficiency is deemed to occur. A deficiency also occurs if the Project contributes 50 or more peak hour trips to an already deficient intersection.
[4] The intersection currently built out to the General Plan ultimate cross-section and exceeds the General Plan target LOS. As such, the deficiency is unavoidable.

Roadway Segment Analysis

Table 5.12-15 provides a summary of the opening year cumulative without Project conditions roadway segment capacity analysis based on the City of Riverside Traffic Impact Analysis Preparation Guide. As shown on Table 5.12-15, the following roadway segments that are anticipated to operate at an unacceptable LOS under opening year cumulative without Project traffic conditions:

- Alessandro Boulevard, from Barton Street to Private Driveway – LOS E
- Alessandro Boulevard, from Private Driveway to Vista Grande Drive – LOS E
- Alessandro Boulevard, from Vista Grande Drive to San Gorgonio Drive – LOS F
- Alessandro Boulevard, from San Gorgonio Drive to Sycamore Canyon Boulevard – LOS F

As shown on Table 5.12-15, there are no additional study area roadway segments anticipated to operate at an unacceptable LOS (LOS E or worse) with the addition of Project traffic, other than

those previously identified under opening year cumulative without Project conditions. As auto delay, on its own, is no longer an environmental impact pursuant to CEQA guidelines, the Project will have **no impacts** to transportation, as a result of LOS deficiency.

Table 5.12-15 – Roadway Segment Analysis for Opening Year Cumulative Conditions

#	Roadway	Segment Limits	Roadway Section	LOS Capacity[1]	2023 NP	V/C[2]	LOS[3]	2023 WP	V/C[2]	LOS[3]	Acceptable LOS[3]
1	Alessandro Bl.	Barton St. to Private Driveway	6D	49,500	45,205	**0.91**	**E**	45,669	**0.92**	**E**	D
2		Private Driveway to Vista Grande Dr.	6D	49,500	46,713	**0.94**	**E**	47,177	**0.95**	**E**	D
3		Vista Grande Dr. to San Gorgonio Dr.	6D	49,500	49,558	**1.00**	**F**	50,710	**1.02**	**F**	D
4		San Gorgonio Dr. to Sycamore Canyon Bl.	6D	49,500	49,529	**1.00**	**F**	50,681	**1.02**	**F**	D
5		Sycamore Canyon Bl. to I-215 SB Ramps	6D	49,500	41,035	0.83	D	42,158	0.85	D	D
6		I-215 SB Ramps to I-215 NB Ramps	6D	49,500	37,546	0.76	C	38,151	0.77	C	D

[1] These maximum roadway capacities have been extracted from the following source: City of Riverside Traffic Impact Analysis Preparation Guide (Exhibit D) for each applicable roadway type. These roadway capacities are "rule of thumb" estimates for planning purposes. The LOS "E" service volumes are estimated maximum daily capacity for respective classifications. Capacity is affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian and bicycle traffic.
[2] V/C = Volume to Capacity ratio
[3] LOS = Level of Service

Off-Ramp Queuing Analysis

A queuing analysis was performed for the off-ramps at the I-215 freeway at Alessandro Boulevard interchange to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially “spill back” onto the I-215 freeway mainline. Queuing analysis findings are presented in Table 5.12-16 for opening year cumulative without and with Project traffic conditions. It is important to note that off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline. As shown on Table 5.12-16, there are no queuing issues anticipated for opening year cumulative without and with Project traffic conditions.

Table 5.12-16 – Peak Hour Freeway Off-Ramp Queuing Summary for Opening Year Cumulative Conditions

Intersection	Movement	Available Stacking Distance (Feet)	2023 Without Project				2023 With Project			
			95th Percentile Queue (Feet)[3]		Acceptable? [1]		95th Percentile Queue (Feet)[3]		Acceptable? [1]	
			AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
I-215 SB Ramps / Alessandro Bl.	SBL	525	264[2]	217	Yes	Yes	264[2]	217	Yes	Yes
	SBL/R	1,540	264[2]	204	Yes	Yes	283[2]	210	Yes	Yes
	SBR	525	249[2]	193	Yes	Yes	268[2]	198	Yes	Yes
I-215 NB Ramps / Alessandro Bl.	NBL	450	507[2]	325[2]	Yes[3]	Yes	522[2]	333[2]	Yes[3]	Yes
	NBL/T/R	1,345	558[2]	372[2]	Yes	Yes	572[2]	380[2]	Yes	Yes
	NBR	450	105	207	Yes	Yes	105	207	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown in this table, where applicable.
[2] 95th percentile volume exceeds capacity; queue may be longer. Queue shown is maximum after two cycles.
[3] Although the 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-215 Freeway mainline.

Deficiencies at Intersections

The effectiveness of the proposed improvements described in Section 5.12.3 – Project Design Considerations for the deficient intersections of Driveway 2/Vista Grande Drive and Alessandro Boulevard (see Table 5.12-14) is presented in Table 5.12-17 for opening year cumulative traffic conditions. Based on each jurisdiction's deficiency criteria, the Project is anticipated to result in deficiencies at the following intersections, as the Project would contribute to the total opening year cumulative with Project traffic forecasts:

- Driveway 2/Vista Grande Drive and Alessandro Boulevard (#4)
- Sycamore Canyon Boulevard and Alessandro Boulevard (#6)

The proposed improvements described in Section 5.12.3 – Project Design Considerations for the deficient intersection of Driveway 2/Vista Grande Drive and Alessandro Boulevard would bring the intersection out of the deficiency designation. However, as mentioned in Section 5.12.3 above, the addition of a traffic signal is not currently feasible as the intersection is too close in proximity to an existing signalized intersection of a private driveway at Alessandro Boulevard. The adjacent signalized intersection of the private driveway and Alessandro Boulevard does not currently warrant a traffic signal as the volumes on the north and south leg are nominal and are significantly less than the south leg of Vista Grande Drive and Alessandro Boulevard. Therefore, the removal of the existing traffic signal at the private driveway and Alessandro Boulevard would be required in order to install a traffic signal at Vista Grande Drive and Alessandro Boulevard. As outlined in the TA, it is recommended that the existing signal at private driveway and Alessandro Boulevard be removed and that the Project construct a new traffic signal at the intersection of Driveway 2/Vista Grande Drive and Alessandro Boulevard.

The intersection of Sycamore Canyon Boulevard and Alessandro Boulevard is currently built out to its General Plan ultimate cross-section and exceeds the General Plan target LOS. Until additional right-of-way beyond those designated in the General Plan is obtained, there are no anticipated feasible improvements. As such, the deficiency at this existing built out intersection is considered unavoidable. As auto delay, on its own, is no longer an environmental impact pursuant to CEQA guidelines, the Project will have **no impacts** to transportation, as a result of LOS deficiency.

Table 5.12-17 – Intersection Analysis for Opening Year Cumulative Conditions with Project Design Improvements

			Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
#	Intersection	Traffic Control[3]	L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
3	Private Driveway & Alessandro Bl.																	
	- Without Improvements	TS	0	1	0	0	1	0	1	3	0	1	3	0	2.8	4.7	A	A
	- With Improvements	**CSS**[4]	0	**0**	**1**	0	**0**	**1**	**0**	3	0	**0**	3	0	11.6	17.6	B	C
4	Driveway 2/Vista Grande Dr. & Alessandro Bl.																	
	- Without Improvements	CSS	0	1	d	0	0	0	0	3	0	1	3	0	**>100.0**	**>100.0**	**F**	**F**
	- With Improvements	**TS**	0	1	d	**1**	**1**	0	**1**	3	0	1	3	0	7.8	9.5	A	A

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; d= Defacto Right Turn Lane; 1 = Improvement
[2] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
[3] **CSS** = Cross-street Stop; **TS** = Traffic Signal; **TS** = Improvement
[4] Recommended improvement includes the elimination of the existing traffic and restricting the driveway access to right-in/right-out access only.

Bicycle Master Plan

Alessandro Boulevard, along the Project's frontage, has an existing Class II Bike Lane, which is identified in the City of Riverside Bicycle Master Plan. Barton Street, along the Project's frontage, does not have an existing bike lane. The Project will modify curb-and-gutter and sidewalk improvements along the Project's southern and western boundaries with Alessandro Boulevard accordingly based on the proposed driveway locations. The Project will construct Barton Street between the Project's northern boundary and southern boundary at its ultimate full-section pavement width as a Local Street (66-foot right-of-way). The proposed street improvements along Alessandro Boulevard would not prohibit the Class II Bike Lane.

The Project is required to provide sidewalk with the capability for RTA to install an Americans with Disabilities Act (ADA) compliant RTA bus stop bench and pole marker in the future along Alessandro Boulevard, near the Alessandro Boulevard/ Vista Grande Drive intersection. A trailhead parking lot is proposed on Parcel C for access to the Sycamore Canyon Wilderness

Park, which will include improvements consisting of a parking lot, sidewalk, shade structure, bike rack, drinking fountain, fencing, and a Fire Department and access gate. The trailhead parking lot will help achieve the goals of the Bicycle Master Plan as it will provide a space for bicycle users that may want to park their vehicle carrying a bicycle or park their bicycle at one of the bicycle lock racks and utilize the Sycamore Canyon Wilderness Park trails. The trailhead parking lot helps plan for the needs of bicyclists by providing bicycle parking and helps eliminate barriers to bicycling by improving safety for bicyclists. The Project will not conflict with the Bicycle Master Plan or a program, plan, or policy addressing bicycle and pedestrian facilities.

Conclusion

The Project will not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities; potential impacts are **less than significant** and no mitigation is required.

Threshold B: *Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

Based on the adopted VMT thresholds applicable to the Project, a significant impact for VMT would occur if the following condition is met:

- For new office and industrial projects, utilizing a threshold consistent with 15% below the City's current baseline VMT Per Worker/Employee is required.

Project Screening

The City Guidelines provide details on appropriate "screening thresholds" that can be used to identify when a proposed land use Project is anticipated to result in a less-than-significant impact without conducting a more detailed VMT analysis. Screening thresholds are broken into three types:

- Project Type Screening
- Map Based Screening based on Low VMT Area
- Transit Priority Area (TPA) Screening

A land use Project need only to meet one of the above screening thresholds to result in a less than significant impact.

Project Type Screening

The City Guidelines identify that local serving retail or other types of local serving land use projects that are consistent with the current SCS or General Plan are presumed to have a less than significant impact. City Guidelines also states projects that generate or attract fewer than 110 trips per day are assumed to cause a less than significant impact. The Project is consistent with the current General Plan; however, the Project is estimated to generate in excess of 110 daily trips and would therefore not be eligible for the project type screening threshold. The Project Type screening threshold is not met.

Map Based Screening based on Low VMT Area

As described in the City Guidelines, "residential and office projects located within a low VMT-generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary." The Screening Tool uses the sub-regional Riverside Transportation Analysis Model (RIVTAM) to measure VMT performance within individual traffic analysis zones (TAZ) within the City. The Project's physical location based on parcel number is input into the Screening Tool to determine project-generated VMT as compared to the City threshold. Based on the Screening Tool results (see Attachment A), the Project is not located within a low VMT generating zone. The Low VMT Area screening threshold is not met.

TPA Screening

Consistent with guidance identified in the City Guidelines, projects located within a Transit Priority Area (TPA) (i.e., within 0.5 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:

- 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.

Based on the Screening Tool results, the Project site is not located within 0.5 mile of an existing major transit stop, or along a high-quality transit corridor. The TPA screening threshold is not met.

Project VMT Analysis

The 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 of the SCAG model. The model was originally completed in 2009 and was later updated to include a 2012 base year and 2040 forecast horizon year. The model was designed to provide a greater level of detail and sensitivity in the Riverside County area as compared to the regional SCAG model. The City Guidelines identifies RIVTAM as the appropriate tool for conducting VMT analysis for land use projects in the City of Riverside. Project VMT has been calculated using the most current version of RIVTAM, which includes a 2012 base year model and a 2040 horizon year model. Adjustments in socio-economic data (SED) (i.e., employment) for the Project have been made to a separate traffic analysis zone (TAZ) within the RIVTAM model to reflect the Project's proposed land use (i.e., industrial/warehouse type use). A separate TAZ has been utilized in order to isolate trips to/from the Project. Table 5.12-18 summarizes the employment factors and employment estimates for the Project.

Table 5.12-18 – Employment Density Factors

	Project
Building Square Footage	603,100
Employment Density Factor[1]	1 employee/1,030 SF
Employment	586
[1]Employee Density Factor was obtained from the County of Riverside General Plan Appendix E-2: Socioeconomic Build-Out Assumptions and Methodology (see Table E-5, Commercial Employment Factors, Page 3).	

Adjustments to employment for the Project's TAZ were made to both the RIVTAM base year model (2012) and the cumulative year model (2040). Project-generated home-based work (HBW) VMT was then calculated for both the base year model (2012) and cumulative year model (2040). The VMT is then normalized by dividing by the number of Project employees. As shown in Table 5.12-19, the Project base year VMT per employee is 15.71 and the Project cumulative year VMT per employee is 17.34.

Table 5.12-19 – Project VMT Per Employee

	Baseline 2012	Cumulative 2040 Project
VMT	9,206	10,159
Employment	586	586
VMT / Employee	15.71	17.34

Table 5.12-20 illustrates the comparison between the Project generated VMT per employee to the City's current baseline VMT per employee. As shown, the Project would exceed the threshold of 15% below the current City of Riverside VMT per employee for both the baseline and cumulative Project generated VMT. As such, the Project's impact based on VMT is **significant and unavoidable**.

Table 5.12-20 – VMT Per Employee Comparison

	2012 VMT/Employee	2040 VMT/Employee
City of Riverside Current VMT/Employee	13.24	13.24
Project VMT/Employee	15.71	17.34
Percent Change	**+18.66%**	**+30.97%**
Potentially Significant?	**Yes**	**Yes**

Project's Effect on VMT

Consistent with City Guidelines, projects that are found to have a potentially significant impact using efficiency-based metrics (such as VMT per employee) should also provide an additional assessment to evaluate a project's effect on VMT. The Project would have a significant impact to

VMT if the Project were to increase VMT per employee under baseline and cumulative scenarios when compared to VMT conditions without the Project. This varies from the City's VMT threshold that requires a Project to be 15% below the City's current baseline VMT per worker/employee. As noted in the City Guidelines, this analysis is performed using the boundary method, which includes all vehicle trips with one or both trip-ends within a specific geographic area of interest (i.e., the City of Riverside). As shown on Table 5.12-21, the Project is anticipated to result in a base year (2012) net decrease of 0.200 VMT per employee and a cumulative year (2040) net decrease of 0.091 VMT per employee. The Project's effect on the City's VMT is **less than significant**.

Table 5.12-21 – Project's Effect on City VMT

	2012 Without Project	2012 With Project	2040 Without Project	2040 With Project
VMT	5,730,358	5,734,341	8,723,408	8,724,916
Employment	119,544	120,130	228,619	229,205
VMT/Employee	47.935	47.735	38.157	38.066
Change in VMT	-0.200		-0.091	
Potentially Significant?	No		No	

Transportation demand management (TDM) strategies have been evaluated for the purpose of reducing VMT. The purpose of TDM strategies is to reduce the need for single occupancy automobile trips. The effectiveness of TDM strategies available to individual land use projects in Riverside County was thoroughly evaluated by the SB 743 Implementation TDM Strategy Assessment (February 26, 2019, Fehr & Peers) (WRCOG Report) prepared for WRCOG, which evaluated the TDM measures identified in the Quantifying Greenhouse Gas Mitigation Measures (CAPCOA, 2010) (CAPCOA) for their relevance to projects in the WRCOG area.

The WRCOG Report indicates that of the 50 transportation measures presented by CAPCOA, only 41 are applicable at a building and site level. Aside from the 41 measures applicable at a building and site level, the remaining 9 measures are functions of, or depend on, site location and/or actions by local and regional agencies or funders.

Based on a review of the 41 transportation measures identified by CAPCOA, the WRCOG Report identifies that seven (7) of those measures have the potential to be effective at the project level in the predominantly suburban context of the WRCOG area. Evaluation of the potentially applicable TDM strategy in the context of the Project is summarized below.

- *Measure 1: Increase Diversity of Land Uses (LUT-3).* Having different types of land uses near one another can decrease VMT since trips between land use types are shorter and may be accommodated by non-auto modes of transportation. For example, when residential areas are in the same neighborhood as retail and office buildings, a resident does not need to travel outside of the neighborhood to meet his/her trip needs.

Remarks: The Project proposes the construction of two high-cube short-term transload warehouse buildings, totaling 603,100 square feet. In order for the above measure to apply, at

least three of the following must be located on-site, or off-site within ¼ mile of the Project: Residential Development, Retail Development, Park, Open Space, or Office. There is residential and limited retail located off-site within ¼ mile south of the Project, and park/open space (Sycamore Canyon Wilderness Park) within a ¼ mile north of the Project. However, as the proposed Project does not include a mix of land uses within the development site, but is instead located within a sphere of influence to a mix residential and retail uses (i.e., ¼ mile radius), this particular TDM measure would provide a low reduction and is therefore not evaluated further as a means of providing a reduction in Project VMT.

- *Measure 2: Provide Pedestrian Network Improvements (SDT-1).* Providing a pedestrian access network to link areas of the Project site encourages people to walk instead of drive assuming that desirable destinations are within walking distance of the Project. This mode shift results in people driving less and a reduction in VMT.

Remarks: There are existing sidewalks along Alessandro Boulevard and Barton Street. The Project is proposing to improve the pedestrian network along the Project frontage and at the intersection of Vista Del Grande & Alessandro Boulevard. As noted in the WRCOG Report and by CAPCOA, this measure would provide a nominal reduction in Project VMT due to the limited new pedestrian connections created.

- *Measure 3: Provide Traffic Calming Measure (SDT-2).* Providing traffic calming measures encourages people to walk or bike instead of using a vehicle. This mode shift will result in a decrease in VMT. Traffic calming features may include: marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts or mini-circles, on-street parking, planter strips with street trees, chicanes/chokers, and others.

Remarks: The Alessandro Boulevard corridor provides for sidewalk and bike lane enhancements. There is limited opportunity for the Project to implement meaningful enhanced mitigation in this area. This measure is therefore not evaluated further as means of providing a reduction in Project VMT.

- *Measure 4: Implement Car-Sharing Program (TRT-9).* Implementing a car-sharing program would allow individuals to have on-demand access to a shared fleet of vehicles on an as-needed basis. User costs are typically determined through mileage or hourly rates, with deposits and/or annual membership fees.

Remarks: It is possible that employers within the Project site could implement car-sharing programs. This may provide car access for employees on an as-needed basis, and thereby alleviate some of the costs and responsibilities of individual car ownership. The effectiveness of this measure is dependent on the ultimate building tenant(s) which are unknown currently. As such, this measure is therefore not evaluated further as means of providing a reduction in Project VMT.

- *Measure 5: Increase Transit Service Frequency and Speed (TST-4).* This measure serves to reduce transit-passenger travel time through more reduced headways and increased speed

and reliability. This makes transit service more attractive and may result in a mode shift from auto to transit which reduces VMT.

Remarks: The study area is currently served by Riverside Transit Agency (RTA), a public transit agency serving various jurisdictions within Riverside County. RTA Routes 20 and 26 currently provide proximate service (within one-quarter mile) of the Project site. 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. It is recommended that the Applicant work in conjunction with the Lead Agency and RTA to coordinate potential bus service to the Project site. Since implementation of this strategy would require agency implementation it is not applicable for individual development projects. This measure is therefore not evaluated further as means of providing a reduction in Project VMT.

- *Measure 6: Encourage Telecommuting and Alternative Work Schedule (TRT-6).* Encouraging telecommuting and alternative work schedules reduces the number of commute trips and therefore VMT traveled by employees. Alternative work schedules could take the form of staggered starting times, flexible schedules, or compressed work weeks.

Remarks: The effectiveness of this measure is dependent on the ultimate building tenant(s) which are unknown currently. As such, this measure is therefore not evaluated further as means of providing a reduction in Project VMT.

- *Measure 7: Provide Ride-Sharing Programs (TRT-3).* This strategy focuses on encouraging carpooling and vanpooling.

Remarks: The effectiveness of this measure is dependent on the ultimate building tenant(s) which are unknown currently. As such, this measure is therefore not evaluated further as means of providing a reduction in Project VMT.

The effectiveness of the above-noted TDM measures would be dependent in large part on future Project occupancies, which are unknown at this time. Beyond Project tenancy considerations, land use context is a major factor relevant to the potential application and effectiveness of TDM measures. More specifically, the land use context of the Project is characteristically suburban center. Of itself, the Project's suburban center context acts to limit the range of feasible TDM measures and moderates their potential effectiveness.

Conclusion

Even under the most favorable circumstances, projects located within a suburban center context, such as the proposed Project evaluated here, could realize a maximum 15 percent reduction in VMT through implementation of feasible TDM measures. The Project is estimated to exceed the current City of Riverside VMT per employee by 18.66% in base year (2012) and 30.97% in cumulative year (2040). Given that the maximum percent reduction is 15% through feasible TDM measures, the Project cannot reduce the Project-generated VMT to below the threshold of 15% below the current City of Riverside VMT per employee. The Project VMT impact is therefore **considered significant and unavoidable.**

Threshold C: *Would the Project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?*

As discussed in Section 5.8 Hazards and Hazardous Materials, the Project is located approximately 3.4 miles northwest of the March Air Reserve Base (MARB) and is located within Zone C1 of the MARB/Inland Port Airport Land Use Compatibility Plan (MARB/IPA LUCP). The Project will consist of light industrial activities, which are uses permitted within Zone C1. Further, as discussed, the Project would not require Zone C1 airspace review for structures over 70 feet in height as both Building A and Building B would maximum building heights of 45 feet, including parapets. Moreover, the Project would not require Federal Aviation Administration (FAA) review for structures with top of roof exceeding 124 feet as the Project's maximum building height will be 45 feet. Thus, as the Project would not conflict with the compatibility requirements of Zone C1 of the MARB/IPA LUCP, the Project is not expected to result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. Potential impacts would be **less than significant**.

Threshold D: *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)?*

Vehicle access, including emergency vehicle access to the Project site would be accessible from Barton Street and Alessandro Boulevard. The Project would include the extension of Barton Street northward to connect Building B with two driveways (TA Driveway 1) with a fire department access gate. Access to Building A from Alessandro Boulevard would require the construction of an access road/driveway (TA Driveway 2). The driveways and internal roadways would comply with California Building Code standards and would not include design features that would increase circulation hazards. The Project proposes a trailhead parking lot at Parcel C, which would include a decomposed granite parking lot, landscaping, shade structure with benches, bike rack, drinking fountain, ADA-compliant parking spaces, and sidewalk. As a condition of approval, the applicant will be required to provide signage, traffic control measures, and a protected route for park users during construction. Safe public access to Sycamore Canyon Wilderness Park during construction and any closures to park access at Barton Avenue must be approved by the City and posted 48-hours in advance and shall not exceed 1 week duration. The parking lot and trail will provide safe access for Park users reducing the potential conflict between Park users and commercial vehicles within the Project site.

For the reasons set forth above, Project impacts with regard to increased hazards due to a geometric design feature would be **less than significant.**

5.12.8 Proposed Mitigation Measures

An EIR is required to describe feasible mitigation measures which could minimize significant adverse impacts (CEQA Guidelines, Section 15126.4). Implementation of the Project will result in significant impacts related to transportation and conflict with GP policies and VMT, and therefore, potential mitigation measures were evaluated. As discussed in Threshold B above, there are no feasible mitigation measures that would reduce impacts to less than significant levels.

5.12.9 Cumulative Environmental Effects

Cumulative Development Traffic

The TA evaluated a Horizon Year (2040) conditions, which represents the cumulative traffic conditions for this EIR. This section discusses the methods used to develop Horizon Year (2040) without and with Project traffic forecasts, and the resulting intersection operations, roadway segment operations, and traffic signal warrant analyses.

Horizon Year Without Project Traffic Conditions

The weekday ADT and weekday AM and PM peak hour volumes which can be expected for Horizon Year (2040) Without Project traffic conditions are shown on Figure 5.12-18.

Horizon Year With Project Traffic Conditions

The weekday ADT and weekday AM and PM peak hour volumes which can be expected for Horizon Year (2040) with Project traffic conditions are shown on Figure 5.12-19.

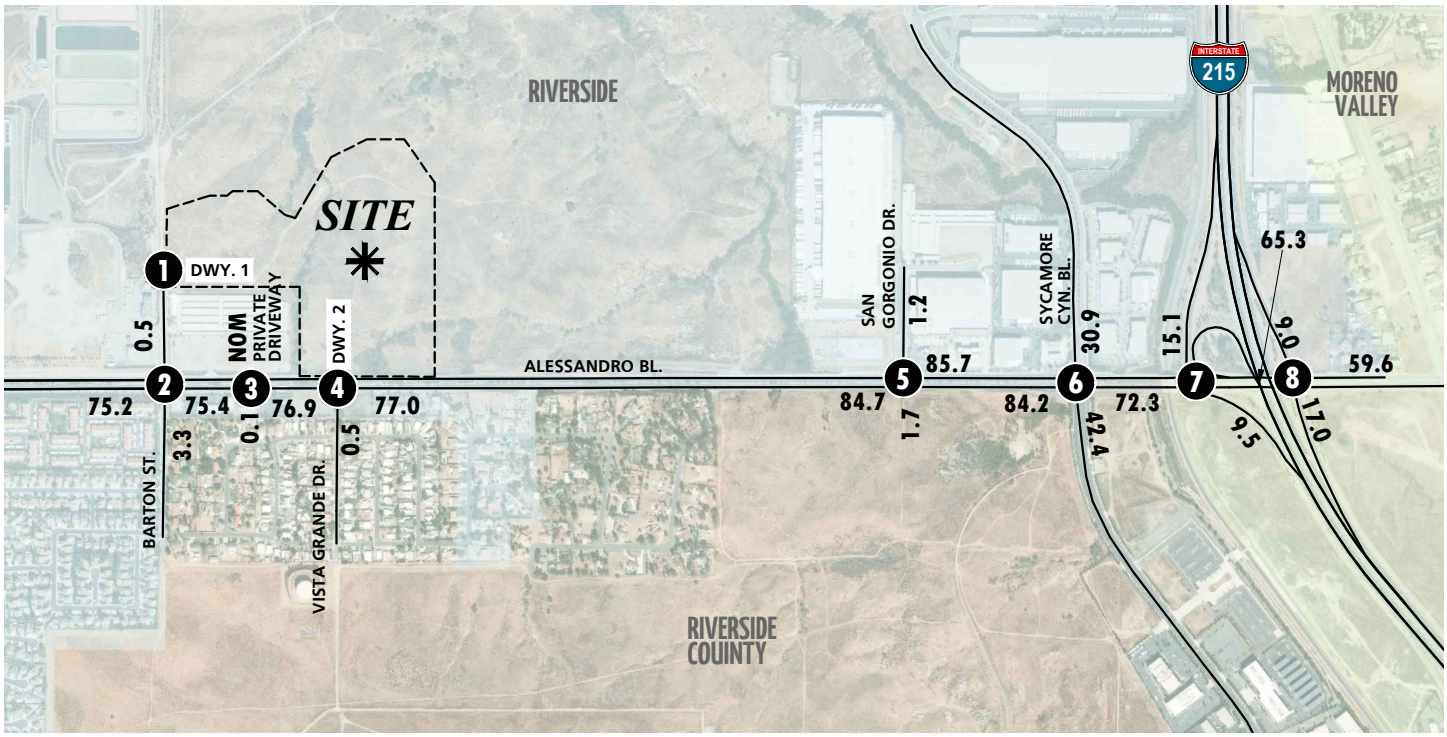
Intersection Operations Analysis

Horizon Year Without Project Traffic Conditions

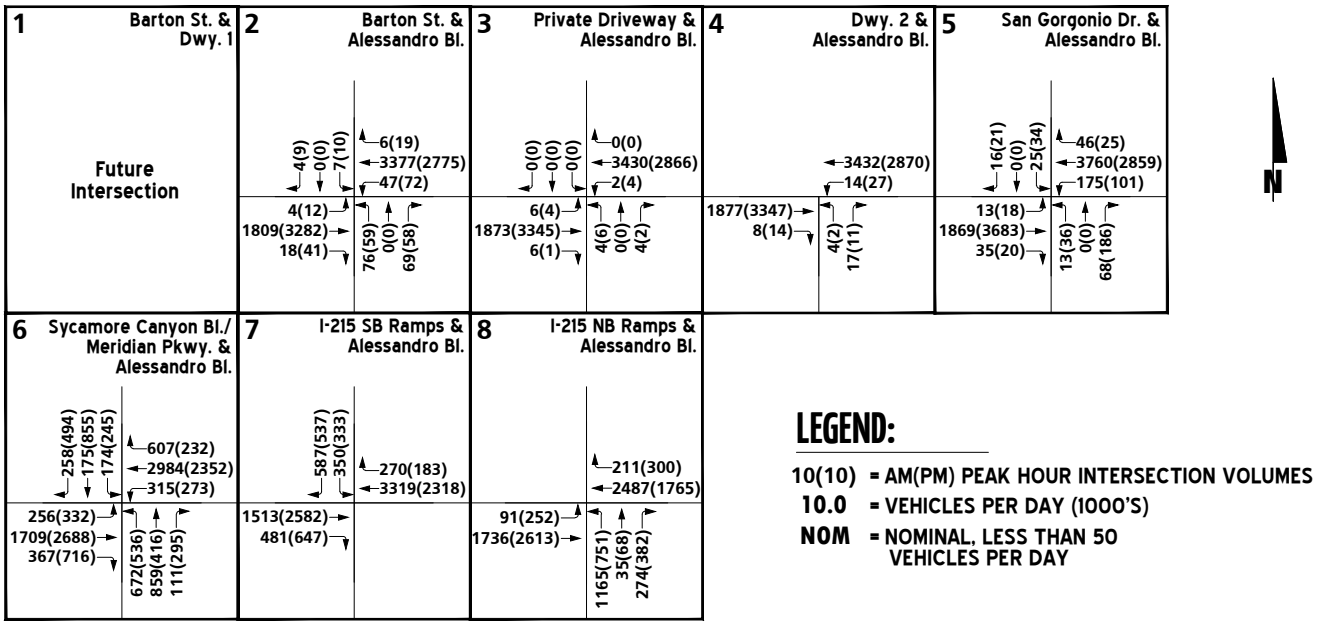
LOS calculations were conducted for the study intersections to evaluate their operations under Horizon Year (2040) without Project conditions with intersection geometrics consistent with Figure 5.12-2. As shown in Table 5.12-22, the following study area intersections are anticipated to operate at an unacceptable level of service (e.g., LOS E or worse):

- Driveway 2/Vista Grande Drive and Alessandro Boulevard (#4) – LOS F AM and PM peak hours
- Sycamore Canyon Boulevard and Alessandro Boulevard (#6) – LOS F AM and PM peak hours
- I-215 NB Ramps and Alessandro Boulevard (#8) – LOS E AM and PM peak hours

A summary of the peak hour intersection LOS for Horizon Year Without Project conditions are shown on Figure 5.12-20.



12014 - vols_.dwg



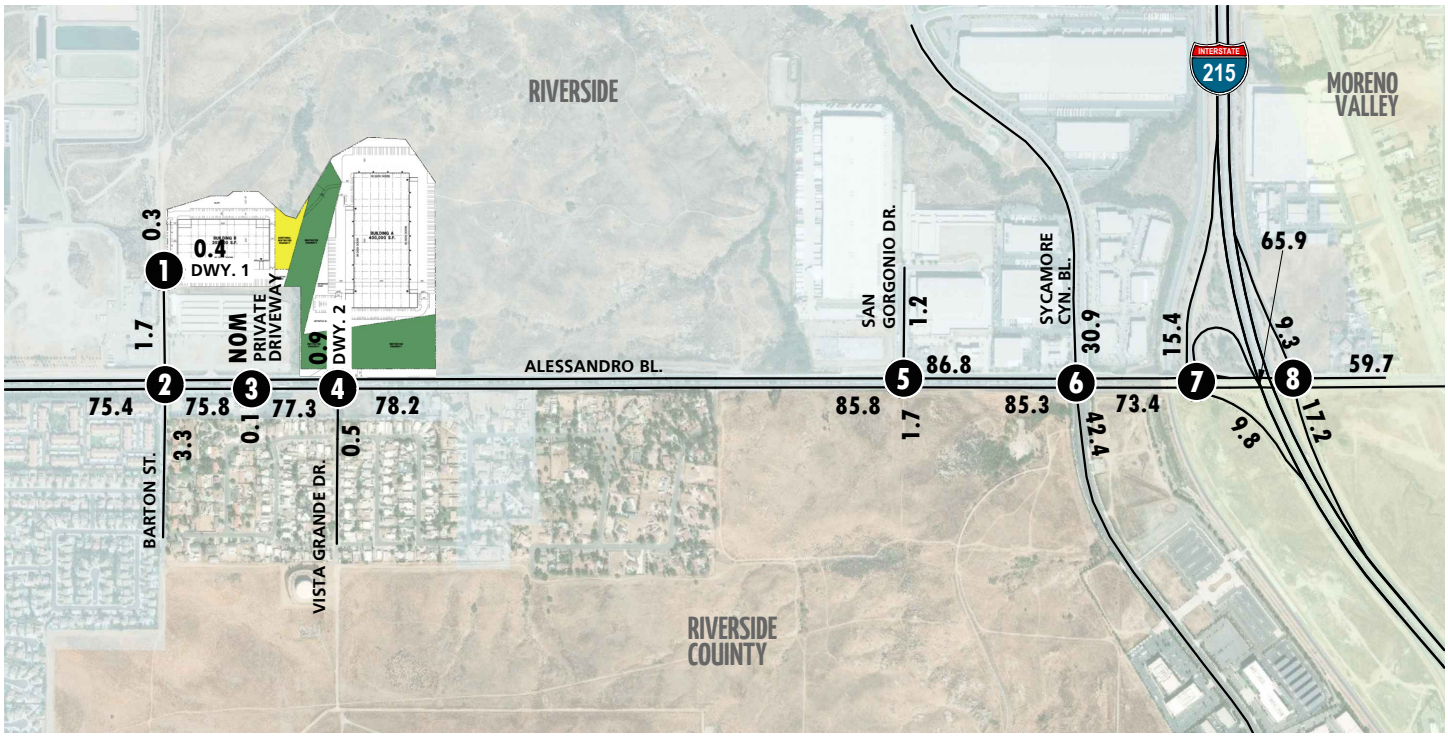
LEGEND:

10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES
10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

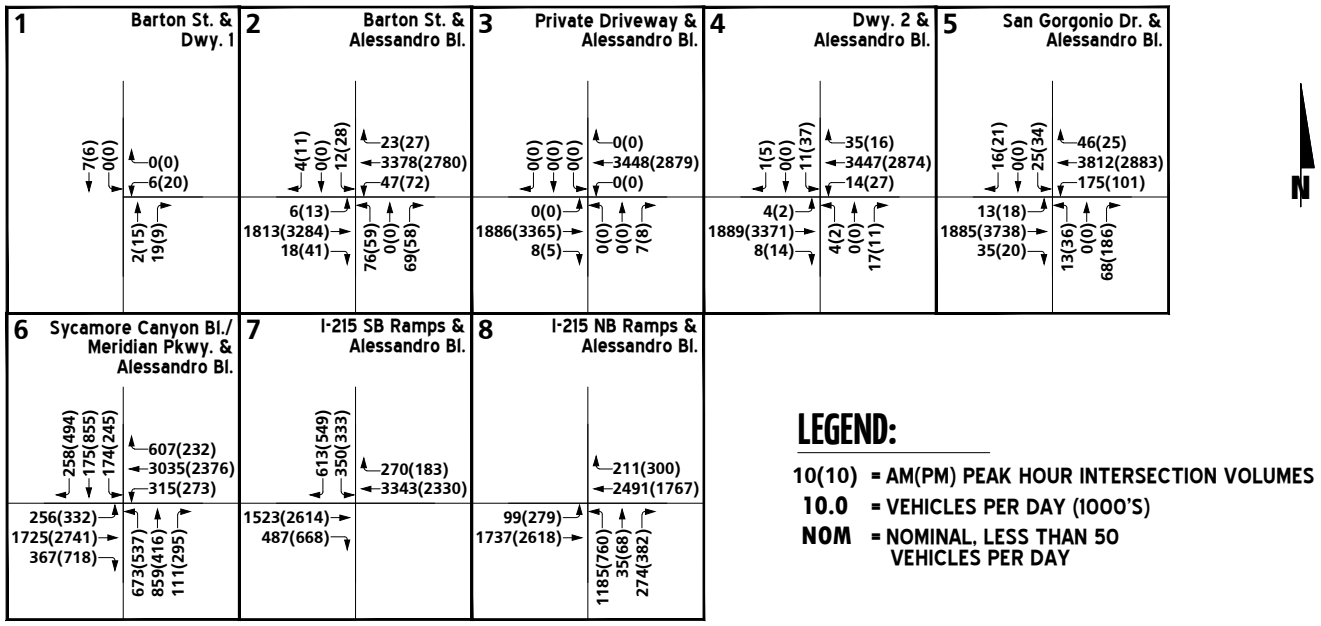
SYCAMORE HILLS DISTRIBUTION CENTER

Horizon Year without Project Traffic Volumes

Figure 5.12-18



12014 - vols_a.dwg



LEGEND:

10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES
10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

SYCAMORE HILLS DISTRIBUTION CENTER

Horizon Year with Project Traffic Volumes

Figure 5.12-19



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LEGEND:

- = AM PEAK HOUR
- = PM PEAK HOUR
- = LOS A-D
- = LOS E
- = LOS F
- NA = NOT AN ANALYSIS LOCATION FOR THIS SCENARIO

N

SYCAMORE HILLS DISTRIBUTION CENTER

RVA

URBAN CROSSROADS

Horizon Year without Project Summary of LOS

Figure 5.12-20

Table 5.12-22 – Intersection Analysis for Horizon Year Conditions

#	Intersection	Traffic Control[2]	2040 Without Project				2040 With Project				Jurisdiction	Deficiency?[3]
			Delay[1] (secs.)		Level of Service		Delay[1] (secs.)		Level of Service			
			AM	PM	AM	PM	AM	PM	AM	PM		
1	Barton St. & Driveway 1	**CSS**	Future Intersection				8.6	8.7	A	A	Riverside	No
2	Barton St. & Alessandro Bl.	TS	49.8	48.5	D	D	51.2	48.6	D	D	Riverside	No
3	Private Driveway & Alessandro Bl.	TS	4.9	13.2	A	B	5.0	13.4	A	B	Riverside	No
4	Driveway 2/Vista Grande Dr. & Alessandro Bl.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**	Riverside	**Yes**
5	San Gorgonio Dr. & Alessandro Bl.	TS	48.4	51.4	D	D	49.2	53.4	D	D	Riverside/JPA	No
6	Sycamore Canyon Bl. & Alessandro Bl.	TS	**213.6**	**148.5**	**F**	**F**	**213.9**	**149.0**	**F**	**F**	Riverside/JPA	**Yes**
7	I-215 SB Ramps & Alessandro Bl.	TS	23.9	27.3	C	C	27.2	30.6	C	C	Caltrans/Riverside/County	No
8	I-215 NB Ramps & Alessandro Bl.	TS	**68.7**	**58.5**	**E**	**E**	**69.5**	**59.8**	**E**	**E**	Caltrans/Riverside/County	No

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).
[1] Per the Highway Capacity Manual 6th Edition, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
[2] CSS = Cross-street Stop; TS = Traffic Signal; CSS = Improvement
[3] See Table 5.12-23 for a detailed summary of deficiencies.

Horizon Year With Project Traffic Conditions

As shown on Table 5.12-22 and illustrated on Figure 5.12-21, there are no additional study area intersections anticipated to operate at an unacceptable LOS (LOS E or worse) with the addition of Project traffic, other than those previously identified under Horizon Year Without Project conditions. The deficiencies are summarized in Table 5.12-23. As auto delay, on its own, is no longer an environmental impact pursuant to CEQA guidelines, the Project will have **no impacts** to transportation, as a result of LOS deficiency.



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LEGEND:

- = AM PEAK HOUR
- = PM PEAK HOUR
- = LOS A-D
- = LOS E
- = LOS F

N

SYCAMORE HILLS DISTRIBUTION CENTER

Horizon Year with Project Summary of LOS

Figure 5.12-21

Table 5.12-23 – Deficient Intersection Summary for Horizon Year Conditions

#	Intersection	Jurisdiction	Project % of Total Traffic		Change in Delay (secs.)		Project Trip Contribution		Deficiency? [1,2,3]
			AM	PM	AM	PM	AM	PM	
1	Barton St. & Driveway 1	Riverside	N/A	N/A	--	--	N/A	N/A	No
2	Barton St. & Alessandro Bl.	Riverside	N/A	N/A	1.4	0.1	N/A	N/A	No
3	Private Driveway & Alessandro Bl.	Riverside	N/A	N/A	0.1	0.2	N/A	N/A	No
4	Driveway 2/Vista Grande Dr. & Alessandro Bl.	Riverside	N/A	N/A	**>1.0**	**>1.0**	N/A	N/A	**Yes**
5	San Gorgonio Dr. & Alessandro Bl.	Riverside/JPA	N/A	N/A	0.8	2.0	N/A	N/A	No
6	Sycamore Canyon Bl. & Alessandro Bl.	Riverside/JPA	1.0 %	1.1%	0.3	0.5	68	80	**Yes[4]**
7	I-215 SB Ramps & Alessandro Bl.	Caltrans/Riverside/County	N/A	N/A	3.3	3.3	N/A	N/A	No
8	I-215 NB Ramps & Alessandro Bl.	Caltrans/Riverside/County	N/A	N/A	0.8	1.3	33	43	No

BOLD = Deficient Intersection
N/A = Not Applicable
[1] "For intersections within the jurisdiction of the City of Riverside, a deficiency occurs at a study area intersection when the addition of project related trips causes either peak hour LOS to degrade from acceptable (LOS A through D) to unacceptable levels (LOS E/F) or the peak hour delay to increase as follows:
- LOS A/B = By 10.0 seconds
- LOS C = By 8.0 seconds
- LOS D = By 5.0 seconds
- LOS E = By 2.0 seconds
- LOS F = By 1.0 seconds"
[2] For intersections within the jurisdiction of March JPA, if the pre-project condition is at or better than LOS D (or acceptable LOS) and the project-generated traffic causes deterioration below acceptable levels, a deficiency is deemed to occur. However, if the pre-project condition is already below LOS D (or acceptable LOS), deficiency occurs if the Project contributes more than 2% of the total traffic.
[3] For intersections within the jurisdiction of Caltrans, the County of Riverside, or City of Moreno Valley, if the pre-project condition is at or better than LOS D (or acceptable LOS) and the project-generated traffic causes deterioration below acceptable levels, a deficiency is deemed to occur. A deficiency also occurs if the Project contributes 50 or more peak hour trips to an already deficient intersection.
[4] The intersection currently built out to the General Plan ultimate cross-section and exceeds the General Plan target LOS. As such, the deficiency is unavoidable.

Traffic Signal Warrants Analysis

No study area intersections are anticipated to meet traffic signal warrants for Horizon Year (2040) without and with Project traffic conditions.

Roadway Segment Analysis

As noted previously, the City of Riverside stated roadway segment capacities are approximate figures only and are used at the General Plan level to assist in determining the roadway functional classification (number of through lanes) needed to meet future traffic demand.

Table 5.12-24 provides a summary of the Horizon Year (2040) without Project conditions roadway segment capacity analysis based on the City of Riverside Traffic Impact Analysis Preparation Guide identified previously on Table 5.12-4. As shown on Table 5.12-24, all roadway segments are anticipated to operate at an unacceptable LOS under Horizon Year (2040) without and with Project traffic conditions. As auto delay, on its own, is no longer an environmental impact pursuant

to CEQA guidelines, the Project will have **no impacts** to transportation, as a result of LOS deficiency.

Table 5.12-24 – Roadway Segment Analysis for Horizon Year Conditions

#	Roadway	Segment Limits	Roadway Section	LOS Capacity[1]	2040 NP	V/C[2]	LOS[3]	2040 WP	V/C[2]	LOS[3]	Acceptable LOS[3]
1	Alessandro Bl.	Barton St. to Private Driveway	6D	49,500	75,352	**1.52**	**F**	75,816	**1.53**	**F**	D
2		Private Driveway to Vista Grande Dr.	6D	49,500	76,860	**1.55**	**F**	77,324	**1.56**	**F**	D
3		Vista Grande Dr. to San Gorgonio Dr.	6D	49,500	84,666	**1.71**	**F**	85,818	**1.73**	**F**	D
4		San Gorgonio Dr. to Sycamore Canyon Bl.	6D	49,500	85,687	**1.73**	**F**	86,839	**1.75**	**F**	D
5		Sycamore Canyon Bl. to I-215 SB Ramps	6D	49,500	72,308	**1.46**	**F**	73,431	**1.48**	**F**	D
6		I-215 SB Ramps to I-215 NB Ramps	6D	49,500	65,293	**1.32**	**F**	65,898	**1.33**	**F**	D

[1] These maximum roadway capacities have been extracted from the following source: City of Riverside Traffic Impact Analysis Preparation Guide (Exhibit D) for each applicable roadway type. These roadway capacities are "rule of thumb" estimates for planning purposes. The LOS "E" service volumes are estimated maximum daily capacity for respective classifications. Capacity is affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian and bicycle traffic.
[2] V/C = Volume to Capacity ratio
[3] LOS = Level of Service

Off-Ramp Queuing Analysis

A queuing analysis was performed for the off-ramps at the I-215 Freeway at Alessandro Boulevard interchange to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially “spill back” onto the I-215 Freeway mainline. Queuing analysis findings are presented in Table 5.12-25 for Horizon Year (2040) without and with Project traffic conditions. It is important to note that off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline. As shown on Table 5.12-25, there are no queuing issues anticipated for Horizon Year (2040) without and with Project traffic conditions.

Table 5.12-25 – Peak Hour Freeway Off-Ramp Queuing Summary for Horizon year Conditions

Intersection	Movement	Available Stacking Distance (Feet)	2040 Without Project						2040 With Project					
			95th Percentile Queue (Feet)[3]				Acceptable?[1]		95th Percentile Queue (Feet)[3]				Acceptable?[1]	
			AM Peak Hour		PM Peak Hour		AM	PM	AM Peak Hour		PM Peak Hour		AM	PM
I-215 SB Ramps / Alessandro Bl.	SBL	525	349	[2]	281	[2]	Yes	Yes	349	[2]	281	[2]	Yes	Yes
	SBL/R	1,540	360	[2]	279	[2]	Yes	Yes	378	[2]	287	[2]	Yes	Yes
	SBR	525	341	[2]	261	[2]	Yes	Yes	360	[2]	270	[2]	Yes	Yes
I-215 NB Ramps / Alessandro Bl.	NBL	450	588	[2]	409	[2]	Yes[3]	Yes	602	[2]	453	[2]	Yes[3]	Yes
	NBL/T/R	1,345	624	[2]	446	[2]	Yes	Yes	636	[2]	490	[2]	Yes	Yes
	NBR	450	123		244		Yes	Yes	123		257		Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown in this table, where applicable.
[2] 95th percentile volume exceeds capacity; queue may be longer. Queue shown is maximum after two cycles.
[3] Although the 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-215 Freeway mainline.

Horizon Year Deficiencies

Based on each jurisdiction's deficiency criteria, the Project is anticipated to result in deficiencies at the following intersections, as the Project would contribute to the total Horizon Year (2040) with Project traffic forecasts:

- Driveway 2/Vista Grande Drive and Alessandro Boulevard (#4)
- Sycamore Canyon Boulevard and Alessandro Boulevard (#6)

The deficiencies and Project Design Consideration (Section 5.12.3) improvements consistent with E+P and Opening Year Cumulative (2023) conditions are also consistent with Horizon Year (2040) conditions.

The intersection of Sycamore Canyon Boulevard and Alessandro Boulevard is currently built out to its General Plan ultimate cross-section and exceeds the General Plan target LOS. Until additional right-of-way beyond those designated in the General Plan is obtained, there are no anticipated feasible improvements. As auto delay, on its own, is no longer an environmental impact pursuant to CEQA guidelines, the Project will have **no impacts** to transportation, as a result of LOS deficiency.

Cumulative VMT Impacts

The Project is estimated to exceed the current City of Riverside VMT per employee by 30.97% in cumulative year (2040). Given that the maximum percent reduction is 15% through feasible TDM measures, the Project cannot reduce the Project-generated VMT to below the threshold of 15% below the current City of Riverside VMT per employee. Cumulatively, the Project VMT impact is therefore considered **significant and unavoidable**.

Conclusion

The Project will not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities; cumulatively considerable potential impacts are **less than significant** and no mitigation is required.

Even with implementation of feasible TDM measures, Project VMT cannot be reduced to less than significant levels and thus, the Project's VMT would also contribute to cumulative impacts and are **considered significant and unavoidable.**

5.12.10 References

The following references were used in the preparation of this section of the DEIR:

Bicycle Master Plan	City of Riverside Bicycle Master Plan Update: Addendum. March 2012. (Available at https://www.riversideca.gov/traffic/pdf/Plan-Update.pdf)
GP 2025	City of Riverside, General Plan 2025, November 2007
GP 2025 FEIR	City of Riverside, General Plan 2025 Program Environmental Impact Report, November 2007
RCMC	City of Riverside, Municipal Code. (Available at http://www.riversideca.gov/municode/, accessed May 2020)
SCAG 2020	Southern California Association of Governments. Connect SoCal – the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy. (Available at https://www.connectsocal.org/Pages/What-Is-Connect-SoCal.aspx)
TA	Urban Crossroads, *Sycamore Hills Distribution Center prepared Traffic Operations Analysis,* June 2019. (Revised October 2020)
VMT	Urban Crossroads, *Sycamore Hills Distribution Center Vehicle Miles Travelled (VMT) Analysis*, October 2020.

5.13 Tribal Cultural Resources

Based on Appendix G of the *State CEQA Guidelines,* the analysis in the Initial Study (IS/NOP) prepared for this Project (Appendix A), and comments received during the NOP public comment period, this section evaluates potential impacts to tribal cultural resources. The analysis is based on the *Phase I and Phase II Cultural Resource Investigations for the Sycamore Hills Distribution Center Project* (September 2020, contained in Appendix E) prepared by Applied Earthworks (AE), a Traditional Cultural Landscape (TCL) Study prepared by AE (February 2021; confidential), a Traditional Cultural Property (TCP) Study prepared by AE (March 2021; confidential), as well as the City's consultation with Native American Tribes.

5.13.1 Setting

Environmental Setting

As discussed in Section 5.4 Cultural Resources, the Project is within the northeastern part of the geologically complex Peninsular Ranges geomorphic province. The Peninsular Ranges are bounded to the east by the Colorado Desert and range in width from 30 to 100 miles. The Project is approximately 3.5 miles northeast of Lake Mathews and 1.5 miles southwest of Box Springs Mountain, within the central part of the Perris Block, a relatively stable rectangular structural unit positioned between the Elsinore and San Jacinto fault zones.

The geology in the vicinity of the proposed Project consists largely of Cretaceous plutonic rocks that are part of the composite Peninsular Ranges batholith. East of the proposed Project, very old alluvial fan deposits flank the west side of the San Jacinto Valley and form a low relief and nearly level plain, which are likely derived from the Val Verde Pluton and the Box Spring Mountains. Similarly, to the west is a very old alluvial fan forming the eastern side of the Santa Ana Valley that is likely also derived from the Val Verde Pluton and the western slopes of the Box Spring Mountains.

Much of the Project consists of biotite-hornblende tonalite, the principal plutonic rock type of the Val Verde Pluton. The tonalite is a relatively weathered, homogeneous, gray granitic rock that is mostly massive and occasionally foliated.

Soils within the Project, as mapped by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), are all derived from alluvium from granitic bedrock, which is usually deeply weathered. Mapped soil series with a buried A (Ab) horizon are considered to have a higher probability of a cultural resource. None of the mapped soil series has a buried A (Ab) horizon; therefore, intact and significant buried cultural deposits are unlikely. The majority of the Project site consists of Ramona and Fallbrook soils. Ramona fine sandy loams are nearly level to moderately steep on terraces and fans at elevations of 250 to 3,500 feet AMSL. Fallbrook soils are gently rolling to very steep on round hills at elevations of 200 to 3,000 feet AMSL or as high as 3,500 feet AMSL on south-facing slopes. Bedrock outcrops are common in some areas. As the climate of the region is largely determined by topographic features, climate, in turn, largely dictates the character of the biotic environment exploited by native populations. The climate of the Project is characterized as Mediterranean, with hot, dry summers and cool,

moist winters. It has a semi-arid precipitation regime; significant changes in temperature and moisture occur based on elevation and exposure, particularly in the nearby mountains. The average annual rainfall ranges from 9 to 16 inches and the mean annual temperature varies from 59 to 65 °F.

Cultural Resources Investigation and Known Historical Resources

According to 36 CFR § 800.16(d), the Area of Potential Effect (APE) is the geographic area within which a federal undertaking may directly or indirectly cause alterations to the character or use of historic properties. The Project qualifies as a federal undertaking because it is under direct or indirect jurisdiction of a federal agency (36 CFR § 800.16[y]). The APE for this Project is limited to all proposed features within the 48.64-acre vacant Project area investigated by AE for CEQA purposes, and belowground where ground disturbance may reach a maximum depth of 16 feet below the current grade within the APE. For the purposes of documenting all potential archaeological resources, the APE is part of a larger Study Area, which is comprised of the APE and a 1-mile-radius of the APE.

Archival and published reports suggest the Project area is situated where the traditional use territories of the Serrano, Cahuilla, Luiseño, and Gabrielino overlap. All of these cultural groups spoke languages belonging to the Takic branch of the Shoshonean family, a part of the larger Uto-Aztecan language stock. Specific aspects of Serrano, Cahuilla, Luiseño, and Gabrielino ethnography and ethnohistory are explored in section 5.4.1 (AE 2020b).

A California Native American Heritage Commission (NAHC) Sacred Lands File search indicated the presence of Native American cultural sites within the immediate Project area. The NAHC recommended that other sources of cultural resources be contacted to solicit any information pertinent to cultural or tribal resources within the Project site, and they provided a list of regional Native American tribal representatives who may have knowledge of cultural resources within the Project area. Tribal communities listed on the NAHC list included the Agua Caliente Band of Cahuilla Indians, Augustine Band of Cahuilla Mission Indians, Cabazon Band of Cahuilla Mission Indians, Cahuilla Band of Indians, Los Coyotes Band of Cahuilla and Cupeño Indians, Morongo Band of Mission Indians, Ramona Band of Cahuilla Indians, Santa Rosa Band of Cahuilla Indians, Soboba Band of Luiseño Indians, and the Torres-Martinez Desert Cahuilla Indians. All of these tribes were contacted by AE on October 2, 2018. (AE 2020b)

Review of previously recorded resources and results of a pedestrian field survey by AE archaeologists revealed findings of tribal cultural resources present on the Project site.

On September 19, 2018, AE archaeologists completed an intensive pedestrian surface survey for cultural resources in the 48.64-acre Project site. All of the prehistoric archaeological resources documented within a 1-mile radius of the Project site are bedrock milling sites (some with ground stone, such as manos, and other lithics). The Project site contains a total seven bedrock milling sites. These sites are comprised of granitic boulders with multiple milling slicks, described in detail below. Four of the sites (CA-RIV-2486, CA-RIV-2487, CA-RIV-2488, and CA-RIV-2489) were previously recorded, and AE identified and documented three more archaeological milling sites (CA-RIV-11772, CA-RIV-11770, and CA-RIV-11769) within the Project site.

During the September 2018 pedestrian survey, AE survey personnel attempted to re-identify any cultural resources within the Project's APE, which included the entire approximately 48.64 acres of land constituting the Project site. All areas likely to contain or exhibit archaeologically or historically sensitive cultural resources were inspected carefully to ensure that visible, potentially significant cultural resources were discovered and documented (AE 2020b). In addition to the four previously documented sites, AE identified another three sites. AE evaluated each identified archaeological resource within the Project site for significance and eligibility for listing in the National Register of Historic Places (NRHP) and/or the California Register of Historic Resources (CRHR) and recommended that all seven sites are individually ineligible for listing in the NRHP (see section 5.13.2.1 below for listing criteria), CRHR, or as a City of Riverside Cultural Resource. (AE 2020b).

CA-RIV-2486 (33-002486)

AE found CA-RIV-2486 to be a 58 by 35-meter bedrock milling site consisting of two granitic boulder outcrops with a total of 10 milling slicks. The two outcrops are located approximately 30 meters north-south from each other. At the time of the original 1982 recordation, CA-RIV-2486 included two granitic boulders with seven grinding slicks. When the site was revisited in 2008 for an archaeological site relocation survey for the City's Burn Training Project, a total of eight slicks on three granitic boulders within the two outcrops was recorded. This current update identified a total of eight milling slicks on one of the granitic boulder outcrops (the 6 original slicks and 2 new slicks) and two on the other granitic boulder outcrop. The west side of the site is situated flush with the ground surface and the location of milling slicks 6 and 7 appear to have been exposed by rain. Weed abatement activities in the area surrounding the bedrock milling outcrops have removed the native plant communities that would have been found prehistorically. Further, the site's integrity has been further impaired by recreational hiking/biking trail use which has disturbed the native sediments in the immediate area south of the bedrock milling features.

CA-RIV-2487 (33-002487)

AE documented another three milling slicks, for a total of eight milling slicks, across three granitic boulder outcrops approximately 24 meters southwest of the presumed southern boundary of CA-RIV-2486. The three rock outcrops are approximately 19 and 22 meters apart from north to south. At the time of its 1982 recordation, CA-RIV-2487 included a single granitic boulder with five grinding slicks. AE's current update identified that five milling slicks are on one granitic boulder outcrop, two of the milling slicks are on the second granitic boulder outcrop, and one of the milling slicks is on the third granitic boulder outcrop at this 75 by 31-meter bedrock milling site. To the east and north the terrain is relatively unaltered. Moreover, weed abatement activities in the area surrounding the bedrock milling outcrops have removed the native plant communities that would have been found prehistorically.

CA-RIV-2488 (33-002488)

CA-RIV-2488 is a 73 by 63-meter bedrock milling site consisting of four granitic boulder outcrops with a total of 17 milling slicks. This site is approximately 33 meters southeast of the presumed south boundary of CA-RIV-2486 and approximately 48 meters east-northeast of the presumed

east boundary of CA-RIV-2487. As originally recorded (McCarthy 1982c), the milling slicks are distributed in clusters across at CA-RIV-2488. Although the site retains integrity of location, the integrity of setting, feeling, and association has been impaired by industrial development to the west and south. To the east and north the terrain is relatively unaltered. Furthermore, weed abatement activities have removed the native plant communities and disturbed the ground surface of the area surrounding the bedrock milling feature.

CA-RIV-2489 (33-002489)

CA-RIV-2489 is a is a 21 by 17-meter bedrock milling site approximately 59 meters east-southeast of the presumed east boundary of CA-RIV-2488. As originally recorded (McCarthy 1982d), this site consists of one granitic boulder outcrop with a total of three milling slicks. Although the site retains integrity of location, the integrity of setting, feeling, and association has been impaired by industrial development to the west and south. To the east and north the terrain is relatively unaltered. Furthermore, weed abatement activities have removed the native plant communities and disturbed the ground surface of the area surrounding the bedrock milling feature.

CA-RIV-11772 (33-028956)

CA-RIV-11772 is a is an 18 by 25-meter bedrock milling site approximately 80 meters southeast of the south tip of CA-RIV-2487. This site consists of two granitic boulder outcrops six meters apart with a total of four milling slicks (3 on one granitic boulder outcrop and 1 on the second granitic boulder outcrop). The two rock outcrops are aligned east-west from each other. Although the site retains integrity of location, the integrity of setting, feeling, and association has been impaired by industrial development to the west and south. To the east and north, the terrain is relatively unaltered. Further, weed abatement activities have removed the native plant communities and disturbed the ground surface of the area surrounding the bedrock milling feature.

CA-RIV-11770 (33-028955)

CA-RIV-11770 is a 19 by 16.5-meter bedrock milling site consisting of one granitic boulder outcrop with a total of two milling slicks. CA-RIV-11770 is approximately 28 meters southwest of the presumed west boundary of CA-RIV-11769 and approximately 99 meters west of the presumed west boundary of CA-RIV-2487. Some previous disturbance is evident and modern refuse is present in the area. In addition, soils around the boulder appeared somewhat loose and the boulder may not be in its original location. The integrity of setting, feeling, and association has been impaired by industrial development to the west and south. To the east and north the terrain is relatively unaltered. In addition, weed abatement activities have removed the native plant communities and disturbed the ground surface of the area surrounding the bedrock milling feature. Further, the site's integrity has been further impaired by use of the recreational hiking/biking trail to the south and a dirt road to the west, which has disturbed the native sediments in the immediate area of the site.

CA-RIV-11769 (33-028954)

CA-RIV-11769 is another bedrock milling site approximately 28 meters northeast of the presumed south boundary of CA-RIV-11770, approximately 75 meters northwest of the presumed north boundary of CA-RIV-2487, and approximately 79 meters southwest of the presumed west boundary of CA-RIV-2486. This site is 21 by 21 meters in size and consists of one granitic boulder outcrop with one milling slick. Although the site retains integrity of location, the integrity of setting, feeling, and association has been impaired by industrial development to the west and south. To the east and north, the terrain is relatively unaltered. In addition, weed abatement activities have removed the native plant communities and disturbed the ground surface area surrounding the bedrock milling feature.

Bedrock milling features likely represent one of an unknown number of site types that made up the subsistence-based procurement and processing ensemble. Bedrock milling sites were used in the collection and processing of local resources, and related tasks may have included the gathering of small seeds, grasses, and possibly small game for processing on the bedrock features and ground stone metates using hand grinding or pounding stones. Lithic-reduction activities to produce tools used in food gathering and processing and the packaging of processed and unprocessed materials for transport back to the residential site may also have been tasks integrated into the subsistence regime at bedrock milling sites. (AE 2020b)

Site distribution data suggest subsistence-based procurement and processing tasks involving bedrock milling features may have been centered on the area immediately surrounding Sycamore Canyon. Specifically, the examination of known bedrock milling sites within the two-mile-wide Study Area (comprised of the APE and a 1-mile-radius of the APE) indicates that the highest densities of outcrop features are found within a half-mile of Sycamore Canyon Creek with the highest concentrations located on the terraces that border the creek. While the current Project is located along a secondary drainage, it is still within a half-mile of Sycamore Canyon Creek. The majority of the grinding slicks at the seven sites within the Project site exhibit moderate-to-heavy polish, which implies long-term and/or repeated use of the bedrock milling features, unlike other bedrock milling sites elsewhere which exhibit signs of minimal use. The locations of the seven sites within a half-mile of Sycamore Canyon Creek suggest the processing activities that occurred at these loci were an integral part of a larger subsistence regime centered on the canyon. Additionally, the area may have also served residential, economic, and ceremonial functions as well. While industrial development to the west and south of the sites has somewhat impacted the integrity of setting, feeling, and association of the seven resources, the area to the north and east is open vacant land. (AE 2020b)

A Tribal Cultural Landscape (TCL) Study was prepared by AE (February 2021, confidential), as requested by the Soboba Band of Luiseño Indians, and a Tribal Cultural Resource and Traditional Cultural Property (TCR/TCP) Study, prepared by AE (March 2021, confidential), as requested by the Pechanga Band of Luiseño Indians. The reports indicated that both the TCL and TCR/TCP identified in the respective studies are potentially eligible for listing in the National Register.

5.13.2 Related Regulations

5.13.2.1 Federal Regulations

Native American Involvement

Several federal and state laws address Native American involvement in the development review process. The most notable of these are the federal Native American Graves Protection and Repatriation Act (1990) and the California Native American Graves Protection and Repatriation Act (2001). These acts ensure that Native American human remains and cultural items be treated with respect and dignity.

NRHP Listing

For a property to qualify for the NRHP, it must meet one of the NRHP Criteria for Evaluation by being associated with an important historic context and retaining historic integrity of those features necessary to convey its significance. It must be at least 50 years old and must meet one or more of the four NRHP criteria of historical significance (36 CFR 60):

A. associated with events that have made a significant contribution to the broad patterns of our history;
B. associated with the lives of persons significant in our past;
C. embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
D. have yielded, or may be likely to yield, information important to prehistory or history.

Traditional Cultural Properties

The *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation* provides guidance on the most effective process for identifying whether a property can quality for listing on the NRHP. The preferred sequence when evaluating historic properties is:

1. Categorize the property. A property must be classified as a district, site, building, structure, or object for inclusion in the National Register.
2. Determine which prehistoric or historic context(s) the property represents (American history, architecture, archaeology, engineering, or culture).
3. Determine whether the property is significant under the four National Register Criteria (A-D, above).
4. Determine if the property represents a type usually excluded from the National Register. If so, determine if it meets any of the Criteria Considerations.
5. Determine whether the property retains integrity.

When evaluating TCPs Bulletin 15 refers to guidance provided in the *National Register Bulletin 38: Guidelines for Evaluating and Documenting Traditional Cultural Properties*, which states that tradition is defined as “those beliefs, customs, and practices of a living community of people that

have been passed down through the generations, usually orally or through practice." Thus, a TCP "can be defined generally as one that is eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in the community's history, and (b) are important in maintaining the continuing cultural identify of the community."

Applying Bulletin 38 guidance to identify the properties eligible for listing on NRHP associated with traditional practices and that serve as TCPs normally involves gathering information from knowledgeable tribal informants. Conducting ethnographic studies concerning traditional tribal values, beliefs, worldview, and circular notions of time and space and their associated implications for the tangibility and integrity of historic places and landscapes and cultural resources is vital to develop how such places, landscapes, and resources are essential for tribe historical and geographical identity and ongoing traditional religious and cultural beliefs and practices. It is vital that lead agencies and cultural resource practitioners who are evaluating properties thought to have traditional cultural significance do so from the viewpoint of the community that attaches significance to them and be cautious not to ascribe their own belief system or values to the property or properties. Furthermore, agencies and practitioners must take into account prior evaluations, or lack thereof, when applying NRHP criteria to potential traditional properties:

> In consultation with the SHPO/THPO and any Indian tribe or Native Hawaiian organization that attaches religious and cultural significance to identified properties and guided by the Secretary's standards and guidelines for evaluation, the agency official shall apply the National Register criteria (36 CFR part 63) to properties identified within the area of potential effects that have not been previously evaluated for National Register eligibility. The passage of time, changing perceptions of significance, or incomplete prior evaluations may require the agency official to reevaluate properties previously determined eligible or ineligible. The agency official shall acknowledge that Indian tribes and Native Hawaiian organizations possess special expertise in assessing the eligibility of historic properties that may possess religious and cultural significance to them.

The NRHP and guidance bulletins do not address cultural resources that are entirely "intangible" by nature. However, many intangible resources are tied to a tangible referent and it is such attributes that give the properties their significance. Such attributes cannot be ignored in evaluating and managing historic properties; properties and their intangible attributes of significance must be considered together.

For decades, the regulatory community has struggled to find ways to apply NRHP criteria as well as NPS (National Park Service) and ACHP (Advisory Council on Historic Preservation) guidance to Native American TCLs. Complicating matters more, is that access to many of these landscapes was taken away from Native Americans many generations ago: tribes and people were relocated or components of these landscapes have been drastically altered by modern development, exploitation, or removal of natural resources, such as water. How to identify, evaluate and incorporate these landscapes into the Section 106 process is still a work in progress. The ACHP summed the situation: "The consideration of Native American traditional cultural landscapes in Section 106 review has challenged federal agencies, Indian tribes, and Native Hawaiian

organizations for some time. There has been confusion regarding what makes a place a traditional cultural landscape, whether they can be considered historic properties, and whether the size of such places influences their consideration under the National Historic Preservation Act." The California State Historic Preservation Officer (SHPO) recognizes the need to better understand and evaluate landscapes and has identified several themes that need additional research. Identification of significant themes form the basis for landscape-specific contexts. For the pre-1769 period, the SHPO has identified deficiencies in pre-contact Settlement and Subsistence Patterns; Special Adaptations and Environmental Management; Trade and Movement (e.g., trails, trade networks and nodes on trails, seasonal migration areas); and, Ideology (which includes sacred sites, petroglyphs, pictographs and intaglios).

Traditional Cultural and Ethnographic Landscapes

According to the NPS, "A cultural landscape is defined as "a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values." There are four general types of cultural landscapes, not mutually exclusive: historic sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes. The NPS Cultural Resource Management Guidelines provides guidance for management of these four broad categories:

> *Historic designed* landscapes – a landscape that was consciously designed or laid out by a landscape architect, master gardener, architect, or horticulturist according to design principles, or an amateur gardener working in a recognized style or tradition. The landscape may be associated with a significant person(s), trend, or event in landscape architecture; or illustrate an important development in the theory and practice of landscape architecture. Aesthetic values play a significant role in designed landscapes. Examples include parks, campuses, and estates.
>
> *Historic vernacular landscapes* – a landscape that evolved through use by the people whose activities or occupancy shaped that landscape. Through social or cultural attitudes of an individual, family or a community, the landscape reflects the physical, biological, and cultural character of those everyday lives. Function plays a significant role in vernacular landscapes. They can be a single property such as a farm or a collection of properties such as a district of historic farms along a river valley. Examples include rural villages, industrial complexes, and agricultural landscapes.
>
> *Historic sites* – a landscape significant for its association with a historic event, activity, or person. Examples include battlefields and president's house properties.
>
> *Ethnographic landscapes* – a landscape containing a variety of natural and cultural resources that associated people define as heritage resources. Examples are contemporary settlements, religious sacred sites and massive geological structures. Small plant communities, animals, subsistence and ceremonial grounds are often components.

Ethnographic landscapes differ from the historic landscape categories in a key way that parallels procedures for investigating and accounting for TCPs and echoes guidelines of Bulletin 38: it is the people for whom ethnographic landscapes hold value and importance who are the primary authorities on them. The NPS definition of an ethnographic landscape parallels the ACHP definition of a traditional cultural landscape. The NPS notes that:

> an ethnographic landscape is composed of "a variety of natural and cultural resources that associated people define as heritage resources. Examples are contemporary settlements, religious sacred sites and massive geological structures. Small plant communities, animals, subsistence and ceremonial grounds are often components."

Whereas the ACHP defines a TCL as:

> There are no single defining feature or set of features that comprise a traditional cultural landscape. Such places could be comprised of natural features such as mountains, caves, plateaus, and outcroppings; water courses and bodies such as rivers, streams, lakes, bays, and inlets; views and view sheds from them, including the overlook or similar locations; vegetation that contributes to its significance; and, manmade features including archaeological sites; buildings and structures; circulation features such as trails; land use patterns; evidence of cultural traditions, such as petroglyphs and evidence of burial practices; and markers or monuments, such as cairns, sleeping circles and geoglyphs.

Agencies are encouraged to identify and manage traditional cultural landscapes early in the planning process, treating them as they would TCPs. ACHP guidance also states that '… *frequently the only entities aware of these landscapes are either an Indian tribe or a Native Hawaiian organization. Since such places are often comprised of related locations across some distance and for which the connections may not be obvious to those outside of the culture that holds them significant, it stands to reason that the most appropriate entity to inform such identifications and evaluations are either Indian tribes or Native Hawaiian organizations."*

The NPS notes that cultural landscapes are a category of cultural resource that can be determined eligible for inclusion on the NRHP. Ethnographic landscapes do not depend on NRHP eligibility criteria for their existence, and importantly, are identified and defined by the cultural groups associated with them rather than by historic preservation professionals.

In a recently released guidance paper on cultural landscapes and potential adverse effects to them, the ACHP notes that "in addition to the physical, on the ground components, visual and audio aspects of place are often important to how they are defined." For example, impacts to rock art would affect the visual and physical integrity of the TCP by diminishing or destroying a key ceremonial component of the religious and ceremonial nature of the TCP.

Section 800.4(c)(1) of 36 CFR Part 800, thus, takes a central role in ethnographic landscape identification, NRHP eligibility evaluations, and assessment of potential adverse effects, as it requires acknowledgment on the part of agencies "that Indian tribes and Native Hawaiian organizations possess special expertise in assessing the eligibility of historic properties that may possess religious and cultural significance to them." According to the ACHP:

There are very different views [between Federal agencies and Native American tribes] on the treatment of effects to traditional cultural landscapes. Non-native people tend to think in a linear fashion while native peoples tend to think cyclically. This difference in world view affects not only whether or not the significance of sacred places is understood but also how such places should be treated. These places are part of living communities and are their actual history.

Only tribal descendants can assign significance to the nature of the space and place, within the relationship of culture and belief systems to the environment. Cultural landscapes within the NPS are defined as a category of cultural resource that can be determined eligible for inclusion in the NRHP. Ethnographic landscapes within the NPS context are broader, do not depend on NRHP eligibility criteria for their existence, and importantly, are identified and defined by the cultural groups associated with them rather than by historic preservation professionals.

5.13.2.2 State Regulations

CRHR Listing

Discretionary City approval is required for Project development to proceed and is therefore, applicable to the procedures and policies of the CEQA, as amended, regarding historical resources. Therefore, cultural resource management work conducted as part of the proposed Project shall comply with the CEQA Statutes and Guidelines, which directs lead agencies to first determine whether cultural resources are “historically significant” resources. A project that may result in a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment (Title 14, California Code of Regulations §15064.5[b]). The CEQA Statute and associated guidelines direct lead agencies to evaluate whether a project will have a significant impact on historical resources and provides guidance on how to manage the resources. Generally, a cultural resource shall be considered historically significant if the resource is 45 years old or older; possesses integrity of location, design, setting, materials, workmanship, feeling, and association; and meets the requirements for listing on the CRHR under any one of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or,
4. Has yielded, or may be likely to yield, information important in prehistory or history.

The CEQA adopted similar criteria to assess eligibility for listing of historic resources on the CRHR as the NHPA. For clarification, the term “historical resources” is used in CEQA terminology as “historic properties” is used in NHPA terminology.

Senate Bill 18, California Tribal Consultation Guidelines

The State of California Governor's Office of Planning and Research developed these guidelines in order to provide guidance to cities and counties on the process for consulting with Native American tribes during the adoption or amendment of local general plans or specific plans (defined in Government Code Section 65450 *et seq.*). SB 18 requires local agencies to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process, thereby providing tribes an opportunity to participate in local land use decisions at an early planning stage. SB 18 does not apply in this case because the Project does not propose any amendments to the GP 2025 or Sycamore Canyon Business Park Specific Plan, as the Project is consistent with the General Plan, Specific Plan, and zoning.

Assembly Bill 52, Impacts to Tribal Cultural Resources

AB 52 adds a new requirement to CEQA regarding tribal cultural resources. PRC Section 20184.2 now establishes that a project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment. To help determine whether a project may have such an effect, PRC Section 21080.3.1 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 Project. That consultation must take place prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project. As a result of AB 52, the following must take place: 1) prescribed notification and response timelines; 2) consultation on alternatives, resource identification, significance determinations, impact evaluation, and mitigation measures; and 3) documentation of all consultation efforts to support CEQA findings.

Under AB 52, if a lead agency determines that a project may cause a substantial adverse change to a TCR, the lead agency must consider measures to mitigate that impact. PRC Section 21074 provides a definition of tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe." In brief, in order to be considered a TCR, 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 supported by substantial evidence, to treat as a TCR. In the latter instance, the lead agency must determine that the resource meets the criteria for listing in the state register of historic resources or City Designated Cultural Resource. In applying those criteria, a lead agency shall consider the value of the resource to the tribe.

Assembly Bill 52 Consultation Process

The Project requires discretionary review by the City of Riverside; therefore, notification of Native American tribes in the vicinity of the Project site was required for this Project under Assembly Bill (AB) 52. Pursuant to AB 52 consultation, the City sent letters on October 18, 2019 to the nine (9) tribes who identified their affiliation with the area requesting for information on the Project site and government-to-government consultation. Five Tribes requested actual government-to-government consultation: the Morongo Band of Mission Indians, the Rincon Band of Luiseño Indians, the Pechanga Band of Luiseño Indians, the Agua Caliente Band of Cahuilla Indians, and

the Soboba Band of Luiseño Indians. As noted on Table 5.13-1 – AB 52 Response Log, other tribes did request tribal monitors on site during ground disturbance.

Table 5.13-1 – AB 52 Response Log

Native American Tribe (Individual Responding)	Comment
Morongo Band of Mission Indians	• In a letter dated October 22, 2019, the Tribe indicated its office would like to initiate government-to-government consultation. • The Tribe requested a search be conducted at the appropriate California Historical Resources Information Center (CHRIS) and for copies of the search reports for the Tribe to compare with their records to begin consultation. • The City consulted with the Tribe through January 2020. • The Tribe requested to be included in monitoring activities. • Consultation with the Tribe concluded on January 22, 2020.
Rincon Band of Luiseño Indians	• In a letter dated October 25, 2019, the Tribe requested consultation to learn more about the Project and any potential impacts to cultural resources. • The Tribe requested a copy of the archaeological record search and assessment. • The City consulted with the Tribe including multiple virtual consultation meetings and email updates. Consultation closed October 7, 2020. • The Tribe has requested to remain informed on the process.
Pechanga Band of Luiseño Indians	• In a letter dated November 4, 2019, the Tribe indicated the Tribe intends to assist the City in identifying potential tribal cultural resources. • In an additional letter dated February 14, 2020, the Tribe formally requested government-to-government consultation. • The City consulted with the Tribe including multiple virtual consultation and email updates from December 2019 through April 2021. • The Tribe requested an EIR and Tribal Cultural Resource and Traditional Cultural Property (TCR/TCP) Study be prepared. • A TCR/TCP Study was prepared (confidential). • The Tribe accepted the EIR Mitigation Measures on April 29, 2021. • Consultation with the Tribe remains open at time of publishing this DEIR.
Agua Caliente Band of Cahuilla Indians	• In a letter dated November 18, 2019, the Tribe requested formal government-to-government consultation under AB 52. • The Tribe requested a cultural resources inventory of the Project area and copies of any cultural resource documentation generated in connection with the Project. • In an additional letter dated January 27, 2020, the Tribe requested formal government consultation under Section 106 of the National Historic Preservation Act with the lead agency. • The City consulted with the Tribe including virtual consultation meetings and email updates. • The Tribe requested monitoring be conducted. • Consultation with the Tribe concluded August 31, 2020.

Native American Tribe (Individual Responding)	Comment
Soboba Band of Luiseño Indians	• In a letter dated November 18, 2019, the Tribe requested to initiate formal consultation with the City. • In an additional letter dated December 24, 2019, the Tribe indicated the Project area falls within what the Tribe considers to be a Traditional Cultural Landscape (TCL) and defined as a Tribal Cultural Resource (TCR) as defined under AB 52. • The City consulted with the Tribe including multiple virtual consultation meetings and email updates from December 2019 through April 2021. • The Tribe requested an EIR, a City Historic District Study, and a TCL Study be prepared. • A TCL Study was prepared (confidential). • Consultation with the Tribe remains open at time of publishing this DEIR.
San Manuel Band of Mission Indians	• The Tribe declined the opportunity to consult via letter dated October 24, 2019.
Gabrieleño Band of Mission Indians - Kizh Nation	• The Tribe did not respond.
Cahuilla Band of Indians	• The Tribe did not respond to the City's letter regarding consultation; however, the Tribe responded to AE during the Native American Consultation aspect of the Phase I and Phase II Cultural Resources Investigations report, which occurred outside of the AB 52 process. The Tribe requested the consultant include monitoring as part of their recommendation.
San Gabriel Band of Mission Indians	• The Tribe did not respond.

5.13.2.3 Local Regulations

City of Riverside General Plan 2025

The Historic Preservation Element of the General Plan 2025 contains policies related to the historic and prehistoric cultural resources in the City of Riverside (City). The following policies of the Historic Preservation Element would apply to the Project:

Objective HP-1: To use historic preservation principles as an equal component in the planning and development process.

> **Policy HP-1.3:** The City shall protect sites of archaeological and paleontological significance and ensure compliance with all applicable State and federal cultural resources protection and management laws in its planning and project review process.

Objective HP-2: To continue an active program to identify, interpret and designate the City's cultural resources.

> **Policy HP-2.1:** The City shall actively pursue a comprehensive program to document and preserve historic buildings, structures, districts, sites (including archaeological sites), objects, landscapes, and natural resources.

Policy HP-2.3: The City shall provide information to citizens, and the building community about what to do upon the discovery of archaeological resources and burial sites, as well as, the treatment, preservation, and repatriation of such resources.

Objective HP-4: To fully integrate the consideration of cultural resources as a major aspect of the City's planning, permitting, and development activities.

Policy HP-4.3: The City shall work with the appropriate tribe to identify and address, in a culturally appropriate manner, cultural resources and tribal sacred sites through the development review process.

Objective HP-7: To encourage both public and private stewardship of the City's cultural resources.

Policy HP-7.4: The City shall promote the preservation of cultural resources controlled by other governmental agencies, including those related to federal, state, county, school district, and other agencies.

Riverside Municipal Code

Title 20 of the Riverside Municipal Code (RMC) is the primary body of local historic preservation laws. The purpose of Title 20 is to promote the public health, safety, and general welfare by providing for the identification, protection, enhancement, perpetuation and use of improvements, buildings, structures, signs, objects, features, sites, places, areas, districts, neighborhoods, streets, works of art, natural features, and significant permanent landscaping having special historical, archaeological, cultural, architectural, community, aesthetic, or artistic value in the City. Title 20 establishes procedures for preserving, protecting, and designating significant cultural resources should the resource be considered a historic/cultural resource.

Chapter 20.50 defines eligible cultural resources as:

A cultural resource or historic district which has been determined by the Historic Preservation Officer or Qualified Designee, Board, or City Council to meet the City's designation criteria pursuant to a survey prepared by a professional meeting the Secretary of the Interior's standards which either documents the resource, records the resource on the State Department of Parks and Recreation survey forms or has been so designated by the California State Historic Preservation Officer.

Applications for eligible cultural resources are reviewed by the City's Cultural Heritage Board and ultimately approved by City Council. Further, in accordance with Title 20, a Certificate of Appropriateness is required to alter, demolish or relocate properties that are designated or determined eligible for designation as a City Cultural Resource. A Certificate of Appropriateness is also required for new construction within historic districts and neighborhood conservation areas. The Project does not meet these criteria, and as such, a Certificate of Appropriateness is not required for this Project.

Chapter 20.50 defines a landmark as:

> *Any Improvement or Natural Feature that is an exceptional example of a historical, archaeological, cultural, architectural, community, aesthetic or artistic heritage of the City, retains a high degree of integrity, and meets one or more of the following criteria:*
>
> 1. *Exemplifies or reflects special elements of the City's cultural, social, economic, political, aesthetic, engineering, architectural, or natural history;*
> 2. *Is identified with persons or events significant in local, state, or national history;*
> 3. *Embodies distinctive characteristics of a style, type, period, or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship;*
> 4. *Represents the work of a notable builder, designer, or architect, or important creative individual;*
> 5. *Embodies elements that possess high artistic values or represents a significant structural or architectural achievement or innovation;*
> 6. *Reflects significant geographical patterns, including those associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of park or community planning, or cultural landscape;*
> 7. *Is one of the last remaining examples in the City, region, State, or nation possessing distinguishing characteristics of an architectural or historical type or specimen; or*
> 8. *Has yielded or may be likely to yield, information important in history or prehistory.*

An Improvement or Natural Feature meeting one or more of the above criteria, yet not having the high degree of integrity to qualify as a Landmark, may qualify as a Structure or Resource of Merit (see subsection below).

An Improvement or Natural Feature meeting one or more of the above criteria, yet not formally designated as a Landmark by the City Council, may be an eligible Landmark.

Chapter 20.50 defines a Structure or Resource of Merit as:

> *Any Improvement or Natural Feature which contributes to the broader understanding of the historical, archaeological, cultural, architectural, community, aesthetic, or artistic heritage of the City, retains sufficient integrity, and:*
>
> 1. *Has a unique location or singular physical characteristics or is a view or vista representing an established and familiar visual feature of a neighborhood community or of the City;*
> 2. *Is an example of a type of building which was once common but is now rare in its neighborhood, community or area;*
> 3. *Is connected with a business or use which was once common but is now rare;*

4. *A Cultural Resource that could be eligible under Landmark Criteria no longer exhibiting a high level of integrity, however, retaining sufficient integrity to convey significance under one or more of the Landmark Criteria;*
5. *Has yielded or may be likely to yield, information important in history or prehistory; or*
6. *Is an improvement or resource that no longer exhibits the high degree of integrity sufficient for Landmark designation, yet still retains sufficient integrity under one or more of the Landmark criteria to convey cultural resource significance as a Structure or Resource of Merit (Ord. 7248 §5, 2014; Ord. 7206 §24, 2013; Ord. 7108 §1, 2010).*

Chapter 20.50 defines a Historic District as:

1. *A concentration, linkage, or continuity of cultural resources, where at least fifty percent of the structures or elements retain significant historic integrity (a 'geographic Historic District'), or*
2. *A thematically related grouping of cultural resources which contribute to each other and are unified aesthetically by plan or physical development, and which have been designated or determined eligible for designation as a historic district by the Historic Preservation Officer, Board, or City Council, or is listed in the National Register of Historic Places or the California Register of Historic Resources, or is a California Historical Landmark or a California Point of Historical Interest (a 'thematic Historic District').*

In addition to either 1 or 2 above, the area also:

3. *Exemplifies or reflects special elements of the City's cultural, social, economic, political, aesthetic, engineering, architectural, or natural history;*
4. *Is identified with persons or events significant in local, State, or national history;*
5. *Embodies distinctive characteristics of a style, type, period, or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship;*
6. *Represents the work of notable builders, designers, or architects;*
7. *Embodies a collection of elements of architectural design, detail, materials or craftsmanship that represent a significant structural or architectural achievement or innovation;*
8. *Reflects significant geographical patterns, including those associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of park or community planning;*
9. *Conveys a sense of historic and architectural cohesiveness through its design, setting, materials, workmanship or association; or*

10. Has yielded or may be likely to yield, information important in history or prehistory.

Sycamore Canyon Business Park Specific Plan

The Project site is located within the *Sycamore Canyon Business Park Specific Plan* (SCBPSP) area. Originally adopted in 1984, the SCBPSP stipulates the development of a planned industrial park consisting of approximately 920 acres of industrial and commercial uses within a 1,400-acre Specific Plan area. The SCBPSP calls for a multipurpose use of the area that includes industrial, industrial support, retail business and offices, and open space. The Project site is designated "Industrial" within the Specific Plan. Since its approval, the Specific Plan has been subject to a number of amendments.

5.13.3 Project Design Considerations

The Project site contains a total of seven milling sites, containing a total of 14 bedrock outcrops. Seven of these bedrock outcrops are located in the western portion of the Project site. These sites are comprised of granitic boulders with multiple milling slicks and are described in detail in Section 5.13.1 above, and also in Section 5.4.1 of Section 5.4 Cultural Resources.

Project design considerations have been made in efforts to minimize and/or avoid potential impacts to the tribal cultural resources identified on site. Figure 3.0-8 Tentative Parcel Map and Figure 3.0-9 Site Plan, in Section 3.0 Project Description, provide visual references for the locations of Project parcels and Project features (i.e., the proposed warehouse buildings) described below. The Project, as described below, has been designed in order to be least impactful to tribal cultural resources.

There are 14 bedrock outcrops with milling features located on Parcel 2 and Parcel C. The Project has been designed to minimize the removal of these resources to the greatest extent possible, while accommodating the construction of Building B and associated parking, and the trailhead parking lot. No bedrock outcrops with milling features, or other cultural resources, were identified that would require removal for the construction of Building A or associated parking.

These Project design considerations include the following:

- Car and vanpool parking spaces along the west side of Building B has been designed to avoid and preserve the single bedrock outcrop and a total of two milling slicks that comprise feature CA-RIV-11770.
- The detention basin area at the southeast side of Building B has been designed to avoid and preserve a total of two bedrock outcrops with a total of three milling slicks that comprise CA-RIV-11772.
- The northeast side of Building B is angled and the parking along the northeast portion of Building B has been designed to avoid two of four bedrock outcrops and three of 17 milling slicks that comprise feature CA-RIV-2488.

- The proposed trailhead parking lot (Parcel C) has been designed with a curved drive aisle and parking along the northern portion of Building B has been designed to avoid and preserve two bedrock outcrops and 10 milling slicks that comprise feature CA-RIV-2486.
- The Parcel Map has been designed to include one bedrock outcrop and a total of three milling slicks that comprise feature CA-RIV-2489 within the conservation area (Parcel A), which will be avoided and preserved.

In summary, a total of eight out of fourteen bedrock outcrops, 22 of 36 milling slicks, and four of seven complete milling sites will be avoided and preserved.

5.13.4 Methodology

Potential impacts on tribal cultural resources are analyzed based on the potential for the Project to impact any tribal cultural resources during construction or operation. The significance of a tribal cultural resource and subsequent significance of any impact is determined by, among other things, consideration of whether or not that resource has heritage value to California Native Americans. Further, this impact analysis is also based on consultations with the interested tribe leaders.

As previously stated, review of previously recorded resources and results of a pedestrian field survey by AE archaeologists revealed findings of tribal cultural resources present on the Project site. The Project requires discretionary review by the City of Riverside; therefore, notification of Native American tribes in the vicinity of the Project site was required for this Project under AB 52.

On October 18, 2019, the City of Riverside sent out AB 52 consultation notices to nine Native American tribes. The following tribes requested to consult with the City pursuant to AB 52:

- Morongo Band of Mission Indians
- Agua Caliente Band of Cahuilla Indians
- Pechanga Band of Luiseño Indians
- Rincon Band of Luiseño Indians
- Soboba Band of Luiseño Indians

The discussion of TCRs is based on consultations with interested Native American tribal leaders and on the results of the TCR/TCP Study for the Pechanga Tribe and the TCL Study for the Soboba Tribe. In an effort to prevent vandalism or other potential negative impacts of the resources discussed and mapped in the studies, the studies are confidential and will not to be made publicly available but will remain as part of the City's internal administrative record. The TCL study was requested by Soboba as a result of consultation, as was the TCR/TCP study by Pechanga.

Traditional Cultural Landscape Approach

"Cultural landscape" refers broadly to culturally constructed space, the creation of meaningful places, and the manifestations of these interactions through time. It not only includes natural

resource distributions and the relationship of human groups to those resources, but also how natural resources and landmarks are incorporated into the cultural landscape as meaningful places to the people who lived there. Places are perceived, experienced, contextualized, and given meaning by people and their actions and these actions are both constrained and enabled by the natural and cultural resources composing the landscape. The cultural landscape is therefore, created by human activity and structured by the distribution of resources on the land and the cultural perceptions of human relationships to those resources.

Cultural landscapes may be divided into three basic dimensions: formal, historical, and relational. The lines among the dimensions are often blurred, especially for locations remembered within the creation stories or events of the first people, and it is not uncommon for a place to demonstrate qualities of all three.

- *The formal dimension of the cultural landscape is the natural or physical dimension attributed by tangible characteristics and properties* such as the material correlates of a site, landscape topography, hydrology, and vegetation. Archaeological analysis tends to focus on this dimension because it is tangible, subject to empirical observation, and quantifiable, leading to the identification of patterns that may explain traits in human behavior.
- *The historical dimension is what has happened on and with a landscape through time*—the sequential associations among places, resources, and communities. It is embedded within the transformation of natural to cultural landscape and is encapsulated in oral history, song, and memory. This dimension survives in the collective memory of Native Americans, as well as in the ethnographic and ethnohistoric records.
- *The relational dimension is what links material and conceptual realities*—the social and symbolic connections that make landscapes meaningful. It draws from the interplay among humans, their physical environment, and the intangible qualities (e.g., social, behavioral, and symbolic meanings) woven into the landscape. The information contained within the relational dimension communicates public or private information, marks village territories, rights to use land, or areas of communal use, retells stories and events surrounding the creation and first peoples and is imbued with moral and spiritual symbolism, or warns of great power that should be revered or be avoided. It is captured in places, landmarks, and features on the physical landscape and is retained in the oral histories, songs, and memories of the Native people. The relational dimension is also represented at landscape features, some of which contain no clear evidence of cultural modification. Natural features, such as mountain peaks, springs, boulders, and bodies of water, may communicate symbolic information that relates to the history of the Native people, and also perpetuate moral, religious, or cautionary behaviors.

In addition to assessing cultural landscapes under the three basic dimensions listed above, NPS provides guidance for the consideration of component landscapes as well. For this study, it would be appropriate to consider assessment of *Q'axall'pah* as a component landscape.

A component landscape is physical area within the boundaries of a landscape that is listed on, or eligible for listing on, the National Register of Historic Places. It contributes to the significance of the landscape and may also be individually eligible for the National Register. A component landscape warrants individual documentation to adequately record the physical character or assemblage of related features. By using the dimension and component landscape approach when assessing TCLs, multiple layers of significance can be presented and developed to better understand the relationship of the people to the landscape.

When viewing this process through the lens of existing federal and state regulations, identification of significance of a landscape is easily comprehended as it is clear that cultural landscapes are not one dimensional. Often, cultural landscapes are examined singularly for their archaeological value, with emphasis placed on the tangible, remaining "artifacts" to identify significance. Alternatively, if significance is assessed using as many available aspects as possible, including but not limited to cultural, historical, geographical, sociological, and archaeological (the varied layers of interaction between humans and their environment), an improved understanding of cultural landscapes would emerge. Further, the discipline of archaeology should not be entirely excluded from the assessment; rather, it should be viewed as one facet of the overall whole of the importance of cultural landscapes.

Two significant issues are at odds with the Native American view of a landscape. The first relates to the need to define a specific *geographic area* or boundary. Defining landscape boundaries is difficult from a tribal perspective; however, it is necessary from a management perspective. The second problematic issue is the integrity requirement. The Luiseño and Cahuilla people, respectively, do not feel that their traditional homelands, ancestral resource gathering areas, traditional or religious areas are no longer significant, sacred, or important because of unwanted development built upon them. Tribes are affected by any development, land alteration, or destruction of unceded lands used by their ancestors for resource procurement, associated with a traditional event, or ancestral being etc. However, these landscape scars do not reduce or remove the *feeling* or *association* that living people have with the past events or ancestral people in these geographic locations.

5.13.5 Thresholds of Significance

The City of Riverside has not established local CEQA significance thresholds as described in Section 15064.7 of the *State CEQA Guidelines*. The City of Riverside generally utilizes the CEQA significance thresholds in Appendix G ("Environmental Checklist") of the State CEQA Guidelines. The Environmental Checklist prepared by the City for the Project (see Appendix A of this document) indicates that impacts related to the Sycamore Hills Distribution Center Project may be considered potentially significant if the proposed Project:

- Would 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 that is:

- (Threshold A) 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
- (Threshold B) 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.

5.13.6 Environmental Impacts

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 that is:

- Threshold A: *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)?*
- Threshold B: *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, would the lead agency consider the significance of the resource to a California Native American tribe?*

Bedrock Milling Sites

As discussed in Section 5.4 Cultural Resources, four previously recorded archaeological sites were re-identified and three newly identified resources were documented during the 2018 survey. The 2018 report that evaluated these seven resources found that none of the resources individually appeared to meet eligibility requirements for listing on the CRHR, NRHP, or as a City Cultural Resource.

Archaeological data from the earlier work at the four previously documented sites, along with archaeological information obtained during the recent cultural resource survey and testing, indicate that each of the seven sites do not individually meet any of the criteria for listing on the NRHP (see 5.13.2.1 above) or CRHR (see 5.13.2.2 above). None of the individual sites appear to meet the criteria as a City Designated Cultural Resource and would not be considered a City Landmark as they are not individually “exceptional examples” of an archaeological resource. Furthermore, each individual site appears to also lack the data potential to individually contribute important information to the “broader understanding” of the archaeological heritage of the City. Finally, protein residue analysis conducted on bedrock milling sites approximately 1.4 miles to the northeast yielded inconclusive results regarding chronology (AE 2020b). While none of the individual sites meet any of the aforementioned eligibility criteria, as discussed in Section 5.4.4

Project Design Considerations above, the Project's site plan has been designed to avoid to the greatest extent possible, both directly and indirectly, the boulder outcrops with milling features. A total of eight out of fourteen bedrock outcrops, 22 of 36 milling slicks, and four of seven complete milling sites will be avoided and preserved.

As the preceding paragraphs discuss, the seven sites individually were not found to be eligible for listing under NRHP Criterion A-D, CRHR criterion 1-4, or as a City Cultural Resource, and impacts to these tribal cultural resources individually would not have significant impacts.

Traditional Cultural Property (TCP), Tribal Cultural Resource (TCR), and Traditional Cultural Landscape (TCL)

Pursuant to AB 52, representatives of nine Native American tribes were contacted on October 18, 2019 to initiate the consultation process. See Table 5.13-1 – AB 52 Response Log for a summary of the consultation process for all nine tribes. The following is a summary of the more extensive consultation process with the Pechanga Tribe Band of Luiseño Indians and the Soboba Band of Luiseño Indians.

The Pechanga Band of Luiseño Indians consulted with the City through multiple virtual consultation and email updates. Through consultation, the Tribe indicated that the Project area lies within *'Atáaxum* (Luiseño), and therefore the Tribe's aboriginal territory, as evidenced by the existence of cultural resources, place names, *tóota yixélval* (rock art, pictographs, petroglyphs), and an extensive '*Atáaxum* artifact record in the vicinity of the undertaking. This culturally sensitive area is affiliated with the Pechanga Band of Luiseño Indians because of the Tribe's cultural ties to this area as well as an extensive documentation of the Tribe's ancestors living in the Riverside area." Based on this history, the Tribe requested tribal monitoring be conducted, an EIR be prepared, and later requested a Traditional Cultural Property (TCP) Study be prepared. A TCP is defined as a property that is eligible for inclusion in the National Register of Historic Places (NRHP) based on its associations with the cultural practices, traditions, beliefs, lifeways, arts, crafts, or social institutions of a living community.

A TCP Study was prepared (March 2021, confidential) to identify the resources within the Project site and determine the eligibility for listing under the state and national registers of historic places. The study determined that the project site is within the general boundary of the TCP/TCR, and that the bedrock milling features on the site are collectively considered contributing features. The study also found that the TCP/TCR is potentially eligible for listing in the CRHR and NRHP under Criterion 1 (CRHR)/A (NRHP), 3/C, and 4/D and retains sufficient integrity for listing (criteria are listed in sections 5.13.2.1 and 5.13.2.2 above).

For the purpose of analysis of impacts in this EIR, and to be conservative, it is assumed that the TCP/TCR is eligible for CRHR and NRHR listing. However, based on the information included in the TCP/TCR Study, it was determined that listing of the TCP/TCR is not required as a mitigation

measure for the Project, as the Project affects a relatively small area (35.81[1] acres) of the TCP/TCR, and listing would be outside the scope of the Project.

The Soboba Band of Luiseño Indians indicated that the Project area falls within what the Tribe considers to be a Traditional Cultural Landscape (TCL) with religious and cultural significance to the Tribe, and is defined as a TCR under AB 52. The Tribe formally requested preparation of a City Historic District Study and a TCL Study. A TCL is defined as "any place in which a relationship, past or present, exists between a spatial area, resource, and an associated group of indigenous people whose cultural practices, beliefs, or identity connects them to that place. A TCL is determined by and known to a culturally related group of indigenous people with relationships to that place." The Tribe asserts that, while none of the bedrock milling sites on or adjacent to the Project site qualify *individually* as historic properties, collectively they are part of an unevaluated archaeological district and TCL. The bedrock milling sites and Sycamore Canyon are "part of a TCP known as *Q'axall'pah* (Cahuilla word for 'Quail Place') and the Cahuilla people attach specific oral histories to said landscape. These oral histories specific to this TCP are kept in the stories and song," (Soboba Tribe Formal Comments to the Phase I and Phase II Cultural Resource Investigations for the Sycamore Hills Distribution Center Project, May 20, 2020). A TCL Study was prepared (March 2021, confidential). However, a City Historic District Study, was not prepared as it was determined the TCL Study and previously completed Cultural Resources Assessment (Appendix E), were adequate to address potential impacts to tribal cultural resources found on the site.

Results of the TCL Study found that the TCL is potentially eligible for listing in the CRHR and NRHP under Criterion 1 (CRHR)/A (NRHP) and 4/D and retains sufficient integrity for listing (criteria are listed in sections 5.13.2.1 and 5.13.2.2 above).

For the purpose of analysis of impacts in this EIR, and to be conservative, it is assumed that the TCL is eligible for CRHR and NRHR listing. However, based on the information included in the TCL Study, it was determined that listing of the TCL is not required as a mitigation measure for the Project, as the Project affects a relatively small area (35.81[2] acres) of the TCL, and listing would be outside the scope of the Project.

Although the specific area or location of the TCL and TCP/TCR is confidential, for context, the TCL roughly stretches from the Box Springs area in Riverside, south into the City of Perris. The TCP/TCR is smaller in area than the TCL, but they generally overlap in their central portions. Large portions of the TCL and TCP/TCR have already been impacted with development. However, regional development has not removed or impacted the tribes' connections to these TCL and TCP/TCR.

[1] Total of Parcels 1, 2 and C, collectively the development footprint, excluding the Restricted Property/Conservation Areas
[2] Total of Parcels 1, 2 and C, collectively the development footprint, excluding the Restricted Property/Conservation Areas

The proposed Project will impact the TCL and TCP/TCR by developing two warehouse buildings and associated improvements within the overall TCL and TCP/TCR and converting vacant/undeveloped natural land to developed land. However, the Project's development footprint of 35.81 acres is a relatively small area within the larger TCP/TCR/TCL and is located on the periphery of the TCP/TCR/TCL. The Project has also been designed to avoid the majority of bedrock milling sites within the project site, preserving them in perpetuity. The number of bedrock milling sites affected by the Project (three, out of the seven located on-site) is small in relation to the other outcroppings within the much larger TCP/TCR/TCL.

Additionally, Parcels A and B within the Project encompass 12.23 acres and include onsite preserved bedrock milling sites as well as a drainage course and associated habitat that will be preserved under a conservation easement and managed in perpetuity. Therefore, this 12.23 conservation area would retain and preserve undeveloped natural land within the TCP/TCR/TCL. Therefore, the Project's impacts to the identified TCP/TCR and TCL are considered **less than significant** with the Project design considerations outlined above as well as the Project's small size and location on the periphery of the TCP/TCR/TCL. Nonetheless, mitigation measures **MM CUL-1** through **MM CUL-9**, as outlined in in Section 5.13.7 below, are required to further reduce potential impacts to tribal cultural resources, including to potentially undiscovered/unknown tribal cultural resources. Soboba and Pechanga have reviewed the proposed mitigation measures and are in agreement with them. Impacts to onsite tribal cultural resources will be **less than significant** with Project design considerations.

5.13.7 Proposed Mitigation Measures

MM CUL-1: Prior to grading permit issuance, if there are any changes to project site design and/or proposed grades, the Applicant and the City shall contact consulting tribes to provide an electronic copy of the revised plans for review. Additional consultation shall occur between the City, developer/applicant, and consulting tribes to discuss any proposed changes and review any new impacts and/or potential avoidance/preservation of the cultural resources on the project site. The City and the developer/applicant shall make all attempts to avoid and/or preserve in place as many cultural resources and paleontological resources as possible that are located on the project site if the site design and/or proposed grades should be revised. In the event of inadvertent discoveries of archaeological resources, work shall temporarily halt until agreements are executed with consulting tribe, to provide tribal monitoring for ground disturbing activities.

MM CUL-2 Archaeological Monitoring: At least 30 days prior to application for a grading permit and before any grading, excavation and/or ground disturbing activities take place, the developer/applicant shall retain a Secretary of Interior Standards qualified archaeological monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources.

1. The project archaeologist, in consultation with consulting tribes, the Developer, and the City, shall develop an Archaeological Monitoring Plan to address the details, timing, and responsibility of all archaeological and cultural activities that will occur on the project site. Details in the plan shall include:

a. Project grading and development scheduling;

b. The development of a schedule in coordination with the developer/applicant, the project archaeologist, and for designated Native American Tribal Monitors from the consulting tribes for grading, excavation, and ground-disturbing activities on the site, including the scheduling, safety requirements, duties, scope of work, and project archeologist and Native American Tribal Monitors' authority to stop and redirect grading activities;

c. The protocols and stipulations that the Applicant, tribes, and project archaeologist/paleontologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits, or nonrenewable paleontological resources that shall be subject to a cultural resources evaluation;

d. In conjunction with the Archeological Monitor(s), the Native American Monitor(s) shall have the authority to temporarily divert, redirect or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources.

e. Treatment and final disposition of any archeological and cultural and paleontological resources, sacred sites, if discovered on the project site; and

f. The scheduling and timing of the Cultural Sensitivity Training noted in mitigation measure MM-CUL-5.

MM CUL-3: Native American Monitor: Prior to issuance of grading permit, the developer/permit applicant shall engage each of the consulting tribe(s) regarding Native American Monitoring. The developer/permit applicant shall provide evidence to the City that they have reached an agreement with each of the consulting tribe(s) regarding the following:

a. The treatment of known cultural resources;

b. The treatment and final disposition of any tribal cultural resources, sacred sites, human remains or archaeological and cultural resources inadvertently discovered on the Project site;

c. Project grading, ground disturbance (including but not limited to excavation, trenching, cleaning, grubbing, tree removals, grading and trenching) and development scheduling; and

d. The designation, responsibilities, and participation of professional Tribal Monitor(s) during grading, excavation and ground disturbing activities.

If the developer/permit applicant and the consulting tribe(s) are unable to reach an agreement, the mitigation measure shall be considered satisfied if the developer/permit applicant provides sufficient documented evidence that they have made a reasonable good faith effort, as determined by the City, to reach an agreement with the consulting tribes with regards to items a-d, as listed above).

MM CUL-4 Treatment and Disposition of Cultural Resources: Treatment and Disposition of Cultural Resources: In the event that Native American cultural resources are inadvertently

discovered during the course of grading for this project, the following procedures will be carried out for treatment and disposition of the discoveries:

1. Consulting Tribes Notified: within 24 hours of discovery, the consulting tribe(s) shall be notified via email and phone. Consulting tribe(s) will be allowed access to the discovery, in order to assist with the significance evaluation.
2. Temporary Curation and Storage: During the course of construction, all discovered resources shall be temporarily curated in a secure location on site. The removal of any artifacts from the project site shall require the approval of the Consulting Tribes and all resources subject to such removal must be thoroughly inventoried with a tribal monitor from each consulting tribe to oversee the process; and
3. Treatment and Final Disposition: The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The Applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Riverside Community and Economic Development Department with evidence of same:
    a. Preservation-In-Place of the cultural resources, if feasible as determined through coordination between the project archeologist, developer/applicant, and consulting tribal monitor(s). Preservation in place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resources in perpetuity.
    b. Accommodate the process for on-site reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed, with an exception that sacred items, burial goods and Native American human remains are excluded. No cataloguing, analysis, or other studies may occur on sacred items, human remains, and grave goods. Any reburial process shall be culturally appropriate. List of contents and location of the reburial shall be included in the confidential Phase IV Report. The Phase IV report shall be prepared by the project archeologist and shall be filed with the City under a confidential cover and not subject to a Public Records Request. The Tribe(s) should be able to access these areas in the future through enforceable agreement;
    c. If reburial is not feasible, a curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79 and therefore will be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation;
    d. At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such

resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City of Riverside, Eastern Information Center, and consulting tribes.

MM CUL-5 Cultural Sensitivity Training: The Secretary of Interior Standards County certified archaeologist and Native American monitors shall attend the pre-grading meeting with the developer/permit holder's contractors to provide Cultural Sensitivity Training for all construction personnel. This shall include the procedures to be followed during ground disturbance in sensitive areas and protocols that apply in the event that unanticipated resources are discovered. Only construction personnel who have received this training can conduct construction and disturbance activities in sensitive areas. A sign-in sheet for attendees of this training shall be included in the Phase IV Monitoring Report.

MM CUL-6 Fencing of the Avoided Sites: Prior to any earthmoving activities, the current boundaries of the avoided sites (CA-RIV-11770, CA-RIV-11772, CA-RIV-2486, two milling slicks within CA-RIV-2488, and CA-RIV-2489) will be fenced and identified as an Environmental Sensitive Area (ESA). The project applicant will ensure that appropriate temporary fencing is installed i.e., orange fabric/barrier fencing) to prevent any unintentional disturbances to CA-RIV-11770, CA-RIV-11772, CA-RIV-2486, two milling slicks within CA-RIV-2488, and CA-RIV-2489 during any earthmoving activities on the project site. The fencing will be installed before clearing and grubbing and will not be removed until all earthmoving activities have been completed and the wall in Parcel 4 has been constructed. The project archaeologist and Tribal Monitor(s) will be on site to monitor the fence installation and removal and will conduct daily inspections of the fencing to make sure that it is intact and has not been breached.

If the project archaeologist and/or Tribal Monitor(s) identify a breach of the fence, i.e., removal, cut, depressed, driven over or intentionally breached in any way, all work within a 25-foot buffer shall cease and the Project Applicant, City, project archaeologist and the Monitoring Tribe(s) shall meet and confer as to the best method to repair the fencing. The person(s) responsible for the breach and the Construction Supervisor (or appropriate supervisory personnel) shall be required to retake the sensitivity training provided at the beginning of construction, in addition to any other remedies considered appropriate.

MM CUL-7 Relocation of Impacted Sites: Prior to any grading in the associated areas, the Project Applicant shall meet with the Project Archaeologist and the Consulting Tribe(s) in order to assess CA-RIV-11769, CA-RIV-2487, and two milling slicks within CA-RIV-2488 to determine the suitability for relocation to a permanent open space area. The Consulting Tribe(s) shall work with the Project Archaeologist, Project Applicant, and the grading contractor or appropriate personnel to ensure that every effort is made to relocate the Features safely and to discuss the most appropriate methods for relocation. Using professional archaeological methods, the milling slicks associated with Sites CA-RIV-11769, CA-RIV-2487, and CA-RIV-2488 shall be relocated to the planned open space area in the northern portion of the Project site. The Tribe(s) should be able to access these areas in the future through enforceable agreement. Before construction activities may resume in the affected area, any visible artifacts shall be recovered and recorded, and the features recorded using professional archaeological methods. The current Department of Parks and Recreation forms for the sites shall be updated, detailing which features were relocated, the process taken, and updated maps using sub meter GIS technology to document the new location

of each feature. The relocation information shall be included in a Phase IV Monitoring Report. The site record should clearly indicate that the Features are not in their original location and why they were relocated.

MM CUL-8 Long-Term Preservation Plan: Prior to occupancy, a Long-Term Preservation Plan (LTPP) shall be prepared among the City, Land Owner, and Consulting Tribe(s). The LTPP should include the following:

a. Description of archaeological resources
b. Documentation of resources of concern, such as high-resolution photographs or similar
c. Listing of Preservation Actions to Date
d. The determination of responsibility for care, maintenance, and guidance in the event preserved resources [CA-RIV-11770, CA-RIV-11772, CA-RIV-2486, two milling slicks within CA-RIV-2488, and CA-RIV-2489] should be vandalized or damaged. This section should also address responsibility for regular site condition assessments to determine if resources are being affected by project construction and later operations.

MM CUL-9 Controlled Grade: Sites CA-RIV-11769, CA-RIV-11770, CA-RIV-11772, CA-RIV-2486, CA-RIV-2487, CA-RIV-2488, and CA-RIV-2489 will be impacted during grading and construction activities and the soils surrounding them will be disturbed. Prior to any grading in the associated areas, the Project Applicant, the Consulting Tribes, and the City will formalize a written agreement to identify the area that will be subject to "Controlled Grading" during construction of the Project. The Pechanga Tribe, the Project Applicant, and the City will develop an exhibit that outlines the area subject to controlled grading, and that area will be highlighted on the rough grading plans, precise grading plans or other off-site improvement plans that may impact this site. "Controlled Grading" shall include, without limitation, the slow and deliberate excavation and removal of soils employing the smallest reasonable cuts in certain areas using light scrapers (for example Caterpillar 623 or 627), dozers (for example D6- D8), front end loaders, excavators, skip loaders, dump trucks, and motor graders. A controlled grading plan will be monitored by the Project Archeologist and Tribal Monitor(s) to ensure the systematic removal of the ground surface surrounding these features are monitored to allow for the identification of resources. Results of all controlled grading activities shall be included in the Phase IV monitoring report.

A STANDARD CONDITION OF APPROVAL WILL INCLUDE THE FOLLOWING – CONSISTENT WITH STATE LAW:

Discovery of Human Remains: In the event that human remains (or remains that may be human) are discovered at the Project site during grading or earthmoving, the construction contractors, Project Archaeologist, and/or designated Native American Monitor shall immediately stop all activities within 100 feet of the find. The Project proponent shall then inform the Riverside County Coroner and the City of Riverside Community & Economic Development Department immediately, and the coroner shall be permitted to examine the remains as required by California Health and Safety Code Section 7050.5(b) unless more current State law requirements are in effect at the time of the discovery. Section 7050.5 requires that excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a

Native American. If human remains are determined as those of Native American origin, the Native American Heritage Commission shall be contacted within the period specified by law (24 hours). The coroner shall contact the NAHC to determine the most likely descendant(s). The MLD shall complete his or her inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The Disposition of the remains shall be overseen by the most likely descendant(s) to determine the most appropriate means of treating the human remains and any associated grave artifacts.

The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. The County Coroner will notify the Native American Heritage Commission in accordance with California Public Resources Code 5097.98.

According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). The disposition of the remains shall be determined in consultation between the Project proponent and the MLD. In the event that the Project proponent and the MLD are in disagreement regarding the disposition of the remains, State law will apply and the median and decision process will occur with the NAHC (see Public Resources Code Section 5097.98(e) and 5097.94(k)).

5.13.8 Cumulative Environmental Effects

Similar to cultural resources, the geographic scope for cumulative impacts to tribal cultural resources is defined by the cultural setting and territory of the prehistoric and historic people who occupied the area of southern California in which the City is located. Western Riverside County was part of the territory of the Cahuilla and Luiseno people. Cumulative projects in the Project area and other development in western Riverside County could result in the progressive loss of as-yet unrecorded archaeological resources. This loss, without proper mitigation, would be an adverse cumulative impact.

Cumulative projects within the City have the potential to impact tribal cultural resources; however, to reduce impacts to significant historical, archeological, and tribal cultural resources, the City's General Plan and General Plan EIR incorporate policies and programs to protect and/or document these resources as part of the City's development review process and mitigation measures that require preparation of technical studies, coordination with native American tribes, and the presence of monitors if necessary.

As outlined in Section 5.13.6 above, the bedrock milling sites individually do not meet all of the four criteria for listing on the NRHP or the CRHR. Therefore, as none of the sites are eligible for listing, impacts to each site individually from implementation of the Project would be less than significant.

Results of the TCP Study found that the TCP/TCR is potentially eligible for listing in the CRHR and NRHP under Criterion 1 (CRHR)/A (NRHP), 3/C, and 4/D and retains sufficient integrity for listing. Similarly, the TCL Study found that the TCL is potentially eligible for listing under the CRHR and NRHP under Criterion 1 (CRHR)/A (NRHP) and 4/D and retains sufficient integrity for listing.

The studies determined that the Project site is within the general boundary of the respective TCP/TCR and TCL and the bedrock milling features on the site are considered contributing features. For the purpose of analysis of impacts in this EIR, and to be conservative, it is assumed that the TCP/TCR and TCL are eligible for CRHR and NRHR listing. However, based on the information included in the TCP/TCR and TCL Studies, it was determined that listing of the TCP/TCR and TCL are not required as a mitigation measure for the Project, as the Project affects a relatively small area (35.81[3] acres) of the TCP/TCR and TCL, and listing would be outside the scope of the Project.

The City and the Pechanga and Soboba Tribes, respectively, have agreed on mitigation measures (MM CUL-1 through MM CUL-9) for the Project in addition to the avoidance and preservation of resources outlined in Section 5.13.3 Project Design Considerations.

Although the specific area or location of the TCL and TCP/TCR is confidential, for context, the TCL roughly stretches from the Box Springs area in Riverside, south into the City of Perris. The TCP/TCR is smaller in area than the TCL, but they generally overlap in their central portions. Large portions of the TCL and TCP/TCR have already been impacted with development. However, regional development has not removed or impacted the tribes' connections to these TCL and TCP/TCR.

The proposed Project will impact the TCL and TCP/TCR by developing two warehouse buildings and associated improvements within the overall TCL and TCP/TCR and converting vacant/undeveloped natural land to developed land. However, the Project's development footprint of 35.81 acres is a relatively small area within the larger TCP/TCR/TCL and is located on the periphery of the TCP/TCR/TCL. The Project has also been designed to avoid the majority of bedrock milling sites within the project site, preserving them in perpetuity. The number of bedrock milling sites affected by the Project (three, out of the seven located on-site) is small in relation to the other outcroppings within the much larger TCP/TCR/TCL.

Additionally, Parcels A and B within the Project encompass 12.23 acres and include onsite preserved bedrock milling sites as well as a drainage course and associated habitat that will be preserved under a conservation easement and managed in perpetuity. Therefore, this 12.23 conservation area would retain and preserve undeveloped natural land within the TCP/TCR/TCL.

Finally, the Sycamore Canyon Wilderness Park is a 1,500-acre open space park and core reserve for the federally endangered, state threatened Stephens' kangaroo rat. Both the TCL and TCP/TCR encompass the entire Sycamore Canyon Wilderness Park. As an open space park and endangered species reserve, the park will not be developed and will be preserved and maintained in perpetuity. Thus, a large area of the TCL and TCP/TCR will be protected in place and would not be impacted by future development.

[3] Total of Parcels 1, 2 and C, collectively the development footprint, excluding the Restricted Property/Conservation Areas

Although the project will result in an incremental impact to the TCL and TCP/TCR, these impacts are not considered cumulative considerable based on the following reasons:

1) Individually the bedrock milling sites are not eligible for listing on the CRHR or NRHP and are not significant losses;
2) More bedrock milling sites are being avoided and preserved onsite in perpetuity than are being adversely impacted or lost (a total of eight out of fourteen bedrock outcrops, 22 of 36 milling slicks, and four of seven complete milling sites);
3) The City and the Pechanga and Soboba Tribes have agreed on mitigation measures to further reduce potential adverse impacts to known onsite tribal cultural resources (including the fencing of avoided sites, relocation of impacted sites, controlled grading, and implementation of a Long-Term Preservation Plan), and those to reduce potential adverse impacts to unknown resources (including archaeological and native American monitoring, treatment and disposition procedures, and cultural sensitivity training);
4) The Project's development footprint of 35.81 acres is a relatively small land area within a larger TCL and TCR/TCP and impacts to a small number (six) of bedrock milling slicks within a larger TCL and TCR/TCP that could potentially include up to thousands of bedrock milling slicks would not be significant;
5) In addition to there being many more resources in the area, all resources within 2 miles of the project site are bedrock milling sites, so those impacted are not unique, and many more of the same type are being preserved;
6) Onsite preservation of 12.23 acre area of undeveloped natural land protects the TCP/TCR/TCL; and
7) The City's 1,500-acre Sycamore Canyon Wilderness Park is located within the TCL and TCP/TCR and will also protect tribal cultural resources within it from future development and associated cumulative losses.

With the project designed to avoid the majority of bedrock milling sites, both directly and indirectly, and with implementation of the mitigation measures **MM CUL-1 through MM CUL-9** described above, the Project will have a less than significant cumulative impacts on tribal cultural resources. Cumulative impacts will be **less than significant with mitigation** incorporated.

5.13.9 References

The following references were used in the preparation of this section of the DEIR:

AE 2020b	Applied EarthWorks, *Phase I and Phase II Cultural Resource Investigations for the Sycamore Hills Distribution Center Project*, September 2020.

GP 2025 FPEIR	City of Riverside, *General Plan 2025 Program Environmental Impact Report* (SCH# 2004021108), certified November 2007. (Available at https://www.riversideca.gov/planning/gp2025program/)
TCP Study	Applied EarthWorks, *Sycamore Hills Traditional Cultural Property Study for the Sycamore Hills Distribution Project*, March 2021. (Confidential)
TCL Study	Applied EarthWorks, *Sycamore Hills Traditional Cultural Landscape Study for the Sycamore Hills Distribution Project*, February 2021. (Confidential)

5.14 Utilities and Service Systems

Based on Appendix G of the *State CEQA Guidelines* and comments received during the Notice of Preparation (NOP) public review comment period, and comments received during the NOP public review comment period (Appendix A), this section evaluates the Project's impacts on utilities and service systems such as water, wastewater, stormwater drainage facilities, and solid waste.

The following analysis of potential impacts is based, in part, on the Preliminary Water Quality Management Plan ([PWQMP] Appendix J) revised March 2020 and the *Report of Preliminary Deep Percolation Testing, Proposed Commercial Building, APN 263-060-022, Riverside, California* prepared by GeoMat Testing Laboratories, Inc., July 2019 (Appendix H).

5.14.1 Setting

Stormwater Drainage

The storm drain system within the City is managed and maintained by both the City and the Riverside County Flood Control and Water Conservation District (RCFCWCD). RCFCWCD is responsible for the operation and maintenance of regional flood control facilities such as dams, flood basins, levees, open channels, and regional underground storm drains. Smaller drainage facilities, consisting mostly of underground closed pipelines and storm drains located primarily in developed areas, are typically maintained by the City. The City's local facilities collect stormwater and convey it to regional facilities, including RCFCWCD facilities, the Santa Ana River, and the many arroyos located in the City. (GP 2025 FPEIR, p. 5.16-4)

The majority of stormwater flows collected within the City discharge to the Santa Ana River, which ultimately drains into the Pacific Ocean near Newport Beach. The Santa Ana River watershed is over 2,700 square miles and includes Orange County, the northwestern corner of Riverside County, the southwestern corner of San Bernardino County, and a small portion of Los Angeles County. In the City, there are 11 principal drainage areas for which Master Drainage Plans have been completed; 10 of these drainage areas eventually flow into the Santa Ana River. A Master Drainage Plan addresses the current and future drainage needs of a given community or area, usually following regional watershed limits. (GP 2025 FPEIR, pp. 5.16-3 – 5.16-4) The Project Site, however, is not located within a Master Drainage Plan area, but is located in an area where the stormwater flows to Sycamore Creek then to Reach 3 of the Santa Ana River followed by Reach 2 and 1 until reaching the Pacific Ocean (PWQMP, p. 10).

The City is located in the Santa Ana River Region, which is within the Riverside County Drainage Area Management Plan (DAMP). DAMP addresses the requirements of the municipal separate storm sewer system (MS4) permits issued to the Riverside County Co-Permittees by the Santa Ana Regional Water Quality Control Board. The City is a Permittee under the MS4 Permit, and as such, the City is required to enforce and comply with stormwater discharge requirements. (GP 2025 FPEIR, p. 5.16-4)

The existing hydrology of the Project site is shaped by the existing topography of the site as well as the size of tributary area (areas that are at a higher elevation or upland to and drain to the site) and how stormwater runoff is conveyed from the tributary area to the site (i.e. via sheet flow or in stormwater drainage pipes or channels). As outlined in Section 5.9 Hydrology and Water Quality, the existing Project site is comprised of five (5) drainage management areas (DMAs), which each drain to their respective points of discharge (POD), along the northern and eastern Project site boundary. The planned onsite storm drain system for the site will convey stormwater runoff that drains onto the site from upland areas, as well as stormwater runoff from the site itself, to existing natural drainage courses that extend north into the Sycamore Canyon Wilderness Park, and an existing low lying area that extend east to adjacent private property. As the Project's stormwater runoff is not conveyed uphill and towards Alessandro Boulevard or Barton Street, the Project site would not connect to the existing public storm drain system or require the construction of stormwater management facilities in the public right of way.

Water Services

Potable water service to the Project is provided by Western Municipal Water District (Western) (GP 2025, Figure PF-1). Urban water purveyors such as Western are required to prepare and update an Urban Water Management Plan (UWMP) every five years. Western's 2015 UWMP was adopted on June 1, 2016. The UWMP addresses water supply, water supply reliability, water shortage contingency plans, and demand management measure. Western coordinated preparation of its UWMP with its wholesale supplier, the Metropolitan Water District of Southern California (Metropolitan); however, Western's UWMP reports solely on its service area and as such is considered an "Individual UWMP." (UWMP, p.2-4)

According to its 2015 UWMP, Western has both retail and wholesale customers. One of Western's retail areas is the Riverside Retail Service Area, which includes a portion of the City of Riverside in addition to unincorporated portions of Riverside County. Fourteen local retail agencies, referred to as wholesale customers, within Western's service area currently receive, or can receive water from Western. Western serves eight of its 14 wholesale customers with water from the Colorado River, the State Water Project, and groundwater desalters. (UWMP, P.3-1)

Western serves water directly to approximately 23,500 domestic and 760 irrigation (landscaping, agricultural, and Western's sites) connections in its retail service area (approximately 95,000 persons) (UWMP, p. 3-1). Western's general district (wholesale and retail areas combined) consists of a 527–square-mile area of western Riverside County and has an estimated population of more than 860,000 people. The 2015 UWMP provides a summary of anticipated supplies and demands for the years 2010 to 2035. (UWMP, p. 3-7)

Water Supply and Demand

Western relies on three existing water sources: groundwater, imported water, and recycled water to meet its wholesale and retail demands. Planned supplies include new groundwater production and expanded recycled water use. Western obtains approximately 71 percent of its total supply through imported water sources from Metropolitan. About one-quarter of the water Western purchases from Metropolitan comes from the Colorado River Aqueduct and about three-quarters

from the State Water Project (SWP). However, SWP deliveries were dramatically reduced, leading to a greater proportion of Colorado River supplies in Metropolitan's deliveries. Western also purchases water from the City of Riverside, Riverside Highland Water Company, and the Meeks and Daley Water Company (UWMP, p. 6-2). Western's local supplies come from groundwater in the Arlington, Chino, and Murrieta basins, as well as the San Bernardino Basin Area, Western also provides recycled water supply from its own water recycling facility. Future supplies will be developed locally to increase groundwater recharge, encourage conjunctive and recycled water use, and improve the Chino desalters (UWMP, p. 6-21).

Although Western's overall historical total water demands have generally increased, demands have decreased in recent years due to the 2008 economic recession and subsequent conservation measures. Although the State is no longer in drought, the Water Board continues to develop permanent prohibitions on wasteful water use (CalGov). By year 2035, forecasted demand will increase by approximately 60 percent. At build-out (estimated sometime near year 2040), total demands on Western water supplies would be approximately 131,954 acre-feet per year (AFY) (UWMP, p. ES-4). Western's 2015 UWMP demonstrates that Western anticipates adequate water supplies for years 2020 to 2035 under normal hydrological conditions, single-dry year hydrological conditions, and multiple-dry year hydrological conditions as shown below in Tables 5.14-1 through 5.14-6, respectively (UWMP, Tables 7-5 through 7-8, pp. 7-6 – 7-7).

Table 5.14-1: Retail Supply and Demand Comparison for a Normal Year

	2020	2025	2030	2035	2040
Supply totals	69,718	76,264	79,672	92,030	90,400
Demand totals	30,814	33,714	39,170	39,170	41,704
Difference	**38,904**	**42,550**	**52,257**	**52,860**	**48,696**

Table 5.14-2: Wholesale Supply and Demand Comparison for a Normal Year

	2020	2025	2030	2035	2040
Supply totals	152,491	159,389	169,372	178,155	184,095
Demand totals	110,787	114,039	123,515	122,895	132,999
Difference	**41,704**	**45,350**	**45,857**	**55,260**	**51,096**

Table 5.14-3: Retail Single-Dry Year Supply and Demand Comparison

	2020	2025	2030	2035	2040
Supply totals	69,718	76,264	79,672	92,030	90,400
Demand totals	30,814	33,714	39,170	39,170	41,704
Difference	**38,904**	**42,550**	**52,257**	**52,860**	**48,696**

Table 5.14-4: Wholesale Single-Dry Year Supply and Demand Comparison

	2020	2025	2030	2035	2040
Supply totals	152,491	159,389	169,372	178,155	184,095
Demand totals	110,787	114,039	123,515	122,895	132,999
Difference	**41,704**	**45,350**	**45,857**	**55,260**	**51,096**

Table 5.14-5: Retail Supply and Demand Comparison in Multiple-Dry Years

		2020	2025	2030	2035	2040
First year	Supply totals	69,718	76,264	79,672	92,030	90,400
	Demand totals	30,814	33,714	36,415	39,170	41,704
	Difference	**38,904**	**42,550**	**43,257**	**52,860**	**48,696**
Second year	Supply totals	69,718	76,264	79,672	92,030	90,400
	Demand totals	30,814	33,714	36,415	39,170	41,704
	Difference	**38,904**	**42,550**	**43,257**	**52,860**	**48,696**
Third year	Supply totals	69,718	76,264	79,672	92,030	90,400
	Demand totals	30,814	33,714	36,415	39,170	41,704
	Difference	**38,904**	**42,550**	**43,257**	**52,860**	**48,696**

Table 5.14-6: Wholesale Supply and Demand Comparison in Multiple-Dry Years

		2020	2025	2030	2035	2040
First year	Supply totals	152,491	159,389	169,372	178,155	184,095
	Demand totals	110,787	114,039	123,515	122,895	132, 999
	Difference	**41,704**	**45,350**	**45,857**	**55,260**	**51,096**
Second year	Supply totals	152,491	159,389	169,372	178,155	184,095
	Demand totals	110,787	114,039	123,515	122,895	132,999
	Difference	**41,704**	**45,350**	**45,857**	**55,260**	**51,096**
Third year	Supply totals	152,491	159,389	169,372	178,155	184,095
	Demand totals	110,787	114,039	123,515	122,895	132,999
	Difference	**41,704**	**45,350**	**45,857**	**55,260**	**51,096**

As the Project's buildings are both less than 500,000 square feet of industrial use a Water Supply Assessment (WSA) is not required pursuant to Senate Bill 610 and no WSA was conducted. Per email communication on January 15, 2020 with Western, no WSA is required.

Groundwater

In addition to its routine use of imported water supplies (discussed below), Western currently has the capability to purchase local groundwater supplies from Meeks and Daily Water Company, Riverside Highlands Water Company, and the City when available (UWMP, p. ES-3). These local groundwater resources have become increasingly important to Western's water supply because SWP and Colorado River deliveries are less reliable due to drought conditions. Therefore, additional groundwater supplies are pumped by Western from the Temecula Valley Groundwater

Basin, the San Bernardino Basin Area, and the Arlington Subsection of the Riverside-Arlington Groundwater Basin (UWMP, p. ES-3).

In 2015, groundwater represented 21 percent of Western's total supply. Western plans to develop additional local groundwater sources including programs to use recycled and storm water to recharge groundwater basins, and to participate in the Chino Desalter expansion to treat more local Chino Basin Groundwater to usable standards.

Imported Water

Western's water supply consists primarily of purchased or imported water from Metropolitan under normal circumstances. Metropolitan obtains its supply primarily from the SWP or Colorado River Aqueduct.

Uncertainty arising from extended dry conditions, pending environmental and regulatory mandates, pending and potential litigation concerning water supplies, and long-term water supply planning efforts all affect the reliability and sustainability of imported water from the SWP and the Colorado River. During the current drought, SWP water allocations were significantly cut, leading to a greater proportion of Colorado River water in the supply and increased efforts to develop local groundwater supplies.

State Water Project

As noted, Western receives potable water from the delta region via the SWP. The availability of this water supply may be highly variable depending on environmental and regulatory conditions. The Department of Water Resources' *State Water Project Delivery Capability Report* was prepared to address uncertainty in availability of SWP water. Most notably, the Federal biological opinions requiring a reduction in the amount of water pumped from the Delta to protect several endangered fish species covered by the Endangered Species Act (ESA) have impacted the availability of SWP water (DWR, p. 5). The Delta Stewardship Council has developed a Delta Plan to balance competing agricultural and biological interests in the delta region. Additionally, the U.S. Environmental Protection Agency published the *San Francisco Bay Delta Action Plan* in August 2012 that identifies priority activities to advance the protection and restoration of aquatic resources and ensure a reliable water supply in the Bay Delta Estuary watershed (EPA Plan).

State and Federal resource agencies and various environmental and water user entities engaged in the development of the California WaterFix project which evolved from the Bay Delta Conservation Plan (BDCP) to support the issuance of a 50-year incidental take permit under Section 10 of the Endangered Species Act (ESA). The California WaterFix goals are aimed at addressing the basic elements that include the Delta ecosystem restoration, water supply conveyance, and flood control protection and storage development. On July 10, 2015, the California Department of Water Resources published its Public Review Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement (RDEIR/SDEIS) by posting it on the public web site for the Bay Delta Conservation Plan (BDCP, http://baydeltaconservationplan.com). State and Federal agencies proposed a new preferred sub-alternative which will separate the conveyance facility and habitat restoration

measures identified in the California WaterFix. As such, addressing the environmental issues of the Bay Delta remains an ongoing process to date.

Colorado River Water

Metropolitan-allocated water from the Colorado River is conveyed through the Colorado River Aqueduct to Metropolitan's member agencies, subject to availability of water for delivery. Other California users, as well as users from Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming, also possess water rights to Colorado River water, resulting in supply competition and the need for cooperation among these right holders. This competition for resources has intensified because the Colorado River has been in drought conditions for much of the past 15 years. As with the SWP, environmental laws protecting endangered species have the potential to restrict Metropolitan's Colorado River water supplies. However, it should be noted that under the Colorado River Basin Project Act of 1968, other states that receive Colorado River water are subordinate to California's apportionment, meaning California's allocation takes precedence.

Recycled Water

In addition to its water supply operations, Western also provides wastewater services to portions of Riverside County. In 2014, the Western Water Recycling Facility (WWRF) was upgraded to produce 2,200 AFY of tertiary treated wastewater. Treated water from the WWRF is provided to the Riverside National Cemetery and General Archie Old Golf Course as well as parks, schools, groves and nurseries in place of imported potable water so as to better manage long-term water supplies. In 2015, Western delivered approximately 1,300 acre feet per year (AFY) tertiary treated water to its retail customers. (UWMP, p. 6-15) Recycled water service is not available in the Sycamore Canyon Business Park.

Water Conservation

Given the constraints on imported water supplies, water conservation strategies are being implemented at the State, regional, and local levels. At the State level, CALGreen, California's building code imposes mandatory measures for water efficiency and conservation. To meet the State-mandated goal of a 20 percent reduction in per capital water usage by 2020, Western is expanding its water conservation project by developing a Water Use Efficiency Master Plan (WUEMP) (UWMP, p. 9-1). The WUEMP includes a number of programs to achieve its conservation goals, with a specific focus on improving the efficiency of outdoor irrigation because this sector provides the opportunity for the largest and most cost effective savings (UWMP, Appendix P). Additionally, both a Water Conservation and Supply Shortage Program (WCSSP) and a Drought Allocation Plan (DAP) have been prepared by Western in conjunction with its retail agencies (UWMP, p. 8-1). The DAP provides Westerns and its wholesale customers with a means of allocating limited imported water supplies from Metropolitan under shortage conditions (UWMP, p. 8-1). The WCSSP addresses the retail area and describes size stages of water supply shortages and provides a set of strategies to ensure that water is beneficially used at the customer level (UWMP, P. 8-2).

Statewide Drought

In January 2014, Governor Brown issued a drought State of Emergency Proclamation. The Emergency Proclamation urged local urban water supplier and municipalities to implement their local water shortage contingency plans (CalGov). In addition to the Emergency Proclamation, Governor Brown issued subsequent Executive Order B-26-14 which provided local government assistance as it deemed appropriate for the purpose of providing temporary water supplies to households (CalGov). In December 2014, Governor Brown issued Executive Order B-28-14 which extended the length of the 2014 Proclamation by two years (CalGov). In the face of the current five-year drought, every water agency in California must implement measures to comply with Governor Brown's April 1, 2015 Executive Order B-29-15. Executive Order B-29-15 proclamated that Executive Order B-26-14 and B-28-14 will remain in full effect. The 2015 executive order also increased enforcement against water waste.

For Western customers, compliance entails severely limiting outdoor water use, which was effective immediately. On May 20, 2015, Western's Board of Directors approved moving into a more restrictive stage of the WCSSP and adoption of a DAP that identifies the method that will be used to allocate limited imported supplies among Western's retail agencies if Metropolitan reduces water deliveries. Moreover, the State Water Resources Control Board has mandated that Western achieve a 32 percent reduction in water use from 2013 levels. Through July 2015, Western has achieved a 24 percent reduction.

In May 2016, Governor Brown issued Executive Order B-17-16 to modify the 2014 Emergency Proclamation and subsequent Executive Orders to develop new targets for water use reduction and to make certain water use restrictions permanent (EO B-17-16). The 2016 Executive Order gives more control to local agencies to develop targets appropriate to the unique conditions within their jurisdiction. In April 2017, Governor Brown terminated the January 2014 Drought State of Emergency for all counties in California except the Counties of Fresno, Kings, Tulare, and Tuolumne. Although the drought has been lifted, Govern Brown contained the orders and provisions to Executive Order B-37-16, Making Water Conservation a California Way of Life which allows the Water Board to continue development of permanent prohibitions on wasteful water use (CalGov).

Wastewater Services

The City's Public Works Department provides for the collection, treatment, and disposal of all wastewater generated within the City through its Riverside Regional Water Quality Control Plant (RRWQCP) and complies with state and federal requirements governing the treatment and discharge of wastewater. Primary, secondary and tertiary treatment of wastewater from the Jurupa, Rubidoux and Edgemont Community Services Districts is also provided by the RRWQCP. (GP 2025 FPEIR, p. 5.16-11)

The City's wastewater collection system includes over 776 miles of gravity sewers ranging in size from 6-inch to 54-inch diameter pipelines. The system also includes 18 wastewater pump stations. Most of the wastewater lift stations are designed for flows of 100 to 400 gallons per minute (GPM).

There are two large lift stations with design capacities in excess of 2,000 GPM. The Public Works Department installs and maintains the wastewater system.

According to Riverside Public Utilities' 2015 UWMP, the RWQCP has recently been expanded to have a capacity of 46 million gallons per day (MGD) (RPU, p. 7-7). The RWQCP expansion included the incorporation of various new technologies designed to produce high-quality effluent water that can be reused throughout the region. The RRWQCP currently discharges tertiary-treated effluent to the Santa Ana River and delivers recycled water to irrigation customers.

Solid Waste Services

The proposed Project will be served by Burrtec Waste Industries Inc (Burrtec) for solid waste collection. All non-hazardous solid waste collected by Burrtec will be taken to Robert A. Nelson Transfer Station (also known as Agua Mansa Material Recovery Facilities), which is owned by the County of Riverside and operated under a 20-year franchise by Burrtec. Burrtec then transfers the waste to Badlands Landfill and other county landfills in the area such as Lamb Canyon or the El Sobrante landfill (GP 2025 FPEIR, p. 5.16-15). These three landfills have a combined remaining capacity of 178,969 million tons as shown on Table 5.14-7 – Existing Landfills.

Table 5.14-7–Existing Landfills

Landfill	Maximum Permitted Daily Load (tons/day)	Maximum Permitted Capacity (tons)	Current Remaining Capacity (tons)	Cease Operation Date
Badlands	4,800	34,400,000	15,748,799	1/1/2022
Lamb Canyon	5,000	38, 935,653	19,242,950	4/1/2029
El Sobrante	16,054	209,910,000	143,977,170	1/1/2051

Source: CalRecycle

As the Project site is currently vacant, no solid waste is being generated in the existing conditions.

Utilities Services

Wet and dry utility extensions will be constructed underground to serve the Project and will connect to existing utility lines located along Alessandro Boulevard, for Building A and along Barton Street for Building B. Electric-power service will be provided by Riverside Public Utilities. Natural gas service will be provided by Southern California Gas Company. Water will be provided by Western Municipal Water District. Metropolitan Water District of Southern California (Metropolitan) will not provide the Project with any utilities, however it has facilities located near the Project site, including the Box Springs Feeder to the north, the Mill's Treatment Plant to the west, and the Perris Valley Pipeline to the south in (beneath) Alessandro Boulevard. The Project will not obstruct access to or impact these facilities.

5.14.2 Related Regulation

5.14.2.1 Federal Regulations

Clean Water Act

In 1972, the Federal Water Pollution Control Act (Clean Water Act) was amended to prohibit the discharge of pollutants to waters of the United States unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The Clean Water Act (CWA) focused on tracking point sources, primarily from wastewater treatment facilities and industrial waste dischargers, and required implementation of control measures to minimize pollutant discharges. The CWA was amended again in 1987, adding Section 402(p), to provide a framework for regulating municipal and industrial stormwater discharges. In November 1990, the U.S. Environmental Protection Agency (EPA) published final regulations that establish application requirements for specific categories of industries, including construction projects that encompass greater than or equal to 5 acres of land. The Phase II Rule became final in December 1999, expanding regulated construction sites to those greater than or equal to 1 acre. The regulations require that stormwater and non-stormwater runoff associated with construction activity, which discharges either directly to surface waters or indirectly through MS4s, must be regulated by an NPDES permit.

5.14.2.2 State Regulations

California Water and Government Code

The California Water Code (CWC) was established to regulate the use and conservation of water for the public benefit. Under the CWC, urban water suppliers are obligated to prepare urban water management plans (UWMPs), which include a description of all water supply projects and programs that might be undertaken to meet total projected water use over the next 20 years. Metropolitan's Regional Urban Water Management Plan (RUWMP) assesses water supply and demand for all Metropolitan member agencies, whereas Western's UWMP is concerned only with Western's service area. Both documents meet the requirements of the California Water Code and the abovementioned legislation.

Senate Bills 610 (which amended CWC 10910 et. seq.) and 221 (which added Government Code Section 66473.7), adopted in 2003, were passed to ensure sufficient water supplies to meet demand associated with proposed development in California. Section 10910 et seq. of the CWC requires that a WSA be prepared if the proposed project has certain use and size characteristics (if, for example, the residential development is greater than 500 dwelling units). The WSA must evaluate the anticipated water demands of the project and determine if the local water supplier has adequate supplies to serve the project and meet existing and projected obligations. Section 66473.7 requires water supply verification when a project's tentative map, parcel map, or development agreement is submitted for a land use agency for approval. This determination requires an analysis of whether the total water supply available during normal, single-dry, and multiple-dry years within a 20-year horizon will meet the projected demand associated with the proposed project, in addition to existing and planned future uses.

For the purposes of SB 610, a "project" is a proposed development with water demand of 500 dwelling units or more. For industrial development, a "project" is a proposed development larger than 650,000 square feet or 40 acres. For commercial development, a "project" is a proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space. The Project entails the construction and operation of a total of 603,100 square feet of warehouse space on approximately 34.49 acres and therefore a WSA was not required under SB 610 as confirmed with Western in January 2020.

Sections 13550-13556 of the Water Code states that local, regional, or State agencies shall not use water from any source of quality for non-potable uses if suitable recycled water is available as provided in Section 13550 of the Water Code.

California State Water Resources Control Board

In the State of California, the State Water Resources Control Board (SWRCB), and nine Regional Water Quality Control Boards (RWQCBs) are responsible for implementing the CWA and the state Porter-Cologne Water Quality Control Act. The Porter-Cologne Water Quality Control Act, Section 13000, directs each RWQCB to develop a Water Quality Control Plan (Basin Plan) for all areas within its region. The Basin Plan is the basis for each RWQCB's regulatory programs. The proposed Project is located within the purview of the Santa Ana RWQCB (Region 8) and must comply with applicable elements of the region's Basin Plan, as well as the Porter-Cologne Water Quality Control Act.

Water Conservation in Landscaping Act

The Water Conservation Act of 2009, or Senate Bill X7-7, which was enacted in November 2009, set a requirement for water agencies to reduce their per capita water use by 2020. The overall goal is to reach a statewide reduction of per capita urban water use of 20 percent by December 31, 2020, with an intermediate 10 percent reduction by December 31, 2015. Demand reduction can be achieved through both conservation and the use of recycled water as a potable demand offset. Since July 2009, customers and residents in Western's general service area have achieved a water use reduction of roughly 30 percent. Western has accomplished full compliance with this act.[1]

California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989, also known as Assembly Bill (AB) 939, requires that each city or county prepare a new integrated waste management plan. The act further required each city to prepare a Source Reduction and Recycling Element by July 1, 1991. Each Source Reduction and Recycling Element includes a plan for achieving a solid waste goal of 25 percent by January 1, 1995, and 50 percent by January 1, 2000. A number of changes to the municipal solid waste diversion requirements under the Integrated Waste Management Act were adopted, including a revision to the statutory requirement for 50 percent diversion of solid

[1] Western's website *Water Use Regulations & Restrictions*, https://wmwd.com/208/Water-Use-Regulations-Restrictions

waste. In 2011, AB 341 was passed, requiring the California Department of Resources Recycling and Recovery to require local agencies to include strategies to enable the diversion of 75 percent of all solid waste by 2020. Since the passing of AB 341, California has actually seen a decrease in recycling rates from 49 percent (49%) in 2010 to 44 percent (44%) in 2016 (CalRecycle, https://www.calrecycle.ca.gov/75percent/recyclerate).

Moreover, as set forth by AB 341, all businesses in the state are required to recycle as of July 2012. A business is defined as including any commercial or public entity that generates more than 4 cubic yards of solid waste per week. The law requires that such businesses source separate their recycling and/or compostable materials and donate or haul the material to recycling facilities.

5.14.2.3 Regional Regulations

Riverside County Waste Resources Department Design Guidelines

The Riverside County Waste Resources Department (RCWRD) Design Guidelines for Refuse and Recyclables Collection and Loading Areas are intended to assist project proponents in identifying space and other design considerations for refuse/recyclables collection and loading areas per the California Solid Waste Reuse and Recycling act of 1991. The Design Guidelines require one 4-cubic-yard refuse bin and one 4-cubic-yard recyclables bin per each 20,000 square feet of office, general commercial, or industrial space. Compliance with the Design Guidelines is necessary for obtaining a RCWRD clearance for issuance of a building permit. Prior to building permit issuance, a site plan that indicates the location and capacity of solid waste and recycling collection and loading areas must be submitted to the RCWRD for review and approval.

Riverside County Waste Resources Department Construction and Demolition Recycling

The RCWRD also requires that projects that have the potential to generate construction and demolition waste complete a Waste Recycling Plan (WRP) to identify the estimated quality and location of recycling of construction and demolition waste from the project. A waste recycling report is then required upon completion of the project that demonstrates that the project recycled a minimum of 50 percent of its construction and demolition waste per its WRP.

5.14.2.4 Local Regulations

Water Efficient Landscaping and Irrigation (Riverside Municipal Code Chapter 19.570)

The City of Riverside Zoning Code establishes minimum landscape and irrigation standards for all land uses. This ensures the enhancement of developments, reduction of heat and glare, control of soil erosion and conservation of water. It also provides recreation areas, cleaner air and water, and fire protection standards and establishes a buffer between residential and non-residential land use.

Chapter 19.570 includes setting a Maximum Applied Water Allowance (MAWA) as an upper limit for water use and reducing water use to the lowest practical amount, and assures the attainment of water efficient landscape goals by requiring that landscapes not exceed a maximum water demand of seventy percent (70%) of its reference evapotranspiration (ETo). Plant selection for projects in fire-prone areas shall address fire safety and prevention. When a project is located in

adjacent to the Sycamore Canyon Wilderness Park, a part of the MSHCP Conservation area, Table 6-2 (*Plants That Should be Avoided Adjacent to the MSHCP Conservation Area)* of the Multiple Species Habitat Conservation Plan shall be consulted to avoid the use of invasive plant species. The Code also promotes the use of recycled water for landscaping, and all irrigation systems shall be designed to prevent runoff, over-spray, lowhead drainage and other similar conditions where water flows off-site on to adjacent property, non-irrigated areas, walk, roadways, or structures.

Chapter 19.570 applies to private development projects with a landscape area equal to or greater than 2,500 square feet requiring a building permit, plan check, or design review. An applicant proposing any new or rehabilitated landscape subject to Chapter 19.570 will prepare and submit an application to the Planning Division for review and approval by the Community & Economic Development Director. The planting plan, irrigation plan, and soils management plan will be reviewed to ensure that all components of the plans adhere to the requirements of this Chapter. No certificate of occupancy or other final City approval shall be issued until the City reviews and approves the landscape and irrigation plans and the landscape and irrigation are installed in accordance with the approved plans.

The City shall consult with Western during the development review process to ensure the Project's proposed landscape plans comply with the applicable standards, approvals, and implementation requirements of Ordinance 375.

Landscape Water Use Efficiency Program (Ordinance 375)

Western's Ordinance 375 establishes a Landscape Water Use Efficiency Program providing compliance measures in support of State Landscape Model Ordinance requirements. The program includes the following:

- Establish provisions for water management practices and water waste prevention;
- Establish a structure for planning, designing, installing, maintaining, and managing water efficient landscapes in new construction and rehabilitated projects;
- To reduce the water demands from landscapes without a decline in landscape quality or quantity;
- To retain flexibility and encourage creativity through appropriate design;
- To assure the attainment of water-efficient landscape goals by requiring that landscapes not exceed a maximum water demand of seventy percent (70 percent) of its reference evapotranspiration or any lower percentage as may be required by Western policy or state legislation, whichever is stricter;
- To eliminate water waste from overspray and/or runoff;
- To achieve water conservation by raising the public awareness of the need to conserve water through education and motivation to embrace an effective water demand management program; and

- To implement the requirements to meet the state of California Water Conservation in Landscaping Act 2006 and the California Code of Regulations Title 23, Division 2, Chapter 2.7.

Water Conservation and Supply Shortage Program (Ordinance 374)

Western's Water Conservation and Supply Shortage Program is designed to eliminate outdoor water waste at all stages of water supply for Western's retail customers. The purpose of the program is to ensure the highest beneficial use of Western's water supplies and to provide sufficient water supplies to meet the basic needs of human consumption, sanitation, and fire protection within Western's direct retail service area. The Project will be required to comply with this program.

Subdivision Code Title 18

The City's Subdivision Code (Title 18, Section 18.48.020) requires drainage fees to be paid to the City for new construction. Fees are transferred into a drainage facilities fund that is maintained by the RCFCWCD. Section 18.48.020 also complies with the California Government Code (Section 66483), which provides for the payment of fees for construction of drainage facilities. Fees are required to be paid as part of the conditions of approval/waiver for filing of a final map or parcel map. Pursuant to the City's Subdivision Code (Title 18, Section 18.48.020), the Project Applicant would be required to pay all sewer connection fees and facilities fees. The Project will also be required to comply with all rules, regulations, and other requirements of the City for use of stormwater facilities.

Riverside Municipal Code

Title 6

The City's Health and Sanitation Code (Municipal Code Title 6, Section 6.04 et seq.) specifies the requirements for handling solid waste and recycling materials.

Title 14

Under Title 14 of the City's Municipal Code, Section 14.08.030 (Connection to Public Sewer Required), states all homes and any other structures must be properly connected to a public sewer whenever the property abuts upon a right-of-way in which there exists a public sewer to which connection may be made. However, Parcel 2 abuts upon a right of way to which a public sewer is not able to connect. The elevation of Barton Street drops from Alessandro Boulevard going north to the Project site; as such, there is no existing gravity wastewater/ sewer pipeline in Barton Street or the option to construct one (the flows would be going away from Alessandro Boulevard, not towards it). Therefore, Building B on Parcel 2 will have a septic system and leach lines. Building A on Parcel 1 will connect to the existing public sewer system in Alessandro Boulebard.

Riverside General Plan 2025

The GP 2025 contains objectives and policies related to utilities and service systems in Public Facilities and Infrastructure Element. Applicable GP 2025 Public Facilities and Infrastructure Element policies to the Project include:

Objective PF-1: Provide superior water service to customers

> **Policies PF-1.1:** Coordinate the demands of new development with the capacity of the water system.
>
> **Policies PF-1.2:** Support the efforts of the Riverside Public Utilities Department, Eastern Municipal Water District and Western Municipal Water District to work together for coordination of water services.
>
> **Policies PF-1.3:** Continue to require that new development fund fair-share costs associated with the provision of water service.
>
> **Policies PF-1.4:** Ensure the provision of water services consistent with the growth planned for the General Plan area, including the Sphere of Influence, working with other providers.
>
> **Policies PF-1.5:** Implement water conservation programs aimed at reducing demands from new and existing development.

Objective PF-3: Maintain sufficient levels of wastewater service throughout the community.

> **Policy PF-3.1:** Coordinate the demands of new development with the capacity of the wastewater system.
>
> **Policy PF-3.2:** Continue to require that new development fund fair-share costs associated with the provision of wastewater service.

Objective PF-4: Provide sufficient levels of storm drainage service to protect the community from flood hazards and minimize the discharge of materials into the storm drain system that are toxic, or which would obstruct flows.

> **Policy PF-4.2:** Continue to cooperate in regional programs to implement the National Pollutant Discharge Elimination System program.

5.14.3 Project Design Considerations

Project design considerations refer to ways in which a project will reduce or avoid potential impacts through design. On-site pollutant sources will be minimized through the implementation of four (4) standard bioretention basins and four (4) flow based basins which will then drain to one (1) combined underground detention system in accordance with standards set forth by the RWQCB and the County of Riverside's Best Management Practice (BMP) Design Manual. The Project also proposes conventional industrial uses reflecting contemporary energy efficient/energy conserving designs and operational programs. Uses proposed by the Project would not be inherently energy intensive and Project energy demands would be comparable to, or less than, other industrial projects of similar scale and configuration. The Project's design

features with regard to solid waste includes: reusing and recycling construction and demolition waste; interior and exterior storage areas for recyclables and green waste; recycling containers in public areas; education materials about reducing waste and available recycling services.

5.14.4 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance thresholds in Appendix G ("Environmental Checklist") of the State CEQA Guidelines. The Environmental Checklist prepared by the City for the Project (Appendix A) indicates that impacts related to the Sycamore Hills Distribution Center Project may be considered potentially significant if the proposed project would:

- (Threshold A) require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
- (Threshold B) have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;
- (Threshold C) result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- (Threshold D) generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals;
- (Threshold E) comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

5.14.5 Environmental Impacts

Threshold A: *Would the Project 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?*

As discussed in Section 5.9, Hydrology and Water Quality, the existing site is comprised of five (5) drainage management areas (DMAs) and two (2) sub areas which each drain to their respective points of discharge (POD). The Project site will contain ten DMAs and three (3) sub areas (PWQMP, p. 6). Per the site's geotechnical analysis (Appendix F) infiltration was determined to be infeasible and therefore four (4) standard bioretention basins and four (4) flow based treatment basins will be constructed to remove pollutant sources (PWQMP, p. 9). Per the hydromodification study discussed in the PWQMP, first flush runoff will be treated via the bioretention basins which drain to one (1) combined underground detention system in accordance

with standards set by the RWQCB and the County of Riverside's BMP Design Manual. (REC, p. 5). Bioretention basins will be constructed as BMPs within the Project site to address the Project's storm water runoff. No off-site storm water drainage facilities are required.

As discussed in the IS (Appendix A), dry utility extensions will be constructed underground to serve the Project and will connect to existing utility lines in Alessandro Boulevard for Building A and Barton Street for Building B, respectively. Electricity will be provided by Riverside Public Utilities. Natural gas would be provided by Southern California Gas Company. Water to Buildings A and B will be provided by Western Municipal Water District via Project constructed connections or laterals to existing lines located in Alessandro Boulevard and Barton Street.

Building A will connect to the City's wastewater (sewer) collection system via a gravity flow lateral to be constructed across Alessandro Boulevard. As Building A is at a lower elevation than the existing wastewater pipeline in Alessandro Boulevard, a pump is required to get wastewater from Building A up to the gravity flow lateral connection. The wastewater flow factor for industrial land uses in the City's 2019 Update of the Integrated Master Plan for the Wastewater Collection and Treatment Facilities (Volume 3, Chapter 5, Table 5.4) is 670 gallons per day per acre (gpd/ac). Parcel 1 at 24.31 acres is anticipated to generate approximately 16,288 gallons per day (mgd) and Parcel 2 at 10.32 acres is anticipated to generate approximately 6,914 mgd. As outlined above in Section 5.14.1, the RWQCP has recently been expanded to have a capacity of 46 mgd, and the Project would not require RPU to expand wastewater treatment facilities.

It is not feasible for Building B to connect to the City's wastewater system. The elevation of Barton Street drops from Alessandro Boulevard going north to the Project site; as such, there is no existing gravity wastewater/ sewer pipeline in Barton Street or the option to construct one (the flows would be going away from Alessandro Boulevard, not towards it). Therefore, Building B will have a septic system and leach lines. To determine septic feasibility for Building B, Deep Percolation Testing (Appendix G) was conducted on July 18, 2019. Two deep percolation tests were conducted for the proposed septic system. Boreholes were tested at 20 feet and 15 feet below existing ground surface for test holes P-1 and P-2, respectively. Based on the percolation test results, the onsite soils have favorable percolation rates. Based on the Deep Percolation Report, there is sufficient area on the Project site to support a primary and expansion of the onsite wastewater system that will meet the current standards of the Department of Environmental Health, County of Riverside and Regional Quality Control Board (RWQCB).

Per the Project's *Energy Analysis* (Appendix F), the Project proposes conventional industrial uses reflecting contemporary energy efficient/energy conserving designs and operational programs. Uses proposed by the Project would not be inherently energy intensive and Project energy demands would be comparable to, or less than, other industrial projects of similar scale and configuration. Further, per the Project's Energy Analysis, the energy demands of the Project can be accommodated within the context of available resources and delivery systems. The Project will not 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. Therefore, impacts are **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?*

As discussed in Section 5.14.3.1, *State Regulations*, certain types of development projects are required to provide detailed WSAs to planning agencies. The primary purpose of a WSA is to determine if the identified water supply or water supplier will be able to meet projected demands for the project, in addition to existing and planned future uses, over a 20-year projection and with consideration to normal, dry, and multi-dry water years. For industrial development, a WSA would be required if the "project" consists of a development larger than 650,000 square feet or 40 acres. The proposed Project entails the construction and operation of a total of 603,100 square feet of warehouse space on approximately 34.49 acres. Therefore, the Project does not meet the threshold for requiring a WSA.

As discussed in Section 5.14.1, *Setting/Water Supply and Demand*, Western is a member agency of the Metropolitan Water District which obtains water under normal water year conditions, and relies entirely on imported SWP and Colorado River (CRA) water supplies (GP 2025, p. 5.16-37). Water supplies from the SWP and CRA are increasingly constrained due to California's current drought situation and Metropolitan has developed a Water Supply Allocation Plan (WSAP) and Water Surplus and Demand Management Plan (WSDM) to provide guidance on managing regional water supply actions. When the WSAP is in effect Metropolitan member agencies, including Western, do not lose their ability to receive imported water but instead are limited in the amounts that they can purchase without being assessed a surcharge. Nevertheless, Western has developed a Drought Contingency Plan and an Emergency Response and Recovery Plan to address catastrophes (GP 2025 PEIR, p. 5.16-38).

Metropolitan's 2015 RUWMP evaluated single dry-year and multiple dry-year hydrological conditions as well as average year hydrologic conditions. Metropolitan has supply capabilities to meet expected demands from 2020 through 2040 under single dry-year and multiple dry-year conditions as shown below.

Table 5.14-8 Metropolitan Regional Water Demands Single Dry-Year (Acre-Feet)

		2020	2025	2030	2035	2040
A.	**Total Demands[1]**	**5,234,000**	**5,409,000**	**5,549,000**	**5,679,000**	**5,808,000**
	Retail Municipal and Industrial	4,739,000	4,874,000	5,016,000	5,148,000	5,279,000
	Retail Agricultural	131,000	168,000	164,000	162,000	160,000
	Seawater Barrier	72,000	72,000	72,000	72,000	72,000
	Storage Replenishment	292,000	295,000	297,000	297,000	297,000
B.	**Total Conservation**	**1,056,000**	**1,127,000**	**1,200,000**	**1,263,000**	**1,339,000**
	Existing Active (through 2015)[2]	210,000	196,000	184,000	166,000	159,000
	Code-based	381,000	423,000	462,000	497,000	532,000
	Price-Effect[3]	215,000	258,000	304,000	350,000	398,000
	Pre-1990 Conservation	250,000	250,000	250,000	250,000	250,000
C.	**Total Local Supplies**	**2,447,000**	**2,497,000**	**2,523,000**	**2,538,000**	**2,550,000**
	Groundwater	1,304,000	1,302,000	1,302,000	1,302,000	1,302,000
	Surface Water	107,000	107,000	107,000	107,000	107,000
	Los Angeles Aqueduct	127,000	127,000	127,000	127,000	127,000
	Seawater Desalination	56,000	56,000	56,000	56,000	56,000
	Groundwater Recovery	143,000	157,000	163,000	165,000	167,000
	Recycling[4]	436,000	466,000	486,000	499,000	509,000
	Other Imported Supplies[5]	274,000	282,000	282,000	282,000	282,000
D.	**Total Metropolitan Demands**	**1,731,000**	**1,784,000**	**1,826,000**	**1,878,000**	**1,919,000**
	Consumptive Use	1,560,000	1,616,000	1,658,000	1,710,000	1,751,000
	Seawater Barrier	5,000	2,000	2,000	2,000	2,000
	Replenishment	166,000	166,000	166,000	166,000	166,000

Notes:
All units are acre-feet unless specified, rounded to the nearest thousand. Totals may not sum due to rounding.
[1]Growth projections are based on SCAG 2012 Regional Transportation Plan and SANDAG Series 13 2050 Regional Growth Forecast.
[2]Does not include future active conservation savings. 1990 is base year.
[3]Includes un-metered water use savings.
[4]Excludes Santa Ana River base flow, which is used for recharge of Orange County groundwater basin and reflected in the Groundwater production numbers.
[5]IID/SDCWA transfer and canal linings.

Table 5.14-9 Metropolitan Regional Water Demands Multiple Dry-Years

(in Acre-Feet)

		2020	2025	2030	2035	2040
A.	**Total Demands[1]**	**5,199,000**	**5,450,000**	**5,601,000**	**5,732,000**	**5,865,000**
	Retail Municipal and Industrial	4,701,000	4,920,000	5,063,000	5,197,000	5,332,000
	Retail Agricultural	128,000	164,000	169,000	166,000	164,000
	Seawater Barrier	72,000	72,000	72,000	72,000	72,000
	Storage Replenishment	298,000	294,000	297,000	297,000	297,000
B.	**Total Conservation**	**1,056,000**	**1,127,000**	**1,200,000**	**1,263,000**	**1,339,000**
	Existing Active (through 2015)[2]	210,000	196,000	184,000	166,000	159,000
	Code-based	381,000	423,000	462,000	497,000	532,000
	Price-Effect[3]	215,000	258,000	304,000	350,000	398,000
	Pre-1990 Conservation	250,000	250,000	250,000	250,000	250,000
C.	**Total Local Supplies**	**2,416,000**	**2,487,000**	**2,511,000**	**2,535,000**	**2,550,000**
	Groundwater	1,305,000	1,302,000	1,302,000	1,302,000	1,303,000
	Surface Water	102,000	102,000	102,000	102,000	102,000
	Los Angeles Aqueduct	113,000	129,000	125,000	131,000	133,000
	Seawater Desalination	56,000	56,000	56,000	56,000	56,000
	Groundwater Recovery	139,000	155,000	162,000	165,000	167,000
	Recycling[4]	427,000	461,000	482,000	497,000	507,000
	Other Imported Supplies[5]	274,000	282,000	282,000	282,000	282,000
D.	**Total Metropolitan Demands**	**1,727,000**	**1,836,000**	**1,889,000**	**1,934,000**	**1,976,000**
	Consumptive Use	1,547,000	1,668,000	1,721,000	1,766,000	1,808,000
	Seawater Barrier	6,000	2,000	2,000	2,000	2,000
	Replenishment	174,000	166,000	166,000	166,000	166,000

Notes:
All units are acre-feet unless specified, rounded to the nearest thousand. Totals may not sum due to rounding.
[1]Growth projections are based on SCAG 2012 Regional Transportation Plan and SANDAG Series 13 2050 Regional Growth Forecast.
[2]Does not include future active conservation savings. 1990 is base year.
[3]Includes un-metered water use savings.
[4]Excludes Santa Ana River base flow, which is used for recharge of Orange County groundwater basin and reflected in the Groundwater production numbers.
[5]IID/SDCWA transfer and canal linings.

Table 5.14-10 Metropolitan Regional Water Demands Average Year

(in Acre-Feet)

		2020	2025	2030	2035	2040
A.	**Total Demands[1]**	**5,219,000**	**5,393,000**	**5,533,000**	**5,663,000**	**5,793,000**
	Retail Municipal and Industrial	4,725,000	4,859,000	5,001,000	5,133,000	5,264,000
	Retail Agricultural	130,000	167,000	163,000	161,000	160,000
	Seawater Barrier	72,000	72,000	72,000	72,000	72,000
	Storage Replenishment	292,000	295,000	297,000	297,000	297,000
B.	**Total Conservation**	**1,056,000**	**1,127,000**	**1,200,000**	**1,263,000**	**1,339,000**
	Existing Active (through 2015)[2]	210,000	196,000	184,000	166,000	159,000
	Code-based	381,000	423,000	462,000	497,000	532,000
	Price-Effect[3]	215,000	258,000	304,000	350,000	398,000
	Pre-1990 Conservation	250,000	250,000	250,000	250,000	250,000
C.	**Total Local Supplies**	**2,578,000**	**2,631,000**	**2,657,000**	**2,674,000**	**2,689,000**
	Groundwater	1,303,000	1,301,000	1,301,000	1,301,000	1,302,000
	Surface Water	110,000	110,000	110,000	110,000	110,000
	Los Angeles Aqueduct	261,000	264,000	264,000	266,000	268,000
	Seawater Desalination	51,000	51,000	51,000	51,000	51,000
	Groundwater Recovery	143,000	157,000	163,000	165,000	167,000
	Recycling[4]	436,000	466,000	486,000	499,000	509,000
	Other Imported Supplies[5]	274,000	282,000	282,000	282,000	282,000
D.	**Total Metropolitan Demands**	**1,586,000**	**1,636,000**	**1,677,000**	**1,726,000**	**1,765,000**
	Consumptive Use	1,415,000	1,468,000	1,509,000	1,558,000	1,597,000
	Seawater Barrier	5,000	2,000	2,000	2,000	2,000
	Replenishment	166,000	166,000	166,000	166,000	166,000

Notes:
All units are acre-feet unless specified, rounded to the nearest thousand. Totals may not sum due to rounding.
[1]Growth projections are based on SCAG 2012 Regional Transportation Plan and SANDAG Series 13 2050 Regional Growth Forecast.
[2]Does not include future active conservation savings. 1990 is base year.
[3]Includes un-metered water use savings.
[4]Excludes Santa Ana River base flow, which is used for recharge of Orange County groundwater basin and reflected in the Groundwater production numbers.
[5]IID/SDCWA transfer and canal linings.

Additionally, Metropolitan has comprehensive plans to address up to a 50 percent reduction in its water supplies and a catastrophic interruption in water supplies through its Water Surplus and Drought Management and Water Supply Allocation Plans (RUWMP, p. ES-5).

Per the Sycamore Canyon Business Park Specific Plan, Western has stated that there is adequate water volume available to serve any potential industrial development within the Specific Plan Area. Additonally, per Metropolitan's 2015 UWMP report, Western will have sufficient water supply available to serve the Project including any reasonably foreseeable future development during normal, dry and multiple dry years. Therefore, sufficient water supplies exist to serve the Project, and **impacts are less than significant.**

Threshold C: *Would the Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

The City's Public Works Department provides for the collection, treatment, and disposal of all wastewater generated within the Riverside Regional Water Quality Control Plant (RRWQCP). In 2015, RRWQCP's plant capacity expanded to 46 million gallons per day (mgd) (City of Riverside Public Works, 2016). Per the UWMP, the RRWQCP serves approximately 295,000 people, who generate approximately 18 mgd, indicating the RRWQCP currently has excess capacity. As outlined above under Threshold A, Parcel 1 is anticipated to generate approximately 16,288 gallons per day (mgd) and will connect to the City's wastewater/sewer collection system and will be treated at RRWQCP. Parcel 2 is anticipated to generate approximately 6,914 mgd but will not connect to City sewer, as it will be served by a septic system. As outlined above in Section 5.14.1, the RWQCP has recently been expanded to have a capacity of 46 mgd, and the Project would not require RPU to expand wastewater treatment facilities. Therefore, **impacts are less than significant.**

Threshold D: *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?*

The proposed Project will generate solid waste during construction and operation. The Project's estimate construction waste is shown below in Table 5.14-11. As shown in Table 5.14-11 the proposed Project is anticipated to generate approximately 1,173 tons of construction related solid waste. Given the limited contribution of construction related solid waste anticipated to be generated by the Project over and estimated 15 month construction period (a negligible percent of the annual landfill capacity), Project construction will not substantially contribute to the exceedance of the permitted capacity of the designated landfills.

Table 5.14-11 – Estimated Project Construction-Related Solid Waste Generation

Proposed Land Use	Size (Square Feet)	Generation Factor[a] (lbs/SF)	Projected Project Total (tons)[b]
Building A	400,000	3.89	778
Building B	203,100	3.89	395
Total Construction Waste			**1,173**
Disposal Facility	**Disposal Capacity (tons/year)[c]**	**Projected Project Construction Waste[b]**	**Projected Project Contribution to Yearly Intake**
Badlands Landfill	1,752,000	1,173	0.07%
Lamb Canyon	182,500	1,173	0.64%
El Sobrante Landfill	5,859,710	1,173	0.02%
Total	**7,794,210**	1,173	0.02%

Notes:
a. Source: USEPA
b. 1 ton = 0.0005 lbs. Proposed Project Tons = (SF X 3.89 lbs/SF X 0.0005 lbs)
c. Daily Disposal capacity multiplied by 365 days per year.

Additionally, should the construction-related solid waste be processed at the Robert A. Nelson Transfer Station before being sent to a landfill, the proposed Project's construction-related solid waste would constitute a negligible percent of the annual permitted intake capacity of the transfer station. Further, the California Green Building Standards Code (CalGreen) requires projects involving construction and demolition to recycle, reuse, compost, and/or salvage a minimum of 50 percent by weight of material or waste generated on site. Projects that have the potential to generate construction and demolition waste are required to complete a Waste Recycling Plan to identify the estimated quantity and location or recycling for construction and demolition waste resulting from the project to meet this goal. Thus, impacts to the existing landfills during construction are **less than significant.**

After construction, the Project would generate 1,113.4 tons per year of operational solid waste over its lifetime. The estimated operational-related solid waste generation for the Project is reflected below in Table 5.14-11 – Estimated Operational Project-Related Solid Waste Disposal.

As shown in Table 5.14-12, the operation of the Project is anticipated to result in the disposal of approximately 1,113.4 tons of solid waste per year assuming 586 employees. Having calculated the anticipated solid waste to be disposed of by the proposed Project, implementation of the proposed Project would not substantially contribute to the exceedance of the permitted capacity of the designated landfills. Thus, operational impacts are **less than significant**.

Table 5.14-12 – Estimated Operational Project-Related Solid Waste Disposal

Proposed Land Use	Total Number of Employees	Disposal Factor (tons/employee/year)	Proposed Project Total (tons/year)
Building A and B	586	1.9	1,113.4
Total Projected Operational Waste Disposal			1,113.4
Disposal Facility		**Disposal Capacity (tons/year)**	**Projected Project Contribution of Yearly Intake**
Badlands Landfill		1,752,000	0.06%
Lamb Canyon		182,500	0.61%
El Sobrante Landfill		5,859,710	0.02%

Further, the Project would be required to comply with all Federal, State, and Local solid waste-related statues and regulations. If the Project participates in source reduction programs, the yearly solid waste generated by the Project could be reduced over time. Regardless, all three (3) landfills have the capacity to accommodate the Project's construction and operational related solid waste. Thus, the Project is served by a transfer station and landfill(s) with sufficient permitted capacity to accommodate the Project's solid waste disposal needs. Therefore, operational impacts are **less than significant.**

Threshold E: *Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

Federal, State, and local statutes and regulations regarding solid waste generation, transport, and disposal are intended to assure adequate landfill capacity through mandatory reductions in solid waste quantities (for example, through recycling and composting of green waste) and the safe and efficient transportation of solid waste. The Project will comply with all regulatory requirements regarding solid waste including AB 939 and AB 341. AB 939, which is administered by the California Department of Resources Recycling and Recovery required local governments to achieve a landfill diversion rate of at least 50 percent by January 1, 2000, through source reduction, recycling, and composting activities. Moreover, AB 341 increases the minimum solid waste diversion rate to 75 percent by 2020, and mandates multi-family residential uses of five dwelling units or more and commercial or public entities that generate more than four cubic yards of commercial solid waste per week to recycle. Since the passing of AB 341, California has actually seen a decrease in recycling rates from 49 percent (49%) in 2010 to 44 percent (44%) in 2016 (CalRecycle, https://www.calrecycle.ca.gov/75percent/recyclerate). However, such regulations will be applicable to this Project and compliance is mandatory. Further, mandates set forth by the California Green Building Standards Code (CALGreen Code) aim to reduce solid waste generation and promote recycling and diversion design and activities, to which this Project is required to comply (California Code of Regulations, Title 24, Part 11). As outlined above in 5.14.3 Project Design Considerations, the Project's features include: reusing and recycling construction and demolition waste; interior and exterior storage areas for recyclables and green waste; recycling containers in public areas; education materials about reducing waste and

available recycling services.The Project will comply with Federal, State, and local statutes and regulations related to solid waste and impacts are **less than significant**.

5.14.6 Proposed Mitigation Measures

An EIR is required to describe feasible mitigation measure that could minimize significant adverse impacts (State CEQA Guidelines Section 15126.4). Implementation of the Project will not result in any potentially significant impacts to utilities and service systems, and therefore, no mitigation measures are necessary, and no mitigation measures are required.

5.14.7 Cumulative Environmental Effects

Utilities and service systems include water, wastewater, storm drains, landfills, and solid waste disposal services. Drainage is discussed in Section 5.9 Hydrology and Water Quality.

Water Supply

Potable water service to the Sycamore Canyon Business Park, which includes the Project site, is provided by Western Municipal Water District (Western); thus, the geographic scope for water service is Western's Riverside Retail Area. As described in Section 3 – Project Description, the proposed Project will include water-efficient landscaping to conserve water, thus reducing the amount of water required and the amount of wastewater generated. Although the Project will have water efficient landscaping, the proposed Project when combined with the cumulative development projects within Western's Riverside Retail Area will increase the demand for water. Pursuant to SB 610 a Water Supply Assessment is prepared for certain projects to determine the project water supply. As the proposed Project is less than 650,000 square feet of industrial use, a WSA is nore required and was not conducted. Email communication with Western in January 2020 confirmed no WSA was required.

According to Table 5.14-1 through 5.14-6 Western will be able to provide a sufficient amount of water to its service area based on current and project future water use. Thus, Western has the ability to serve the proposed Project, as well as the cumulative development projects for the next 15 years. Because cumulative water supplies exceed water demand, **cumulative impacts to water supply are less than significant** and the proposed Project will not contribute to a cumulatively considerable impact on water supply.

Wastewater Services

The City's Public Works Department provides for the collection, treatment, and disposal of all wastewater; thus, the geographic scope for these services is the City. The Riverside Public Works Department operates a comprehensive wastewater collection, treatment, and disposal system. Wastewater generated by the proposed Project and the cumulative development projects will be collected in facilities owned and maintained by the Public Works Department and conveyed to the Riverside Regional Water Quality Control Plant (RWQCP). In January 2020 the City prepared an *Update of the Integrated Master Plan for the Wastewater Collection and Treatment Facilities* for to facilitate planning through a 20-year horizon for the City's RWQCP and collection system. The recommended plan is intended to enable the RWQCP to continue to reliabley provide wastewater

treatment for the City and surrounding communities as the wasterwater flow and loading increase due to projected population growth. The RWQCP has a capacity of 40 million gallons per day (MGD) and can provide sufficient capacity to treat the wastewater generated by Parcel 1/Building A of the proposed Project, as well as cumulative development projects, and overall buildout in the City per the GP 2025. Parcel 2/Building B will be on septic with leach lines, and will not need to be treated at the RWQCP. For these reasons, **cumulative impacts to wastewater collection and treatment are less than significant** and the proposed Project will not contribute to a cumulatively considerable impact in this regard.

Solid Waste

The geographic context for cumulative impacts regarding solid waste collection and disposal is Riverside County. Development of the proposed Project and cumulative development projects will increase the amount of solid waste entering the waste stream. All non-hazardous solid waste collected in the City is transported to the Robert A. Nelson Transfer Station, which is owned by the County of Riverside and operated under a 20-year franchise agreement by a private company. Waste is then transferred to the Badlands, El Sobrante, or Lamb Canyon landfills for disposal; however, local trash haulers may use other Riverside County landfills. All Riverside County landfills are Class II disposal sites that are permitted to receive nonhazardous municipal solid waste.

As discussed in Threshold D, the predicted total maximum load is 1,113.4 tons per year at buildout of which a maximimum of 556.7 tons per year would be conveyed to local landfills for disposal, as at least 50% is required to be recycled. This projected Project contribution of yearly intake ranges between approximately 0.02% - 0.61% for the 3 local landfills. Due to the Project's small percentage of total yearly intake for each landfill, the Project's operational impacts associated with solid waste would be less than cumulatively considerable. Additionally, the Project and other cumulative developments in the landfills' service areas would be required to comply with all applicable solid waste statutes and regulations, including the requirement to divert at least 50 percent of solid waste materials from landfills. Accordingly, the Project and other cumulative developments have are not expected to conflict with federal, state, and local statutes and regulations related to solid waste, and impacts would be **less than significant** on a cumulative basis, and the Project's contribution would be less than cumulatively considerable.

5.14.8 References

The following references were used in the preparation of this section of the DEIR:

CalGov	Governor Brown Declares Drought State of Emergency (Available at https://www.ca.gov/archive/gov39/2014/01/17/news18368/index.html, accessed December 30, 2020) Governor Brown Streamlines Relief Efforts for Families with Drinking Water Shortages Due to Drought (Available at https://www.ca.gov/archive/gov39/2014/09/19/news18713/index.html, accessed December 30, 2020) Executive Order B-28-14 (Available at https://www.ca.gov/archive/gov39/2014/12/22/news18815/index.html, accessed December 30, 2020) Executive Order B-40-17 (Available at https://www.ca.gov/archive/gov39/wp-content/uploads/2017/09/4.7.17_Attested_Exec_Order_B-40-17.pdf, accessed December 30, 2020)
CalRecycle	Solid Waste Information System, Badlands Sanitary Landfill (Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2245?siteID=2367, accessed September 4, 2020) Solid Waste Information System, Lamb Canyon Sanitary Landfill (https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2246?siteID=2368, accessed September 4, 2020) Solid Waste Information System, El Sobrante Landfill (https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2280?siteID=2402, accessed September 4, 2020) California's Statewide Recycling Rate (Available at https://www.calrecycle.ca.gov/75percent/recyclerate, accessed December 30, 2020.)
DWR	Department of Water Resources, State Water Project Delivery Capability Report 2015, July 1, 2015. (Available at https://data.cnra.ca.gov/dataset/dcr2015/resource/fe29da65-f2dd-4811-a4a6-2a0b0b9d09fe, accessed February 3, 2020)
EPA Plan	U.S. Environmental Protection Agency, San Francisco Bay Delta, Bay Delta Action Plan, August 2012. (Available at http://www2.epa.gov/sfbay-delta/baydelta-action-plan, accessed February 3, 2020)
GP 2025 FPEIR	City of Riverside, General Plan 2025 Program Environmental Impact Report (SCH#2004021108), certified November 2007. (Available athttps://riversideca.gov/cedd/planning/city-plans/general-plan-0, accessed February 2020)

PWQMP	Project Specific Water Quality Management Plan, Revised March 5, 2020. (Appendix J)
RPU	City of Riverside Public Utilities, 2015 Urban Water Management Plan, June 2016. (Available at http://www.riversideca.gov/utilities/water-umwp.asp, accessed February 3, 2020)
Master Plan	Update of the Integrated Master Plan for the Wastewater Collection and Treatment Facilities. (Available at https://riversideca.gov/publicworks/sewer/masterplan-wastewater.asp, accessed January 9, 2021)
Specific Plan	Specific Plan/EIR Sycamore Canyon Business Park. (Available at https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/spec-plans/syc-bus-park/plan_doc.pdf, accessed January 2021)
USEPA	United States Environmental Protection Agency Report No. EPA530-R-98-010, Characterization of Building-Related Construction and Demolition Debris in the United States, June 1998. (Available at https://www.epa.gov/sites/production/files/2016-03/documents/charact_bulding_related_cd.pdf, accessed September 9, 2020)
RUWMP	Regional Urban Water Management Plan, June 2016. (Available at http://www.mwdh2o.com/PDF_About_Your_Water/2.4.2_Regional_Urban_Water_Management_Plan.pdf, accessed September 9, 2020)
UWMP	Western Municipal Water District, 2015 Urban Water Management Plan Update, Adopted June 1, 2016. (available at http://www.wmwd.com/215/Urban-Water-Management-Plan, accessed February 3, 2020)
Water Education Foundation	Bay Delta Conservation Plan, 2020. (Available at https://www.watereducation.org/aquapedia/bay-delta-conservation-plan, accessed February 3, 2020)

5.15 Wildfire

Based on Appendix G of the *State CEQA Guidelines,* the analysis in the Initial Study (IS/NOP) prepared for this Project (Appendix A), and comments received during the NOP public comment period, this section evaluates potential impacts related to wildfire and fire protection service.

5.15.1 Setting

A wildfire is a nonstructural and unplanned fire that occurs in vegetative fuels. Wildfires can occur in undeveloped areas and spread to urban areas where the landscape and structures are not designed and maintained to be ignition resistant. Wildfires burn in many types of vegetation - forest, woodland, scrub (including chaparral, sage scrub, and desert scrub), and grassland. Many species of native California plants are adapted to fire (Cal Fire 1999).

Areas of dense, dry vegetation, particularly in canyon areas and on hillsides, pose the greatest potential for wildfire risks. An urban/wildland interface is an area where urban development is in proximity to open space or “wildland” areas. The potential for wildland fires represents a hazard where development is adjacent to open space or within close proximity to wildland fuels or designated fire severity zones. Figure PS-7, “Fire Hazard Areas,” of the GP 2025 identifies areas of fire hazard with hazard ratings ranging from moderate, high, and very high. The major urban/wildland interface areas identified in GP Figure PS-7 closest to the Project site are from *Hills and Canyons*, partially within the site, and nearest the site, which includes Box Springs Mountain to the north and Sycamore Canyon Wilderness Park adjacent to the project directly to the north. These two areas include areas with fire hazard ratings of very high.

The City's undeveloped hillsides are visually appealing but can provide fuel for a wildfire and subsequently mudslides in heavy rains. The Project site is a bordered by urbanized and industrial areas to the south across Alessandro Boulevard, and to the west, and vacant land and the Sycamore Canyon Wilderness park to the north and east. Urban fires and wildfires both pose a risk to the immediate area. Wildfires in the Sycamore Canyon Wilderness Park can easily spread into the urban areas and start urban fires. Additionally, structure and car fires can have the potential to spread to other structures or areas, particularly if not extinguished promptly. Proactive efforts, such as fire sprinkler systems, fire alarms, fire resistant roofing and construction methods, can collectively lessen the likelihood and reduce the severity of urban fires.

Wildfire Regional Trends

In the past decades, wildfire season in the west lengthened from an average of five months to an average of seven months, and the number of large wildfires (>1,000 acres) has increased from 140 to 250 per year. And more recently, wildfires now burn year-round in California (SBFFP and Cal Fire 2018). This is occurring as average annual temperatures in the west have risen by nearly two degrees Fahrenheit since the 1970s, and the winter snowpack has declined.

The latest large wildfire near the Project site was the 2006 Esperanza Fire in Cabazon and the San Jacinto Mountains (approximately 30 miles east). The fire was started by arson but was also wind-driven resulting in the fire being designated as a wildfire. The fire burned an estimated

40,200 acres before containment resulting in the death of 5 firefighters and destroying 54 structures that included 34 homes. Due to the fire's close proximity to the surrounding chaparral biome vegetation, the fire spread rapidly in moderate Santa Ana winds and flammable brush, charring 24,000 acres (97 km²) in 18 hours. This was the largest fire in Riverside County, since 1994.

Topography

The review of previous site documentation, as well as observation of the current surface topography, indicates that the on-site topography consists of rolling undeveloped land. Maximum topographic relief is estimated at 30 feet. There are several dirt trails traversing the Project. The northern unimproved extension of Barton Street forms the western boundary of the Property. The Project site is bordered by undeveloped open space to the north and east, Alessandro Boulevard and commercial and residential uses border to the south, and Commercial/Industrial uses border to the west.

Weather

Weather conditions influence the potential for fire ignition and rates of spread, intensity, and the direction(s) toward which a fire burn. Wind, temperature of the wind and humidity levels are the variables used to predict fire behavior. According to the California Department of Forestry and Fire Protection (Cal Fire), the fire season is starting earlier and ending later each year. Climate Change has been considered an important influence on California fire season. Warmer spring and summer temperatures, reduced snowpack, and earlier spring snowmelt create longer and more intense dry seasons that increase moisture stress on vegetation and make forests more susceptible to severe wildfire (Cal Fire 2020).

Vegetation

Vegetation usually provides most of the fuel that feeds wildfire, along with other flammable materials on site (such as human-built structures). The volume, character, distribution, and arrangement of vegetation, the relative presence of volatile oils, and the moisture content of fuels all greatly influence fire behavior. The Project area is covered with non-native grassland crossed by several drainages, some of which contain riparian woodland. Patches of sparse Riversidean sage scrub are present in the uplands. Several unpaved trails cross the uplands and drainages.

Wind

Wind plays a role in the flammability of fuels by removing moisture through evaporation, preheating fuels in a fire's path, and increasing spotting distances (the distance at which a spot fire might be ignited by a flying ember). Winds blowing more than 20 feet above the ground can carry embers downwind, causing spot fires. As outlined in the GP 2025 FPEIR, Section 5.3 – Air Quality, the City lies within the South Coast Air Basin, which consists of Orange County together with the coastal and mountain portions of Los Angeles, Riverside and San Bernardino counties. The interaction of land (offshore) and sea (onshore) breezes control local wind patterns in the area. Daytime winds typically flow from the coast to inland areas, while the pattern typically reverses in the evening, flowing from the inland areas to the ocean. (FPEIR, pp. 5.3-3 – 5.3-4)

Therefore, prevailing daytime winds at the Project site are from west to east and during the night are east to west.

City of Riverside Fire Department

Per the GP 2025, the average time for on-site response to fire calls is 5 minutes, 30 seconds. Delivering and maintaining such a high level of service in the future as the City grows is a major concern to the City of Riverside Fire Department (RFD). The RFD's goal is to maintain a 5-minute response time for the first arriving units 90 percent of the time for all emergency medical services (EMS) and fire related incidents. The first arriving unit is capable of advancing the first line for fire control, initiating rescue, or providing basic life support for medical incidents. Additionally, the RFD's policy states that units will be located and staffed such that an effective response force of 4 units with 12 personnel minimum shall be available to all areas of the City within a maximum of 10 minutes (total response time). Table 5.15-1 below shows the RFD's fire and rescue stations in the City. The nearest fire stations are Fire Station 9 – Canyon Crest (6674 Alessandro Boulevard) approximately 2 miles northwest on Alessandro Boulevard and Fire Station 13 – Box Spring Station (6490 Sycamore Canyon Boulevard), which is approximately 2.5 miles northeast of the Project site, via Alessandro Boulevard and Sycamore Canyon Boulevard.

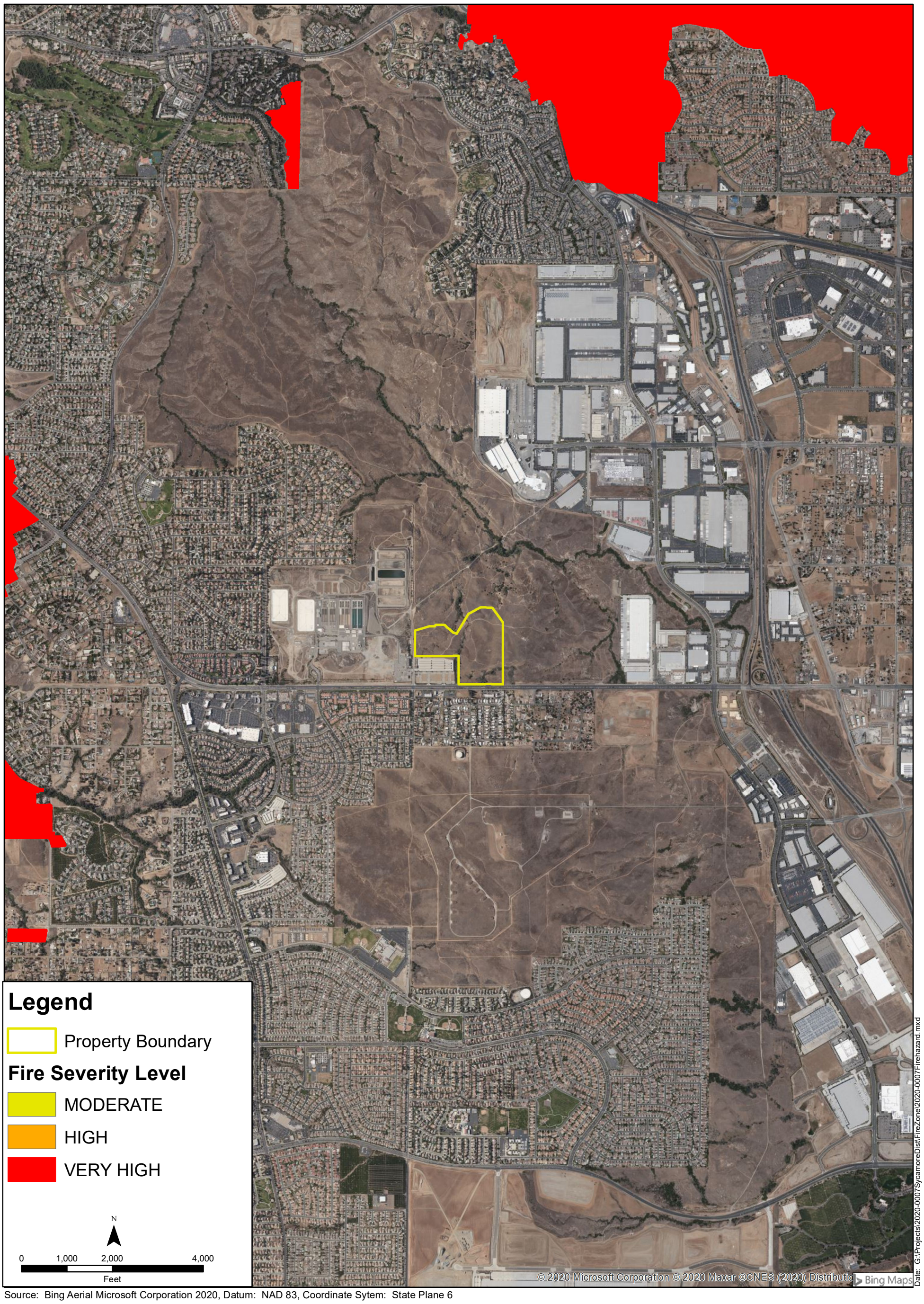
Table 5.15-1 – RFD Fire and Rescue Stations

Station No.	Station Name	Location
Fire Station No. 1	**Downtown**	3401 University Avenue
Fire Station No. 2	**Arlington**	9449 Andrew Street
Fire Station No. 3	**Magnolia Center**	6395 Riverside Avenue
Fire Station No. 4	**University**	3510 Cranford Avenue
Fire Station No. 5	**Airport**	5883 Arlington Avenue
Fire Station No. 6	**Northside**	1077 Orange Street
Fire Station No. 7	**Arlanza**	10191 Cypress Avenue
Fire Station No. 8	**La Sierra**	11076 Hole Avenue
Fire Station No. 9	**Canyon Crest**	6674 Alessandro Boulevard
Fire Station No. 10	**Arlington Heights**	2590 Jefferson Street
Fire Station No. 11	**Orange Crest**	19595 Orange Terrace Parkway
Fire Station No. 12	**La Sierra South**	10692 Indiana Avenue
Fire Station No. 13	**Box Springs**	6490 Sycamore Canyon Boulevard
Fire Station No. 14	**Sycamore Canyon**	725 Central Avenue
Source: Table 5.13-B City of Riverside General Plan and Supporting Documents EIR, Section 5.13-Public Services		

Fire Hazard Severity Zone in the Project Area

The level of hazard to life and property is affected not only by a fire itself but also by road access for evacuation, the number of available firefighters, vegetation clearance around the property, availability of water and water pressure, the effectiveness of building/fire codes, and inspection of developments in areas of higher fire hazard. The City will reduce the destructive potential of fire by providing funding for the RFD so that it continues to provide adequate levels of fire protection and fire hazard education. The current California Fire Code (CFC) is used to reduce structural fire hazards throughout the City. These proactive measures lay out a blueprint to reduce the risks from all types of fires in the City. The Project site is not within a very high fire hazard severity zone (VHFHSZ), as seen on Figure 5.15-1– Fire Hazard Areas. The nearest areas in a VHFHSZ zone

is near Via Vista Drive (2.4 miles northwest) and to the north along the western edge of the Sycamore Canyon Wilderness Park, south of Central Avenue and east of Canyon Crest Drive (GP 2025).



Source: Bing Aerial Microsoft Corporation 2020, Datum: NAD 83, Coordinate Sytem: State Plane 6

SYCAMORE HILLS DISTRIBUTION CENTER

RVA

Fire Hazard Severity Zone Map

Figure 5.15-1

5.15.2 Related Regulations

5.15.2.1 Federal Regulations

There are no Federal plans, policies, regulations, or laws related to fire response and wildfire hazards applicable to the Project under consideration.

5.15.2.2 State Regulations

California Department of Forestry and Fire Protection

The Cal Fire is dedicated to the fire protection and stewardship of over 31 million acres of California's wildlands. The Office of the State Fire Marshal supports the Cal Fire mission to protect life and property through fire prevention engineering programs, law and code enforcement, and education. The State Fire Marshal provides for fire prevention by enforcing fire-related laws in state-owned or -operated buildings, investigating arson fires in California, licensing those who inspect and service fire protection systems, approving fireworks as safe and sane for use in California, regulating the use of chemical flame retardants, evaluating building materials against fire safety standards, regulating hazardous liquid pipelines, and tracking incident statistics for local and state government emergency response agencies. Classification of a zone as moderate, high, or very high fire hazard is based on a combination of how a fire will behave and the probability of flames and embers threatening buildings. Each area of the map gets a score for flame length, embers, and the likelihood of the area burning. Scores are then averaged over the zone areas. Final zone class (moderate, high, and very high) is based on the average scores for the zone (Cal Fire 2018).

The Board of Forestry and Fire Protection (Board) is a government-appointed body within the Cal Fire. It is responsible for developing the general forest policy of the state, determining the guidance policies of the Cal Fire, and representing the State's interest in Federal forestland in California. Together, the Board and the Cal Fire work to carry out the California Legislature's mandate to protect and enhance the state's unique forest and wildland resources.

The Board is charged with protecting all wildland forest resources in California that are not under federal jurisdiction. These resources include major commercial and non-commercial stands of timber, areas reserved for parks and recreation, woodlands, brush-range watersheds, and all private and state lands that contribute to California's forest resource wealth.

Cal Fire 2019 Strategic Plan

The Board has adopted Strategic Fire Plans for California since the 1930s and periodically updates them to reflect current and anticipated needs of California's wildland. The Strategic Fire Plan is the state's road map for reducing the risk of wildfire through planning and prevention to reduce firefighting costs and property losses, increase firefighter safety, and contribute to ecosystem health. The Strategic Fire Plan is adopted to better respond to the changes of the environmental, social, and economic landscape of California's wildlands and to provide the Cal Fire with appropriate guidance for adequate statewide fire protection of state responsibility areas. The latest Strategic Fire Plan is dated January 2019. (Cal Fire 2019)

California Office of Emergency Services

The California Emergency Management Agency was incorporated into the Governor's Office on January 1, 2009, by Assembly Bill (AB) 38, and merged the duties, powers, purposes, and responsibilities of the Governor's Office of Emergency Services (Cal OES) with those of the Governor's Office of Homeland Security. Cal OES is responsible for the coordination of overall state agency response to major disasters in support of local government. The agency is responsible for ensuring the state's readiness to respond to and recover from all hazards - natural, man-made, emergencies, and disasters—and for assisting local governments in their emergency preparedness, response, recovery, and hazard mitigation efforts.

The Cal OES Fire and Rescue Division coordinates statewide response of fire and rescue mutual aid resources to all types of emergencies, including hazardous materials. Operations Section under the Fire and Rescue Division coordinates the California Fire and Rescue Mutual Aid System and coordinated response through the Mutual Aid System includes responses to major fires, earthquakes, tsunamis, hazardous materials and other disasters.

California Building Code

The California Building Standards Code (CBC), in Part 2 of Title 24 of the California Code of Regulations (CCR), identifies building design standards, including those for fire safety. The CBC is based on the International Building Code but has been amended for California conditions. The CBC is updated every three years, and the current 2019 CBC went into effect January 1, 2020. It is effective statewide, but a local jurisdiction may adopt more restrictive standards based on local conditions under specific amendment rules prescribed by the State Building Standards Commission. Commercial and residential buildings are plan-checked by local city and county building officials for compliance with the CBC. Typical fire safety requirements of the CBC include the installation of fire sprinklers for new construction (unless otherwise exempt or using alternative fire suppression systems); the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas.

California Fire Code

The CFC, contained in Part 9 of CCR Title 24, incorporates by adoption the International Fire Code of the International Code Council, with California amendments. The CFC is updated every three years, and the current 2019 CFC went into effect January 1, 2020. It is effective statewide, but a local jurisdiction may adopt more restrictive standards based on local conditions under specific amendment rules prescribed by the State Building Standards Commission. The CFC regulates building standards in the CBC, fire department access, fire protection systems and devices, fire and explosion hazards safety, hazardous materials storage and use, and standards for building inspection.

Very High Fire Hazard Severity Zone

Government Code 51175 to 51189 directs Cal Fire to identify areas of very high fire hazard within local responsibility areas. Mapping of Very High Fire Hazard Severity Zones (VHFHSZ) is based

on data and models of potential fuels over a 30- to 50-year time horizon and their associated expected fire behavior and expected burn probabilities in order to quantify the likelihood and nature of vegetation fire exposure (including firebrands) to buildings. Local Responsibility Area VHFHSZ maps were initially developed in the mid-1990s and are now being updated based on improved science, mapping techniques, and data.

In late 2005, effective in 2008, the California Building Commission adopted CBC Chapter 7A, requiring new buildings in VHFHSZ to use ignition-resistant construction methods and materials. CBC Chapter 7A is applicable to building materials, systems, and/or assemblies used in the exterior design and construction of new buildings in a Wildland-Urban Interface Fire Area as defined in CBC Section 702A. Chapter 7A establishes minimum standards for the protection of life and property by increasing the ability of a building in any fire hazard severity zone within State Responsibility Areas or any wildland-urban interface fire area to resist the intrusion of flames or burning embers Projected by a vegetation fire, and therefore contributes to a systematic reduction in conflagration losses.

VHFHSZs are delineated and used to identify property whose owners must comply with natural hazards disclosure requirements at time of property sale as well as a 100-foot defensible space clearance and/or other alternative means and methods to reduce fire hazards.

5.15.2.3 Local Regulations

Riverside Operational Area - Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP)

The Riverside Operational Area - Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) dated October 5, 2004, is Riverside's commitment to reduce risks from natural and other hazards and serves as a guide for decision makers as they commit resources to reducing the effects of natural and other hazards. It also serves as a basis for Cal OES to provide technical assistance and to prioritize project funding.

Emergency Operations Plan

The Emergency Operations Plan, approved in May 2002, addresses the City's planned response to emergencies associated with natural disasters and technological incidents – including both peacetime and wartime nuclear defense operations.

Hazardous Materials Response Plan

The Fire Department has two levels of a Hazardous Materials Response Plan. The first level is for all responders and the second is specifically for the City's Hazardous Materials Response Team. In addition, the County has a similar plan for multi-agency response.

Riverside General Plan 2025

The following addresses the objective and policies within the GP 2025:

Objective PS-6: Protect property in urbanized and nonurbanized areas from fire hazards.

> **Policy PS-6.1:** Ensure that sufficient fire stations, personnel and equipment are provided to meet the needs of the community as it grows in size and population.

Policy PS-6.2: Endeavor to meet/maintain a response time of five minutes for Riverside's urbanized areas.

Policy PS-6-3: Integrate fire safety considerations in the planning process.

Policy PS-6.4: Evaluate all new development to be located in or adjacent to wildland areas to assess its vulnerability to fire and its potential as a source of fire.

Policy PS-6.5: Mitigate existing fire hazards related to urban development or patterns of urban development as they are identified and as resources permit.

Policy PS-6.6: Continue to implement stringent brush-clearance requirements in areas subject to wildland fire hazards.

Policy PS-6.7: Continue to involve the City Fire Department in the development review process.

Policy PS-6.8: Pursue strategies that maintain and improve the City's Class 2 ISO rating.

Policy PS-6.9: Provide outreach and education to the community regarding fire safety and prevention.

Policy PS-6.10: Identify noncontiguous streets and other barriers to rapid response and pursue measures to eliminate the barriers.

Policy PS-6.11: Promote the prevention, detection, investigation and prosecution of accidental and arson fires through coordinated investigative and training partnerships with fire and law enforcement agencies and prosecuting authorities.

Sycamore Canyon Wilderness Park Stephen's Kangaroo Rat Management Plan and Updated Conceptual Development Plan (SCWP SKRMP)

The Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan (SCWP SKRMP) was prepared with two purposes: update the park's conceptual development plan and provide a coordinated Maintenance/Management Plan for the endangered Stephens' kangaroo rat (SKR). Because the Sycamore Canyon Wilderness Park was designated as a core reserve in the Habitat Conservation Plan (HCP) for the SKR, the City was required to prepare a Maintenance/Management Plan for the core reserve.

Fire is considered from two different viewpoints in the SCWP SKRMP. The first viewpoint, control of wildland fire, recognizes the potentially detrimental effects that an *uncontrolled* wildland fire would have on the resources within the park as well as on the surrounding developed properties. The second viewpoint, the use of fire as a management tool, recognizes *controlled* burns as a means to achieve potentially positive results in the enhancement of Stephens' kangaroo rat (SKR) habitat. As a pilot program within a limited area, the controlled burning of designated habitat areas can enhance grasslands habitat for the SKR.

The SCWP SKRMP analyzed wildland fire severity. The Wildfire Hazard and Risk Assessments were based upon the existing use patterns and vegetative conditions found within the Sycamore

Canyon Wilderness Park and those areas immediately surrounding the park. The assessments included fire hazard and risk evaluations of each Management Unit. The assessments followed a 7-step method. The assessments of each Management Unit is based heavily on steps 1 and 2 stated in Section 3.3.6 subsection A of SCWP SKRMP. Three categories of fire hazard were identified:

- High – Sage scrub Vegetation on 25% plus southwest slopes aligned with the prevailing winds.
- Moderate – Grassland, sage scrub and light brush on gentle slopes, 25% or less aligned with the prevailing winds.
- Low – Grassland and riparian fuels generally not aligned with the prevailing winds.

Based on this fire analysis, as outlined in the SCWP SKRMP, the Project site is located in a hazard category of Low. The rating indicates that there is low occurrence of potential ignition causes.

5.15.3 Project Design Considerations

Although the Project is not within a Moderate, High or Very High Fire Hazard Severity Zone it is partially located within a *Hills and Canyons* area (generally coinciding with the Sycamore Canyon Wilderness Park) as identified in the GP 2025 Public Safety Element, Figure PS-7, Fire Hazard Areas.

The Project will provide adequate fire access to ensure the safety for building occupants as well as RFD. Building A fire access will be on the south side of the Project site located on Driveway 2/Vista Grande Drive and Alessandro Boulevard, and Building B fire access will be on the west side of the Project site located on Driveway 1 and Barton Street. Buildings A and B will both provide fire access and fire access lanes that will leave room for fire trucks to come in and out of the Project and will allow them to reach all areas of the Project site in the event of a fire. Building A and Building B will have a 26-foot-wide fire access lane (refer to Figure 3.0-3 – Site Plan), which would allow room for fire trucks to easily navigate through the planned development. The Project's buildings will be outfitted with sprinkler systems as a means of further protecting the structures from potential wildfire impacts. A fire department access gate will be provided at the terminus of Barton Street and the entrance to Sycamore Canyon Wilderness Park, as shown on the site plan (Figure 3.0-3). There is an existing gate at the current terminus of Barton Street to control vehicle access to the park and it will be removed and replaced with a new access gate at the new terminus of Barton Street further to the north, constructed as part of this Project.

The edge treatment between Building A in Parcel 1 and the Sycamore Canyon Wilderness Park includes an 8-foot high concrete wall and landscaping with fire resistant groundcover, shrubs and columnar trees, consistent with the SCWP SKRMP. The edge treatment between Building B in Parcel 2 includes a 4-foot high wall with 4-foot high tubular steel fence on top along with landscaping that includes fire resistant groundcover, shrubs and columnar trees, also consistent with the SCWP SKRMP. The proposed trailhead parking lot (Parcel C, approximately 1.18 acres)

provides an additional set back with landscaping and buffer from the Sycamore Canyon Wilderness Park boundary. The concrete walls, fire resistant landscaping, and setbacks between the wilderness park boundary and the buildings all reduce the risk of fires spreading to the park from the Project site or from the Project site to the park.

5.15.4 Thresholds of Significance

The City of Riverside has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City of Riverside generally utilizes the CEQA significance thresholds in Appendix G ("Environmental Checklist") of the State CEQA Guidelines. The Environmental Checklist prepared by the City for the Project (see Appendix A of this document) indicates that impacts related to the Sycamore Hills Distribution Center Project may be considered potentially significant if the Project would:

- (Threshold A): substantially impair an adopted emergency response plan or emergency evacuation plan;
- (Threshold B) result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for Fire Protection Public Services;
- (Threshold C): 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 D): 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;
- (Threshold E): 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;
- (Threshold F) expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

5.15.5 Environmental Impacts

Threshold A: *Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?*

The Project will be served by Alessandro Boulevard and Barton Street. No street closures are required during the Project's construction. Per the GP 2025, Public Safety Element, Figure PS 8.1 Evacuation Routes, Alessandro Boulevard is an arterial evacuation route and the I-215 is designated as a freeway evacuation route. Thus, the Project site is located adjacent to and has immediate access to a designated evacuation route.

In the event of an accident or natural disaster, the increase in traffic in the City may impede the rate of evacuation for the residents. The City's Office of Emergency Management (OEM) is also known as the RFD's Emergency Service Division. The RFD operates and manages the OEM, a comprehensive all-hazards community-based emergency management program. According to the RFD's OEM, and per the GP 2025 FPEIR, in the event of a disaster, the location of a shelter will only be established if needed; otherwise a "shelter-in-place" order will be enacted to provide protection. "Shelter-in-place" is intended to protect public safety by encouraging people to remain indoors. This order would keep unnecessary traffic off the roads to allow emergency vehicles to respond and/or direct an orderly evacuation, if needed. In certain circumstances, local officials may direct people to go to a community shelter for safety purposes.

Emergency response and evacuation procedures would be coordinated through the City in coordination with the police and RFD. The Project would not impair an adopted emergency response plan or evacuation plan and would comply with necessary procedures. The Project's surrounding roadways would continue to provide emergency access through the Project area and to surrounding properties during construction and operation of the Project. Therefore, the Project will have a **less than significant impact** directly, indirectly and cumulatively to an emergency response or evacuation plan.

Threshold B: *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 governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for Fire Protection Public Services?*

The Project site is located in an area that will be served by the RFD. The nearest fire stations are Fire Station 9 – Canyon Crest (6674 Alessandro Boulevard) approximately 2 miles northwest on Alessandro Boulevard and Fire Station 13 – Box Spring Station (6490 Sycamore Canyon Boulevard), which is approximately 2.5 miles northeast of the Project site, via Alessandro Boulevard and Sycamore Canyon Boulevard.

According to the GP 2025 FPEIR, the average time for on-site response to fire calls is 5 minutes, 30 seconds. Delivering and maintaining such a high level of service in the future as the City grows is a major concern to the RFD. The RFD's goal is to maintain a 5-minute response time for the first arriving units 90 percent of the time for all EMS and fire related incidents. Given the Project site's proximity to the nearest fire station, response time is anticipated to be within the City's 5-minute response time average. The first arriving unit can advance the first line for fire control, initiating rescue, or providing basic life support for medical incidents. Additionally, the RFD policy states that units will be located and staffed such that an effective response force of 4 units with 12 personnel minimum shall be available to all areas of the City within a maximum of 10 minutes (total response time). The Project is not anticipated to necessitate the need for additional staffing.

In the event of a fire, the Project provides a feasible fire access network that allows fire trucks to easily navigate through the planned development to reach all areas of potential wildfire impacts that include structures and open spaces. The standard width of a typical fire truck, especially as

those used by the RPD, is 8 feet wide. The Project fire lanes will be 26 feet wide for Building A and Building B. The fire access would also allow for a typical apparatus turning radius that would allow a typical standard fire truck to navigate through. With the proposed development of Parcel 1 and associated fire lane and gate access along the parcel's eastern side, it would provide improved access for the Fire Department from Alessandro Boulevard to Sycamore Canyon Wilderness Park.

Additionally, the Project does not propose to use substantially hazardous materials or engage in hazardous activities that will require new or expanded fire protection equipment to meet potential emergency demand. The proposed Project development would pose a minor incremental impact on fire protection or emergency medical facilities and services as it would require services in the event of a fire or other medical emergency. However, the proposed uses of the Project site are not inherently high risk for causing fires, susceptible to fires, or dangerous, and would not be expected to put a high burden on these services. Any potential impacts to the provision of fire protection or emergency medical facilities and services from the Project will not be significant. Potential impacts will be offset by the payment of development impact fees as required by Chapter 16.52 of the Riverside Municipal Code (RMC) and from revenue generated for the City from property taxes. With the given feasible Project specific fire access network, project design, and two Fire Stations located within 2.5 miles of the Project site, impacts on fire protection public services would be **less than significant.**

Threshold C: *Due to slope, prevailing winds, and other factors, would the Project exacerbate wildfire risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

The Project site does not contain steep slopes in excess of 30 percent and is not surrounded by steep slopes that would increase the rate of fire spread. A fire will generally spread uphill due to the preheating of the fuel and the up-slope draft unless the general wind is strong enough to overcome these two forces. The flames are closer to the fuel on the uphill side and they receive more radiant heat. This results in more preheating and faster igniting of the fuel. The heated air rises along the slope increasing the draft that further increases the rate of spread. As a result of winds blowing up-slope, more convective heat also reaches the fuel in front of the fire and it is pre-heated more quickly to the ignition temperature. The opposite is true at night. When the slope becomes shaded, the surface generally loses heat rapidly and becomes cool. The air adjacent to the surface also cools and becomes denser thus heavier and it can begin to flow down-slope.

The Project site does not contain steep slopes in excess of 30 percent and the Sycamore Canyon Wilderness Park does not contain steep slopes adjacent to the Project site. Thus, the Project will not be subject to significant wildfire risks in relation to slopes. In addition, as outlined in Section 5.15.3, Project Design Considerations above, the edge treatment between Building A in Parcel 1 and the Sycamore Canyon Wilderness Park includes an 8-foot high concrete wall and landscaping with fire resistant groundcover, shrubs and columnar trees, consistent with the requirements of the SCWP SKRMP. The edge treatment between Building B in Parcel 2 includes a 4-foot high wall with 4-foot high tubular steel fence on top along with landscaping that includes fire resistant groundcover, shrubs and columnar trees, also consistent with the SCWP SKRMP. The proposed

trailhead parking lot (Parcel C, approximately 1.18 acres) provides an additional setback with landscaping and buffer from the Sycamore Canyon Wilderness Park boundary. The concrete walls, fire resistant landscaping, and setbacks between the wilderness park boundary and the buildings all reduce the risk of fires spreading to the park from the Project site or from the Project site to the park.

As noted, the Project site is not within a VHFHSZ, and the closest area within a VHFSZ is 2.4 miles northwest on Alessandro Boulevard between Canyon Crest Drive and Via Vista Drive. However, the major urban/wildland interface areas identified in GP Figure PS-7 closest to the Project site are from areas identified in the legend of the figure as *Hills and Canyons*, partially within the site, and Sycamore Canyon Wilderness Park adjacent to the project, directly to the north. The Project site is bordered by Alessandro Boulevard to the south, Barton Street to the west, Sycamore Canyon Wilderness Park to the north, and undeveloped private land to the east. The risk for the Project site to exacerbate wildfire risks for a wildfire spreading to or from the Project site to these roadways will be relatively unlikely because there is generally little wildfire fuel in the form of vegetation on paved roadways. The addition of 8 foot high concrete walls, fire resistant landscaping, and set-backs between the wilderness park boundary and the buildings all reduce the risk of fires spreading to the park from the Project site or from the Project site to the park. The conservation areas within the Project site will be managed by a 3rd party and would not become overgrown with wildfire fuels.

Additionally, as mentioned previously in this section regarding wind, prevailing daytime winds at the Project site are from west to east and nighttime winds are from east to west. As such, the most likely risk is that a fire from the Project site could be blown to the adjacent undeveloped property to the east from prevailing winds during the day and from the adjacent undeveloped property to the east to the Project site from prevailing winds during the night. The Project would be constructed and operated in compliance with the CFC and CBC.

Further, Project structures would be required to comply with the CFC with regard to emergency fire access and use of building materials that would limit the spread of wildfire to the greatest extent possible, and all proposed construction activities would be subject to compliance with all applicable State and local regulations in place to reduce risk of construction-related fire, such as installation of temporary construction fencing to restrict site access and maintenance of a clean construction site. This would reduce potential spread of a fire from the Project site to areas outside the Project site boundary, which would also reduce the potential of exacerbating wildfire risks. The proposed development will include fire suppression equipment such as alarm systems, fire extinguishers and sprinklers, which could assist in the quick suppression of a fire if it were to occur at the Project site and reduce the potential for spread to the Sycamore Canyon Wilderness Park to the north.

The Project would be constructed and operated in compliance with the CFC and CBC, along with being compliant with the GP 2025 and would not exacerbate wildfire risks or the uncontrolled spread of a wildfire and as a result expose Project occupants to pollutant concentrations from wildfire. Impacts would be **less than significant.**

Threshold D: *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?*

Within the Project's proposed Parcel C, the Project will construct trailhead improvements including a parking lot, sidewalk, shade structure, bike rack, drinking fountains, fencing, and a fire department access gate for consistency with the Sycamore Canyon Wilderness Park Stephen's Kangaroo Rat Management Plan and Updated Conceptual Development Plan. The Project site is not within a VHFHSZ, although it is partially located within a *Hills and Canyons* area (GP 2025 Figure PS-7, Fire Hazard Areas), and sits on a vacant land in a mostly developed area with roadways, residential units, and open space adjacent to the site and its surrounding area. There are existing utilities near the Project site, and utilities such as water and power will be installed underground via Alessandro Boulevard and Barton Street to access points to Building A and Building B. There would be no utilities crossing overhead over open space and fields where fires are more likely to occur. Implementation of the Project would not require installation of new or increased level of infrastructure maintenance that could exacerbate fire risk or result in temporary or ongoing impacts to the environment. Therefore, impacts on resources such as installation or maintenance associated with infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment would be **less than significant.**

Threshold E: *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 Project site is bordered by a self-storage facility, Alessandro Boulevard, and commercial and residential uses across Alessandro Boulevard to the south, open space to the north, Barton Street to the west, and vacant land to the east. As mentioned in previous sections and the Geotechnical Evaluation, on-site topography consists of undeveloped land on natural rolling terrain descending gradually from a west to east direction.

As outlined above under Thresholds C and D above, the Project would not exacerbate wildfire risks or the uncontrolled spread of a wildfire. As identified in Section 5.6 Geology and Soils, Threshold A, the project site is not in an area of high susceptibility to landslides. The Project site is also not within a flooding hazard zone per the GP 2025. As outlined in Section 5.9 Hydrology and Water Quality, Threshold C, the Project would be required to comply with the NPDES Statewide General Construction Permit (Order No. 09-09-DWQ). The permit requires preparation of an effective Storm Water Pollution Prevention Plan (SWPPP), which describes erosion and sediment control BMPs to prevent stormwater runoff during construction. Post construction storm water runoff and erosion is minimized with proposed landscaping around the buildings (refer to Section 3.0 Project Description and Figures 3.0-10A and 3.0-10B) as well as Low Impact Development (LID) Best Management Practices (BMPs) to address storm water runoff as outlined in the project specific Water Quality Management Plan (Appendix J).

Thus, the Project would not expose people or structures to significant downstream flooding impacts or landslides as a result of post-fire slope stability, runoff, or drainage changes. With all considered, Project impacts related to exposure of people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes would be **less than significant.**

Threshold F: *Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

As discussed, the Project site is also not within a VHFHSZ although it is partially located within a *Hills and Canyons* area. Nonetheless, the Project would be required to comply with applicable CFC, GP 2025, and City Guideline requirements such as fire breaks, sprinklers, walls, emergency access roads, etc. The Project site will be landscaped with fire-resistant landscape, drought-tolerant and climate appropriate trees, shrubs, and ground cover that will meet or exceed the City's requirements. Additionally, the Project site is within approximately 2.5 miles of two fire stations, Fire Station 9 – Canyon Crest (6674 Alessandro Boulevard) and Fire Station 13 – Box Spring Station (6490 Sycamore Canyon Boulevard), which would provide adequate response times to the Project site.

Although the Project is allowing more accessibility to areas with the potential for fire risk/hazard, the Project will include necessary and adequate fire access for RFD to access the site and adjacent Sycamore Canyon Wilderness Park and for occupants (workers/employees) to leave the site in case of a fire. With the proposed development of Parcel 1 and associated fire lane and gate access along the parcel's eastern side, it would provide improved access for the Fire Department from Alessandro Boulevard to Sycamore Canyon Wilderness Park.

Additionally, the Project would comply with all CBC and CFC fire safety codes and regulations to further minimize the potential risk for a wildfire. The SCWP SKRMP also identifies appropriate edge treatments between the wilderness park and the Project site. Fencing and walls around the Project site have been designed to be compliant with requirements in the SCWP SKRMP. With adherence to RFD practices, Project design considerations, and the Project compliance existing codes and policies, impacts involving wildland fires **would be less than significant.**

5.15.6 Proposed Mitigation Measures

Potential impacts are less than significant and mitigation measures are not required.

5.15.7 Cumulative Environmental Effects

The Project site is not within a VHFHSZ, although it is partially located within a *Hills and Canyons* area. The area for cumulative impacts consists of lands within the Cities of Riverside and Moreno Valley and Riverside County that are categorized as VHFHSZ since wildfire can spread rapidly across City and County limits. Urban development projects that are constructed in compliance with applicable CBC and CFC would ensure that appropriate measures, including fire prevention and fuel modification features, are provided so that urban development do not expose project occupants to increased and uncontrolled wildfire hazards. Applicable CBC and CFC standards

are designed to minimize the potential for uncontrolled fires. With compliance with applicable CBC and CFC standards and General Plan policies, implementation of the Project, combined with other development in the City and County, would not result in increased exposure to wildfire risks. Furthermore, cumulative projects would not result in permanent road closures, nor impede an established emergency or evacuation access route, or interfere with emergency response requirements, such as fire protection response time standards established by GP 2025. The Project is surrounded by mostly urban development and served by existing infrastructure. It would not contribute incrementally with other projects in the Cities of Riverside and Moreno Valley and Riverside County to create an environment that could exacerbate wildfire risks. Cumulative wildfire hazard impacts would be **less than significant**.

5.15.8 References

The following references were used in the preparation of this section of the DEIR:

Cal Fire 1999	California Department of Forestry and Fire Prevention (Cal Fire). 1999. Learning to Live with Fire. (Available at https://www.fire.ca.gov/media/8657/live_w_fire.pdf)
Cal Fire 2018	Cal Fire's Fire Hazard Severity Zones Viewer website. (Available at https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414)
Cal Fire 2019	Cal Fire January 2019 Strategic Plan. (Available at https://www.fire.ca.gov/about-us/strategic-plan/)
Cal Fire 2020	Cal Fire 2020 Incident Archive website. (Available at https://www.fire.ca.gov/incidents/2020/)
GP 2025	City of Riverside, General Plan 2025, Public Safety Element. (Available at https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/general-plan/18_Public_Safety_Element_with%20maps.pdf, accessed May 2020)
GP 2025 FPEIR	City of Riverside, General Plan 2025 Program Environment Impact Report (SCH# 2004021108), Sections 5.3 Air Quality and 5.13 Public Services. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0, accessed August 2020)
OEM	City of Riverside, Office of Emergency Management, Riverside Operational Area – Multi-Jurisdictional LHMP, 2019 Part 1/Part 2 and OEM's Strategic Plan. (Available online at: https://riversideca.gov/fire/divisions/office-emergency-management/lhmp, accessed May 2020)
SBFFP and Cal Fire 2018	State Board of Forestry and Fire Protection (SBFFP). January 22, 2019 California Department of Forestry and Fire Protection, *Strategic Fire Plan*

SCWP SKRMP	Dangermond & Associates, O'Farrell Biological Consulting, Firewise 2000, Inc., Tierra Madre Consultants, Inc., *Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan*, March 1999. (Available online at: http://www.riversideca.gov/planning/pdf/SpecificPlans/SycCynMnmgtPlan_Up datedConceptualPlan.pdf, accessed February 2020)

6.0 Other CEQA Topics

This section includes a summary of the significant and unavoidable impacts found in Section 5.0 Potentially Significant Environmental Effects and also analyzes potential irreversible environmental effects and growth-inducing impacts of the Project. Energy impacts are addressed in Section 5.5, Energy.

6.1 Significant Unavoidable Adverse Impacts

This topic is intended to address any significant impacts that cannot be mitigated to below a level of significance (State CEQA Guidelines Sections 15126.2(c). As discussed in detail throughout Section 5.0 Potentially Significant Environmental Effects of this DEIR, the proposed Project will not result in any Project-specific or cumulatively significant unavoidable adverse impacts related to Aesthetics, Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hazards & Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Noise, Tribal Cultural Resources, Utilities, and Wildfire.

The proposed Project will result in Project-specific or cumulatively significant unavoidable impacts related to Transportation, more specifically Vehicle Miles Traveled (VMT). As outlined in Section 5.12.5, Threshold B, the Project would exceed the threshold of 15% below the current City of Riverside VMT per employee for both the baseline and cumulative Project generated VMT. Even under the most favorable circumstances, projects located within a suburban center context, such as the proposed Project evaluated here, could realize a maximum 15 percent reduction in VMT through implementation of feasible Transportation Demand Management (TDM) strategies. The Project is estimated to exceed the current City of Riverside VMT per employee by 18.66% in base year (2012) and 30.97% in cumulative year (2040). Given that the maximum percent reduction is 15% through feasible TDM measures, the Project cannot reduce the Project-generated VMT to below the threshold of 15% below the current City of Riverside VMT per employee. The Project VMT impact is therefore **considered significant and unavoidable.**

6.2 Consistency with Regional Plans

CEQA, Section 15125(d), requires an EIR to discuss any inconsistencies between the proposed Project and applicable general and regional plans.

City of Riverside General Plan and Sycamore Canyon Business Park Specific Plan

A discussion of the Project's consistency with the City's General Plan 2025 (GP 2025), Municipal Zoning Code, and the Sycamore Canyon Business Park Specific Plan (SCBPSP) is contained in Section 5.10 Land Use and Planning of this DEIR. As discussed, per the GP 2025, the Project site has a current land use designation of B/OP – Business Office Park and is zoned BMP-SP – Business Manufacturing Park and Specific Plan (Sycamore Canyon Business Park) Overlay Zones. The SCBPSP implements the GP 2025 and is intended to guide development within the Specific Plan area, establishing high-quality development that strengthens the City's economic base. The Project would be consistent with the existing General Plan land use designation, the Municipal Zoning Code, and the SCBPSP.

March Air Reserve Base Land Use Compatibility Plan

Section 5.8 Hazards and Hazardous Materials and Section 5.10 Land Use and Planning provide discussions of the Project's consistency with the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan (MARB/IPA LUCP). As discussed, the Project is located within Zone C1 of the LUCP, which requires airspace review for structures over 70 feet in height. According to the MARB/IPA LUCP, objects over 70 feet tall within Zone C1 require airspace review in accordance with Federal Aviation Regulation (FAR) Part 77. Both Building A and Building B would have clear heights of 36 feet and parapet heights of 44 feet, with maximum building heights of 45 feet. Thus, the proposed buildings would not exceed the FAR Part 77 height limits of structures over 70 feet in height.

Both Building A and Building B would be subject to the intensity requirements for Zone C1. Utilizing the Airport Land Use Commission's (ALUC) recommendation of determining land use intensity by use of the Building Code Method as provided in Appendix C of the *Riverside County Airport Land Use Compatibility Plan Policy Document*, Table C1-*Occupancy Levels, California Building Code, adopted December 2004*, the Project would not exceed the ALUC Per Person Average Acre Buildings Maximum of 100 persons, nor would the Project exceed the ALUC Per Single Acre Maximum of 250 persons. Thus, the Project would be consistent with the applicable guidelines and requirements of the MARB/IPA LUCP.

Air Quality Management Plan (AQMP)

Section 5.2 Air Quality discusses consistency with the current 2016 Air Quality Management Plan (AQMP). As discussed, the growth forecasting for the AQMP is based in part on the land uses established by local general plans. Thus, if a project is consistent with the land use as designated in the local general plan, it can normally be considered consistent with the AQMP. The Project site is designated as B/OP in the GP 2025 and is zoned BMP-SP Overlay Zones. Permitted land uses include light industrial, distribution and warehousing, and product assembly. The Project would be consistent with the land use and zoning designations and would therefore be consistent with the growth assumptions of the 2016 AQMP.

Another factor used to determine if a project would conflict with implementation of the AQMP is determining if the project would result in an increase in the frequency or severity of existing air quality violations, or cause or contribute to new violations, or delay the timely attainment of air quality standards (NAAQS and CAAQS) or interim emissions reductions specified in the AQMP. NAAQS and CAAQS violations could occur if project emissions would exceed regional significance thresholds or localized significance thresholds (LSTs).

As shown in Tables 5.2-6 and 5.2-7 of Section 5.2 Air Quality, construction and operational emissions would be less than the regional significance thresholds. Additionally, as shown in Tables 5.2-8 and 5.2-9 of Section 5.2 Air Quality, construction and operational emissions would be less than the LSTs. Therefore, the Project would not result in an air quality violation and would not conflict with or obstruct the implementation of the AQMP.

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

Consistency with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) is contained in Section 5.3 Biological Resources. As discussed, the Project site is located within the MSHCP Plan Area, although the site is not located in a Criteria Cell. The Project site is flanked by Public Quasi Public (PQP) Lands within the Sycamore Canyon Wilderness Park, which is located directly north of the site. The MSHCP requires projects comply with its Sections 6.1.2 (Protection of Species within Riparian/Riverine Areas and Vernal Pools), 6.1.3 (Protection of Narrow Endemic Plant Species), 6.1.4 (Urban and Wildlands Interface), 6.3.2 (Additional Survey Needs and Procedures), Appendix C (Standard Best Management Practices), and Section 7.5.3 (Construction Guidelines). Section 5.3.6 of Biological Resources, including Table 5.3-3 – Project Compliance with MSHCP Urban/Wildlands Interface Guidelines, provides discussions on how the Project would be consistent to the applicable MSHCP Sections mentioned here. Overall, through Project design features and recommended mitigation measures, the Project would be in compliance with applicable guidelines associated with the MSHCP Sections listed above.

Stephen's Kangaroo Rat Habitat Conservation Plan (SKR HCP)

The Project site is not within an SKRHCP Core Reserve. To be compliant with SKRHCP, the Project proponent is required to pay the SKR mitigation fee in effect at the time a grading permit is issued. With payment of this fee the Project would be in compliance with the Plan.

City's Restorative Growthprint-Climate Action Plan (RRG-CAP)

As discussed in Section 5.7 Greenhouse Gases (GHG), the Project was evaluated for consistency with the strategies and actions contained in the City's Restorative Growthprint-Climate Action Plan (RRG-CAP). Table 5.7-8 of Section 5.7 summarizes the Project's consistency with the RRG-CAP measures. As discussed within Table 5.7-8, the Project would be consistent with applicable RRG-CAP measures and would not conflict with applicable policies or regulations adopted for the purpose of reducing GHG emissions.

Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

The Southern California Association of Governments (SCAG) is an association of local governments and agencies that serves as a Metropolitan Planning Organization (MPO), a Regional Transportation Planning Agency (RTPA) and a Council of Governments (COG). The SCAG region encompasses six (6) counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura) and 191 cities. SCAG is responsible for developing long-range regional transportation plans, including the regional Sustainable Communities Strategy (SCS) and associated growth forecasts, regional transportation improvement programs, and regional housing needs allocations.

SCAG's Connect SoCal – The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. Connect SoCal embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions (CTCs), tribal governments, non-profit organizations,

businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura.

Section 5.12 Transportation includes a discussion of whether the Project would conflict with an applicable program, plan, ordinance or policy addressing the circulation system, including the RTP/SCS. With implementation of the improvements identified in the Traffic Operations Analysis to address deficiencies to study area intersections, the Project would not conflict with applicable programs, plans, ordinances, or policies addressing the local circulation system. Therefore, the Project will not conflict with the Connect SoCal – 2020-2045 RTP/SCS.

2015 Urban Water Management Plan

Section 5.14 Utilities and Service Systems discusses Project in relation to the Western Municipal Water District's (Western) 2015 Urban Water Management Plan (UWMP). As discussed, potable water service to Building A and Building B would be provided by Western. The Project would be subject to compliance with the City's Water Conservation Ordinance and the California Green Building Code. Further, based on the water supply and demand projections, projected water supplies would be sufficient to meet the projected water demand for the Project. Thus, the Project would not conflict with the provisions of the UWMP.

6.3 Significant Irreversible Environmental Changes

Section 15126.2(d) of the CEQA Guidelines requires EIRs to contain a discussion of significant irreversible environmental changes which would be caused by the proposed project, should it be implemented. This section addresses the use of non-renewable resources during initial and continued phases of the Project, the commitment of future generations to environmental changes or impacts because of the Project, and any irreversible damage from environmental accidents associated with the Project.

6.3.1 Use of Non-Renewable Resources

The Project would involve an irreversible commitment of building materials and energy resources, some of which are non-renewable, to construct 603,000 square feet of planned high cube transload short-term warehouse use within two buildings. The Project additionally proposes a proposed trailhead parking lot, improved with decomposed granite parking, landscaping, shade structure with benches, a bike rack, drinking fountain (including for pets), and ADA compliant parking spaces and sidewalk. Consumption of resources for this development would also occur with any development of the Project site and are not unique to the Project.

Operation of the Project would irreversibly increase local demand for non-renewable energy resources, such as petroleum products and natural gas. However, increasingly efficient building design would offset this demand to some degree by reducing energy demands of the Project. The Project would be subject to the energy conservation requirements of the California Energy Code (Title 24, Part 6, of the California Code of Regulations, California's Energy Efficiency Standards for Residential and Nonresidential Buildings) and the California Green Building Standards Code (Title 24, Part 11 of the California Code of Regulations). The California Green Building Standards Code functions to:

- Reduce GHG emissions from buildings
- Promote environmentally responsible, cost-effective, healthy places to live and work
- Reduce energy and water consumption
- Respond to the environmental directives of the administration

The California Energy Code provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California, and the Green Building Standards Code requires solar access, natural ventilation, and stormwater capture. With adherence to these standards, the Project would not use unusual amounts of energy or construction materials, and impacts related to consumption of non-renewable and slowly renewable resources would be less than significant. Consumption of these resources would occur with any development of the Project site and would not be unique to the Project. Section 5.5, Energy, includes a discussion of the potential energy consumption and/or conservation impacts of the Project.

6.3.2 Commitment of Future Generations

Approval of the Project would result in environmental changes or impacts that commit future generations to new environmental circumstances. The Project would require an irreversible commitment of law enforcement, fire protection, water supply, wastewater treatment, and solid waste disposal services. However, as discussed in the Initial Study (Appendix A) and in Sections 5.14 Utilities, and 5.15 Wildfire, impacts to these services and systems would not be significant.

6.4 Growth-Inducing Impacts

Section 15126.2(e) of the CEQA Guidelines requires a discussion of a proposed project's potential to foster economic or population growth, including ways in which a project could remove an obstacle to growth. Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. The Project's growth inducing potential would therefore be considered significant if project-induced growth could result in significant physical effects in one or more environmental issue areas.

6.4.1 Population Growth

The Project does not include residential development, but rather would consist of the construction of two warehouse buildings that may indirectly induce population growth through the provision of new employment opportunities within the City if those employment opportunities were filled by people moving to the City of Riverside from other areas. While construction of the Project would generate the demand for temporary construction jobs, given the availability of labor in the Riverside County and San Bernardino County region, and the southern California region as a whole, it is reasonable to assume that the construction of the Project will be completed by existing companies already doing business in the area with employees already residing in the area. Thus, construction-related growth inducement would not result from implementation of the Project.

Because the Project is consistent with the GP 2025 Typical Growth Scenario and population growth impacts that were previously evaluated in the GP 2025 FPEIR, the Project does not result

in new impacts beyond those previously evaluated in the GP 2025 FPEIR. The employment opportunities anticipated to be generated by the Project are relatively minor and within the Southern California Association of Governments (SCAG) population, housing, and employment forecasts. As discussed in the Project's Initial Study (Appendix A), SCAG prepares population, housing, and employment estimates as part of its Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). As of September 3, 2020, SCAG has fully adopted the Connect SoCal 2020-2045 RTP/SCS, from which forecasts for employment, population, and households for the City of Riverside were obtained. The Project is a speculative development and, as such, the number of employees, shifts, and days and hours of operation are not known at this time. However, the anticipated number of employees for both buildings was calculated using the County of Riverside generation rate[1] to be approximately 586. This number represents approximately 0.3 percent of the expected opportunities within the City by 2045. Thus, the Project will not induce substantial population growth and impacts will be less than significant.

6.4.2 Economic Growth

The Project is a speculative development and the tenants are unknown at this time, so the number of employees, shifts, days and hours of operation are not known at this time. However, for the purposes of the analysis in the Initial Study and EIR, conservative assumptions utilizing the worst-case/ most intensive use is assumed as operating three 8-hour shifts, 24 hours a day, 7 days a week. The estimated number of employees, using the County of Riverside General Plan Appendix E-2: Socioeconomic Build-Out Assumptions and Methodology[2], which uses a factor of 1,030 SF per employee, would be 388.3 employees for Building A and 197.2 employees for Building B, for a total of 586 (rounded to the nearest whole number) for both buildings. The employment opportunities anticipated to be generated by the Project are relatively minor and within SCAG population, housing, and employment forecasts.

Additionally, as described above in Section 6.4.1, the 586 employment opportunities represent approximately 0.3 percent of the expected opportunities within the City by 2045. Therefore, as Project employment opportunities are both within SCAG population, housing, and employment forecasts as well as within expected opportunities within the City, the Project would not be expected to induce substantial economic expansion to the extent that direct physical environmental effects would result. Moreover, the environmental effects associated with any future development in or around Riverside would be addressed as part of the CEQA environmental review for each of those development projects.

[1] County of Riverside General Plan Square Feet/Employee Factor of 1,030 SF per employee for Light Industrial land use, Appendix E-2: Socioeconomic Build-Out Assumptions and Methodology, April 11, 2017, https://planning.rctlma.org/General-Plan-Zoning/General-Plan

[2] County of Riverside General Plan Square Feet/Employee Factor of 1,030 SF per employee for Light Industrial land use, Appendix E-2: Socioeconomic Build-Out Assumptions and Methodology, April 11, 2017, https://planning.rctlma.org/General-Plan-Zoning/General-Plan

6.5 References

The following references were used in the preparation of this section of the DEIR:

GP 2025	City of Riverside, *General Plan 2025*, certified November 2007 with subsequent amendments to various elements. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0, accessed January 2020)
RMC, Title 17	City of Riverside, Code of Ordinances, Title 19 Zoning (Available at: https://library.municode.com/ca/riverside/codes/code_of_ordinances?nodeId=PTIICOOR_TIT17GR, accessed February 2020)
RMC, Title 19	City of Riverside, Code of Ordinances, Title 19 Zoning https://library.municode.com/ca/riverside/codes/code_of_ordinances?nodeId=PTIICOOR_TIT19ZO, accessed February 2020)
MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan (Available at https://www.wrc-rca.org/document-library/, accessed June 2020)
RRG-CAP	Riverside Restorative Growthprint – Climate Action Plan (Available at: https://riversideca.gov/cedd/planning/city-plans/other-city-plans, accessed May 2020)
SCAG 2020	Southern California Association of Governments. Connect SoCal – the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy. (Available at https://www.connectsocal.org/Pages/What-Is-Connect-SoCal.aspx, accessed August 2020)

7.0 Environmental Effects Found Not to be Significant

CEQA provides that a DEIR shall focus on all potentially significant effects created by the project onto the environment, discussing the potential effects with emphasis on proportion to their severity and probability of occurrence. This section summarizes the analysis of issue areas for which no significant adverse impacts were identified and are therefore not discussed in this DEIR. The items listed below are contained in the City's environmental checklist form as well as Appendix G of the CEQA Guidelines. Items not addressed in this section have been addressed in Section 5.0, Environmental Analysis, of this DEIR. Section 5.0 also includes an expanded discussion of the settings under each environmental issue area discussed therein. Issue areas found to have a Project-specific less than significant impact include a short discussion of the potential for cumulative impacts when assessing the Project in addition to the projects listed in Table 4.0-1 – Summary of Cumulative Development Projects in Section 4.0, Environmental Setting.

7.1 Effects Found Not to be Significant During Preparation of the NOP

Section 21100(c) of the Public Resources Code states that an EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR. Section 15128 of the *CEQA Guidelines* adds, "Such a statement may be contained in an attached copy of an Initial Study." Please refer to the Project's Initial Study (Appendix A) for the complete issue area analysis.

7.1.1 Agriculture and Forestry Resources

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

As discussed in the Project's Initial Study, the Project site includes approximately 33.67 acres of designated Farmland of Local Importance and approximately 14.18 acres of Other Land. The Project site is not designated as, or in close proximity to any land classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, nor are these lands found within the Project site. While implementation of the Project will result in the conversion of approximately 33.67 acres of Farmland of Local Importance to a non-agricultural use, the Project will not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland). Therefore, the Project will have a **less than significant** impact on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. As the Project will not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) it will not have a direct or cumulatively considerable impact on Farmland.

7.1.1.2 Threshold B: *Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

The Project site is not located within a Williamson Act Preserve or under a Williamson Act Contract. The nearest area under the Williamson Act Contracted Land is approximately 4.6 miles from the Project and the nearest Williamson Act Preserve is approximately four (4) miles from the Project site. The Project site is not zoned for agricultural use and is not adjacent to land zoned for agricultural use. Therefore, the Project will not conflict with existing zoning for agricultural use or a Williamson Act contract and thus will have **no impact.** As the Project will not conflict with existing zoning and is not located within a Williamson Act contract, it will not have a direct or cumulatively considerable impact on agricultural use.

7.1.1.3 Threshold C: *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 in Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?*

The Project site is not zoned for or used for agricultural purposes, nor will the Project cause rezoning of or conflict with zoning for forest land or timberland. The Project site does not contain timberland, is not zoned for timberland production and is not next to land zoned for timberland. There is riparian habitat associated with drainage features on site, and there are an estimated ten trees located in the development footprint (per a review of Google Earth and the Project's Site Plan). However, these individual trees are not great enough in number or size to be considered a forest or forest land. Thus, potential impacts to timberland or forest land as a result of the Project would be **less than significant**. As the Project will not conflict with existing zoning and will not cause rezoning of forest land, timberland, or timberland zoned for Timberland Production, it will not have a direct or cumulatively considerable impact on forest land or timberland.

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

As outlined above under Threshold C, the Project site contains riparian habitat/vegetation associated with the drainage feature and there are an estimated ten trees located in the development footprint. However, these individual trees are not great enough in number or size to be considered a forest or forest land. The Sycamore Canyon Wilderness Park is not considered forest land and the Project site is not adjacent to any other land with forest land. The Project would not result in the conversion of any forest land; therefore, potential impacts would be **less than significant**. As the Project will not convert forest land, it will not have a direct or cumulatively considerable impact on forest land.

7.1.1.5 Threshold E: *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?*

The Project site does not support agricultural resources or operations and would not result in the conversion of designated Farmland to non-agricultural uses. Moreover, there are no agricultural

resources or operations, including farmlands, within proximity to the Project site. Thus, the Project would not result in the conversion of Farmland to non-agricultural use or the conversion of forest land to non-forest use; **less than significant impacts** will occur. As the Project will not convert Farmland to non-agricultural use or convert forest land to non-forest use, it will not have a direct or cumulatively considerable impact on Farmland or forest land.

7.1.2 Hazards & Hazardous Materials

7.1.2.1 Threshold F: *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The Project will be served by existing, fully improved streets, Alessandro Boulevard and Barton Street as well as a network of on-site local streets. A temporary lane closures may be necessary during construction of roadway improvements to Alessandro Boulevard and Barton Street. As no full street closures would be required construction would not impede with any emergency response or evacuation plan. Therefore, the project will have a **less than significant impact** on an emergency response or evacuation plan. The Project will not impede any emergency response or evacuation plan and therefore will also not have a direct or cumulatively considerable impact on an adopted emergency response plan or emergency evacuation plan.

7.1.3 Hydrology and Water Quality

7.1.3.1 Threshold D: *Would the Project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

The City in which the Project is located is not within a coastal area, where tsunamis occur. Moreover, the Project site is not within proximity to standing bodies of water that pose seiche or tsunami risks to the Project site, and the Project site is not within a flood hazard area or a dam inundation area. Therefore, **no impacts** related to tsunamis, seiches, or other flood hazard areas will occur. As the Project is not within a flood hazard area and there are no impacts, the Project will not have direct or cumulatively considerable impact related to flood hazards.

7.1.4 Land Use and Planning

7.1.4.1 Threshold A: *Would the Project physically divide an established community?*

The Project site is currently vacant, undeveloped, and located northeast of Alessandro Boulevard and Barton Street, directly adjacent to and south of the Sycamore Hills Wilderness Park. There is a wastewater treatment plant to the west of the Project site and vacant, undeveloped land that is zoned for industrial uses to the east. The northern terminus of Barton Street, along the western boundary of the Project, serves as an access point into and trailhead of the Sycamore Canyon Wilderness Park. The Project will not impede or adversely affect continued access to the park. Rather, it is enhancing access to the park by developing a trailhead shade structure and additional parking and dedicating this area to the City. Therefore, there are **no impacts** related to dividing an established community. As the Project will have no impacts related to dividing an established community, the Project will also not have a cumulatively considerable impact related to dividing an established community.

7.1.5 Mineral Resources

7.1.5.1 Threshold A: *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?*

The Project site is within designated MRZ-3 Zone and the formational material that underlies the Project site is the rock products formation. This formation does not contain recoverable mineral resources of economic value. The General Plan 2025 does not include specific policies regarding property identified as MRZ-3 and has not designated the Project site for mineral resource related uses. Moreover, there is no historical use of the site or surrounding area for mineral extraction purposes. The loss of known mineral resources valuable locally or regionally would not occur because of the Project; therefore, the Project will have **no impact** on mineral resources. As the Project will have no impacts related to loss of availability of known mineral resources, the Project will also not have a cumulatively considerable impact related to loss of availability of known mineral resources.

7.1.5.2 Threshold B: *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?*

The General Plan 2025, Final Program Environmental Impact Report (GP 2025 FPEIR) determined that there are no specific areas within the City or Sphere Area which have locally important mineral resource recovery sites and that the implementation of the General Plan 2025 would not significantly preclude the ability to extract state-designated resources. The Project site does not contain a locally important mineral resource recovery site; therefore, the Project will have **no impact** on mineral resources. As the Project will have no impacts related to loss of locally important mineral resources, the Project will also not have a cumulatively considerable impact related to the loss of locally important mineral resources.

7.1.6 Noise

7.1.6.1 Threshold C: *For a Project located within the vicinity of a private airstrip or an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?*

The Project is located within an airport land use plan and partially within the Community Noise Equivalent Level (CNEL) contour designation of 60 CNEL airport noise contour area of the March Air Reserve Base (ARB). The maximum threshold for the proposed industrial warehouse use is 70 dBA. Because the noise contour level for the Project site is found to be a normally acceptable level for the proposed use of the Noise Element of the General Plan 2025, impacts related to exposure of people working in an airport land use plan area to excessive noise is considered **less than significant.** The Project does not include residential development and will not result in exposure of people residing at the Project site to excessive noise. As the Project will not expose people working at the Project site to excessive noise, the Project will also not have a cumulatively considerable impact related to excessive noise exposure.

7.1.7 Population and Housing

7.1.7.1 Threshold A: *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)?*

The Project does not include proposed homes. Construction of the Project would generate the demand for temporary construction jobs. However, given the availability of labor in the Riverside County and San Bernardino County region, and the southern California region as a whole, it is reasonable to assume that the construction of the Project will be completed by existing companies already doing business in the area with employees already residing in the area. Thus, construction-related growth inducement would not result from implementation of the Project.

As the Project is a speculative development, the number of employees, shifts, days and hours of operation are not known at this time. However, for the purposes of the analysis in the Project's Initial Study, as well as the EIR, the anticipated number of employees for both buildings is approximately 586 using County of Riverside[1] generation rate.

The operation of the Project will result in additional employment opportunities within the City. While tenants for these proposed warehouses have not been identified to date, up to approximately 586 long-term employment opportunities are anticipated per the SCAG forecast. The Project's potential to generate approximately 586 employment opportunities represents approximately 0.3 percent of the expected opportunities within the City by 2045. Moreover, SCAG's forecast data are based on various factors including local policies such as land use plans. As the Project is consistent with existing land use plan designations (the GP 2025 and SCBPSP), SCAG's growth Projections for the City incorporate the type of growth that would result from the Project. Per SCAG's Connect SoCal Demographics and Growth Forecast Technical Report data for the City of Riverside for 2016 the jobs to housing ratio is 1.54 and is considered housing rich. Therefore, it can reasonably be assumed that there are enough residents to fill the jobs generated by the Project.

Because the Project is consistent with the General Plan 2025 Typical Growth Scenario and population growth impacts that were previously evaluated in the GP 2025 FPEIR, the Project does not result in new impacts beyond those previously evaluated in the GP 2025 FPEIR. The employment opportunities anticipated to be generated by the Project are relatively minor and within forecasts. Thus, the Project will not induce substantial population growth and impacts will be **less than significant.** As the Project will not induce substantial population growth, the Project will also not have a cumulatively considerable impact related substantial population growth.

[1] County of Riverside General Plan Square Feet/Employee Factor of 1,030 square feet per employee for Light Industrial land use, Appendix E-2: Socioeconomic Build-Out Assumptions and Methodology, April 11, 2017, https://planning.retlma.org/General-Plan-Zoning/General-Plan

7.1.7.2 Threshold B: *Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The Project will not displace existing people or housing, necessitating the construction of replacement housing elsewhere, as the Project site is proposed on vacant land that has no existing housing that will be removed or affected by the Project. Therefore, there will be **no impact** on existing housing. As the Project will have no impacts related to loss of housing or displace existing people, the Project will also not have a cumulatively considerable impact related to the loss of housing and displacement of existing people.

7.1.8 Public Services

7.1.8.1 Threshold A: *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:*

a. *Fire protection?*

The nearest fire station to the Project site is the Box Spring Station (Fire Station No. 13), located at 6490 Sycamore Canyon Boulevard, approximately 2.5 mile to the northeast of the site. The second nearest station to the Project site is Sycamore Canyon Station (Fire Station No. 14), located at 725 Central Avenue, approximately 4.5 miles to the northwest of the site. The City of Riverside Fire Department's (RFD) goal is to maintain a five-minute response time for the first arriving units 90 percent of the time for all Emergency Medical Services (EMS) and fire related incidents. The average time for on-site responses to fire calls is five minutes and 30 seconds.

The Project site will be served by the Box Springs Station (Fire Station No. 13) and if necessary, emergencies at the Project site may also be served by the Sycamore Canyon Station (Fire Station No. 14). Given the nature of the proposed use and the proximity of existing fire stations, as well as stations throughout the City, the Project will not impact fire response times and will not otherwise create a substantially greater need for fire protection services than already exists. No new or expanded fire protection facilities will be required as a result of the Project. Additionally, the Project does not propose to use substantially hazardous materials or engage in hazardous activities that will require new or expanded fire protection equipment to meet potential emergency demand (see Section 5.8 Hazards and Hazardous Materials of this EIR). Any incremental impacts on the provision of fire protection or emergency medical facilities and services will be offset by the payment of development impact fees as required by Chapter 16.52 of the Riverside Municipal Code and from revenue generated for the City from property taxes. Therefore, Project impacts on the demand for additional fire facilities or services will be **less than significant.** As the Project and other development projects are required to offset their incremental impacts with payment of development impact fees, the Project would not have a cumulatively considerable impact related to fire protection or emergency medical facilities.

b. *Police protection?*

The Field Operations Division of the City of Riverside Police Department (RPD) provides first response to all emergencies, performs preliminary investigations, and provides basic patrol services to the City. Field Operations for the East NPC, which covers the Project site, are based at the Lincoln Station located at 8181 Lincoln Avenue, which is approximately 7.4 miles from the Project site. Moreover, additional police facilities are located throughout the City.

The Project includes street lighting, parking lot lights, and building lighting to deter unauthorized activities at the Project site. Additionally, the Project site will be fenced with all parking areas gated to deter and prevent unauthorized access. The Project proposes to operate continuously or 24-hours a day, which helps keep the site less inviting for crime. Industrial land uses generally do not generate a substantial number of law enforcement calls as compared to residential uses; therefore, the Project would not result in any unique or more extensive crime problems that cannot be adequately handled by the existing level of police resources. As such, no new or expanded police facilities would need to be constructed as a result of the Project. Further, because the staffing needs have already been accounted for in the City's General Plan 2025 and there is no change in land use, the Project is not anticipated to increase the amount of police resources needed. Therefore, Project impacts to police protection services would be **less than significant.** As the Project is not anticipated to increase the amount of police resources needed and is consistent with the City's General Plan 2025 used to determine staffing levels, the Project will also not have a cumulatively considerable impact related to police protection services.

c. *Schools?*

The Project site is located in the Moreno Valley Unified School District (MVUSD) boundary, per GP 2025 FPEIR Figure 5.13-4, Other School District Boundaries. The Project site is served by the following schools located within the City of Moreno Valley: Edgemont Elementary School (21790 Eucalyptus Avenue), Badger Springs Middle School (24750 Delphinium Avenue), and Moreno Valley High School (2330 Cottonwood Avenue). The Project is a non-residential use that would not involve the addition of any housing units that would directly increase numbers of school age children within the MVUSD. It is anticipated that the Project's employment opportunities would be filled by residents that reside in the regional already, and therefore the Project would not indirectly induce population growth, including school-aged children. Therefore, the Project will have **no impact** on the demand for additional school facilities or services. As the Project will have no impacts related to schools, the Project will also not have a cumulatively considerable impact related to schools.

d. *Parks?*

The closest parks in proximity to the proposed Project are Sycamore Canyon Wilderness Park (directly north of Project site), Taft Park (1-mile northwest), Castleview Park (2 miles northwest), and Orange Terrace Community Park (1.5 miles south). The Project is a non-residential use that would not involve the addition of any housing units that would directly increase the population and

associated use of existing park facilities. It is anticipated that the Project's employment opportunities would be filled by residents that reside in the regional already.

The proposed Project includes a new trailhead parking lot in Parcel C. Trailhead parking lot improvements include: a decomposed granite parking lot and landscaping, a shade structure with benches, ADA compliant parking spaces and sidewalk, drinking fountain (including for pets), interpretive signage and trail map. The 1.18-acre parking lot and trailhead will be dedicated to the City and operated and managed by the City's Parks, Recreation, & Community Services Department, though it should be noted that Parcel C will not be formally incorporated into the Park. The proposed trailhead parking lot is not required but is being provided by the applicant as an amenity to the City's Sycamore Canyon Wilderness Park,. Trail fencing, gates and signage will be incorporated to direct access, circulation and trail connection to existing trails as well as master planned multipurpose trail on the west side of Barton Street. The addition of parking lot and trailhead amenities would be consistent with the Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan (SCWPMP), which identifies the northerly terminus of Barton Street as a trailhead. While the addition of the parking lot and trailhead amenities could facilitate additional usage of the Sycamore Canyon Wilderness Park, the SCWPMP included a trailhead at this location, and it would not be to a substantial level of physical deterioration of the facility to occur or be accelerated because the parcel would be consistent with the SCWPMP.

The Project would not indirectly induce population growth and associated increase in use of existing park facilities, nor would the trailhead parking lot and improvements result in a substantial level of physical deterioration of existing park facilities. Thus, the Project will have **no impact** on the demand for additional park facilities or services. Although the Project is providing a trailhead, a trailhead at this location is included in the SCWPMP and was already planned for. Therefore, an increase in use of the park from providing the trailhead would not be more than already considered as part of the SCWPMP. The Project will not have cumulatively considerable impacts related to the demand for parks and services or the use of existing recreational facilities.

e. *Other public facilities?*

The nearest library branch to the Project of the City of Riverside Public Library (RPL) is the Orange Terrace Branch, located at 20010-B Orange Terrace Parkway, approximately 1.5 miles to the south. The nearest community center to the Project site is the Stratton Center at Bordwell Park, located at 2008 Martin Luther King Boulevard, approximately 5.8 miles to the northwest. The Project does not include a residential component and would not directly increase population growth and associated increase in the use of existing library facilities or community centers. It is also anticipated that the Project's employment opportunities would be filled by residents who already reside in the region; therefore, the Project would not indirectly induce population growth, or associated use of library facilities or community centers. Thus, the Project would have **no impacts,** directly or cumulatively, on the demand for additional public facilities or services, including libraries and community centers.

7.1.9 Recreation

7.1.9.1 Threshold A: *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?*

The closest parks in proximity to the Project are Sycamore Canyon Wilderness Park (directly north of Project site), Taft Park (1-mile northwest), Castleview Park (2 miles northwest), and Orange Terrace Community Park (1.5 miles south). Increase in demand for neighborhood or regional parks or other recreational facilities generally occurs due to population increase. The Project is a non-residential use that would not involve the addition of any housing units that would directly increase the population and associated use of existing park facilities. In addition to members of the public who typically utilize parks in the area, employees of the Project may utilize the adjacent Sycamore Canyon Wilderness Park trails or nearby neighborhood and community parks during the workday; however, this potential increase in use is not anticipated to be significant in relation to existing number of users of these parks.

The Project will not impact nor reroute any designated trail per the Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan (SCWP SKRMP). The Project would provide a new 1.18-acre parking lot and trailhead amenities that will be dedicated to the City and operated and managed by the City's Parks, Recreation, & Community Services Department. While the addition of the parking lot and trailhead amenities could facilitate additional usage of the Sycamore Canyon Wilderness Park, the Project will not substantially 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 because the parcel would be consistent with the SCWPMP The Project would result in **less than significant impacts** on recreational facilities.

7.1.10 Transportation

7.1.10.1 Threshold E: Would the Project result in inadequate emergency access?

The Project will be served by existing, fully improved streets, Alessandro Boulevard and Barton Street as well as a network of on-site local streets. A temporary lane closure may be necessary during construction of roadway improvements to Alessandro Boulevard and Barton Street. As no full street closures would be required construction would not impede with any emergency response or evacuation plan. Therefore, the Project will have a **less than significant impact** directly, indirectly and cumulatively to an emergency response or evacuation plan.

Section 5 of this document summarizes those topics that were found to be less than significant as part of the EIR analysis.

7.2 Effects Found to be Less Than Significant with Mitigation as Part of EIR Analysis

Section 5 of this document summarizes those topics that were found to be less than significant with the need for mitigation as part of the EIR analysis.

8.0 Alternatives to the Proposed Project

The following discussion considers alternatives for implementation of the Project. The discussion examines the potential environmental impacts resulting from each alternative. Through comparisons of these alternatives to the Project, the relative advantage(s) of each can be weighed and analyzed.

The *CEQA Guidelines*, Section 15126.6, identify the parameters within which consideration and discussion of alternatives to the Project should occur. As stated in this section of the guidelines, alternatives must focus on those that would feasibly attain most of the basic objectives of the Project but would avoid or substantially lessen any of the significant effects on the Project.

8.1 Project Objectives

As stated in Section 3.0 of this DEIR, the Project objectives include:

- Develop the site with two warehouse buildings with a total of 603,100 square feet of building space, a conservation easement, and trailhead improvements area.
- Modify the Restricted Covenant (RC) to allow access to Building A on Parcel 1, which is currently landlocked by the RC.
- Provide trailhead improvements consistent with the *Sycamore Canyon Wilderness Park Stephen's Kangaroo Rat Management Plan and Updated Conceptual Development Plan* including:
    - a parking lot,
    - sidewalk,
    - shade structure with benches,
    - bike rack,
    - drinking fountains,
    - fencing, gates, signage, and fire department access gate.
- Develop and operate warehouse buildings that:
    - Take advantage of existing City infrastructure.
    - Are adjacent to similar industrial logistics and distribution centers.
    - Are in close proximity to March Inland Port, State Route 60/Interstate 215, and Interstate 10 to support the distribution of goods throughout the region and that also limit traffic truck disruption to residential areas within the City and neighboring jurisdictions.
    - Will attract quality tenants and will be competitive with other similar facilities in the region.

  - Meet industry standards for operational design criteria.

- Implement the *Sycamore Canyon Business Park Specific Plan* through development of a land use allowed by the industrial land use designation and consistent with criteria relevant to the site and proposed use.
- Facilitate the development of underutilized land currently planned for industrial uses that maximizes the use of the site and responds to market demand within the *Sycamore Canyon Business Park Specific Plan* area for warehouse buildings.
- Provide and expand on-site conservation to mitigate for the loss of riparian/riverine resources.
- Positively contribute to the economy of the City through new capital investment, creation of new employment opportunities, including opportunities for highly trained workers, and expansion of the tax base.

8.2 Summary of the Project's Significant Unavoidable Impacts

The analysis in Section 5.0 determined that even with implementation of mitigation measures, significant environmental impacts will result from the operation of the Project related to Vehicles Miles Traveled. To satisfactorily provide the CEQA-mandated alternatives analysis, the alternatives considered must reduce the following Project-related significant unavoidable impact:

Vehicle Miles Traveled: The Project is estimated to exceed the City of Riverside VMT per employee by 18.66% in base year (2012) and 30.97% in cumulative year (2040). Given that the maximum percent reduction is 15% through feasible TDM measures, the Project cannot reduce the Project-generated VMT to below the threshold of 15% below the City of Riverside VMT per employee. The Project VMT impact is therefore considered significant and unavoidable.

8.3 Rationale for Alternative Selection

State CEQA Guidelines Section 15126.6(a) requires that an EIR "…describe a range of reasonable alternatives to the project, or 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." Each alternative must be capable of avoiding or substantially lessening any significant effects of the proposed project. According to this section of the State CEQA Guidelines, "…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 City, as lead agency, is responsible for selecting a range of Project alternatives to be discussed other than the "rule of reason" (CEQA Guidelines Section 15126.6(a)). 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 an alternative. (CEQA Guidelines Section 15126.6 (f)(1)). The rationale for selecting the alternatives to be evaluated, and a discussion of the "no project" alternative, are also required (*State CEQA Guidelines*, Section 15126.6(e)).

Alternative 1: As the Project is consistent with designated land use and zoning in and the Sycamore Canyon Business Park Specific Plan, the "no project" alternative is no project development or no change from the existing use (vacant land). This alternative was selected based on CEQA requirements (Section 15126.6(e)).

Alternative 2: Manufacturing is also a permitted use within the BMP-SP – Business Manufacturing Park and Specific Plan (Sycamore Canyon Business Park) Overlay Zone. Alternative 2 consists of the same Project design, with manufacturing instead of warehousing as the use for the site. This alternative was selected as it is an allowable use under the existing land use, zoning, specific plan, and was anticipated to reduce potential impacts associated with trucks, including trip generation and VMT, and also associated air quality and greenhouse gas emissions. Other types of uses such as institutional (educational or religious), retail/commercial, or residential would not meet the density/intensity standards of the compatibility Zone C1 of the MARB/IPA LUCP, resulting in an increase in potential impacts related to hazards, safety, and land use compatibility, as compared to the proposed Project.

Alternative 3: The third alternative is a reduced development consisting only of the development of Parcel 1/Building A. Alternative 3 was identified and evaluated based on its the potential to reduce or avoid significant impacts related to VMT. In addition, as there are fewer physical cultural resources/tribal cultural resources in the eastern portion of the Project site, Alternative 3 would also reduce impacts to these individual resources as well as the larger TCL and TCP/TCR.

8.4 Alternatives Rejected from Further Consideration

Section 15126.6(c) of the *State CEQA Guidelines* specifies that an EIR should identify alternatives that were considered by the lead agency but were rejected during the scoping process and identify the reasons for eliminating the alternatives from further consideration. Section 15126.6(c) further indicates that a lead agency may eliminate an alternative from detailed consideration in an EIR if it fails to meet the basic Project objectives, is infeasible, or does not avoid significant environmental impacts. The Original Project Design, Other March JPA-Owned Property, and Other Vacant Properties within Sycamore Canyon Business Park Specific Plan (SCBPSP), were alternatives considered and rejected by the City and are discussed below.

Original Project Design

The Project applicant originally proposed a two-building logistics center totaling 603,100 square feet (Building A – 400,000 square feet; Building B – 203,100 square feet) similar to the currently proposed project. However, the original configuration of Building B featured a more rectangular and symmetrical building. Based on feedback from City Staff and discussion with consulting Native American tribes, the Original Project Design was revised as follows:

Parcel 2/Building B

- Pulled back northwest building corner to avoid and preserve two bedrock milling sites
- Parking and landscaping along the west side of Building B have been designed to avoid and preserve one bedrock milling site
- The detention basin area at the southeast side of Building B has been designed to avoid and preserve two bedrock milling sites
- Parcel 2 and Parcel C were configured to avoid and preserve 100 linear feet of streambed with riparian/riverine resources (Drainage A as shown in Figure 5.3-5 Drainages) and one bedrock milling site

Trailhead Parking Lot

- Drive aisle curbed and parking designed to avoid and preserve two bedrock milling sites

Based on the benefits of the redesigned Project, the Original Project site plan was withdrawn from further consideration by the Project applicant. The Original Project Conceptual Site Plan is shown in Figure 8.0-1.

Alternative Project Locations

Additionally, pursuant to State CEQA Guidelines Section 15126.6(f)(2), alternate sites should be evaluated, if any feasible sites exist, where significant impacts can be lessened. Alternative locations were considered and rejected by the City as discussed below.

Other March Joint Powers Authority-Owned Property

As outlined in Section 3.1.2 Project Site Background, the Project site was formerly owned by the Grove Community Church that planned to build a new church. However, as the site is located within the C-1 Primary Approach/Departure Zone of the March Air Reserve Base/ Inland Port Airport Land Use Compatibility Plan, and due to restrictions regarding the height of the building and the maximum number of people allowed to congregate at any time, it was not conducive to the church's plans. March Joint Powers Authority (MJPA) assisted the church in finding a new location for the church, approximately one mile to the southwest at 19900 Grove Community Drive, Riverside. To mitigate for impacts caused by construction of the church, a portion of the Project Site at Alessandro Boulevard and Barton Street was set aside and preserved in a legally designated "Restricted Property".

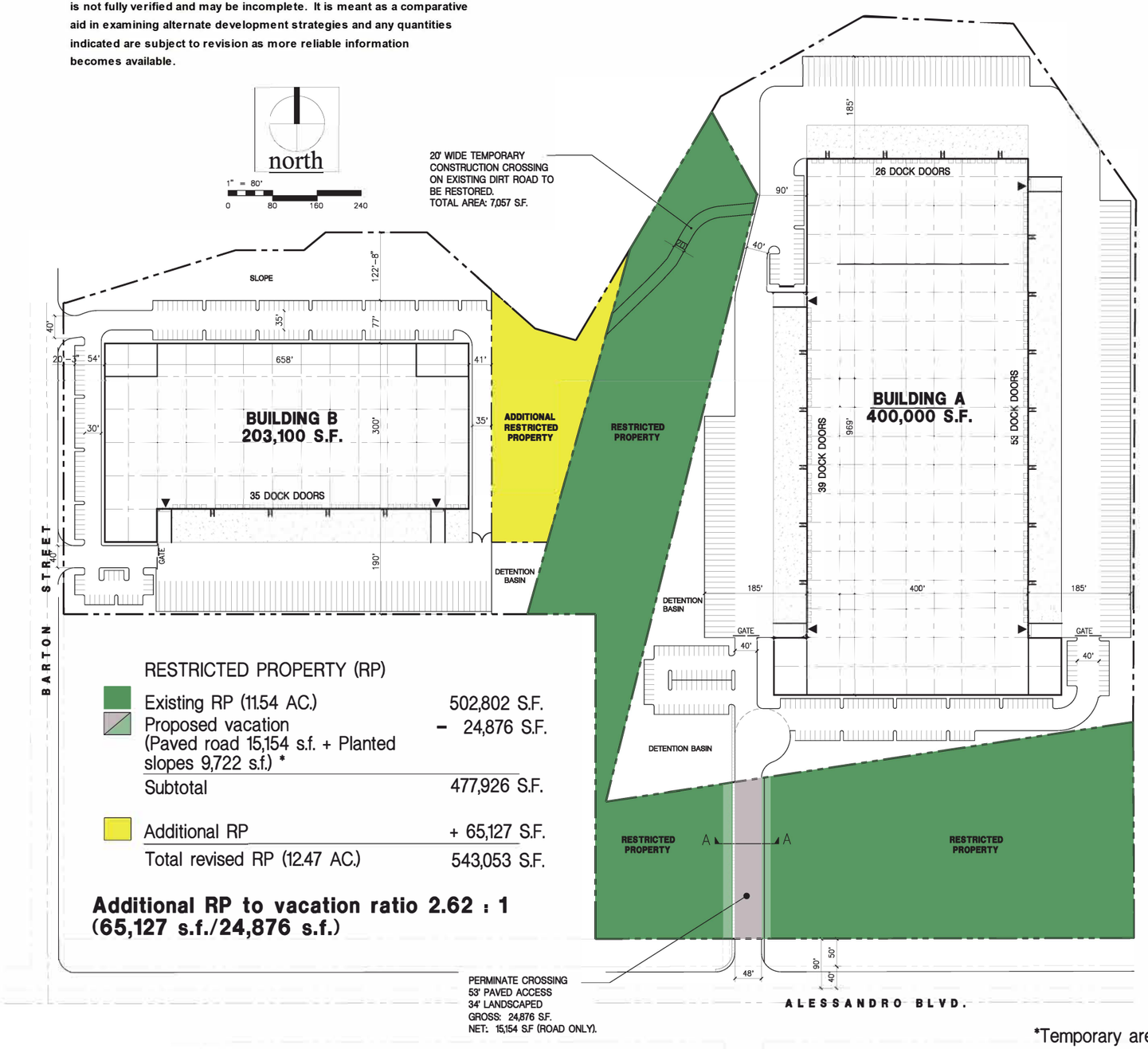
MJPA purchased the Project site property from the church with the intent to sell and to convey title of the "Restricted Property" area to the City of Riverside. However, a parcel map was not created, and the title transfer did not take place. MJPA is still the owner of the entire Project site property. The Project applicant has entered into an agreement with MJPA to purchase the property and develop it consistent with the City of Riverside General Plan and Sycamore Canyon Business Park Specific Plan. MJPA does not have other property available and for sale in the SCBPSP area, therefore, no further analysis of MJPA-owned alternative sites is possible.

Other Vacant Properties within Sycamore Canyon Business Park Specific Plan (SCBPSP)

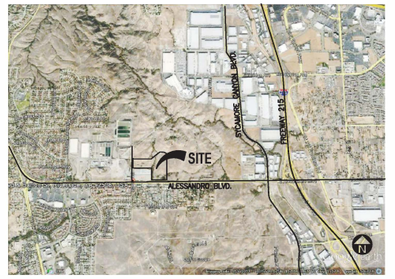
As outlined in Section 3.0 Project Description, the SCBPSP encompasses approximately 1,500 acres, consisting of a 920-acre planned industrial park with industrial and commercial uses, and a 480-acre wilderness park (Sycamore Canyon Wilderness Park) within the City of Riverside. The SCBPSP is the primary industrial area on the east side of the City of Riverside with direct access to the I-215 and SR-60 freeways. Most of the SCBPSP has been built out and there only a few undeveloped areas remaining in the SCBPSP that are designated as *Industrial* or *Industrial Support*, which are identified in Figure 8.0-2 SCBPSP Industrial Undeveloped Land. These sites range in size from approximately 2.37 acres up to 39.58 acres. The largest of these site is located directly east of the Project Site. This is the only site within the SCBPSP comparable in size to the Project Site, and capable for supporting a warehouse development comparable to the proposed Project. As the smaller undeveloped parcels are not large enough to support the proposed Project or a project of comparable size (approximately 600,000 square feet), they are rejected from further consideration.

The property directly east of the Project is privately owned and the current property owner has no intention to sell the property at the time of preparation of this EIR. Therefore, an alternative site is not considered feasible as the proposed Project's applicant does not own or control another site of comparable size within an area planned for industrial development in the SCBPSP, a major business park in the City of Riverside, and an alternative site would likely fail to achieve the underlying purpose and objectives of the Project. In addition, an alternative site would not likely avoid the Project's significant impacts with regard to vehicle miles traveled because these impacts are a function of the Project's use and size and are not location-specific. An alternative site in proximity to the Project would also not likely avoid impacts to Tribal Cultural Resources as there is a high probability that they would occur on nearby properties as well.

Note: This is a conceptual plan. It is based on preliminary information which is not fully verified and may be incomplete. It is meant as a comparative aid in examining alternate development strategies and any quantities indicated are subject to revision as more reliable information becomes available.



Aerial Map



Tabulation

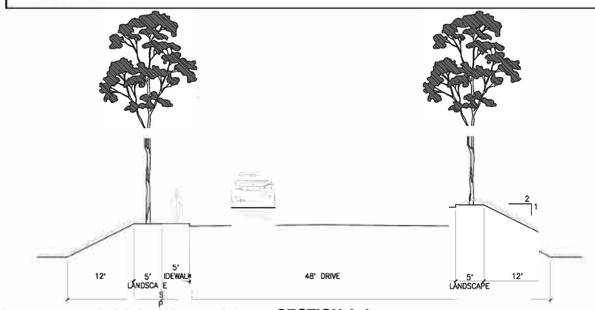
	BLDG. A	BLDG. B	TOTAL	
SITE AREA				
in s.f.	1,045,440	570,636	1,616,076	s.f.
in acres	24.0	13.1	37.1	ac
BUILDING AREA				
Office	10,000	10,000	20,000	s.f.
Warehouse	390,000	193,100	583,100	s.f.
TOTAL	400,000	203,100	603,100	s.f.
COVERAGE	38.3%	35.6%	37.3%	
AUTO PARKING REQUIRED				
office: 1 per 250 s.f.	40	40	80	stalls
whse: 1 space per 1,000 s.f.	390	194	584	stalls
TOTAL	430	234	664	stalls
AUTO PARKING PROVIDED				
Standard (9 'x 18')	189	180	369	stalls
Trailer (10 'x 55')	160	60	220	stalls
TOTAL	349	240	589	stalls

MAXIMUM FLOOR AREA RATIO
FAR - 0.60

MAXIMUM BUILDING HEIGHT ALLOWED
Height - 45'

ZONING ORDINANCE FOR CITY
Zoning Designation - General Industrial (I)

SETBACK
Front - 20'
Side / rear - 0'



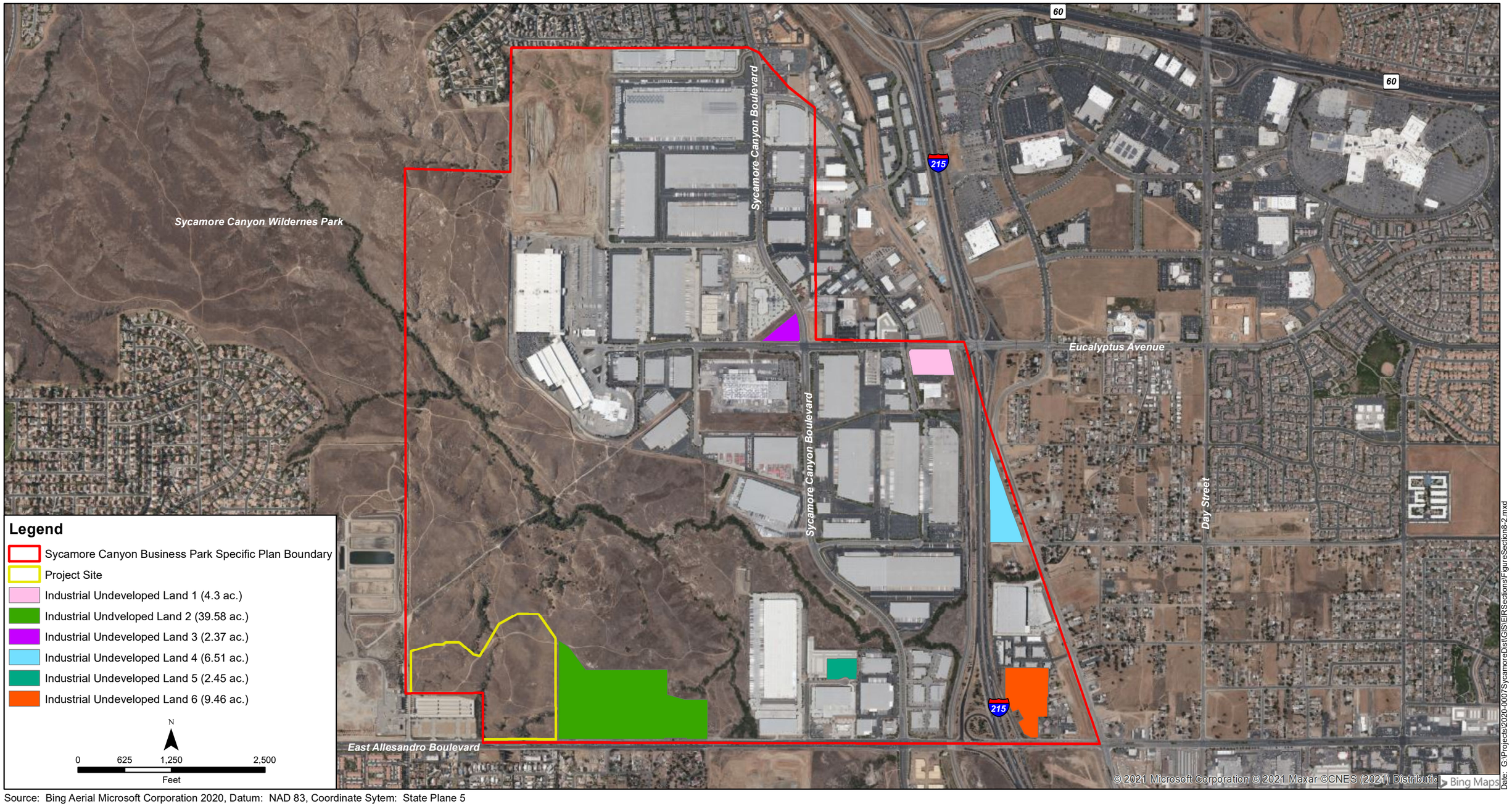
SECTION A-A

*Temporary area of approx. 8,000 s.f. could be disturbed during construction approx. 10' wide at the toe of road slope, to be replanted with native vegetation.

SYCAMORE HILLS DISTRIBUTION CENTER

Original Project Conceptual Site Plan

Figure 8.0-1



Source: Bing Aerial Microsoft Corporation 2020, Datum: NAD 83, Coordinate Sytem: State Plane 5

SYCAMORE HILLS DISTRIBUTION CENTER

RVA

SCBPSP Industrial Undeveloped Land

Figure 8.0-2

8.5 Description of Alternatives Evaluated in the EIR

This section of the EIR presents the analysis of three alternatives in comparison to the potential environmental effects associated with the Project. In accordance with State CEQA Guidelines Section 15126.6(d), the discussion of the environmental effects of the alternatives may be less detailed than the discussion of the impacts to each of the environmental topics evaluated in the EIR. A comparison of alternatives matrix is presented in Table 8.0-4 – Comparison of Alternatives Matrix in Section 8.7.

The following Alternatives were identified and considered in this section:

- **Alternative 1:** As the Project is consistent with designated land use and zoning and the Sycamore Canyon Business Park Specific Plan, the "no project" alternative is no project development or no change from the existing use (vacant land). This alternative was selected based on CEQA requirements (Section 15126.6(e)).
- **Alternative 2:** Manufacturing is also a permitted use within the designated land use, zoning, and specific plan. As such, Alternative 2 is manufacturing use with the same site plan as the proposed Project. This alternative was selected as it is an allowable use under the existing land use, zoning, specific plan, and was anticipated to reduce potential impacts associated with trucks, including trip generation and VMT, and also associated air quality and greenhouse gas emissions. Other types of uses such as institutional (educational or religious), retail/commercial, or residential would not meet the density/intensity standards of the compatibility Zone C1 of the MARB/IPA LUCP, resulting in an increase in potential impacts related to hazards, safety, and land use compatibility, as compared to the proposed Project.
- **Alternative 3:** The third alternative is a reduced development; it was selected based on the potential to reduce or avoid impacts to vehicle miles traveled.

8.5.1 Alternative 1 – No Project/No Development

Pursuant to State CEQA Guidelines Section 15126.6(e)(3)(B), the No Project Alternative for a development project on identifiable property is the circumstance under which the Project does not proceed, and the discussion of the No Project Alternative must compare the environmental effects from the Project site remaining in its existing state, versus the environmental effects that would occur if the Project is approved. Accordingly, under the No Build Alternative, the site would remain in its existing condition (vacant land) and no development would occur. Thus, assessor parcels, 263-060-022-7, 263-060-024-9, and 263-060-026-1 would remain vacant and undeveloped.

8.5.1.1 Impact Analysis of Alternative 1 – No Project/No Development

Aesthetics

Alternative 1, No Project/Development, would retain the Project site's existing conditions (vacant land). There would be no development that would modify the existing visual character of the Project site. With no structures being developed, there would be no views obstructed from roadways and adjacent neighborhoods, and impacts concerning light or glare would not occur. Therefore, there would be no aesthetic impacts associated with Alternative 1 and the level of impact under Alternative 1 would be less than that of the Project.

Air Quality

As analyzed in Section 5.2, Air Quality, the Project would generate emissions through construction and operations. Alternative 1, No Project/Development would result in no construction or operation needed since the site would remain undeveloped, thus resulting in generated emissions being less impactful compared to the other Alternatives and the Project. Carbon monoxide (CO) is emitted directly from internal combustion engines – motor vehicles operating at slow speeds are the primary source of CO in the Basin. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections. With no construction or operation proposed with Alternative 1, the number of emission-generating vehicles on the Project Site would not increase, and air quality impacts would be avoided compared to the Project. Therefore, there would be no air quality impacts associated with Alternative 1 and the level of impact under Alternative 1 would be less than that of the Project.

Biological Resources

Under Alternative 1, No Project/Development, there would be no need for site preparation or construction, and thus Alternative 1 would not result in a change to the existing biology of the Project site. As assessed in Section 5.3 Biological Resources, disturbed non-native grassland dominates the site with a few ephemeral drainages, some with riparian vegetation, transecting the site. Under this Alternative, the Project would not involve construction or the development of the site, and, no impacts would occur to any special-status plant or wildlife species, riparian/riverine areas, or waters of the US and State. Therefore, there would be no biological impacts associated with Alternative 1 and the level of impact under Alternative 1 would be less than that of the Project.

Cultural Resources

As discussed in Section 5.4, Cultural Resources, all of the prehistoric archaeological resources documented within a one-mile radius of the Project's Area of Potential Effects (APE) are bedrock milling sites (some with ground stone, such as manos, and other lithics), including the four previously recorded sites and the three additional sites within the Project's APE. A review of the EIC archaeological literature and records, NRHP, OHP Archaeological Determinations of Eligibility File, OHP Directory of Properties in the Historic Property Data File, and the City's Historic Landmark List indicated that no historic properties or landmarks are recorded or listed within, or immediately adjacent to, the Project's APE. Under Alternative 1, No Project/Development, construction or ground-disturbing activities would not occur, which would avoid all bedrock milling sites and eliminate potential impacts to previously unidentified archaeological resources and human remains. Therefore, there would be no cultural resources impacts associated with Alternative 1 and the level of impact under Alternative 1 would be less than that of the Project.

Energy

Under Alternative 1, No Project/Alternative, the site would remain vacant and there would be no use of electricity, natural gas, or petroleum in the construction or operation of the Project. As discussed under Section 5.5, Energy, the Project would utilize electricity, natural gas, and

petroleum in the construction and operation of the development. Thus, Alternative 1 would not utilize any energy resources or generate energy consumption and impacts related to energy conservation. Therefore, there would be no energy impacts associated with Alternative 1 and the level of impact under Alternative 1 would be less than that of the Project.

Geology and Soils

Under Alternative 1, No Project/Development, the Project site would not be altered and there would be no ground disturbance on the site. Thus, with no development, there would be no construction, operation, and maintenance in a seismically active area. However, the potential for loss of topsoil and soil erosion would continue and would not be countered by the incorporation of best management practices (BMPs) or landscaped areas and groundcovers intended to reduce soil erosion as would be implemented under the Project. Therefore, there would be impacts associated with Alternative 1 which would be greater than those of the Project.

Greenhouse Gas Emissions (GHG)

With no construction and operation needed in Alternative 1, No Project/Development, the generation of greenhouse gas emissions (GHG) would not occur. Therefore, there would be no GHG impacts associated with Alternative 1 and the level of impact under Alternative 1 would be less than that of the Project.

Hazards and Hazardous Materials

Under Alternative 1, No Project/Development, there would be no potential to create a significant hazard to the public due to improper handling or use of hazardous materials or hazardous wastes during construction or operation of future development of the Project site. Therefore, there would be no hazards impacts associated with Alternative 1 and the level of impact under Alternative 1 would be less than that of the Project.

Hydrology and Water Quality

Under Alternative 1, No Project/Development, the existing hydrologic conditions would continue, and the existing storm drain facilities and storm flow patterns and capacity would remain as discussed in the existing setting in Section 5.6, Hydrology and Water Quality. Water supplies throughout the City of Riverside are predominately sustained by groundwater basins. Groundwater conditions in these basins are influenced by natural hydrologic conditions such as precipitation, groundwater seepage and surface water from the Santa Ana River and the six arroyos that traverse the City. The existing drainage features would remain in their current state. Therefore, Alternative 1 would have no hydrology or water quality impacts, and the level of impact under Alternative 1 would be less than that of the Project.

Land Use and Planning

With Alternative 1, there would be no possibility of an existing community being separated as the Project site would remain undeveloped. There would also be no potential conflict with applicable land use plans, policies, or habitat conservation plans. However, under this Alternative, certain

General Plan and *SCBPSP* goals and objectives for industrial and warehouse activity in the City would not be met. Thus, impacts under this Alternative would be greater than those of the Project.

Noise

Under the Alternative 1, No Project/Development, the Project site would remain vacant and undeveloped with no noise generated from construction, operation, or any other form of development on the site. Therefore, Alternative 1 would have no noise impacts and the level of impact under Alternative 1 would be less than that of the Project.

Transportation

Under Alternative 1, No Project/Development, traffic would remain at current conditions. Temporary traffic associated with construction activities, the increase in average daily trips from the operation of the Project, and the impacts to surrounding intersections would be eliminated. Additionally, since the Project site would remain undeveloped and vacant, vehicle miles traveled would be less than those of the Project as the Project site would be not be used and would not generate any trips. Therefore, Alternative 1 would have no transportation impacts and the level of impact under Alternative 1 would be less than that of the Project.

Tribal Cultural Resources

Under Alternative 1, No Project/Development, there would be no construction that would involve ground-disturbing activities with the potential to adversely impact any of the bedrock milling sites identified and discussed in Sections 5.4 Cultural Resources and 5.13 Tribal Cultural Resources, or potentially unearth or adversely impact previously unidentified tribal cultural resources. A Traditional Cultural Landscape (TCL) Study (confidential) was prepared by Applied Earthworks (AE) as requested by the Soboba Band of Luiseño Indians and a Traditional Cultural Property/ Tribal Cultural Resource (TCP/TCR) Study (confidential) prepared by AE as requested by the Pechanga Band of Luiseño Indians. Results of the TCP/TCR Study found that the TCP/TCR is potentially eligible for listing in the CRHR and NRHP under Criterion 1 (CRHR)/A (NRHP), 3/C, and 4/D and retains sufficient integrity for listing. Similarly, the TCL Study found that the TCL is potentially eligible for listing under the CRHR and NRHP under Criterion 1 (CRHR)/A (NRHP) and 4/D and retains sufficient integrity for listing. The studies determined that the project site is within the general boundary of the respective TCP/TCR and TCL and the bedrock milling features on the site are considered contributing features. All bedrock milling sites documented on site as well as the TCL/TCP/TCR would be avoided and left in place under Alternative 1, No Project/Development. Therefore, Alternative 1 would have no impacts on tribal cultural resources and the level of impact under Alternative 1 would be less than that of the Project.

Utilities

Under Alternative 1, No Project/Development, there would be no development on the site, no impact to utilities or service systems. Therefore, Alternative 1 would have no impacts on utilities and the level of impact under Alternative 1 would be less than that of the Project.

Wildfire

The Project site is not in a Very High Fire Hazard Severity Zone (VHFHZ). The site will be served by the Riverside Fire Department (RFD). However, areas of dense, dry vegetation, particularly in canyon areas and on hillsides, pose the greatest potential for wildfire risks. The Project includes landscaping and an extension wall which constitutes a fuel break. Since Alternative 1 will not be developing an extension wall nor a landscape buffer, higher risks of wildfire may occur, and impacts on wildfire will be more significant. Additionally, since there will be no construction of structures for this Alternative, there will not be any fire suppression equipment such as alarm systems, fire extinguishers, and sprinklers provided. However, under Alternative 1, No Project/Development, the risk of exposing people to wildfire will be less since there will be no tenants on the Project site. Conversely, Alternative 1 will provide a higher risk of starting a wildfire since it does not provide fuel breaks and fire equipment such as sprinklers and retaining walls. Overall, wildfire impacts under Alternative 1 would be greater than those of the Project.

Alternative 1 – Relationship to Project Objectives

Under Alternative 1, no development would occur. The proposed buildings, conservation easement, and trailhead parking lot and associated improvements would not be realized. Table 8.0-1 – Ability to Achieve Project Objectives, Alternative 1 – No Project/No Development identifies the Project objectives and whether or not Alternative 1 meets each objective.

Table 8.0-1 – Alternative 1 (No Project/No Development Alternative) Ability to Meet Project Objectives

Project Objective	Alternative Meets Objective?
Develop the site to create two warehouse buildings with a total of 603,100 square feet of building space, a conservation easement, and trailhead improvements area.	**No.** Alternative 1 would not develop the site, construct the two warehouse buildings, create a conservation easement, or create a trailhead parking lot and associated improvements.
Modify the Restrictive Covenant (RC) to allow access to Building A on Parcel 1, which is currently landlocked by the RC.	**No.** Alternative 1 would not involve any development and thus would not modify any portions of the Restricted Property (RP) or the RC.
Provide trailhead improvements including a parking lot, sidewalk, shade structure with benches, bike rack, drinking fountains, fencing, gates, signage, and a fire department access gate, consistent with the Sycamore Canyon Wilderness Park Stephen's Kangaroo Rat Management Plan and Updated Conceptual Development Plan.	**No.** Alternative 1 would not develop the Project site; thus, trailhead improvements such as a parking lot, sidewalk, shade structure, bike rack, drinking fountains, fencing, and a Fire Department access gate would not be developed.
Develop and operate warehouse buildings that: • Take advantage of existing City infrastructure • Are adjacent to similar industrial logistics and distribution centers • Are in close proximity to March Inland Port, State Route 60/Interstate 215, and Interstate 10 to support the distribution of goods throughout the region, while limiting traffic	**No.** Alternative 1 would not develop the site or construct and operate the warehouse buildings. Therefore, none of the listed Project objectives associated with the development of the warehouse buildings would be realized.

Project Objective	Alternative Meets Objective?
truck disruption to residential areas within the City and neighboring jurisdictions • Will attract tenants and will be competitive with other similar facilities in the region • Meet industry standards for operational design criteria	
Implement the ***Sycamore Canyon Business Park Specific Plan*** through development of a land use allowed by the industrial land use designation and consistent with the criteria relevant to the site and proposed use.	**No.** Alternative 1 would not implement the *Sycamore Canyon Business Park Specific Plan*.
Facilitate the development of underutilized land currently planned for industrial uses that maximizes the use of the site and responds to market demand within the ***Sycamore Canyon Business Park Specific Plan*** area for warehouse buildings.	**No.** Alternative 1 would not facilitate the development of underutilized industrial land; therefore, Alternative 1 would not respond to the market demand in the *Sycamore Canyon Business Park Specific Plan* area.
Provide and expand on-site conservation to mitigate for the loss of riparian/riverine resources.	**No.** Alternative 1 would not provide or expand on-site conservation or provide on-site mitigation.
Positively contribute to the economy of the City through new capital investment, creation of new employment opportunities, including opportunities for highly trained workers, and expansion of the tax base.	**No**. Alternative 1 would not contribute to the economy of the City.

Alternative 1 Conclusion

While the majority of the environmental impacts from Alternative 1 would be less than the Project, with the exception of those related to Geology and Soils, Land Use and Planning, and Wildfire, Alternative 1 would greatly underutilize the Project site and would not meet any of the Project objectives listed above. Section 15126.6(f)(1) of the *State CEQA Guidelines* states that among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability and economic viability; Alternative 1 is neither suitable for the site nor economically viable. Although in the short-term this alternative may be feasible, over the long-term it is expected that the owners of the site would seek some productive use of this property and that the Project site would therefore be developed in some form. Thus, as it can be reasonably anticipated that the site would not remain in an undeveloped state over the long term, Alternative 1 is not economically viable and thus not feasible.

8.5.2 Alternative 2 – Other Permitted Use/ Manufacturing

The City of Riverside's General Plan (GP 2025) designates the Project site as B/OP (Business/Office Park). The Project site is zoned BMP-SP – Business and Manufacturing Park and Specific Plan (Sycamore Canyon Business Park) Overlay Zones. The SCBPSP designates the Project site as Industrial. The land use designation, zoning, and Specific Plan permit the warehouse/distribution center use proposed by the Project, as well as manufacturing and other

uses. This alternative was selected as manufacturing is also a permitted use within the BMP-SP – Business Manufacturing Park and Specific Plan (Sycamore Canyon Business Park) Overlay Zone and was anticipated to reduce potential impacts associated with trucks, including trip generation and VMT, and associated air quality and greenhouse gas emissions, while utilizing the same site plan. Other types of uses such as institutional (educational or religious), retail/commercial, or residential would not meet the density/intensity standards of the compatibility Zone C1 of the MARB/IPA LUCP, resulting in an increase in potential impacts related to hazards, safety, and land use compatibility, as compared to the proposed Project. Under Alternative 2, the Project site would be developed with approximately 603,100 square feet of manufacturing uses. This alternative is assumed to be developed with the same site plan as the proposed Project for Buildings A and B, with the only changes being additional parking, as required parking for manufacturing use is greater than warehouse/distribution use. Alternative 2 would also include the on-site conservation areas and a trailhead parking lot.

8.5.2.1 Impact Analysis of Alternative 2 – Other Permitted Use/Manufacturing

Aesthetics

Alternative 2, Other Permitted Use/Manufacturing, would result in the construction of approximately 603,100 square feet of industrial buildings for manufacturing use, utilizing the same plans as the Project, with additional parking spaces provided. As with the Project, Alternative 2 would modify the visual character of the Project site through grading, vegetation removal, construction of industrial buildings, associated parking, walls, fencing, landscaping, trailhead parking, a trailhead parking lot, fire access road, and parking and security lighting. The grading concept would remain the same as the Project so that the structures' comparable height to existing large scale light industrial buildings in the Sycamore Canyon Business Park would preserve views of the Box Springs Mountains. Lighting under Alternative 2 would be shielded and directed downward and away from the adjacent residences to the south, Sycamore Canyon Wilderness Park to the north, and the Conservation Areas within the Project site. Therefore, impacts resulting from implementation of Alternative 2 would be similar to those of the Project.

Air Quality

Development of Alternative 2, Other Permitted Use/Manufacturing, would result in grading the same portion of the Project site as the Project, the same amount of paving, and construction of a building of similar size as the Project. Because construction under Alternative 2 would use similar equipment and incorporate the same project design features and mitigation measures as the Project, short-term construction impacts would be the same as the Project and will not exceed SCAQMD thresholds. However, odor and pollutants due to operation will have a higher impact to air quality. The Project under Alternative 2 may facilitate manufacturing uses, such as chemical manufacturing, fiberglass manufacturing, and Painting/Coating operations that may result in air quality impacts such as odor and pollutants. Thus, Alternative 2 would have greater air quality impacts as compared to the Project.

Biological Resources

As detailed in Section 3.0, Biological Resources, certain sensitive species, non-native grassland, and vegetation would be impacted under the Project. Because development of Alternative 2, Other Permitted Use/Manufacturing, would encompass a similar footprint as the Project, impacts to biological resources would be the same and would also be required to provide the same mitigation measures as the Project. Thus, impacts under Alternative 2 would be similar to those of the Project.

Cultural Resources

Alternative 2, Other Permitted Use/Manufacturing, includes the same building footprint as the Project. Thus, Alternative 2 would impact the same number of bedrock milling sites and have the potential to unearth or adversely impact unidentified tribal cultural resources. As discussed in Section 5.4, Cultural Resources, impacts on cultural and historical resources can potentially occur during grading and construction and any other ground disturbance activities under the Project. The Project under Alternative 2 would also implement mitigation measures **CUL-1** through **CUL-9** to mitigate any potential impacts that could occur. Cultural Resource Impacts under Alternative 2 would be similar to impacts under the Project.

Energy

Alternative 2, Other Permitted Use/Manufacturing, would include the same building footprints as the Project and would similarly require site preparation, grading, building construction, paving, and architectural coating. As with the Project, all construction under Alternative 2 would be typical for the region and building types, as would the types of construction equipment. However, construction and operational energy demands such as those related to fuel, natural gas, and electricity consumption may increase under Alternative 2 due to activities related to manufacturing uses (i.e., the transport of raw materials for production, the manufacturing/production of products). While construction and operational activities under Alternative 2 would still be subject to compliance with applicable Federal, State, and regional energy efficiency regulations, energy impacts under Alternative 2 would potentially increase in comparison to impacts under the Project.

Geology and Soils

Alternative 2, Other Permitted Use/Manufacturing, would include the same building footprints as the Project and require similar grading, including grading exceptions. Grading design considerations, such as avoidance of tribal cultural features and potential seismic impacts, would be similar to the Project. Under Alternative 2, impacts would be similar to the Project and the existing geologic hazards on the site would remain the same as the Project.

Greenhouse Gas Emissions (GHG)

In its analysis of GHG emissions impacts, the Project considers construction, mobile, energy use, area source, water and wastewater, and solid waste emissions. While Alternative 2, Other Permitted Use/Manufacturing, would similarly be subject to compliance with applicable guidelines and policies geared toward regulating and/or reducing GHG emissions, GHG emissions would potentially increase as a result of manufacturing-related activities. Manufacturing uses would

likely require increased vehicle trips to transport raw materials and finished products, resulting in increased mobile/vehicle emissions from the combustion of fossil fuels in vehicle engines. Further, as manufacturing uses would create an increased energy demand on electricity and natural gas consumed for the manufacturing of products, GHG emissions from energy use would increase as well. Thus, GHG emissions under Alternative 2 would increase in comparison to the Project.

Hazards and Hazardous Materials

Under Alternative 2, Other Permitted Use/Manufacturing, the buildings for manufacturing uses would be built with the same project footprint on the same site as the Project. The Phase I Environmental Site Assessment (ESA) for the Project revealed no evidence of recognized environmental conditions (RECs) or that hazardous substances or petroleum products above *de minimus* quantities existed on the site. Further, manufacturing and other chemical processing involving hazardous materials (i.e., petroleum products, pesticides, fertilizer) would not be permitted under the provisions of the Specific Plan. Similar to the Project, the overall quantity of hazardous materials and waste generated in the area may generally increase as a result of implementation of Alternative 2. Any development that would handle or use hazardous materials would be required to comply with the regulations, standards, and guidelines established by U.S. Environmental Protection Agency (EPA), the State, County and the City, related to storage, use, and disposal of hazardous materials.

Further, Alternative 2 would similarly be located within Zone C1 of the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan (MARB/IPA LUCP) and subject to its compatibility requirements. Zone C1 discourages above ground storage of more than 6,000 gallons of hazardous or flammable materials and requires airspace review for structures over 70 feet. As Alternative 2 would be subject to the same regulations and compatibility requirements of the Project, impacts related to hazards and hazardous materials under Alternative 2 would be similar to those of the Project.

Hydrology and Water Quality

Under Alternative 2, Other Permitted Use/Manufacturing, the Project would be required to comply with the NPDES Statewide General Construction Permit (Order No. 09-09-DWQ). The permit requires preparation of a SWPPP as previously discussed above under Geology and Soils. Additionally, implementation of a SWPPP would prevent runoff from the construction site and would prevent water degradation of water quality. Similar to the Project, Alternative 2 is not expected to violate any water quality standards or waste discharge requirements during construction.

Generation of pollutants is expected during the operation of the Project under Alternative 2; therefore, Alternative 2 would follow site control, source control, and treatment control BMPs as outlined in the Project-Specific Water Quality Management Plan (PWQMP). An increase of runoff is similarly anticipated under Alternative 2 and would be addressed by self-treated landscape and by four (4) standard bioretention basins and four (4) volume-based treatment basins.

As with the Project, given that the site is not used for and is not suited for groundwater recharge, development of the Project will not impact a local groundwater recharge condition. Therefore, the

Project will not cause a net deficit in aquifer volume or a lowering of the local groundwater table. In conclusion, hydrology and water quality impacts associated with Alternative 2 would be the similar as to those of the Project.

Land Use and Planning

Alternative 2, Other Permitted Use/Manufacturing, would be consistent with the existing General Plan, Zoning Code, and Specific Plan; no amendments would be required. Manufacturing uses are permitted by the underlying land use designation, zoning, and Specific Plan designation (Business/Office Park (B/OP), BMP-SP – Business and Manufacturing Park and Specific Plan, Industrial, respectively), similar to the Project. Moreover, except for the same variances and grading exceptions required for the proposed Project, Alternative 2 would also comply with building standards and City Code standards and regulations required for industrial development. Alternative 2 would also not physically divide an established community, as it also proposes the development of vacant land. Alternative 2 would also be subject to the requirements of the C1 Zone of the March Air Force Base Land Use Compatibility Plan (MARB/IPA LUCP), as reflected in Table 5.8-1 in Section 5.8 Hazards and Hazardous Materials. Thus, Alternative 2 would have the same impacts as the Project related to land use and planning.

Noise

Similar to the Project, Alternative 2, Other Permitted Use/Manufacturing, would be subject to construction noise standards within the allowable times as described by Title 7 of the Riverside Municipal Code (Section 7.35.010). As the project footprint of Alternative 2 would be the same as the Project and the same types of construction equipment would be utilized, construction noise levels and impacts would likely not increase or vary significantly from the Project, particularly if the same types of mitigation measures were implemented to lessen noise impacts to surrounding areas. However, there may be increases in off-site traffic noise and on-site generated noise levels as a result of increased vehicle traffic associated with manufacturing uses in Alternative 2. Thus, noise levels under Alternative 2 would increase in comparison to the Project.

Transportation

Under Alternative 2, Other Permitted Use/Manufacturing, it is anticipated that impacts to transportation would increase in comparison to the Project. Alternative 2 would include manufacturing uses which have a higher overall trip generation rate than the Project. Manufacturing uses typically reduce the number of truck trips, while increasing the number of car trips, as compared to the Project. However, the vehicle miles traveled (VMT) per employee would be similar. Therefore, Alternative 2 would also result in a significant and unavoidable transportation impact, as with the Project.

Tribal Cultural Resources

Under Alternative 2, Other Permitted Use/Manufacturing, the buildings for manufacturing uses would be built with the same project footprint on the site as the Project. Alternative 2 would also include the on-site Conservation Areas and trailhead parking lot as with the Project. A Tribal Cultural Landscape (TCL) Study (confidential) and Traditional Cultural Property (TCP) Study

(confidential) were prepared by Applied Earthworks (AE) as requested by the Soboba Band of Luiseño Indians and the Pechanga Band of Luiseño Indians, respectively. Results of the TCP Study found that the TCP/TCR is potentially eligible for listing in the CRHR and NRHP under Criterion 1 (CRHR)/A (NRHP), 3/C, and 4/D and retains sufficient integrity for listing. Similarly, the TCL Study found that the TCL is potentially eligible for listing under the CRHR and NRHP under Criterion 1 (CRHR)/A (NRHP) and 4/D and retains sufficient integrity for listing. The studies determined that the project site is within the general boundary of the respective TCP/TCR and TCL and the bedrock milling features on the site are considered contributing features. Alternative 2 would still develop the site the same as the Project and would still impact the identified TCP/TCR and TCL. The alternative's impacts to the identified TCP/TCR and TCL are considered **less than significant** with the design considerations in which a majority of the resources will be avoided and preserved. Nonetheless, mitigation measures MM CUL-1 through MM CUL-9 are required to further reduce potential impacts to tribal cultural resources, including to potentially undiscovered/unknown tribal cultural resources. Impacts to onsite tribal cultural resources will be **less than significant** with design considerations. Overall impacts under Alternative 2 would be similar to those of the Project.

Utilities

As with the Project, Alternative 2, Other Permitted Use/Manufacturing, would be subject to requirements of the City's Water Efficient Landscaping and Irrigation Ordinance. Based on the water demand projections in the City for the Project, projected water supplies are similarly anticipated to be enough and would not exceed the projected water demand of the Project under Alternative 2.

Additionally, as with the Project, under Alternative 2, dry utility extensions would be constructed underground to serve the Project and would connect to existing utility lines in Alessandro Boulevard for one of the proposed manufacturing use buildings and Barton Street for the other building, respectively. Electricity would similarly be provided by Riverside Public Utilities (RPU) and natural gas would be provided by Southern California Gas Company. Additionally, water to the manufacturing buildings would be similarly provided by Western Municipal Water District via existing lines.

As described under Energy above, energy use may increase due to manufacturing uses under Alternative 2; thus, there is the potential the Project under Alternative 2 may require or result in expansion of the utilities facilities described above, such as those for electricity and/or natural gas. Therefore, impacts related to the relocation, construction, or expansion of utilities facilities would potentially be greater under Alternative 2 than those under the Project.

Similarly, as it is anticipated the number of employees would increase under Alternative 2 due to the alternative's manufacturing uses, there is potential the amount of operational solid waste would increase accordingly under Alternative 2. However, the Project under Alternative 2 would still be required to comply with all Federal, State, and local solid waste-related statutes and regulations.

Overall, under Alternative 2, impacts would likely be greater than those of the Project.

Wildfire

Alternative 2, Other Permitted Use/Manufacturing, like the Project, would develop structures and a traffic network that would support the Project. The traffic network would include curbs, landscape buffers, parking lots, and improved streets that would serve as a fuel break from wildfire. Structures for industrial and manufacturing uses would likely have fire suppression equipment as well as sprinklers and alarms, as seen in the Project. As Alternative 2 will not be within a VHFSZ, impacts on wildfire will be similar to the Project.

Alternative 2 – Relationship to Project Objectives

Under Alternative 2 - Other Permitted Use/Manufacturing, the Project site would be developed with two manufacturing buildings and supporting infrastructure and would be constructed according to the land use and zoning for the Project site identified in the City's GP 2025 and *Sycamore Canyon Business Park Specific Plan*. Table 8.0-2 – Alternative 2 (Other Permitted Use/Manufacturing Alternative) Ability to Meet Project Objectives identifies the Project objectives and whether or not Alternative 2 meets each objective.

Table 8.0-2 – Alternative 2 (Other Permitted Use/Manufacturing Alternative) Ability to Meet Project Objectives

Project Objective	Alternative Meets Objective?
Develop the site to create two warehouse buildings with a total of 603,100 square feet of building space, a conservation easement, and trailhead improvements area.	**No.** Alternative 2 would develop the site with the same building footprints, conservation easement, and trailhead improvements area, but the alternative manufacturing use would differ from the objective of creating warehouse buildings.
Modify the Restrictive Covenant (RC) to allow access to Building A on Parcel 1, which is currently landlocked by the RC.	**Yes.** As Alternative 2 would be developed and constructed with the same footprint and site plan as the Project, the RC would similarly need to be modified to allow access to the proposed manufacturing building located on Parcel 1.
Provide trailhead improvements including a parking lot, sidewalk, shade structure with benches, bike rack, drinking fountains, fencing, gates, signage, and a fire department access gate for consistency with the Sycamore Canyon Wilderness Park Stephen's Kangaroo Rat Management Plan and Updated Conceptual Development Plan.	**Yes.** Alternative 2 would provide the same trailhead improvements as those provided under the Project.
Develop and operate warehouse buildings that: • Take advantage of existing City infrastructure • Are adjacent to similar industrial logistics and distribution centers • Are in close proximity to March Inland Port, State Route 60/Interstate 215, and Interstate 10 to support the distribution of goods throughout the region, while limiting traffic truck disruption to residential areas within the City and neighboring jurisdictions	**No.** Although Alternative 2 would take advantage of existing City infrastructure, would be adjacent to industrial logistics and distribution centers, would be developed on the same Project site, and would similarly be in close proximity to March Inland Port, State Route 60/215, and Interstate 10 to support the distribution of goods throughout the region, it would not result in the development and operation of warehouse buildings.

Project Objective	Alternative Meets Objective?
• Will attract tenants and will be competitive with other similar facilities in the region • Meet industry standards for operational design criteria	
Implement the ***Sycamore Canyon Business Park Specific Plan*** through development of a land use allowed by the industrial land use designation and consistent with the criteria relevant to the site and proposed use.	**Yes.** Alternative 2 would implement the *Sycamore Canyon Business Park Specific Plan*.
Facilitate the development of underutilized land currently planned for industrial uses that maximizes the use of the site and responds to market demand within the ***Sycamore Canyon Business Park Specific Plan*** area for warehouse buildings.	**No.** Alternative 2 would facilitate the development of underutilized industrial land in the *Sycamore Canyon Business Park Specific Plan* area. However, it would not respond to the market demand as the market demand for warehouse use exceeds the demand for manufacturing (at the time of preparation of this DEIR).
Provide and expand on-site conservation to mitigate for the loss of riparian/riverine resources.	**Yes.** Alternative 2 would similarly provide or expand on-site conservation to mitigate for the loss of riparian/riverine resources.
Positively contribute to the economy of the City through new capital investment, creation of new employment opportunities, including opportunities for highly trained workers, and expansion of the tax base.	**Yes**. Alternative 2 would contribute to the economy of the City through new capital investment, creation of new employment opportunities, including opportunities for highly trained workers, and expansion of the tax base.

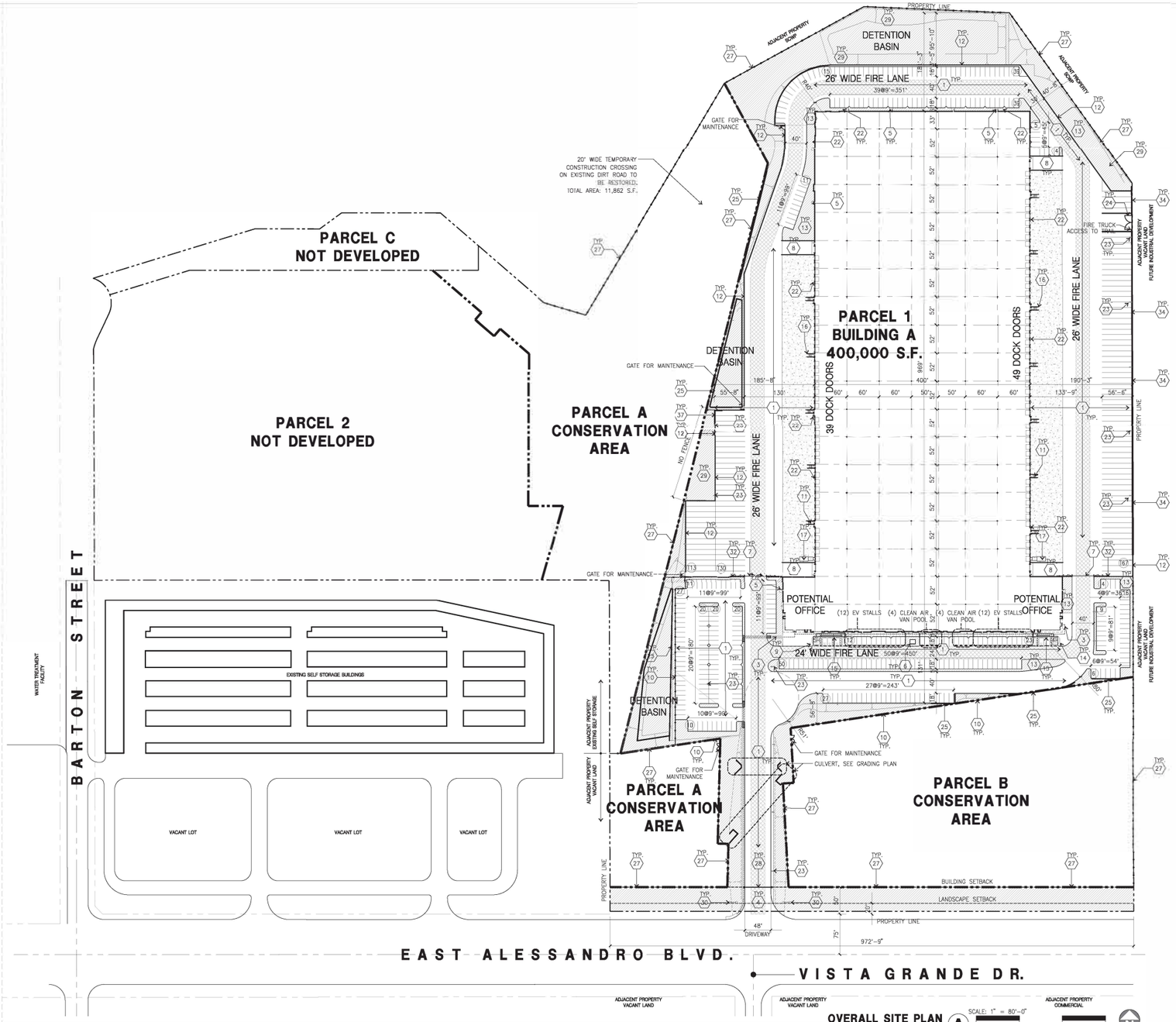
Alternative 2 Conclusion

While Alternative 2 – Other Permitted Use/Manufacturing would meet some of the Project's objectives, it does not meet all of the objectives, and a number of this alternative's environmental impacts have the potential to be greater in comparison to those of the Project. As outlined above, this alternative was selected as it is an allowable use under the existing land use, zoning, specific plan, and was initially anticipated to reduce potential impacts associated with trucks, including trip generation and VMT, and also associated air quality and greenhouse gas emissions. Although this alternative was chosen, in good faith effort to reduce potential impacts, as a result of the analysis above, it actually would have greater impacts than the proposed Project in the following areas: air quality, energy, GHG emissions, noise, transportation, and utilities. As this alternative fails to meet the project objectives and reduce impacts, Alternative 2 is considered infeasible and rejected accordingly.

8.5.3 Alternative 3 – Reduced Development

Alternative 3, Reduced Development, would not develop Parcel 2/ Building B or Parcel C, refer to Figure 8.0-3, Reduced Development Site Plan. The development footprint for Parcel 1/ Building A would remain the same as the Project as well as the proposed Parcels A & B for the conservation areas. This alternative would result in the construction of approximately 400,000 square feet of warehouse/distribution center use. The walls, fencing, landscaping, parking,

security lighting, and other design features for Building A would be with the same as the Project. The proposed revision to the existing Restrictive Property and the Conservation Easement would be required for Alternative 3, as is required for the Project.



OVERALL SITE PLAN

scale: 1"=80'-0"

A

SCALE: 1" = 80'-0"

0 80' 160' 240'

N TRUE NORTH

SITE PLAN KEYNOTES

1. HEAVY BROOM FINISH CONCRETE PAVEMENT.
2. STABILIZED DECOMPOSED GRANITE PER GRADING PLAN
3. CONCRETE WALKWAY, MEDIUM BROOM FINISH
4. DRIVEWAY APRONS TO BE CONSTRUCTED
5. 5'-6"X5'-6"X4" THICK CONCRETE EXTERIOR LANDING PAD TYP. AT ALL EXTERIOR MAN DOORS TO LANDSCAPED AREAS. FINISH TO BE MEDIUM BROOM FINISH. PROVIDE WALK TO PUBLIC WAY OR DRIVE WAY AS REQ. BY CITY INSPECTOR.
6. APPROXIMATE LOCATION OF TRANSFORMER. CONTRACTOR TO VERIFY WITH S.C.E.
7. PROVIDE 8' HIGH METAL SLIDING GATES W/ KNOX-BOX PER FIRE DEPARTMENT STANDARDS PER DRIVEWAY.
8. CONCRETE RAMP W/ 42" HIGH CONCRETE WALL.
9. EXTERIOR BIKE RACK TYPICAL
10. 6' TO 8' HIGH METAL FENCE. SEE A4.1 FOR DETAILS.
11. EXTERIOR CONCRETE STAIR
12. 8' HIGH CONCRETE WALL
13. LANDSCAPE. ALL LANDSCAPE AREAS INDICATED BY SHADING
14. EMPLOYEE BREAK/SMOKING AREA.
15. PRE-CAST CONCRETE WHEEL STOP.
16. CONCRETE FILLED GUARD POST "6 DIA. U.N.O. 42" H.
17. TRASH COMPACTOR 30 YARD SELF CONTAINED
18. ACCESSIBLE ENTRY SIGN.
19. ACCESSIBLE PARKING STALL SIGN.
20. TRUNCATED DOME.
21. APPROXIMATE LOCATION OF FIRE HYDRANT
22. WALL MOUNTED LIGHTING FIXTURE. LOCATION PER PHOTOMETRIC PLAN
23. SITE LIGHT POLE W/ CONCRETE BASE. LOCATION PER PHOTOMETRIC PLAN
24. 8' HIGH METAL SWING GATE W/ KNOX-BOX PER FIRE DEPARTMENT STANDARDS PER DRIVEWAY.
25. RETAINING WALL PER CIVIL DRAWINGS.
26. SHADE STRUCTURES WITH BENCHES AND DRINKING FOUNTAIN (HUMAN AND PET) AND BIKE RACKS
27. 42" CABLE RAIL THEME FENCE. SEE DETAIL B/A1.1
28. ARM GATE
29. FIRE RESISTANT LANDSCAPING W/ COLUMNAR TREES
30. MONUMENT SIGN
31. PARK ENTRY SIGN
32. 15' H CONCRETE WALL
33. 8' HIGH SCREENING WITH 4' HIGH METAL FENCE ON TOP 4' HIGH SCREEN WALL.

SITE PLAN GENERAL NOTES

1. THE SITE PLAN BASED ON THE SOILS REPORT PREPARED BY: NORCAL ENGINEER 3/29/19 AND 1/3/20
2. IF SOILS ARE EXPANSIVE IN NATURE, USE STEEL REINFORCING FOR ALL SITE CONCRETE.
3. ALL DIMENSIONS ARE TO THE FACE OF CONCRETE WALL, FACE OF CONCRETE CURB OR GRID LINE U.N.O.
4. SEE "C" PLANS FOR ALL CONCRETE CURBS, GUTTERS AND SWALES.
5. THE ENTIRE PROJECT SHALL BE PERMANENTLY MAINTAINED WITH AN AUTOMATIC IRRIGATION SYSTEM.
6. SEE "C" DRAWINGS FOR POINT OF CONNECTIONS TO OFF-SITE UTILITIES. CONTRACTOR SHALL VERIFY ACTUAL UTILITY LOCATIONS.
7. PROVIDE POSITIVE DRAINAGE AWAY FROM BLDG. SEE "C" DRAWINGS
8. CONTRACTOR TO REFER TO "C" DRAWINGS FOR ALL HORIZONTAL CONTROL DIMENSIONS. SITE PLANS ARE FOR GUIDANCE AND STARTING LAYOUT POINTS.
9. SEE "C"DRAWINGS FOR FINISH GRADE ELEVATIONS.
34. COMBINATION OF 8' HIGH SCREEN WALL/RETAINING WALL MEASURED FROM INSIDE OF WALL. REFER TO GRADING EXCEPTION EXHIBIT FOR HEIGHT AND SPAN OF WALL FOR OUTSIDE HEIGHT MEASUREMENT OF WALL AND RETAINING CONDITION.
35. NOT USED
36. NOT USED
37. COMBINATION OF 8' HIGH SCREEN WALL/RETAINING WALL MEASURED FROM INSIDE OF WALL.
10. CONCRETE SIDEWALKS TO BE A MINIMUM OF 4" THICK W/ TOOLED JOINTS AT 6' O.C. EXPANSION/CONSTRUCTION JOINTS SHALL BE A MAXIMUM 12' EA. WAY. EXPANSION JOINTS TO HAVE COMPRESSIVE EXPANSION FILLER MATERIAL OF 1/4". FINISH TO BE A MEDIUM BROOM FINISH U.N.O.
11. PAINT CURBS AND PROVIDE SIGNS TO INFORM OF FIRE LANES AS REQUIRED BY FIRE DEPARTMENT.
12. CONSTRUCTION DOCUMENTS PERTAINING TO THE LANDSCAPE AND IRRIGATION OF THE ENTIRE PROJECT SITE SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT AND APPROVED BY PUBLIC FACILITIES DEVELOPMENT PRIOR TO ISSUANCE OF BUILDING PERMITS.
13. PRIOR TO FINAL CITY INSPECTION, THE LANDSCAPE ARCHITECT SHALL SUBMIT A CERTIFICATE OF COMPLETION TO PUBLIC FACILITIES DEVELOPMENT.
14. ALL LANDSCAPE AND IRRIGATION DESIGNS SHALL MEET CURRENT CITY STANDARDS AS LISTED IN GUIDELINES OR AS OBTAINED FROM PUBLIC FACILITIES DEVELOPMENT.
15. LANDSCAPED AREAS SHALL BE DELINEATED WITH A MINIMUM SIX INCHES (6") HIGH CURB.
16. ROCK OUTCROPPINGS TO BE PRESERVED WILL HAVE A 3' LANDSCAPE BUFFER FROM ANY PAVED AREA.

SITE PLAN GENERAL NOTES

- CONCRETE PAVING. SEE "C" DRWGS. FOR THICKNESS
- DECOMPOSED GRANITE
- STANDARD PARKING STALL (9' X 18')
- LANDSCAPED AREA
- 26' WIDE FIRELANE
- HANDICAP PARKING STALL (9' X 18') W/ 5' ACCESSIBLE AISLE
- HANDICAP PARKING STALL (VAN) (12' X 18') W/ 5' ACCESSIBLE AISLE
- PATH OF TRAVEL

SYCAMORE HILLS DISTRIBUTION CENTER

RVA HPA architecture

Alternative 3 Reduced Dev.Site Plan

Figure 8.0-3

8.5.3.1 Impact Analysis of Alternative 3 – Reduced Development

Aesthetics

As with the Project, Alternative 3, Reduced Development, would modify the visual character of the Project site through grading, vegetation removal, construction of an industrial building, associated parking, walls, fencing, landscaping, and parking and security lighting. The grading concept would remain the same as the Project for Building A, so that the structures' comparable height to existing large scale light industrial buildings in the Sycamore Canyon Business Park would preserve views of the Box Springs Mountains. Lighting under Alternative 3 would be shielded and directed downward and away from the adjacent residences to the south, Sycamore Canyon Wilderness Park to the north, and the Conservation Areas within the Project site. However, the amount of development would be reduced. Therefore, impacts resulting from implementation of Alternative 3 would be less than that of the Project.

Air Quality

Development of Alternative 3, Reduced Development, would result in a reduction in grading, the amount of paving, and building size. Because construction under Alternative 3 would use similar types of but less equipment overall, short-term construction impacts would be less than the Project, and will not exceed SCAQMD thresholds. The reduction in square footage of warehouse development would also have reduced operational emissions. Thus, Alternative 3 would decrease air quality impacts as compared to the Project.

Biological Resources

As mentioned, and detailed in Section 3.0, Biological Resources, certain sensitive species, non-native grassland, and vegetation would be impacted under the Project. Because development of Alternative 3 would encompass a smaller footprint than the Project, impacts to biological resources would be the less than the Project.

Cultural Resources

Alternative 3 includes a smaller building footprint than the Project. The majority of the documented cultural resources are located in Parcel 2/ Building B footprint, with one in Parcel C, the trailhead parking lot, and one in Parcel A, Conservation Area. Alternative 3 would encompass a smaller footprint as the Project and avoid impacts to all known/documented cultural resources, although impacts on cultural and historical resources could potentially occur during grading and construction and any other ground disturbance activities and would require the same mitigation measures as the Project. Overall, impacts to cultural resources under Alternative 3 would be less than the Project.

Energy

Development of Alternative 3, Reduced Development, would result in a reduction in square footage of warehouse development and would also have reduced operational energy demands. Thus, Alternative 3 would have less energy demand and associated impacts as compared to the Project.

Geology and Soils

Alternative 3, Reduced Development, includes a smaller building footprint than the Project. Therefore, impacts to geology and soils would be less than the Project, but would still require mitigation measures.

Greenhouse Gas Emissions (GHG)

Development of Alternative 3, Reduced Development, would result in a reduction in grading, the amount of paving, and building size. Because construction under Alternative 3 would use similar types of but less overall equipment, short-term construction impacts would be less than the Project and will not exceed thresholds. The reduction in square footage of warehouse development would also result in reduced operational emissions. Thus, Alternative 3 would decrease greenhouse gas emissions as compared to the Project.

Hazards and Hazardous Materials

Development of Alternative 3, Reduced Development, would result in a reduction in square footage of warehouse development and would also reduce operational use of chemicals and number of employees within the MARB/IPA LUCP C1 Zone. Thus, Alternative 3 would have less hazards impacts than the Project.

Hydrology and Water Quality

Under Alternative 3, Reduced Development, the Project would be required to comply with the NPDES Statewide General Construction Permit (Order No. 09-09-DWQ). The permit requires preparation of a SWPPP. Additionally, implementation of a SWPPP would prevent runoff from the construction site and would prevent water degradation of water quality. Similar to the Project, Alternative 3 is not expected to violate any water quality standards or waste discharge requirements during construction.

Generation of pollutants is expected during the operation of the Project under Alternative 3, although it would be less than the Project as there is less development and reduced operations. Alternative 3 would still follow site control, source control, and treatment control BMPs as outlined in the Project-Specific Water Quality Management Plan (PWQMP) for Building A/Parcel 1. An increase of runoff is similarly anticipated under Alternative 3, although it would be less than the Project as there is less development and impervious surfaces. The increase in runoff for Alternative 3 and would also be addressed by self-treated landscape and by standard bioretention basins and volume-based treatment basins.

As with the Project, given that the site is not used for and is not suited for groundwater recharge, development of Alternative 3 will not impact a local groundwater recharge condition. Therefore, the Project will not cause a net deficit in aquifer volume or a lowering of the local groundwater table. In conclusion, hydrology and water quality impacts associated with Alternative 3 would be the similar to those of the Project.

Land Use and Planning

Under Alternative 3, Reduced Development, the 400,000 square foot Building A would be permitted under the General Plan, Zoning Code, and Specific Plan. However, the reduced development would not implement the City's objectives in the General Plan or Sycamore Canyon Business Park, such as establishing high-quality industrial development for the City that would strengthen the City's economic base, to the same degree, and would leave Parcel 2 vacant and underutilized. Overall, Alternative 3 would have similar impacts as the Project in regard to land use plans.

Noise

Because development of Alternative 3, Reduced Development, would encompass a smaller footprint than the Project, noise impacts from construction would be less. Development of Alternative 3 would result in a reduction in square footage of warehouse development and would also reduce operational vehicle and truck trips and associated noise, although mitigation measures would still be required. Thus, Alternative 3 would have less operational noise impacts as compared to the Project.

Transportation

Development of Alternative 3, Reduced Development, would result in a reduction in square footage of industrial development and associated transportation impacts in comparison to the Project. Alternative 3 would include approximately 400,000 square feet of warehouse use and would have less vehicle and truck trips, resulting in less VMT than the Project. The reduction in VMT under Alternative 3 could possibly reduce the Project's impact to VMT but due to the size of the building it would still be significant and unavoidable. As outlined in the City's *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment*, July 2020, projects generating less than 110 daily vehicle trips are screened out from the need to complete a VMT analysis as they do not generate VMT impacts. For warehouse use consistent with the proposed Project[1], it would need to be 79,000 square feet in size, or approximately 87% smaller, in order to have no VMT impact. Therefore, impacts to transportation under Alternative 3 would be less than those of the Project, but are not expected to be reduced to less than significant impacts.

Tribal Cultural Resources

Under Alternative 3, Reduced Development, the Parcel 2/ Building B and Parcel C would not be developed, and thus all impacts to individual Tribal Cultural Resources would be avoided, and the impact to the larger TCL and TCP/TCR would be reduced.

A Tribal Cultural Landscape (TCL) Study (confidential) and Traditional Cultural Property (TCP) Study (confidential) were prepared by Applied Earthworks (AE) as requested by the Soboba Band of Luiseño Indians and the Pechanga Band of Luiseño Indians, respectively. Results of the TCP Study found that the TCP/TCR is potentially eligible for listing in the CRHR and NRHP under

[1] The Proposed Project warehouse type is more specifically high cube transload and short-term storage

Criterion 1 (CRHR)/A (NRHP), 3/C, and 4/D and retains sufficient integrity for listing. Similarly, the TCL Study found that the TCL is potentially eligible for listing under the CRHR and NRHP under Criterion 1 (CRHR)/A (NRHP) and 4/D and retains sufficient integrity for listing. The studies determined that the project site is within the general boundary of the respective TCP/TCR and TCL and the bedrock milling features on the site are considered contributing features. A total of seven bedrock milling sites, that include fourteen bedrock outcrops and 36 milling slicks, documented on site, contributing features to the TCL and TCP/TCR would be avoided and left in place under Alternative 3, Reduced Development.

The Reduced Development Alternative will impact the TCL and TCP/TCR by developing one warehouse building and associated improvements within the overall TCL and TCP/TCR and converting vacant/undeveloped natural land to developed land. However, this alternative's development footprint of 24.31 acres is a relatively small area within the larger TCP/TCR/TCL and is located on the periphery of the TCP/TCR/TCL. Additionally, Parcels A and B within the Project encompass 12.23 acres and include onsite preserved bedrock milling sites as well as a drainage course and associated habitat that will be preserved under a conservation easement and managed in perpetuity. Therefore, this 12.23 conservation area would retain and preserve undeveloped natural land within the TCP/TCR/TCL. Impacts to Tribal Cultural Resources under Alternative 3 would be less than the Project.

Utilities

Development of Alternative 3, Reduced Development, would result in a reduction in square footage of industrial development and would also have reduced operational demand for utilities. Thus, Alternative 3 would have less water, electric, and gas demand and less generation of wastewater and solid waste as compared to the Project.

Wildfire

Alternative 3, Reduced Development, like the Project, would develop structures and a traffic network that would support the Project. The traffic network would include curbs, landscape buffers, parking lots, and improved streets that would serve as a fuel break from wildfire. Structures with industrial and manufacturing uses would likely have fire suppression equipment as well, such as sprinklers and alarms as seen in the Project. As Alternative 3 will not be within a VHFSZ, impacts on wildfire will be similar to the Project.

Alternative 3 Relationship to Project Objectives

Alternative 3 – Reduced Development would not develop Parcel 2/ Building B and Parcel C but the development footprint for Parcel 1/ Building A and the conservation area parcels A & B would remain the same as the Project. Table 8.0-3 – Summary of Alternative 3 (Reduced Development) Ability to Meet Project Objectives identifies the Project objectives and whether or not Alternative 3 meets each objective.

Table 8.0-3 – Alternative 3 (Reduced Development) Ability to Meet Project Objectives

Project Objective	Alternative Meets Objective?
Develop the site to create two warehouse buildings with a total of 603,100 square feet of building space, a conservation easement, and trailhead improvements area.	**No.** Alternative 3 would only develop one warehouse building instead of two, and trailhead improvements would not be developed on Parcel C.
Modify the Restrictive Covenant (RC) to allow access to Building A on Parcel 1, which is currently landlocked by the RC.	**Yes.** As Alternative 3 would develop Building A on Parcel 1, the RC would similarly need to be modified to allow access to the proposed warehouse building located on Parcel 1.
Provide trailhead improvements including a parking lot, sidewalk, shade structure with benches, bike rack, drinking fountains, fencing, gates, signage, and a fire department access gate for consistency with the Sycamore Canyon Wilderness Park Stephen's Kangaroo Rat Management Plan and Updated Conceptual Development Plan.	**No.** As only Parcel 1 would be developed, Alternative 3 would not provide the trailhead improvements area on Parcel C.
Develop and operate warehouse buildings that: • Take advantage of existing City infrastructure • Are adjacent to similar industrial logistics and distribution centers • Are in close proximity to March Inland Port, State Route 60/Interstate 215, and Interstate 10 to support the distribution of goods throughout the region, while limiting traffic truck disruption to residential areas within the City and neighboring jurisdictions • Will attract tenants and will be competitive with other similar facilities in the region • Meet industry standards for operational design criteria	**Yes.** While Alternative 3 would only include the development of Building A on Parcel 1, the alternative would still develop and operate a warehouse building as described in this objective.
Implement the ***Sycamore Canyon Business Park Specific Plan*** through development of a land use allowed by the industrial land use designation and consistent with the criteria relevant to the site and proposed use.	**No.** Alternative 3 would only partially implement the *Sycamore Canyon Business Park Specific Plan* and would leave Parcel 2 vacant and underutilized.
Facilitate the development of underutilized land currently planned for industrial uses that maximizes the use of the site and responds to market demand within the ***Sycamore Canyon Business Park Specific Plan*** area for warehouse buildings.	**No.** Alternative 3 would only partially facilitate the development of underutilized industrial land and would not respond as fully to the market demand in the *Sycamore Canyon Business Park Specific Plan* area for warehouse buildings.
Provide and expand on-site conservation to mitigate for the loss of riparian/riverine resources.	**Yes.** Alternative 3 would similarly provide or expand on-site conservation to mitigate for the loss of riparian/riverine resources.
Positively contribute to the economy of the City through new capital investment, creation of new employment opportunities, including opportunities for highly trained workers, and expansion of the tax base.	**No**. Alternative 3 would only partially contribute to the economy of the City through new capital investment, creation of new employment opportunities, including opportunities for highly trained workers, and expansion of the tax base.

Alternative 3 Conclusion

While Alternative 3 meets some of the Project objectives, it does not meet all of the objectives. Alternative 3 would partially develop underutilized land currently planned for industrial uses, but the reduced development under this alternative would not maximize use of available land on the site. This in turn results in a decreased response to market demand within the *Sycamore Canyon Business Park Specific Plan* for warehouse buildings as only one warehouse building would be developed in lieu of the two proposed under the Project. Further, while the development of Building A on Parcel 1 under Alternative 3 would still contribute to the economy of the City, these objectives are similarly only partially met. As this alternative fails to meet the project objectives and reduce significant and unavoidable impacts Alternative 3 is considered infeasible and rejected accordingly.

8.6 Environmentally Superior Alternative

CEQA requires the identification of the environmentally superior alternative among the options studied. The environmentally superior alternative must be an alternative to the Project that reduces some of the environmental impacts of the Project, regardless of the financial costs associated with that alternative. Identification of the environmentally superior alternative is an informational procedure and the alternative identified as environmentally superior may not be the one that best meets the goals or needs of the Project.

Table 8.0-4: Comparison of Alternatives Matrix, indicates whether each alternative's environmental impact is reduced, increased, or similar compared to that of the Project for each of the issue areas studied. Based on the alternative's analysis provided above, Alternative 1: No Project/Development Alternative, would be the environmentally superior alternative. The No Project/Development Alternative would either avoid or lessen the severity of all significant impacts of the Project. However, the No Project Alternative would not fulfill the objectives of the Project.

When the Alternative No Project/Development alternative is determined to be environmentally superior, State CEQA Guidelines also requires identification of the environmentally superior alternative among the development options. Of the other alternatives evaluated in this EIR, Alternative 3: Reduced Development Alternative, is also determined to be an environmentally superior alternative to the Project. However, the Reduced Development Alternative would also not fulfill the objectives of the Project.

8.7 Comparison of Alternatives

Table 8.0-4: Comparison of Alternatives Matrix, below, compares the potential environmental impacts of each alternative and ranks each alternative as *less, same, or greater* in comparison to the significance determinations that the Project would have with respect to each issue area.

Table 8.0-4 – Comparison of Alternatives Matrix

Environmental Issue	Proposed Project	Alternative 1 No Project/No Development	Alternative 2 Manufacturing	Alternative 3 Reduced Development
Aesthetics	LTS	Reduced	Similar	Reduced
Air Quality	LTS	Reduced	Increased	Reduced
Biological Resources	LTSM	Reduced	Similar	Reduced
Cultural Resources	LTSM	Reduced	Similar	Reduced
Energy	LTS	Reduced	Increased	Reduced
Geology and Soils	LTSM	Increased	Similar	Reduced
Greenhouse Gas Emissions (GHG)	LTS	Reduced	Increased	Reduced
Hazards and Hazardous Materials	LTSM	Reduced	Similar	Reduced
Hydrology and Water Quality	LTS	Reduced	Similar	Similar
Land Use and Planning	LTS	Increased	Similar	Similar

Environmental Issue	Proposed Project	Alternative 1 No Project/No Development	Alternative 2 Manufacturing	Alternative 3 Reduced Development
Noise	LTSM	Reduced	Increased	Reduced
Transportation	SU	Reduced	Increased	Reduced
Tribal Cultural Resources	LTSM	Reduced	Similar	Reduced
Utilities	LTS	Reduced	Increased	Reduced
Wildfire	LTS	Increased	Similar	Similar
Meets Project Objectives?		Alternative 1 **does not meet any** of the Project objectives.	Alternative 2 **does not meet all** the Project objectives.	Alternative 3 **does not meet all** the Project objectives.

LTS =Less than Significant Impact

LTSM = Less than Significant Impact with Mitigation

SU = Significant and Unavoidable

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